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# The Evolving Role of the Chief Information Officer

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## Abstract:

The role of the CIO has undergone a complex transformation over the past three decades, evolving from a function which purely consisted of technical support and administration towards a high-level position of senior executive responsibility and business management. A considerable body of research exists on the role of the CIO as well as desired leadership capabilities and the CIO relationship with superiors and peers. However, much of this research has contributed to a state of confusion and ambiguity surrounding the CIO role and has subsequently resulted in uncertainty about the expectations, behaviors and consequences associated with the CIO role. Due to this lack of clarity, this thesis aims to empirically explore the role of the CIO from the perspective of the CIOs themselves and how they perceive their role as opposed to how observers perceive it. In order to achieve this, a comprehensive literature review has been conducted which led to the establishment of a theoretical framework used in six in-depth semi-structured interviews with CIOs from Sweden.

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## **Abbreviations**

CIO – Chief Information Officer

CEO – Chief Executive Officer

COO – Chief Operating Officer

CFO – Chief Financial Officer

CTO – Chief Technology Officer

IT – Information Technology

IS – Information Systems

ICT – Information and Communication Technology

# 1 Introduction

*The first chapter of this thesis presents the background of CIOs with an overview of the changes the CIO role has undergone over the past decades, followed by a description of the problem area we are addressing. Based on the problem area, we then propose our research question and the purpose of the study. The chapter is finalized with a presentation of the report structure and the delimitations of our choice.*

## 1.1 Background

In recent years, the impact of global forces such as the increasing pace of technological innovation and the highly-competitive, global marketplaces of the 21<sup>st</sup> century has changed the role of Information Technology (IT). Organizations have become ever-more dependent on IT and this development has gradually been transforming the role of the Chief Information Officer (CIO) from one of a support role to playing a crucial part in the execution of organizational strategies. (Chun & Mooney, 2009)

The CIO position was created in the early 1980s as organizations started to recognize the rising importance of IT as a means to improve organizational performance (Applegate & Elam, 1992). William Synnott and William Gruber were the first who coined the term and described the CIO as “*the senior executive responsible for establishing corporate information policy, standards and management control over all corporate information resources*” (Synnott & Gruber, 1981, p. 66). At this time, the term CIO was barely used in the professional literature, having only received one citation in 1981 (Schubert, 2005). However, as organizations gradually became more dependent on IT and used technology to increase operational efficiency and to obtain strategic success, the attention and importance of the CIO just kept rising until it finally reached 100-plus citations in the professional literature in 1988 (Schubert, 2005). Almost 30 years later, the position of the CIO in the literature as well as in practice surely looks different as CIOs have proven to play a critical role in the ability of an organization to derive business value from IT (Preston et al., 2008; Chun & Mooney, 2009; Li & Tann, 2013).

The roles and responsibilities of the CIO have undergone fundamental changes over the past decades and are expected to undergo further changes in the future. Today, CIOs are responsible for continually aligning IS (Information System) with the organization’s strategic business objectives as well as planning and maintaining an IT infrastructure that will meet the current and future information processing needs of the organization (Beatty et al, 2005). As the role of IS within organization has grown in importance and as we become more reliant on innovations in IT, the CIO role has become a very important position in all kinds of businesses – expanding rapidly in both magnitude and scope (Yokkhun et al, 2014; Beatty et al, 2005).

## 1.2 Problem Area

When investigating the academic literature on the role of CIOs, it appeared that there is still a great lack of clarity surrounding the CIO role, despite the attention this role has received since the term was coined by Synott and Gruber in 1981 (McLeod et al., 1997; Peppard et al., 2009; Peppard, 2009). One could assume that the CIO role and responsibilities have matured with equal rapidity as the rate of development in technology, but this is unfortunately not possible (Schubert, 2005) due to the fact that humans are not machines and cannot be programmed or built in the same way. It was apparent for us that a limited sample of academic studies explored the CIO role from the perspective of the CIO, and this gap in the literature was also identified by McLeod et al (1997) who stated:

*“In spite of the attention, both pro and con, that has been focused on the CIO, there has been little study of how the CIOs themselves perceive their role and their future. Do the CIOs view their problems and challenges in the same light as the observers? Also, do the descriptions, largely written by US authors and published in US journals, apply equally well to CIOs in other countries?”*  
(McLeod et al, 1997, p. 5)

Peppard et al. (2009) describe the CIO role as ambiguous which indicates uncertainty about the expectations, behaviors and consequences associated with the CIO role. This has resulted in job-dissatisfaction and high CIO turnover rates (CIO Insight, 2004; Peppard et al., 2009), as well as some suggesting the CIO initials mean “career is over” (Beatty et al, 2005; Rothfeder and Driscoll, 1990). The uncertainty of academic studies have contributed to a state of confusion surrounding the CIO role because it seeks to discover the different competencies of CIOs and not the actual understanding of the CIO job, and what CIOs are expected to achieve for their organization.

## 1.3 Purpose and Research Question

The purpose of this thesis is to explore the role of the CIO with a specific focus on the perception that the CIOs have on their own role. By thoroughly examining the existing literature on the CIO role, we wish to explore how prior research differs from practicing CIOs using in-depth interviews in order to clarify CIOs own perception of their role. Based on this purpose, the following research question has been formulated:

- *How do Chief Information Officers perceive their own role and contributions within their organizations?*

The contributions of this research to science consist of the clarification of the CIO role from the perspective of the CIOs themselves and not from observers, which today’s research is currently lacking.

## 1.4 Delimitations

This study will focus solely on those executives who hold the title of CIO in their job description. Because we seek to establish clarity over the existing debate surrounding the roles and responsibilities of the CIO, it will not extend to other C-level executives such as the CEO or the CTO. These functions will instead be used as a supporting instrument to help us establish the level of influence the CIO holds in many organizations today.

Geographically, the study is limited to CIOs working in Sweden. This is because our initial plan was to conduct as many face to face interviews as possible. As such, we decided to limit ourselves to a scope which gave us the ability to achieve this goal. The limitation however does not include the geographical scope of the companies the CIOs work for that our sole focus is on the CIOs perception of their role within the companies they work for.

We have consciously chosen to position our research around CIOs in medium size and large companies because here the role of the CIO is more implicitly defined.

## 1.5 Structure of the Report

The next chapter of this thesis presents the results of the conducted literature review which is divided into three parts. The first part describes the evolution of the CIO role in organizations; starting from the early days of the data processing era, then moving on to the information era of the 1990s and finally finishing today in the digital era of the 2000s. The second part presents the leadership perspective of the CIO role and includes leadership profiles and critical success factors. The third and last part of the literature review describes the CIO relationship with superiors and peers. The literature review is finalized with the theoretical framework which is based on the conducted theory section.

The third chapter is the methodological chapter of the research and includes detailed descriptions on what research approach and strategy that was used, the data collection method and process, data analysis and ultimately presents the quality aspects of the research. The fourth chapter contains a presentation and analysis of the collected empirical data from the conducted interviews, and the fifth chapter presents a discussion based on the result. The sixth and final chapter presents the findings of the study and includes the conclusion and propositions on future research.

## 2 Literature Review

*The second chapter presents the results of the conducted literature review. The areas of the research scope consist of the role of the CIO in the organization, CIO leadership and CIO relationship with superiors and peers. The chapter is finalized with a presentation of our theoretical framework which will function as the baseline of the research and thus steer the continuous work.*

### 2.1 The Role of the CIO

The role of the CIO has changed drastically over the past decades and it appears that from the very beginning, the CIO position was bound to evolve. The genesis of the CIO role can be traced back to a shift from IT having a supporting role in organizational strategy to being on the forefront of competitive advantage, strategic change and innovation. (Gottschalk & Taylor, 2000; Peppard et al, 2009)

#### 2.1.1 Early days – Data Processing Era

According to Applegate and Elam (1992), the evolution of the CIO began in the data processing era of the 1950s and 1960s, when IT served strictly as a support function. At this time, the title of CIO was not introduced yet as organizations referred the person responsible for the firms' technology management as *data processing manager* or IS/IT manager. The original role of the data processing manager was relatively unimportant, serving as a computer knowledgeable technician, managing "Electronic Data Processing" service function (Chun & Mooney, 2009).

The role of the data processing manager evolved drastically in the 1970s as a result of increased importance placed on IT, which created additional responsibilities and titles for IS managers (Chun & Mooney, 2009). During the late 1970s and early 1980s, an increasing awareness of the potential of information was established within organizations as they realized that information needed to be managed in much the same way as people (Chun & Mooney, 2009). This perception called for a new leadership function capable of understanding how management of information and IT could cooperate and contribute in achieving business priorities. Because of this development, the IS managers at the time focused primarily on deploying IT and managing IT investments (Marchand, 2008; Chun & Mooney, 2009).

#### 2.1.2 Information era of the 1990s

Although being coined by Synott and Gruber (1981) in the early 1980s, the CIO title was introduced within organizations in the late 1980s and early 1990s (Applegate & Elam, 1992). The CIO role started to gain influence as organizations started to realize that managing the firms IT investments can no longer be considered as an evolving, or supporting function (Ross

& Feeny, 1999). Organizations needed to find new methods to leverage IS in order to support both operational and strategic goals of the business. These changes and possibilities of the 1990s resulted in a new and expanded set of responsibilities for CIOs, transforming their role solely from technical managers to technical- and business leaders, who possessed strong leadership skills, power and business expertise (Peppard, 2009). CIOs were now capable of deploying IS in ways that generated value-adding information for the business which signaled a shift in their level of importance.

The CIOs of the 1990s were elevated to C-level positions as they were given stewardship of the organization's entire information resources (Stephens & Loughman, 1994). They were adopting additional responsibilities such as strategic technology planning and control, IT architecture management, IT standards development and human resources management. They brought a broad perspective to the position and started adding value to the firm in different ways. An increasing number of CIOs also started to report directly to the CEO which resulted in mixed ideas about the contributions of the CIO position (Karlgaar, 2002). Soon after their rise in importance, CIOs started to encounter problems in their effort to prove their value to their CEOs and other senior managers. CIOs were responsible of a function that consumed major resources but did not offer enough proof of their value (Chun & Mooney, 2009). According to Karlgaar (2002) and Heresniak (1999), the role of the CIO has always been a challenging one and CIOs are often caught in situations where they can be blamed regardless of the decisions that are being made.

Rockart and Ross (1996) argue that factors within the organization were the primary issues influencing and shaping the CIO role during the information era of the 1990s. The effects of external factors were further addressed towards the digital era of the 2000s. Feeny and Willcocks (1998) identified nine IS capabilities that CIOs needed at the time and these capabilities and their main objectives are further described in Table 2.1 below:

<i>IS Capability</i>	<i>Main Objective</i>
Leadership	Integrating IS/IT effort into business activities.
Business Systems Thinking	Defining the business processes that technology makes possible.
Relationship Building	Working with business managers to improve IT usage.
Architecture Planning	Creating the blueprint for a technical platform that responds to current and future business needs.
Making Technology Work	Achieving technical progress, by one means or another.
Informed Buying	Managing the IS/IT sourcing strategy that meets the interests of the business.
Contract Facilitation	Managing contracts for IS services.
Contract Monitoring	Protecting the organization's contractual position, current and future.
Vendor Development	Identifying the potential added value of IS/IT service suppliers.

Table 2.1 *The nine core IS capabilities (Feeny & Willcocks, 1998).*

Overall, the roles and responsibilities of the CIO during the 1990s reflected an ever increasing responsibility for organizational growth and the development of the CIO into a business strategist and visionary. The CIO role has gradually moved from a focus on technology to a focus on business performance, and CIOs were expected to make significant contributions to the overall strategy and competitiveness of the organization (Casper, 2008; Gottschalk, 2000).

### 2.1.3 Today – Digital era of the 2000s

Over the past 15 years, the CIO position has received massive attention from all kinds of researchers and practitioners (Chun & Mooney, 2012; Peppard, 2009; Peppard et al., 2009; Gottschalk & Taylor, 2000). Previous research on the CIO role is controversial and challenging as many researchers have polar-opposite positions on the roles, responsibilities and contributions of the CIO position. Peppard et al. (2009) believe that an unambiguous description has yet to emerge and what is apparent about the CIO role today, is that the role is an ambiguous one. Chun and Mooney (2009) believe that the current body of literature on the role and responsibilities lack information about the evolving role of the CIO with respect to the organization.

There are some researchers who have been critical of the CIO position, suggesting that the CIO today is less vital to the organization and the influence of the role is likely to diminish over time. Ross and Weill (2002) argue that CIOs have failed in providing value to their organization and have become obsolete. Cash and Pearlson (2004) believe CIOs will fail to make a positive contribution to the overall organization if they are solely limited to IT management. Gottschalk and Taylor (2000) are critical of the CIO title itself, meaning it has become a source of confusion. Peppard (2009) believes that many CIOs lack the necessary leadership skills to drive their organizations forward in the use of IT and that CIOs are depicted as unable to deal with organizational politics.

The digital era of the 2000s is different from all the other previous eras in various ways, but never before have organizations been more dependent on IT as they are today (Yokkhun et al., 2014), and this makes the CIO role special and complicated. As a consequence of this development, the role and responsibilities of the CIO have diversified to such an extent that organizations now have different authority profiles and positioning in the organization for their CIOs (Peppard et al., 2009). Peppard et al. (2009) believes that the CIO role is ambiguous, meaning that the CIO role is still unclear in many ways. The authors even believe that there is still some confusion about what exactly a CIO is, and they identified four key reasons for this confusion which are listed below:

- *Unclear Distinction Between Corporate and Business Unit CIOs* – The first reason is the unclear distinction between what constitutes a corporate CIO and a business unit CIO. Despite the fact that both of them are labeled as CIOs, they still play different roles. According to Peppard et al. (2009), a business unit CIO is primarily responsible for aligning the IT investment portfolio with the business unit's strategy, while a



corporate CIO is responsible for seeking (IT) supply synergies across the corporation and defining corporate standards and policies to ensure consistency across the technology infrastructure of the group.

- *Inconsistent Use of IT Director and CIO Titles* – The second reason is the frequently inconsistent use of the titles IT director and CIO. Nowadays, these titles are often used interchangeably which only adds to the confusion. This inconsistent use of language is mostly based on geographic differences since European corporations in particular still prefer to use the title IT director or IT manager, while CIO has become an established title in American organizations. Although used interchangeably, there are significant differences between the two. An IT director has very little to do with strategy and growth, while the CIO's role is about the strategic application of IT and information for value generation.
- *Mismatch Between Expectations and Performance Metrics* – The third reason is the mismatch between what is expected from the CIO and expressed performance metrics. Many CIOs have reported a variance between how they understand and perceive their roles themselves and how their performance is assessed. Peppard et al. (2009) believe this can lead to a situation where the CIO is achieving the necessary performance goals, but the organization is still failing to optimize value from IT. This contraction points to a lack of understanding of how IT generates value to the organization which may be one of the reasons why an increasing amount of organizations fail to see strategic success that is directly linked with their investments in IT (Preston et al., 2008).
- *Outdated View of the CIO Role* – The fourth and final reason for this confusion is the genesis of the CIO role. CEOs seem to have an outdated view of the CIO role which is detrimental for today's business environment (Peppard et al., 2009).

Although the CIO has been actively criticized throughout the 2000s, there are still a great number of researchers and practitioners who praise the CIO position to this day. Li and Tan (2013) believe the CIO is a key person in driving the transformation and innovation in the business as well as an essential factor of organizational performance. McLean and Smits (2012) believe that CIOs have never been more significant and vital as they are today and this development will most likely continue in the future as organizations become more dependent on innovations in IT. In order to derive business value from IT, organizations must understand the importance of the CIO role and view the CIO as a strategic asset (Preston et al., 2008)

The pattern seems to be, if organizations recognize the key strategic role of technology, then the value of the CIO position becomes more prominent in top-performing organizations. However, despite what position researchers have on the contributions of the CIO, what all research practically agrees on today is the increased amount of accountabilities and responsibilities associated with the CIO role (Beatty et al., 2005). The responsibilities of the CIO have extended beyond the corporate boundaries and now encompass key e-business partnerships with customers, businesses, and suppliers (Robbins & Pappas, 2004). This



development has once again resulted in another disagreement within members of both the business and academic communities.

Beatty et al. (2005) is critical of the amount of responsibilities incorporated into the CIO position, describing it as seemingly overwhelming for one individual to handle. The authors believe that the position of CIOs is one of the most politically dangerous and operationally difficult executive positions, which is why the typical responsibilities of the CIO must be “re-allocated” to both the CIO and the CTO (Chief Technology Officer). McLean and Smits (2012) call for “role expansion”, meaning CIOs should adopt additional roles to cope with innovation and efficiency as they are the biggest challenges facing the CIO role in today’s business environment. Broadbent and Kitzis (2005) argue that the main challenge for a CIO, a newly appointed CIO in particular, is to continue to be one because if CIOs are not adapting and evolving as your enterprise changes, then they are not keeping up and will fail to survive.

So far, there seems to be much confusion, opinions and disagreements about the role of the CIO in the existing body of literature. Recent studies call for a more updated and pertinent CIO role description and models (La Paz et al., 2010; Peppard et al. 2009; and Peppard, 2009).

## **2.2 CIO Leadership**

The CIO is a leader and just like any other leader, they must embody crucial leadership characteristics in order to successfully do their job (Marchand, 2008). Nowadays, many CIOs emerge as strategic members of the senior leadership teams in organizations. However, the question many researchers are asking themselves is – is CIO leadership distinct from leadership in other areas? The answer seems to be yes (Willcoxson, 2006; Iyengar, 2007; Karahanna & Watson, 2006).

### *2.2.1 What Makes CIO Leadership Distinctive?*

Willcoxson et al. (2006) believed for a long time that CIOs differ from general managers and tested their hypothesis. They identified significant differences between the two in terms of leadership styles, issues of control and task/relationship orientation. There are similarities between CIO leadership and other functional areas as well, but because of the idiosyncratic nature of IS leadership, researchers have to examine the CIO leadership in its own right (Karahanna & Watson, 2006).

The dual technical and business orientation is another reason why CIO leadership is distinctive. As described earlier, the CIO role has gradually been adopting a focus on business performance which poses unique challenges for the CIO, but this has not always been appreciated. Some suggest that CIOs are less effective in terms of the leadership role, especially CIOs with a superior technical background (Enns et al., 2003; Iyengar, 2007). This goes hand-in-hand with the complex role of the CIO in the organization, requiring them to

possess social, technical, political and business skills in order to lead the team as well as strategic IT initiatives (Enns et al., 2003).

### 2.2.2 Business Leader or IT-leader

There seems to be a lack of understanding whether CIOs should consider themselves business leaders or IT-leaders, and this confusion has been discussed actively in the literature and in practice (Peppard, 2009; Karimi et al., 2001). In an interview with a retired CIO of a global pharmaceutical company conducted by Peppard (2009), the former CIO suggested that every CIO should pose the following question to him/herself: “*are you a business leader with special responsibility for IT or are you an IT-leader who’s delivering to a business?*” (Peppard, 2009, p. 5). He believes there are significant differences between the two in terms of mindset and attitude, and the answer will ultimately have an impact on the performance of the business (Peppard, 2009).

Watson et al. (2001) believe the business aspect of CIO leadership will be the most significant role that CIOs will fulfill in the digital era. Karimi et al. (2001) sees successful CIOs as general business managers and not IT specialists. According to Karimi et al. (2001), successful CIOs characterize themselves in the following way:

- I see myself to be a corporate officer.
- In my organization, I am seen by others as a corporate officer.
- I am a general business manager, not an IT specialist.
- I am a candidate for top-line management positions.
- I have a high-profile image in the organization.
- I have political as well as rationale perspectives of my firm.
- I spend most of my time outside the IT department focusing on the strategic and organizational aspects of IT. (Karimi et al., 2001)

### 2.2.3 CIO Leadership Profiles/Styles

Preston et al. (2008) believe poor leadership is one of the biggest reasons why organizations do not properly benefit from investments in IT.

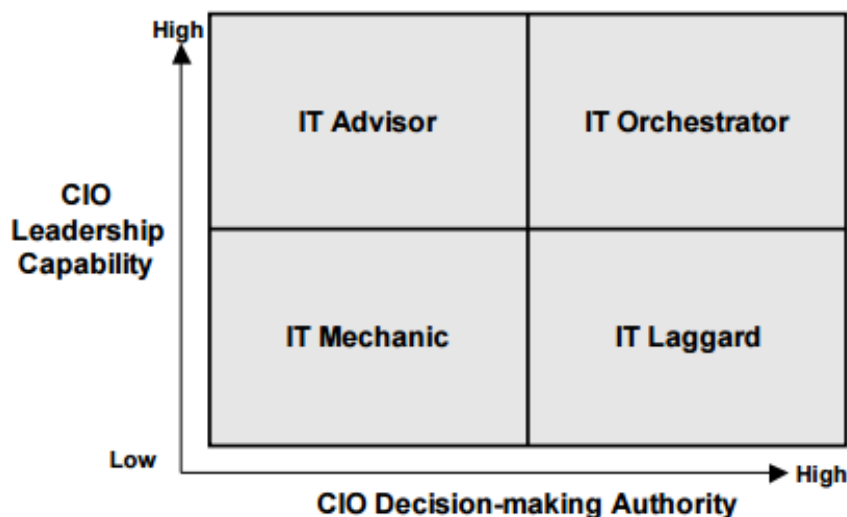


Figure 2.1 The four CIO leadership profiles (Preston et al., 2008)

The key to maximizing its fullest potential is directly linked with strategic leadership, which makes the CIO crucial in the ability of an organization to derive business value from IT (Preston et al., 2008). The authors have identified four CIO leadership profiles (see Figure 2.1) and the typical characteristics of CIOs that match each of these profiles.

The leadership profile of a CIO is determined by whether the CIO's level of strategic decision-making authority is high or low, and whether his or her strategic leadership capability is high or low. The four profiles are listed and further described below:

- *IT Advisor* – As visualized in Figure 2.1, the IT Advisor has limited decision-making authority but is still a highly capable leader. IT Advisors are characterized by having strong interpersonal skills and strategic knowledge, but struggle in providing resources to the IT department.
- *IT Orchestrator* – IT Orchestrators scored highest in the sample created by Preston et al. (2008). They are more directly linked to the CEO and are formal members of the top management team. They are also highly influential in organization due to their dedication of resources to IT and strategic IT vision.
- *IT Mechanic* – IT Mechanics scored the lowest in all characteristics due to their low level of both strategic effectiveness and strategic decision-making authority. They do not possess the necessary leadership skills to make a transformative contribution to the firm.
- *IT Laggard* – IT Laggards have been given a relatively high level of decision-making authority, but they do not have the proper leadership skills to capitalize on the strategic authority provided to them.

#### 2.2.4 *The Successful CIO*

CIOs must possess a number of complex skills to become successful, and there is currently a great variation between CIOs in terms of positive leadership characteristics. Peppard (2009) interviewed a CIO of a large transport organization and he commented:

*“CIOs need to be far more dynamic, commercially minded and communicative ... Being a good code writer or database developer isn't enough. In fact, it may not be necessary at all. Being a capable business leader, who understands the minutiae of every aspect of the business [...] They have to be an influencer, not just a doer or a fire fighter. Specific IT skills are likely to be considerably less important than leadership skills, programme management experience, communications and commercial common sense”*

(Peppard, 2009, p. 5)

When analyzing the profiles of successful CIOs, Cash and Pearlson (2004) argue that it should not come as a surprise if they have a varied career history, including several years of working experience spent outside of IT. Remenyi et al. (2005) compares the characteristics needed to be a successful CIO to a chameleon, meaning CIOs need to adapt to their environment in order to be successful. The authors identified technical competence,

knowledge of ICT trends, corporate strategy competency and appropriate qualification mix as the four most important skills that CIOs ought to possess (Remenyi et al., 2005).

Stephens and Loughman (1994) argue that strong communication skills (both verbally and orally) are perhaps the most important skills that CIOs need to master. The ability to communicate effectively is crucial for any leader, and it is especially important for the CIO because conversations with CIOs have a tendency to become too technical (Stephens & Loughman, 1994). CIOs should avoid using esoteric language and adapt their language to their audience. They should focus on speaking the most widely spoken language of any organization, which is the language of business.

## 2.3 CIO Relationship with Superiors and Peers

Apart from the role of the CIO in the organization and CIO leadership, the CIO relationship with superiors and peers has also received significant attention in the literature.

### 2.3.1 Relationship with the CEO

The CIO-CEO relationship started to evolve in the 1990s as CIOs of mainly larger organizations started to report directly to the CEO, and were also included at the executive management table (Lieberman, 2010). At this time, most CEOs were skeptical to the emergence of the CIO and many of them had mixed ideas about the contributions of the CIO position (Heresniak, 1999). The idea of having a technology executive was not fully appreciated because CIOs were responsible for a function that consumed major resources, but did not offer enough proof of their value (Chun & Mooney, 2009). Gupta (1991) identified three areas which negatively affected the CIO-CEO relationship:

- *Overblown expectations of the CIO* – CEOs expected too much from their CIO, especially in terms of solving IT-related problems in a short amount of time.
- *Outdated view of IT importance* – Many CEOs were skeptical to and unfamiliar with the nature and capabilities of IT which made it difficult for the CIO to prove him/herself. If CEOs did not recognize the strategic importance of IT, then what was the point of having a CIO in the first place.
- *Fear of CIO domination* – Some CEOs were also afraid that CIOs might take too much control of the organization and ultimately dominate the business.

The relationship and situation between the two sides looks very different today. All CIOs work for a CEO, either directly or indirectly and the relationship is more or less symbiotic (Smith & McKeen, 2012). Organizations that recognize the strategic importance of IT should have a CIO (Smith & McKeen, 2012). However, the quality of the CIO-CEO relationship remains complicated to this day. The quality between the two sides plays a vital role in the CIO's effectiveness and ultimate success as a strategic contributor (Lieberman, 2010). Gottschalk (2007) believes CIOs tend to look at their own roles and contributions in a more positive light, while CEOs tend to be more critical and this ultimately affects how both sides

see the relationship between business and information. CEOs also tend to be demanding and are not always clear about what they expect from their CIOs which results in conflicting perceptions (Gottschalk, 2007).

The differences between how both sides see the CIO-CEO relationship impacts the value generated by IT and the power of the executive team (Gottschalk, 2007). In order to create a healthy relationship based on the needs of the business, the expectations of the CEO needs to be clear for the CIO. The expectations can fall into a hierarchy (see Figure 2.2) and at each level in this hierarchy, CEOs have expectations of their CIOs, and CIOs have needs of their CEOs (Smith & McKeen, 2012):

- *Basic and regulatory needs* – The first two levels are rarely discussed by the two sides because these needs are “table stakes”. CEOs need to address the challenges of managing at this level and explore different ways of balancing capital and operating costs.
- *Governance and communication needs* – CEOs need to recognize the potential of IT in business enablement and this begins by providing IT with a “seat at the table”.
- *Enterprise value needs* – CIOs need to deliver business value consistently and must do so in a credible way. As explained earlier, CEOs have been skeptical of how valuable the CIOs actually are and must continue to assure that IT can deliver on innovative business solutions and facilitating business transformation. CIOs must earn their trust as it is not a right.

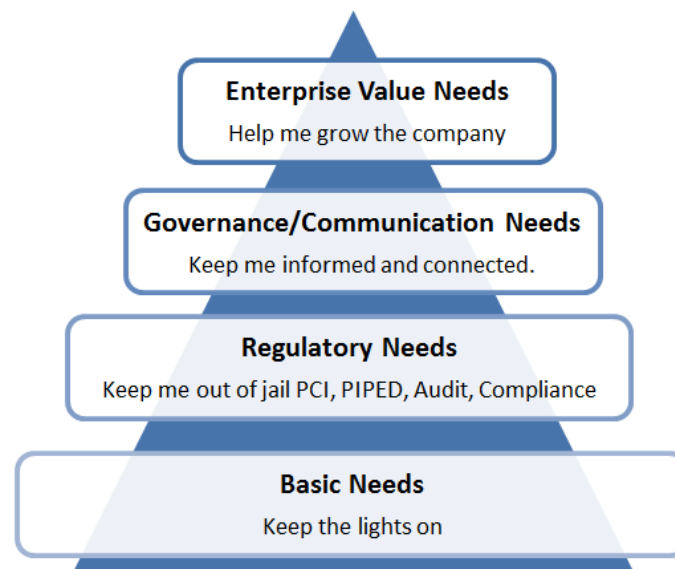


Figure 2.2 The CEO needs of the CIO (Smith & McKeen, 2012)

Finally, a strong CIO-CEO relationship based on mutual respect and support is crucial for any organization to successfully deliver business value. CEOs need to support CIOs in doing their job by providing clear strategic vision, autonomy and sponsorship. (Smith & McKeen, 2012)

### 2.3.2 Relationship with Peers

It is important for CIOs to recognize the importance of establishing and maintaining executive relationships in order to successfully implement initiatives in the organization (Earl & Feeny, 1995). The entire executive team needs a shared and clear vision of IT for long term effectiveness. The CIO is probably the only senior executive whose peers are customers of the CIO and the organization because of the fact that CIOs and the IT team are enablers to the entire company (Schubert, 2005).

The CIO has a difficult job in establishing healthy relationships with peers because of the technology background of these executives (Kwak, 2001). A hierarchical structure of the CIO position in relation to superiors, peers and subordinates is illustrated in Figure 2.3. Kwak (2001) identified technology background of the CIO's peers as the most important factor in determining whether the CIO's influencing tactics would be successful. Different personality types is another important factor as personality plays an important role in any relationship. Schubert (2005) believes a balanced variety of different personality types is beneficial for IT organizations.

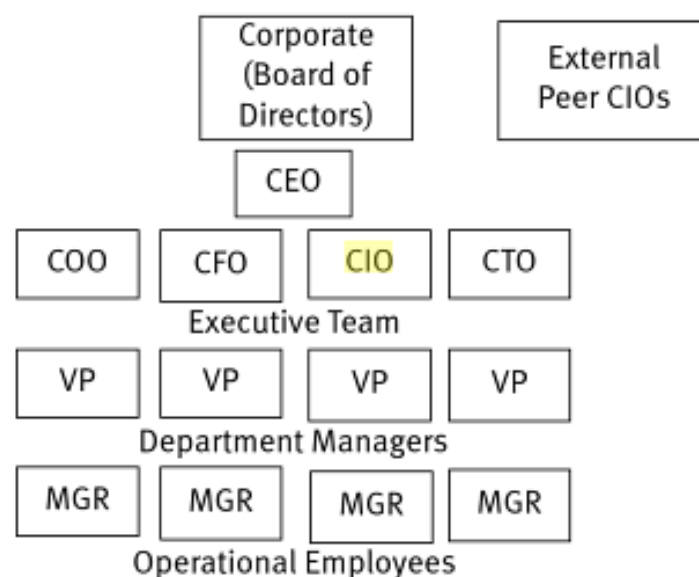


Figure 2.3 Hierarchical structure of CIO position in relation to its superiors, peers and subordinates (Schubert, 2005)

CIOs do not have the authority to change how other executive managers approach challenges on a daily basis, but knowing the variables allows a CIO to modify his/her own approaches and behaviors to support effective individual participation and overall team performance (Schubert, 2005). In order to establish healthy relationships with their peers, CIOs can use the following five leadership postures identified by Schubert (2005):

- *Respect and appreciate* – CIOs must, like any other leader, respect the opinions and feelings of others to enable a successful working environment. They must also make

sure that disagreements never settle on the person and use disagreements to gain different perspectives.

- *Recognize and respond* – A good CIO has to recognize when peers are in need of help and respond in a professional manner. This will ultimately have a positive effect on the relationship between the sides.
- *Adapt* – CIOs must adapt to different situations, especially in terms of communication. As previously described, conversations with the CIO have a tendency to become too technical and this should not be the case.
- *Actively preserve relationships* – To become a successful executive, CIOs must also understand what their peers need in order to be successful. The CIO must gain a clear understanding of the needs of the peers to successfully build IT value.
- *Promote collaborations and remove obstacles* – A healthy relationship between the CIO and peers and actively collaborating opens new opportunities for both sides.

## 2.4 Theoretical Framework

Based on the previous theory sections related to the role of the CIO, CIO leadership and the CIO relationship with superiors and peers, a theoretical framework has been developed as illustrated in Figure 2.4. This framework is the foundation for this research and thus steers the continuous work.

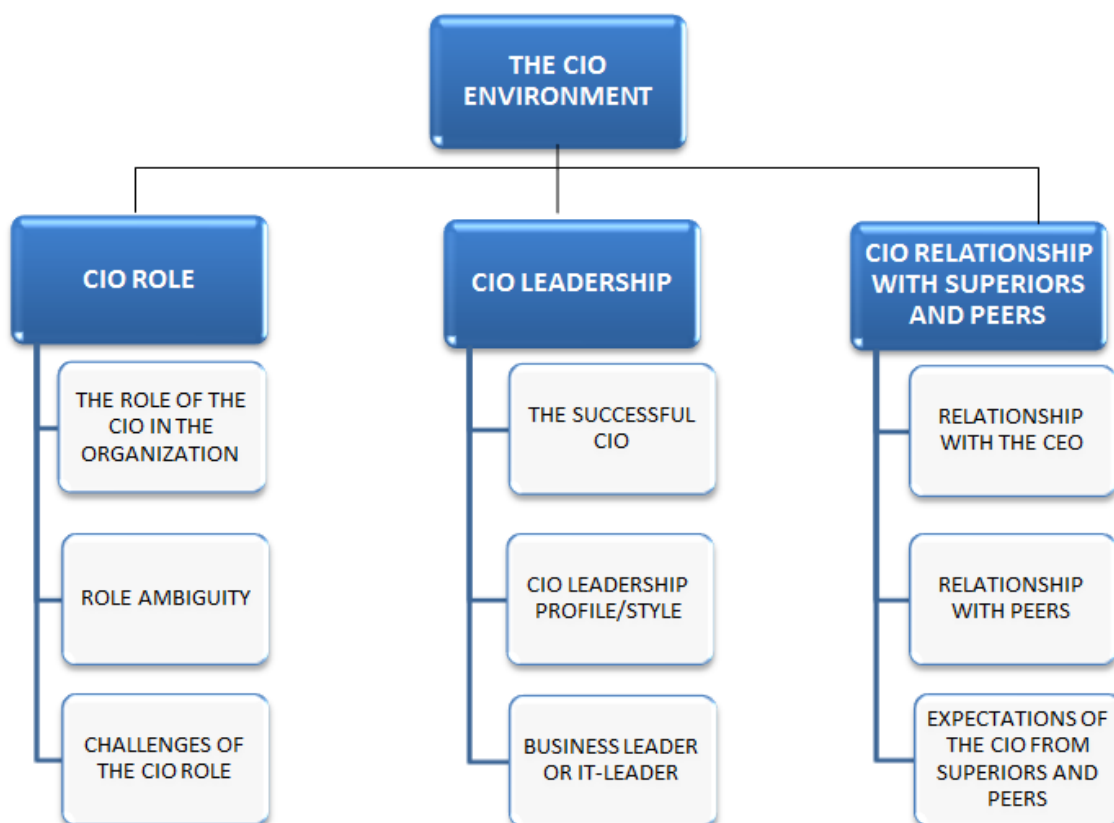


Figure 2.4 The theoretical framework



The three main themes in the theoretical framework have been chosen and discussed because they have driven the CIO literature and the CIO environment for the past three decades (Iyengar, 2007). Each theme consists of three underlying factors which all have been identified as the key areas within that particular theme. The framework is also the foundation for the interview guide, the creation of our questions and the structure of the empirical findings and the discussion. Each factor is further described below, supported by Table 2.2 which includes the relevant literature within each factor:

▪ **Theme 1 – CIO Role**

- *The Role of the CIO in the Organization* – This factor describes the core elements within the CIO role such as the expectations, responsibilities, positions and obligations of the CIO position.
- *Role Ambiguity* – This factor addresses the lack of clarity surrounding the CIO role which has been discussed by several authors within the academic community. We decided to incorporate this factor into our framework because we wanted to test this theory and also see what our respondents had to say about it.
- *Challenges of the CIO Role* – This factor addresses the challenges facing the CIO role. We decided to investigate the challenges as a separate factor because we identified them being of significant importance to the CIO role, and thus wanted to explore if the respondents had a similar or different perception in comparison to the literature.

▪ **Theme 2 – CIO Leadership**

- *The Successful CIO* – This factor describes the skills, personal characteristics and critical success factors necessary to become a successful CIO. The aim of this factor is to explore what the respondents believe is important and crucial to succeed as a CIO.
- *CIO Leadership Profile/Style* – This factor investigates the leadership profile/style of the CIOs as they have developed into executive leaders within their organizations. Our aim with this factor is to identify what leadership profile/style our respondents have.
- *Business Leader or IT-leader* – This factor addresses the ongoing question within the academic community on whether CIOs should consider themselves business leaders or IT-leaders. Our aim is thus to identify what type of leader our respondents identify themselves as.

▪ **Theme 3 – CIO Relationship with Superiors and Peers**

- *Relationship with the CEO* – This factor addresses the CIO relationship with the CEO which is one of the most significant relationships of the CIO position. The aim of this factor is to identify what type of relationship our respondents have with their CEO.



- *Relationship with Peers* – This factor addresses the CIO relationship with peers and the purpose of this factor is to identify what type of relationship the respondents have with other C-level executives, apart from the CEO.
- *Expectations of the CIO from Superiors and Peers* – This factor addresses the expectations that are put on the CIO from both superiors and peers. We decided to include this as a separate factor because we identified the expectations as one of the most significant aspects of the relationship between both of the sides, and wanted to empirically assess whether there is too much or too little expected from the CIO.

<i>Factor</i>	<i>Literature</i>
The Role of the CIO in the Organization	Beatty et al (2005) Chun & Mooney (2009) Feeny & Willcocks (1998) Gottschalk & Taylor (2000) Peppard et al. (2009) Robbins & Pappas (2004) Rockart & Ross (1996) Ross & Weill (2002) Yokkhun et al (2014)
Role Ambiguity	Beatty et al. (2005) CIO Insight (2004) McLeod et al. (1997). Peppard et al. (2009). Peppard (2009)
Challenges of the CIO Role	Broadbent & Kitzis (2005) Mclean & Smits (2012)
The Successful CIO	Peppard (2009) Remenyi et al. (2005) Stephens & Loughman (1994)
CIO Leadership/Styles	Preston et al. (2008)
Business Leader or IT-leader	Karimi et al. (2001) Peppard (2009) Synnott & Gruber (1981)
Relationship with the CEO	Gottschalk (2007) Gupta (1991) Lieberman (2010) Smith and McKeen (2012)
Relationship with Peers	Earl & Feeny (1995) Kwak (2001) Schubert (2005)
Expectations of the CIO from Superiors and Peers	Gupta (1991) Smith & McKeen (2012)

*Table 2.2 The factors of the theoretical framework supported by the literature*

## 3 Methodology

*This chapter provides a detailed overview of the research objectives and a rationale for the research approach taken. It includes the data collection process that was utilized in order to obtain the study's findings. The chapter provides a detailed view in the data analysis section, about the obtained data's transcription and coding process. Finally, in order to ensure that the study was of a sufficiently high quality, the chapter ends by addressing the key aspects of validity, reliability, bias and ethical elements.*

### 3.1 Research Strategy

We decided to employ a qualitative research strategy for our study because qualitative inquiry is well suited for exploratory research where a phenomenon is not yet fully understood (Recker, 2013). The research focuses on the study of the CIOs' perception of their role given that several researchers in the academic field have argued that the role is ambiguous and therefore lacks clarity. The study is therefore mainly associated with exploratory research (Bhattacharjee, 2012, Recker, 2013) because it seeks the views of practitioners to facilitate the investigation.

From a radical humanism paradigm (Bhattacharjee, 2012), the research question is based upon the subjective interpretations of experienced practitioners. The opinion of the practitioners is sought to facilitate the analysis of a role which has been seen to be constantly evolving, however has been portrayed to be ambiguous. Because of this, we ruled out the possibility of using a quantitative method given that it is statistics driven and largely independent of the researcher (Bhattacharjee, 2012). A quantitative method would also have limited our ability to question perspectives and develop new inferences beyond the theoretical principle which had already been established from the academic literature.

### 3.2 Research Approach

The research study examines the continuously evolving role of the CIO from the perspective of the CIOs. The research strategy presented is in line with the theoretical framework which was introduced in the previous chapter. Comprehensive interviews with expert CIO's working for different companies around Sweden were conducted in order to evaluate the arguments reflected in the existing literature.

According to Bhattacharjee (2012), in order to arrive at a comprehensive multi-faceted description or conceptualization (Bhattacharjee, 2012), focus must be given to the development and exploitation of multiple individual perspectives. A qualitative approach in this situation provided the opportunity for dialogue with different CIOs in order to clarify and make concrete judgments about the CIO role. The practitioner opinions and responses were therefore intended to allow the study to assess similarities and patterns relating to academic

literature. Finally, the study moved to evaluate the existing gap between the observers in the academic literature and the practitioners before reaching a conclusion.

### 3.3 Research Process

The study will adopt Bhattacharjee's (2012) functionalistic model for the research process as identified in Figure 3.1. Some modifications have been made to the model in order to better suit this specific project and further enhance iteration. An iterative cycle allowed us to continuously review the different procedures and make necessary adjustments when required. The preliminary phase was the exploration phase, which comprised of an iterative approach to formulating the research question, investigating theoretical claims and conducting the literature review. The second phase was the research design phase which comprised of the construction of a research framework to suit the study, a discussion of the research method and finally a respondent selection strategy. This culminated in the formulation of a research proposal which thereafter resulted in the research execution. In the execution phase, we conducted the data collection, analysis and then reporting.

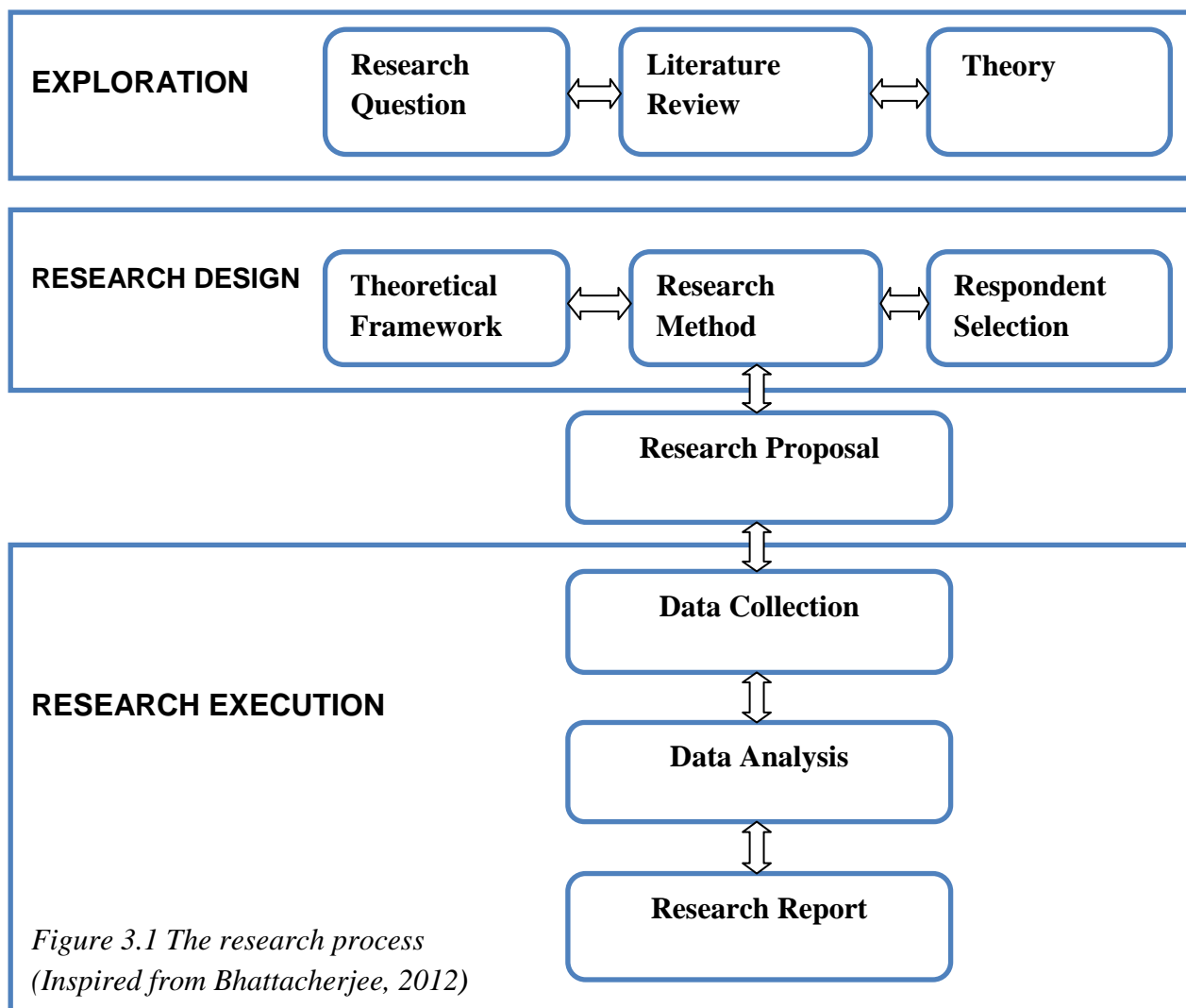


Figure 3.1 The research process  
(Inspired from Bhattacharjee, 2012)

### **Step 1 – Literature Review**

In this phase, we evaluated the underlying literature with a primary goal of exploring and understanding the existing research situation. We deduced that there seemed to be a lack of clarity surrounding the CIO role in the academic literature. Some researchers had observed the role to be ambiguous with a lot of doubt cast over what the CIO was supposed to do in the organizational environment. Additionally there seemed to be limited perspectives from the practitioners themselves to assess these claims. We therefore carefully designed a research strategy (Section 3.1) which would help us to investigate the existing situation from an empirical perspective.

### **Step 2 - Formulating Question**

The next challenge was to formulate a research question which would be specifically be used to address the gap we had identified in the literature (Bhattacharjee, 2012). Our goal here was to delve in to the specific issue and examine the what, the why, and the how (Bhattacharjee, 2012). We based our question on the fact that there had not been empirical feedback from contemporary CIOs concerning their roles to satisfy the existing position of academic researchers in the field. We then designed an interview guide to facilitate the research process. We also made sure the guide corresponded with the design of our theoretical framework.

### **Step 3 - Theory**

In this step, we came up with theoretical factors to assess based upon the literature concerning the evolving role of the CIO today. These included analysis of the CIO role, CIO leadership factors and the CIO relationship with superiors and peers. A theoretical base was necessary in order to develop a research framework so as to answer the research question.

### **Step 3 - Research Design**

In this phase, we developed a theoretical framework which we used to achieve our goal of addressing the research question. We based the design of the framework on our research question, chosen research strategy and approach. The aim of our research design step was to help us to create a blueprint of the activities to take in order to satisfactorily answer the research question (Bhattacharjee, 2012)

### **Step 4 - Data Collection**

In this step, we determined which respondents to approach. We limited our choice of respondents to only those individuals who held the title of CIO in their job description. During the interviews, we encouraged our respondents to discuss their roles in the organizations using in-depth semi-structured interviews in order to obtain as much data as possible to help us address the research question.

### **Step 5 - Analysis**

The analysis phase consisted of the interview transcription process. The interviews were transcribed word by word, excluding pauses, laughter and other irrelevant sounds.

### **Step 6 - Result**

The analysis stage was subsequently followed by a discussion section which was used to evaluate the study's findings. Finally the study's research question is answered in detail before a decisive judgment is made.

## **3.4 Data Collection**

We decided to use in-depth semi-structured interviews as our main data collection method for several reasons. Mainly, respondents participating in semi-structured interviews are given the freedom to interact actively with the researcher because of its more conversational and open nature (Bhattacharjee, 2012). This means that the option to ask follow-up questions based on the nature of the conversation in the moment is possible. This open interaction during the interviews is highly beneficial for us since we seek to investigate the individual experiences of CIOs by asking questions about their own perception of their role.

A focus group is another form of interviewing (Bhattacharjee, 2012) and we were actually considering it in the beginning of the process. However, it was practically impossible for us to gather a reasonable number of CIOs in the same place and at the same time. This is very unfortunate because a focus group usually produces a high level of data accuracy (Recker, 2013), but it would still be very difficult to conduct such an interview.

Out of our six in-depth interviews, four of them were conducted over the phone. This method was the only viable option in most of the circumstances, mainly because of the geographical dispersal of our respondents. We mostly tried to arrange face-to-face interviews but it was very difficult to find the perfect CIO, and expect him/her to live reasonably close. We managed to conduct two face-to-face interviews overall.

## **3.5 Design of the Interview Guide**

The interview guide used during the interviews was based on the theoretical framework derived from the conducted literature review. The guide is divided into three themes and we used the same guide for each interview, but changes were possible as we sometimes changed the order of the questions due to the nature of the conversation. The main sections of the guide include the questions which are directly related to the theoretical framework established in the literature review.

However, before we asked questions relevant to the three themes, we started every interview by letting the respondents describe and introduce themselves. We previously identified in the literature review that it should not come as a surprise if CIOs have varied career histories and

therefore gave them a chance to describe their professional and educational background. The themes of the interview guide were the same as in our theoretical framework:

- *Theme 1: CIO Role* – The first theme is our biggest and includes questions about the CIO role, key responsibilities, activities during the day, what the future holds and challenges facing the CIO position. It also includes questions about if there is a lack of clarity surrounding the CIO role and if CIOs should stay active and updated on IT technology trends and such.
- *Theme 2: CIO Leadership* – The second theme includes questions about what type of leadership style they have, some difficult decisions they have had to make in the past, what makes a successful CIO and if they should and do consider themselves IT leaders or business leaders.
- *Theme 3: CIO Relationship with Superiors and Peers* – The third and final theme includes questions about the CIO relationship with the CEO and other C-level executives, if their superiors and peers play a role in the management of IT resources in the organization as well as if they recognize the potential and importance of IT in the same light as the CIO. All the interviews have been finalized with the respondent's thoughts on considering CIOs as potential candidates for the CEO position.

The interview guide is presented in Appendix 1.

### **3.6 Selection of Respondents**

Since the purpose of this study is to empirically assess how CIOs perceive their own role in organizations, it was of great importance to contact potential respondents with the right level of experience and knowledge. Our sample of respondents is therefore wide and varied as CIOs from different types of organizations in Sweden were interviewed. We also paid attention to the size of the company as we solely limited ourselves to large and medium sized organizations because here the CIO roles are more implicitly defined. We decided not to include participants who call themselves anything but “CIO” as their official title due to the inconsistent use of IT director and CIO, which may have different meanings depending on who you ask.

We conducted some initial interviews, both face-to-face and telephone, and decided afterwards not to use the collected material from those interviews. These decisions were mainly based on the quality of the interviews as we experienced that certain CIOs did not have the proper experience nor did they answer our questions sufficiently enough.

The interviewees, their industry of work, a description of their working experience and number of years as CIO as well as the data collection method used for each interview is presented in Table 3.1.

<i>Respondent</i>	<i>Industry</i>	<i>Experience</i>	<i>Data method</i>	<i>Org. Type</i>
R1	Professional services	About 2 years of experience as CIO, but 17 years in IT management.	Telephone	Multinational
R2	Daily newspaper	About 2 years of experience as CIO, but many more within the IT-field.	Face-to-face	Swedish
R3	IT business	About 10 years of experience as CIO.	Telephone	Nordic
R4	Telecommunications	About 30 years of experience as CIO in large, well-established organizations	Telephone	Swedish
R5	Manufacturing, engineering and services	About 15 years of experience as CIO and has received awards for his contributions.	Face-to-face	Swedish
R6	Governmental	About 7 years of experience as CIO and has also received awards for his contributions.	Telephone	Swedish

*Table 3.1 General information about the respondents*

## 3.7 Data Analysis

### 3.7.1 Transcribing the Interviews

Wellard and McKenna (2001) argue that transcription forms part of the data analysis process and should be clearly disclosed in the methodology of a research project. For this study, the interviews were audio-taped with both researchers present and then transcribed verbatim by one author immediately after each interview had been completed. This approach is strongly recommended because the interview is still fresh in the researcher's mind (Maykut and Morehouse, 1994). After each interview transcript had been transcribed, the second author checked the transcripts and differences were resolved through discussion. After the transcription process had been completed, the authors sent the transcribed interviews to each respective interview respondent to check and verify that the transcriptions had been done correctly, but also because most of the respondents requested it.

### 3.7.2 Analyzing the Data

The data analysis process for this study commenced during the early stages of the data collection process. According to Miles and Huberman (1994), this early involvement in the analysis phase helps the researcher to move back and forth between concept development and data collection. Additionally, according to Patton (2002), the choice of the content must be



justified by what the researcher wants to know. This was reflected in the relationship our interview guide (Appendix 1) had with our theoretical framework.

Given that interviews were our main source of data collection, it was necessary for us to code and reduce the interview transcriptions in order to reveal meanings within the text which were related to areas within our theoretical framework. We thus assigned codes based on the factors in our theoretical framework. To achieve quality and consistency, we revised our coding rules iteratively until sufficient coding consistency had been achieved. The factors used for the coding process are illustrated in Table 3.2 below:

<i>Factor</i>	<i>Description</i>	<i>Code</i>
CIO Role	The CIO perception of their roles and responsibilities	RC
CIO Leadership	The CIO as a strategic member of the senior leadership team	CL
Role Ambiguity	Lack of clarity of the CIO Role	RA
Challenges of the CIO Role	Challenges CIOs face while executing their role	CCR
The Successful CIO	Key factors CIOs need to succeed in their role	SC
CIO Leadership Profiles/Styles	The leadership profile/style CIO has	CLS
Business leader or IT-leader	The CIO as a business leader/IT-leader	BIL
Relationship with the CEO	The CIO's connection to the CEO	CRC
Relationship with Peers	The CIO's relationship with peers	CRP
CIO Expectations from Superiors and Peers	What superiors and peers expect from the CIO	ECSP

*Table 3.2 Factors for coding*

## 3.8 Research Quality

### 3.8.1 Validity

Validity describes whether the data collected really measure what the researcher set out to measure (Recker, 2013). Construct validity refers to how well you translated a concept, idea or behavior, that is a construct, in to a functioning and operating reality, the operationalization (Trochim, 2006). To establish construct validity in the context of this thesis, we linked our theoretical framework to our interview questions. In addition, our findings were all based on the key factors manifested in our theoretical framework.

Internal validity relates to how well the researcher has been able to provide substantiated evidence for the interpretations offered in qualitative data analysis (Recker, 2013). To achieve internal validity in this study, we coded the interview transcripts separately and then compared and combined our individual work in order to come up with a final set of codes. We also sent our transcribed interview transcripts to our respondents so that they could verify if the transcription process had been done properly. External validity concerns whether and how



much the findings from a study can be generalized to other settings (Recker, 2013, p. 94). In the context of this research study, external validity was achieved through the selection of interview respondents with diverse backgrounds who were holding the title of CIO in different professional fields. Through this, we were able to realize that the causal relationships of the CIO role in an industry such as media could be replicated in another industry such as professional services.

### 3.8.2 *Reliability*

In qualitative research, reliability can be thought of as the trustworthiness of the procedures and data generated (Stiles, 1993). Given that we used a qualitative method for this study, interviews were transcribed immediately after each respective interview had been completed in order to ensure technical accuracy in recording and transcribing and then coding was done separately by the study's authors before agreeing upon a final refined coding classification, a method we employed in order to achieve investigator triangulation (Seale, 1999; Thurmond 2001). We used more than one tool for recording purposes during all interviews to better augment reliability. We also used participants' comments in written accounts of our findings to help to increase reliability and readability.

### 3.8.3 *Bias*

Norris (1997) suggests that there is no standard solution to the elimination of error and bias because researchers being human are fallible and can make mistakes (Norris 1997). In order to minimize bias across this study, we tried to stay as neutral as possible. We throughout the scope of this research applied skepticism, commitment, detachment and concentration (Norris 1997) during the process to try and reduce as much as possible any subconscious occurrence of bias. We reviewed the thesis iteratively to try and locate blind spots and omissions, examine our own judgments and make the processes of research more open. We checked and re-checked our interview guide, coding mechanisms and interview transcripts to ensure that there was consistency and that all aspects within them directly related back to the research question in an unbiased manner.

### 3.8.4 *Ethical Considerations*

Since our main data collection method involves semi-structured interviews, it becomes of greater importance to address the ethical issues related to interviews (Bhattacharjee, 2012). We followed the ethical behaviors that are widely accepted within the scientific community as described by Bhattacharjee (2012):

- *Voluntary participation and harmlessness* – All of our respondents were made aware that their participation in our study was voluntary and that they had the freedom to withdraw from the study at any time without any unfavorable consequences. We

made this clear in the beginning of the interview process as well as when we contacted them.

- *Informed consent* – Apart from having the right to withdraw from the study at any time, it is also important that the respondents understand the nature and purpose of the research project. Informed consent is described by Burns (2000) as the most fundamental ethical principle involved in qualitative studies, which made it crucial for us to consider this. Before we asked any questions related to the study, a brief presentation of the topic was provided as well as our purpose.
- *Anonymity and confidentiality* – We asked every respondent if they would like to be anonymous or if they had any preferences on how they would like to be addressed in the final paper. We decided to keep all the respondents anonymous because we treated all empirical data with highest level of confidentiality. We have only revealed what type of industry the organization operates in. Additionally, we promised to send our transcriptions to the respondents who asked or required it before we finalized the material in the paper.
- *Disclosure* – We did provide some information about the purpose of our study before the interview started to make the respondent more aware of our situation and provide more elaborative answers. Before officially booking some of the interviews, the respondent asked us to provide some information about what types of questions they could expect, and this was not problematic for us. However, we have not provided any information about potential or expected outcomes as this can potentially bias responses (Bhattacharjee, 2012). Also, we have not sent out our questions to any respondents before the actual interview took place; we have only explained what types of questions they can expect.
- *Analysis and reporting* – Finally, we have considered analysis and reporting which means that we have provided the empirical data and our result the way it came to us from the very beginning. In other words, we did not alter or modify the results to suit the purpose or research question of our study.

## 4 Results

*The fourth chapter presents the results of the conducted interviews. As highlighted in chapter three, our interview questions were structured based on our theoretical framework. The areas of the research scope consist of the nine factors identified in the framework.*

### 4.1 Deposition of Empirical Findings

The empirical findings of this study are presented by describing the key topics that have emerged from the interview data derived from the three main themes of our theoretical framework. An analysis of the respondents' views on a given factor is discussed using the aid of applicable direct quotations drawn from the interview data. We decided to use this approach because we wanted to portray the CIOs' views using their own voice because we seek to investigate their own perception of their role. All empirical findings are referenced to the interview transcriptions using the appendix and line number. For example, a statement referenced as G:30 is referring to a statement made in Appendix G, line 30.

### 4.2 Theme 1 – CIO Role

This section is based on the first theme in the theoretical framework regarding the role of the CIO in the organization, role ambiguity and the challenges facing the CIO role. Thus, the results from the data collection process regarding these three factors are presented.

#### 4.2.1 The Role of the CIO in the Organization

It appeared from the interviews that all of the respondents described the CIO role and responsibilities differently, but they still had several points in common. All of the respondents agreed that the CIO role is not just technology-centric anymore and is still gradually evolving to something bigger and more significant. They emphasized the importance of understanding the business, and respondent R5 described the CIO role like this:

*“So, I mean to create awareness, to be able to see opportunities and sell the opportunities and very much be an enabler for the business to do better. That's very much the role of the CIO.” (F:8)*

Respondent R6 also describes the CIO role as an enabler of business:

*“The CIO role has actually evolved into a business enabler for how you could actually treat competitive advantages and that move has been enabled by the fact that IT is much more integrated in the core processes” (G:10)*

All of the respondents had something to say about the CIO role gradually evolving away from technology into business, but that did not necessarily indicate that technology was out of the picture. Respondent R4 believed that functional IT-systems and technologies were still part of

the CIO role, but it has been easier to handle. R4 believed this development is due to the involvement of technology and described it like this:

*“...that means that the technical issues have changed over the years. They have disappeared, well, I would not say disappeared but their influence on my agenda has diminished. They are less important than the business side, having good interaction with the business side...”* (E:12)

Respondent R1 did not completely agree with the statement that the CIO role is less technical at the moment, answering both yes and no to that claim. R1 says IT-demands are more complex than many of us think:

*“Of course you can buy services from outsourcing vendors but still, I just want to say that the complexity of IT is growing because the demand of IT is growing and if complexity is the exact same thing as technical, I am not sure but it's not that we can just lean back and then start driving new processes and then new types of innovation that will be important but it is a complex thing.”* (B:20)

Apart from being an enabler for the business to do better, respondent R5 described the CIO role as a bridge – a bridge between technology and business. He described the bridge between business and technology in the following way:

*“You must, as I said again, be a translator, the bridge, the person a little bit in between because you seldom find brilliant business people who are also brilliant system developers. I mean that's a unique combination. It doesn't exist basically”* (F:8)

When describing the CIO role, respondent R3 emphasized the “I” in the CIO title, saying the CIO is responsible for creating a secure way of handling information. Information security seems to be growing in importance as other respondent also emphasized its crucial part of the CIO role. Respondents R1 and R4 both agreed that information security is much more important today than it has ever been before. On the topic of information security, respondent R3 said the following:

*“...but you can't forget security because the cloud strategy is everywhere nowadays. You have to be very careful since you are responsible for all information as a CIO. It's not easy to foresee what will occur if you put everything in the cloud and the combination of having information stored on premise or in the cloud and if you trade some kind of information there between.”* (D:32)

As far as key responsibilities, it was obvious that all of the respondents believed the CIO had too many responsibilities. Table 4.1 below presents how the different respondents articulated the responsibilities of the CIO:

<i>Respondent</i>	<i>Key Responsibilities</i>
R1	Responsible for the IT organization, working with suppliers and solutions related to outsourcing, collaborate with key stakeholders, information security.
R2	Responsible for all kinds of systems throughout the organization, the computers, the phones, everything related to IT-related projects, issues and costs.
R3	Responsible for IT infrastructure, information security, application portfolio, processes that govern access roles towards systems, securing the assets in the IT/IS parts, network infrastructure.
R4	Responsible for technology, active in IT governance, IT infrastructure, delivery of IT (in-house and outsourced), IT strategy, IT architecture, running of IT projects, information security.
R5	Responsible for technical information, asking the correct (critical) questions, explore solutions, IT operations, IT infrastructure, IT governance and information security.
R6	Responsible for the IT infrastructure, IT-strategy, IT-related projects and other development projects, being and IT-specialist responsible for everything related to IT-related problems.

Figure 4.1 A description of the key responsibilities identified by the respondents

#### 4.2.2 Role Ambiguity

Throughout this study, it has been suggested several times that there is still a great lack of clarity surrounding the CIO role in the existing body of literature. It appeared from our conversations with the respondents that most of them understood this confusion. Respondent R1 believed people label themselves as CIOs too easily these days which makes it more difficult to understand what a CIO actually is:

*“But the problem is that it's a lot more fancy for everybody on a team to call themselves CIOs and IT Managers, so I think that there's been an inflation in the titling. There are too many people titling themselves as CIOs and want to increase the balance or whatever which don't really have that mandate and I can see that.” – (B:24)*

Respondent R3 believed the CIO role is not fixed by default which makes it difficult to understand what you are expected to do as a CIO. Respondent R4 definitely believed the CIO role was filled with uncertainty because of the dynamic nature of priorities within organizations. R4 also emphasized that it is especially unclear in the beginning:

*“I said dialogue and I think it's also a dynamic thing where the priorities change over the years or over the months sometimes so yeah, again it's stellar. I wouldn't say that there is one final description because this is depending on the situation, its depending on the company, its depending on especially the business strategy that has impact on the IT strategy of course so yes, from a starting point, it's very unclear. As a CIO, in order to be successful and survive, you have to clarify the role.” (E:36)*

All of the respondents emphasized that the role ambiguity of the CIO is partly an organizational problem as well. Respondent R2 said that it also depends on the psychology of

the CIO, meaning how they understand and communicate with the rest of the team. Respondent R6 does not think his individual role is unclear, but can understand the ambiguity from a general perspective:

*“...I think in general it could be unclear because as I said the CIO on one hand can be very technical and only responsible for infrastructure and then on the other side you have a CIO role which is really involved in the business development for the company. So the spectrum of the role could be quite very broad and that makes it of course unclear in some companies.” (G:30)*

Respondent R6 further explained that the biggest reason why his role is not unclear in any ways is because of his good executive management team.

#### 4.2.3 Challenges of the CIO Role

The respondents had varied perceptions about the challenges facing the CIO role as they seemed to prioritize and focus on different issues. Respondent R1 clearly stated that recruiting the right people in your IT organization is something every CIO should focus on:

*“Because if you don't have the good staff, you are not able to deliver what the business is expecting. So you need to have acceptance from top management in recruiting people from consultant backgrounds, program oriented, very professional in the way of delivering and so on.” (B:22)*

To make sure that your IT organization consists of highly skilled people was just one of the challenges facing the CIO role, according to respondent R1. The financial aspect was another challenge; to ensure that the IT organization will get the right budget to actually drive technology and not just view technology as something that costs less. Innovation was another challenge and this challenge was also emphasized by respondent R4 as one of the most significant ones. He elaborated on innovation in the following way:

*“How can you help the business innovate and that was really part of my job at [Company Name] then it disappeared a little bit in the 90s. [...] then let's say 2000 or roughly 98 or something, innovation came back again as a role for me in the CIO part. [...] it has more been a bit of different trends over the years while innovation has been more or less important” (E:8)*

Respondent R4 also mentioned security as another challenge facing the CIO role due to the fact that issues related to information security has increased significantly over the past 15 years. Respondent R5 provided an unorthodox answer saying there are two very common ways you can get fired as a CIO. He was part of a network with CIOs from other Swedish organizations and they typically met 3-4 times a year. Together, they identified two challenges CIOs need to watch out for:

*“...one is to take on a large SAP program that spans across the whole enterprise, the second is to initiate and drive a very large outsourcing project where you have a*



*very large owner of the IT organization [...] These are probably the two most difficult tasks you can take on. They are very different. The first one is very much business focused and the second one is very technology focused.” (F:24)*

Respondent R2 also provided an unorthodox answer as he believed the main challenges facing the CIO role were psychology and pedagogy, something that none of the other respondents mentioned. Respondent R6 believed his challenges were the same as other CIOs, even though he was positioned in a governmental organization. R6 was quick to mention time due to the fact that CIOs have a pretty busy schedule. He also talked about finding and understanding the right balance between business and technology, something that was widely said by our respondents.

### **4.3 Theme 2 – CIO Leadership**

This section is based on the second theme in the theoretical framework regarding the successful CIO, CIO leadership profiles/styles and whether CIOs should consider themselves business leaders or IT-leaders. Thus, the results from the data collection process regarding these three factors are presented.

#### *4.3.1 The Successful CIO*

All of the respondents mentioned that a strong understanding of the industry in which one works is considered to be a critical success factor in the CIO role. They all emphasized different leadership skills, competencies and capabilities necessary in order to be successful based on their experiences. Respondent R1 mentioned the bridge between technology and business as the most important leadership capability, similar to what respondent R5 said earlier about the CIO role. R1 also said that it is difficult to be a leader in whatever role you have. Respondent R5 emphasized building trust, credibility and helping the business in the prioritization process as the most important factors in order to be successful:

*“Building trust is what you have to do at the end of the day [...] and to be able to help the business in the prioritization process. They should prioritize. The CIO should not.” (F:32)*

Most of the respondents mentioned proper communication skills with people inside and outside the organization as another crucial leadership capability to possess. Respondent R4 talked about dialogue, respect and being a good communicator:

*“Have a good dialogue of what is the best agenda for the firm you work for and discuss it [...] Second, if you have decided something, you need to do it. If you have decided to say OK we can improve efficiency, then do that because that gives you respect. If you have a disturbance in the operations, fix it quick as hell because that's your impression [...] and thirdly which is the strongest area I would say still is being a good communicator.” (E:65)*

Respondent R3 agreed with being straightforward and always keeping your word. He described it like this:

*“...you have to be clear and deliver according to your promises otherwise the trust for you will decline, and definitely everybody remembers a failure for a long time but a successful delivery is forgotten in a week.” (D:52)*

Respondent R4 further explained that lack of communication skills and proper dialogue is probably the biggest reason why there is such a high CIO turnover rate, which was previously identified in the literature. According to R4, the CIO title could potentially mean “Career Is Over” if the CIO do not possess the proper skills to communicate with top management. Respondent R4 identified that six out of ten CIOs lose their jobs because of this:

*“...they [CIOs] lost because of lack of respect or understanding or that they didn't, hadn't aligned the agenda and weren't delivering towards the expectations that top management had.” (E:30)*

According to respondent R3, the key is to understand the business needs and aligning the business demands of the organization into IT/IS solutions. Respondent R6 also talked about understanding the business, especially in terms of understanding the possibilities that technology can add to the business. Respondent R2 said successful CIOs should be aware of how the team works and help the team when in need. R2 also mentioned that CIOs should be curious and not be afraid of challenges, which is something that respondent R6 agreed with.

#### 4.3.2 CIO Leadership Profiles/Styles

It appeared from the interviews that most of our respondents emphasized the importance of having an open leadership style – open for suggestions, new ideas, critique and feedback. Respondent R4 believed openness is the key because the CIO title is a complicated one and involves working with many different types of people. R4 did not support the idea of being too strict as he commented:

*“The good ideas, you won't get them if you give orders. If you say “do like this now!” You need to let people explore the possibilities and the risks themselves.” (E:57)*

Respondent R5 supported the idea of being straightforward, and explained that his leadership style is sometimes too straightforward. However, being honest and outspoken was crucial in your leadership style in order to gain trust from people, both inside and outside the organization. Respondent R1 described the ability to listen to what others have to say, even though you believe your answers are the best ones, as the most important characteristic in your leadership profile. However, R1 described this process as a very difficult one:

*“...but it's hard to be very coaching when you know, or at least believe, you have a lot of answers yourself so that's something that you constantly need to work on in*



*your leadership style [...] You need to be very careful in your leadership style so that these people feel that they are being listened to.” (B:38)*

Respondent R2 described his leadership style as very free, meaning he lets the team work with their responsibilities freely and is also open for suggestions, but is critical if the suggestions do not match his expectations. Respondent R6 described his leadership style as quite demanding and that he was a demanding leader in general. At the same time, R6 believed in the power of feedback and openly listening to what others have to say.

#### 4.3.3 *IT-leader or Business leader*

Similar to the responses regarding the CIO role and responsibilities, most of the respondents identified their leadership profile as more business-centric than technology-centric. However, respondent R5 provided an unorthodox answer compared to the other respondents:

*“That's a tricky one. No, I think I have gradually become more and more on the business side. But as you may understand from it, I have never had the intent to get rid of the other part. I still want to have a foot down. I would say 50-50.” (F:58)*

Respondent R6 considered himself primarily as a business leader because the business aspect of the leadership role seems to be the direction CIOs should aim for in the future. R6 described it like this:

*“I mean you have CIOs today that are really IT leaders. And if you won't have CIOs that are working with the business, developing the business, maybe you need to have some urgent kind of competence” (B:18)*

However, respondent R6 also emphasized the fact that CIOs should, in some shape or form, be IT-specialists as well because IT will always be part of the business. He believed there is a lot of unnecessary discussion in the industry about separating the two and described it in the following way:

*“...IT is part of the business. That doesn't change. So this is something that, I think the IT industry actually created by themselves but they talk about themselves as having a separate side of the business but you can't have that, you're a part of the business, not IT and the business, you're one company and you have to work together to meet your goals and objectives” (G:26)*

### 4.4 Theme 3 – CIO Relationship with Superiors and Peers

This last section is based on the third theme in the theoretical framework regarding the CIO relationship with the CEO, the CIO relationship with its peers and the expectations of the CIO from superiors and peers. Thus, the results from the data collection process regarding these three factors are presented.

#### 4.4.1 Relationship with the CEO

All of our respondents had varied perceptions about their relationship with their CEOs and we clearly observed across the interview spectrum that much of what had been reflected in the existing body of literature was also reflected in their diverse views. Respondent R6, like many of our respondents, was a member of the executive management team:

*“And then I also spend some time, because I'm part of the executive management team at [Company Name] and then therefore add about 10% of my time taking part in the things that we do as a management team so it could be that visiting some stores etcetera or it could be taking part in some official things such as management meetings etcetera” (G:14)*

Respondent R6 proceeded to emphasize that his good relationship with the CEO provided him with more opportunities to demonstrate his autonomy and relevance in the organization:

*“I think we have the right balance between us and she's also demanding and interested that I really understand also the need and the opportunities that technology adds to the business but the thing is that she gives a lot of responsibilities to me as a leader so I think we have a very good relationship” (G:60)*

Respondent R4 stated that the relationship differed quite a lot depending on the personality of the CEO going on to stress that the best relations in his experience were those with CEOs who understood quite a bit about IT as they possessed a distinct ability to identify what was best for the business. R4 explained it like this:

*“I would say the best relations I've had is with people who understand quite a bit about IT. They understand some of the facilities and some of the restrictions, yes. But they also could in some way help with the business perspective and we were a good match you could say where they provided input in terms of this is useful for the business” (E:69)*

Respondent R5 viewed his relationship with the CEO as rather good, however was quick to admit that in spite of this, his CEO had no interest in the IT aspect of the business. He likened his current CEO's expectation of IT to that of an entity which is expected to just work in the organization. However, he acknowledged that his CEO had been there to support him during times he needed to drive critical change processes across the organization:

*“...we were presenting why it is important to do it [huge costly IT program], what are the potential gains, today's pain-point, and actual benefits. And he passed the question around the table at the end of that meeting. People were hesitating, saying that but this means we have to take RnD resources away from your product development to work on fixing the old neglected areas. And then he concluded it all in one simple sentence. I'm sorry guys but we have to do this, so I mean when I really needed him, he was there...” (F:64)*

Respondent R3 perceived his relationship with his CEO as one which was based on hierarchical levels with him positioned one level below the CEO. His argument was that this scenario arose simply because IT/IS was not the core of the business and as such, the CEO directed more trajectories towards the organization's customers and the market. R3 elaborated in the following way:

*"...internal IT/IS is not the key thing in the company I work for. It's the delivery to our customers so that's why I do not report to the CEO because his main focus is the market. You see what I mean. So I'm always in the staff group on a central level. So it's one level between me and the CEO." (D:22)*

Respondent R2 directly reported to the CEO and described his relationship with the CEO as professional and more process based. He stated that communication played a vital role in the relationship given that key issues required a communication process between all stakeholders in the company:

*"So this relationship is not unusual, it's a process between me, my personnel, the CEO, or perhaps a stakeholder out in the organization. So it's again, communication, moving the process forward." (C:102)*

All of our CIO respondents were able to demonstrate that their relationship with their CEOs was based on a sense of mutual respect and support. However, an important observation to make is that the intensity of these relationships was to a large extent influenced by the level of autonomy and influence each CIO held in their respective organizations. Respondents R1, R2, R4, and R5 were for example largely able to demonstrate that their responsibilities leaned towards generating enterprise value and governing IT alongside communication through regular meetings with the CEO. Respondents R1, R4, R5 and R6 also emphasized the value of the IT governance board and thus were able to show that the board was important for governance and regulatory needs in the organization. Respondent R4 particularly explained that the board was a very important aspect in guiding the way he approached his job:

*"I would say IT governance is still very high on the top because, I can give you an example we had, when I joined [Company Name], they implemented an IT Governance board and we had meetings every month which was a really good thing to have because we discussed all matters and over 9 years, we had about 110 meetings or something and without that I would have been lost, so having the right governance or the right platforms I would say is still important." (F:30)*

Respondent R3 particularly seemed to have been pushed back towards a role where his responsibilities mainly addressed the basic needs of the organization which was a job mostly focused on the internal IT operations of the organization. This resulted in not having a direct relationship with the CEO because the CEO's role particularly required that he focus more on the business customers and the market. In addition, the fact that IT/IS was not the key driver of his organization and was imperatively more of a supporting ingredient also contributed to this. Respondent R5 also acknowledged that despite the fact that his role had shifted towards

the business side handling aspects such as governance and cost based efficiency done in meetings with higher level management including the CEO, the technology aspect still remained important

#### 4.4.2 Relationship with Peers

It appeared that each CIO had a uniquely distinct relationship with their peers. The structure of the different organizations within which each CIO worked seemed to largely influence this situation. Respondents R1 and R5 both reported to the CFO. Respondent R5 provided us with more insight into why that was the case. He put it succinctly:

*“And of course in those days, IT applications were more focused on what you refer to as back office type of things, very much finance focused and it was not a coincidence that we who studied finance in those days got in to this. It's not a coincidence that many CIOs report to CFOs because that is where it all started so it is basically owned by heritage” (F:4)*

It was apparent that all our CIO respondents considered networking with peers as a key important element to support their function. Respondent R6 stated that peers were important because they helped in the planning process and also the implementation of key annual decisions addressing projects:

*“They always play a part. As I said, we do our planning together and we then also, for example when we decide on the kind of development projects we should work with for a year” (G:74)*

As has been stated in this study, today's CIO is basically the only senior executive strategically positioned to have their peers as their customers in the organization because of the fact that CIOs and the IT team are enablers to the entire company. Respondent R6 acknowledged this statement and argued like this:

*“The CIO role has actually evolved to become a business enabler for how you could actually treat competitive advantages and that move has been enabled by the fact that IT is much more integrated in the core processes” (G:10)*

These sentiments were reflected in the views of respondent R5 who acknowledged this aspect as well:

*“IT has a historical background as technology and business in both companies, not particularly technology factors; business factors. So, I mean to create awareness, to be able to see opportunities and sell the opportunities and very much be an enabler for the business to do better” (F:8)*

Respondent R4 emphasized that it was important to have a dialogue with peers and discuss important areas so as to make it easier to make decisions, and share through collaborations as well as foster communication which would enhance the smooth running of projects:

*“the key to this is you ought to have a dialogue in your organization within IT of course but also with your peers I mean the COOs, the CFO's, marketing guys and so forth and discuss [...] I would say in terms of communicating especially when a project is running. That's very good in fact so you should communicate, not entirely of course but also especially externally in terms of with your peers in the organization and that will be improved [...] having your network which constitutes a couple of peers because if you could solve every question by yourself, you would not have time to do that and you would be lost. You need to have that good input from others” (E:18; 65; 44)*

Respondent R6 also believed in communication internally with other management heads in order to address the internal company issues as well as analyze also what was happening to the business entity in the world around. Respondent R1 also observed that the COO played a very important role in the management of IT especially when it came to financing IT related decisions because he was the top manager as far as the IT portfolio was concerned in his organization.

#### 4.4.3 Expectations of the CIO from Superiors and Peers

It was apparent from our respondents' feedback that the expectations of their superiors and peers varied depending on different factors. Respondent R2 emphasized that most expectations of him included an expectation to take responsibility for changes and delays in project delivery. He also stated that he was fully in charge of most of the company's projects which were concerned with IT:

*“I wouldn't say blamed but I am responsible so you could use the word blame. Perhaps sometimes we make mistakes of course so then we should be blamed but anyway either way if I can't do something or cannot do something immediately about. It's still my responsibility to make things change in one way or another in a fast way or a more patient way that might take months but still it's my responsibility so in a way yes I can be blamed but anyway, it's my responsibility” (C:66)*

Respondent R5 stated that most of his peers and superiors sometimes had unrealistic views on aspects to do with timeframes, time schedules and costs:

*“...I mean they have unrealistic views on, unrealistic views on timeframes, time schedules and costs. More than one and too frequently, they are asking for a solution, technical solution when the problem is not the existing solution itself. The problem is the poor business processes and a poor discipline to live according to the poor business processes” (F:52)*

Respondent R6 emphasized that his CEO had good balance in terms of her expectations of him. He acknowledged that this was because she understood the importance and the possibilities of IT which he attributed to be a result of their open relationship:

*“...I would say we have more less the same view on it. She's very open and I think*

*she understands the importance and the possibilities of IT...” (G:66)*

Respondent R5 further acknowledged that his peers sometimes had overblown expectations of him especially when they expected issues to progress much faster. Respondent R4 appeared to take a different opinion about the CEOs he had worked for over the years. He noted that their expectations varied depending on the work style of the different CEO's with whom he worked with. He stated that it ranged from one of trust to one that necessitated regular communication because one of his CEO's had been very detail oriented. Respondent R4 then stated that the expectations of other C-Level executives of him very much differed depending on the level of interest and also the area in which they worked.

## 5 Discussion

*The fifth chapter provides a discussion of the empirical data in relation to the literature review. The discussion relates the findings to our theoretical framework and will address each underlying factor in the framework and will thus have the same structure as the chapter before.*

### 5.1 CIO Role

This section is based on the first theme in the theoretical framework regarding the role of the CIO in the organization, role ambiguity and the challenges facing the CIO role. Thus, the discussion which is based on the findings from the empirical data in relation to the theory section is presented.

#### 5.1.1 *The Role of the CIO in the Organization*

One of the first and main things we identified in the academic literature regarding the role and responsibilities of the CIO was the drastic changes they have undergone over the past decades, and how the CIO role was bound to evolve from the very beginning. Most of our respondents have not been CIOs long enough to experience this evolution themselves, but we were lucky enough to have one respondent (R4) who began his journey as a CIO before the title itself was introduced. Respondent R4 completely agrees with the claim regarding the drastic changes and says he never expected the CIO role to stay static. Interestingly, he started off as a business unit CIO, responsible for aligning the IT investment portfolio with the business unit's strategy in one of many organizations he worked for. He acknowledged that organizations had very different perceptions of what constitutes a CIO back in the day, and this confusion was also identified by Peppard et al. (2009) who believed the unclear distinction between corporate and business unit CIOs, was one of the reasons why the CIO role is and has been difficult to define. He also acknowledged, similar to the literature and our other respondents that the main reason why the CIO role has been changing so much is because IT has drastically changed everything around us. Our empirical findings indicate that the role of IT in organizations seems to be the key factor of whether the CIO role will grow or decline in terms of significance, and this obviously makes the CIO role more important today than it has ever been before.

Throughout the literature review, we identified that the CIO role has gradually been moving away from a focus on technology to a focus on business performance, and CIOs today are expected to make significant contributions to the overall strategy and competitiveness of the organization. It appears from our empirical findings that this claim seems to be true. All of the respondents agree that the CIO role constitutes much more than solely a focus on technology as they emphasized the importance for any CIO to understand their specific business and industry. Feeny and Willcocks (1998) identified "Business Systems Thinking", which means defining the business processes that technology makes possible, as one the nine IS capabilities



that CIOs needed in order to survive. Based on our empirical data, it appears that “Business Systems Thinking” seems to be the most important IS capability because several of the respondents described the CIO role as an enabler of business today.

We previously argued in the literature review that practically all research in recent years agreed that there has been an increased amount of accountabilities and responsibilities associated with the CIO role, and this statement was clearly confirmed by all of our respondents. Respondent R3 was critical of the amount of responsibilities incorporated into his role, similar to what Beatty et al. (2005) believed who described the situation as “seemingly overwhelming for one individual to handle”. Interestingly enough, respondent R3 was the only respondent who actually seemed unsatisfied with his amount of responsibilities to the point where he actually wanted the CIO role to be less important and significant than what it is today, because it is simply too much. All of the other respondents had something to say about being assigned with too many responsibilities in their respective organizations, but none of them seemed to be bothered about it. It appeared from the interviews that they just accepted it as part of the CIO role.

Looking at the study conducted by Beatty et al. (2005), the opinion of respondent R3 probably should not come as a surprise because the authors believe there are too many CIOs who are finding it difficult to balance their two key roles as technician and businessperson successfully. The authors propose that the typical responsibilities of the CIO should be “reallocated” to both the CIO and the CTO, and we asked respondent R3 what he thought about this. He basically responded by saying that they work hand-in-hand and that the organization cannot put everything in terms of technology and business in the hands of the CIO alone.

Despite the fact that all of the respondents recognized the busy position they are currently in charge of, respondent R6 did not necessarily regard this as something negative. Due to the large amount of responsibilities incorporated into the CIO role, respondent R6 has more insight into what is happening across different parts of the organization because IT is integrated in everything they do. He believed the CIO was unique in this regard and described the situation as motivating and stimulating. This is similar to what McLean and Smits (2012) argued in their study as they recognized the increased importance placed into the CIO role which ultimately needs to result in additional roles and responsibilities.

### *5.1.2 Role Ambiguity*

As described in the literature review and throughout the thesis, Peppard et al. (2009) described the CIO role as ambiguous, and this claim has been central to our study. We identified a lack of clarity surrounding the CIO role in the academic literature, and based on the findings of the empirical data, this claim seems to be accurate. Peppard et al. (2009) identified four key reasons for understanding the causes of the CIO role ambiguity, and the answers from our respondents regarding the lack of clarity matched some of the reasons to



some extent. The four key reasons followed by whether the respondent acknowledged them or not are described as follows:

- *Reason 1: Unclear Distinction Between Corporate and Business Unit CIOs* – Most of our respondents did not acknowledge this reason in our interviews. The only respondent who actually mentioned something about it was respondent R4 who started his career as a business unit CIO. However, he did not discuss anything about corporate CIOs and whether there is an unclear distinction between the two. Although he did mention that the CIO title has evolved over the years and that organizations had very different perceptions of what constitutes a CIO when he started. This remark was also mentioned by other respondents.
- *Reason 2: Inconsistent Use of IT Director and CIO Titles* – This reason was definitely acknowledged by the respondents. Peppard et al. (2009) argues that there are important differences between the two in terms of role and responsibilities, something that respondent R1 and R6 also confirmed. R1 believed an IT manager could be on the verge of becoming a CIO, but did not possess the appropriate mandate yet to fully have that title. He also explained that people label themselves as CIOs too easily these days which makes it difficult to have an appropriate definition of the title. Respondent R3 said smaller organizations should use the term IT manager and not CIO.
- *Reason 3: Mismatch Between Expectations and Performance Metrics* – Based on our empirical findings, this reason seems to mainly be an organizational problem. Most of our respondents were aware of how their performance was assessed in their respective organizations because they had strategic plans, transformation agendas and defined parameters set up which ultimately measured their individual performances. However, respondent R4 did mention that he was part of a survey a couple of years back where the researchers asked CEO's if they know what to expect from their CIO, and the result showed that 71% of the CEO's did not know what to expect from their CIOs. This is a very high number and will be further discussed in section 5.3.3.
- *Reason 4: Outdated View of the CIO Role* – Peppard et al. (2009) argues that CEOs seem to have an outdated view of the CIO role, and this reason can once again be connected to the CEO expectations of the CIO role. Gupta (1991) identified that CEOs expect too much from their CIOs, especially in terms of solving IT-related problems in a short amount of time. Respondent R5 and R6 could relate to this, saying their CEOs have unrealistic views on timeframes, schedules and costs.

Based on the responses from our respondents, it appears that they are leaning more towards reason two and three. However, they did mention other reasons as well such as the broad spectrum of the role which have been discussed thoroughly in the literature as well as organizational factors. Our results also indicate that clarifying the role seems to be crucial for any CIO in order to do a successful job. Respondent R4 explained it best by saying “As a CIO, in order to be successful and survive, you have to clarify the role” (E:36).

### 5.1.3 Challenges of the CIO Role

When identifying and analyzing relevant challenges facing the CIO role, the literature and the respondents seemed to agree more than disagree. McLean and Smits (2012) emphasized the importance of coping with innovation and efficiency due to new demands placed on the CIO position. They believe these demands are a result of organizations becoming more reliant on innovations in IT to solve their problems of competitiveness and efficiency. Most of our respondents, R1 and R4 in particular, are completely in line with this statement, citing innovations as a crucial challenge for any CIO and has remained so for a long time, and will continue to be one in the future as well. Based on our findings, there is clearly a connection between demands and challenges as CIOs who face more demands are left with more challenges and this is also supported by Broadbent and Kitzis (2005) who recognize that the demands on CIOs are changing in scope and speed which makes it crucial for CIOs to adapt in order to survive. This is especially applicable for newly appointed CIOs as two of our respondents have not been CIOs in their respective organizations for more than two years.

Broadbent and Kitzis (2005) also cited that if CIOs are not growing and changing as the enterprise changes, then they are not keeping up which ultimately means they might be on their way to becoming an ex-CIO. This is in line with our answer from respondent R3 who believed one major challenge of the CIO role is to adapt when the organizations is going through changes, like creating a new solution for example. The challenges that arise from changes in organizations are more difficult in larger enterprises and that makes the CIO position greater in importance, because the CIO has the responsibility of getting the organization ready to adapt to these changes. Respondent R3 deals with this particular challenge by building internal networks with stakeholders that understand what he needs. Communication

## 5.2 CIO Leadership

This section is based on the second theme in the theoretical framework regarding the successful CIO, CIO leadership profiles/styles and whether CIOs should consider themselves business leaders or IT-leaders. Thus, the discussion which is based on the findings from the empirical data in relation to the theory section is presented.

### 5.2.1 The Successful CIO

There are many similarities between how the literature and the respondents perceived a successful CIO, but we also managed to identify some differences. Remenyi et al. (2005) argued that technical competence, knowledge of ICT trends, corporate strategy competence and appropriate qualification mix are the four most important skills CIOs ought to possess in order to be successful. All of the respondents considered knowledge of ICT trends to be important as all of them tried to stay as updated on IT technology trends as they possibly could. They believed CIOs needed to be curious and therefore most of them read IT-

magazines and blogs as well as having frequent discussions with relevant people around them about what direction the industry seems to be moving towards. As far as technical competence, all of them recognized in some shape or form that this is obviously important because the CIO is responsible for aspects concerning IT in their organizations, but many of them emphasized the business aspect more than the technical competence. They described the relationship between technology and business as a bridge, and that combination was regarded as the most important leadership capability for a CIO, similar to what Peppard (2009) argued. Another important critical success factor was strong communication skills, described by Stephens and Loughman (1994) as probably the most important skill that CIOs need to master. Respondent R4 argued that lack of communication skills is probably the biggest reason why there is such a high CIO turnover rate which confirms how important it is to communicate appropriately.

Respondent R2 was the only one in our study who mentioned anything about pedagogy and psychology so this was interesting to us. He argued that explaining to other people why they are doing changes and how the systems are working are big parts of his role. Being an effective communicator is especially important for the CIO as identified by Stephens and Loughman (1994), because conversations with CIOs have a tendency to become too technical. As a result, it makes sense to focus on pedagogy because it concerns the study and practice of how to teach most effectively, which is something respondent R2 was responsible for.

We also noticed that our respondents had varied career histories, both professionally and academically and this is not surprising when analyzing the profiles of successful CIOs as identified by Cash and Pearlson (2004). As explained earlier, we started the interviews by letting the respondents explain their backgrounds in order to test the theory argued by Cash and Pearlson (2004) and it appears to be accurate. Our respondents had backgrounds within journalism, communication, engineering, physics, economics, business as well as IT. Many of them had several years of working experience outside of IT, such as within the automotive industry and many more.

### *5.2.2 CIO Leadership Profiles/Styles*

None of the respondents seemed to disagree with the fact that strategic leadership is crucial for any CIO and ultimately affects the ability of their organization to derive business value from IT, which was supported by Preston et al. (2008). We previously explained in the literature review that the authors identified four CIO leadership profiles (IT Advisor, IT Orchestrator, IT Mechanic and IT Laggard) and the typical characteristics of CIOs that match each of these profiles. The findings of the empirical data reveal that most of our respondents should characterize themselves as IT Orchestrators, which also scored the highest in the sample created by the authors. However, some of our respondents are more likely to be considered as IT Advisors when analyzing their individual CIO leadership profiles.

Respondent R1, R2, R4 and R6 are more likely to be considered as IT Orchestrators because of their position and relationships with other C-level executives, mainly the CEO. All of them report directly to the CEO and are formal members of the top management team. Based on their position in their respective organizations, they are highly influential in the decision making process because of their high level of decision-making authority. They are well respected because of their dedication of resources to IT and execution of their strategic IT visions and plans.

Respondent R3 and R5 are more likely to be considered as IT Advisors because they do not have the same level of decision making authority as the other respondents in our study. Respondent R3 did not report directly to the CEO which ultimately affected his relationship with other superiors, while respondent R5 had a similar relationship with his CEO, but also admitted that his CEO had no interest in the IT aspect of the business. Both of the respondents explained that IT did not have that core position in their organizations and this ultimately affected their decision-making authority. This is supported by Preston et al. (2008) who believed that IT Advisors had limited decision-making authority, but they were still highly capable leaders which both of the respondents were.

None of the respondents were likely to be considered as IT Mechanics or IT Laggards because they still did possess proper leadership skills to make some form of transformative contribution to the firm. Preston et al. (2008) believed IT Mechanics and IT Laggards scored the lowest in all characteristics due to their low level of both strategic effectiveness and strategic decision-making authority.

### 5.2.3 *Business leader or IT-leader*

The empirical data reveals that most of our respondents consider themselves business leaders first and foremost as they believe the business aspect of CIO leadership is a greater part of their role in comparison to the technology aspects, as argued and identified by Watson et al. (2001). All of the respondents agreed that the business side of CIO leadership will be of greater importance as we move further into the digital era. We previously described in the literature review in a study conducted by (Peppard, 2009) that every CIO should pose the following question to him/herself: “*are you a business leader with special responsibility for IT or are you an IT-leader who’s delivering to a business?*” (Peppard, 2009, p. 5). It is clear from our findings that the respondents mostly consider themselves as business leaders with a special responsibility for IT. The only respondent who answered the question differently was respondent R5 who said 50-50, but still emphasized that his leadership role has gradually been moving towards the business side over the years.

Despite the fact that respondent R6 considered himself as a business leader primarily, he still believed that CIOs needed to be IT-specialists in some shape or form. He disagreed with the fact that IT should be separated from the business and believed there is a lot of unnecessary discussion in the industry about this subject. IT should be part of the business, not IT and the

business. Karimi et al. (2001) argued that CIOs are not IT-specialist, they are general business managers and they should consider themselves and be perceived by others as corporate officers. Although R6 did recognize that CIOs who primarily consider themselves as IT-leaders do not have the appropriate competence to develop the business and organizations must therefore bring some urgent kind of competence.

### **5.3 CIO Relationship with Superiors and Peers**

This section is based on the third theme in the theoretical framework regarding the CIO relationship with the CEO, the peers and the expectations of the CIO from both superiors and peers. Thus, the discussion which is based on the findings from the empirical data in relation to the theory section is presented.

#### *5.3.1 Relationship with the CEO*

As portrayed in the literature, the CIO role underwent an important evolution starting in the 1990's (Lieberman, 2010). This trend was first witnessed in larger organizations where the CIO started to report directly to the CEO. The shift resulted into the creation of a new breed of CIOs, an influential executive who is included at the executive management table (Lieberman, 2010). Today this trend is still apparent. Three of our interview respondents R2, R4, and R6 all directly reported to the CEO in their respective organizations. It was also evident that all three respondents seemed to have profound insights about matters concerning the business aspect of their respective organizations, a characteristic which can be attributed to the mutually exclusive relationship they all shared with the CEO. Respondents R1 and R5 both believed that the true CIO was that CIO who had some kind of senior executive responsibility alongside top management. Respondent R6 particularly explained that the good relationship he shared with his CEO stemmed from the fact that she recognized the importance and possibilities of IT for the business and thus accorded him with more leadership responsibilities. Respondent R4 stressed that some of the CEOs he had worked with had sometimes trusted him to make crucial business decisions which were rather risky and could have had a negative impact on their jobs. There is a similarity here with the findings of Smith and McKeen (2012) who argue that a strong CIO-CEO relationship based on mutual respect and support is crucial for any organization to successfully deliver business value.

That being said, the contradictions observed in other bodies of literature such as Chun and Mooney (2009) are not to be underestimated as they have also had an impact on the CIO's relationship with the CEO. Chun and Mooney (2009) argue that the idea of having a technology executive was not fully appreciated by the CEO because they felt that the CIO was responsible for a function that consumed major resources, but did not offer enough proof of value. Respondent R3 particularly appeared to show that this claim seemed to be true. Respondent R3 stated that IT/IS was not the core driver of the business function at his company. Because of this, he did not report directly to the CEO. Respondent R3 as a result

was hierarchically ranked one level below the CEO. R3 also considered himself to be a back office executive and continued to explain that this state of affairs was for the most part not right for someone who held the title of CIO. This is also in line with the findings of Gupta (1991) that the outdated view of IT importance by CEOs' negatively affected the CIO-CEO relationship. Under this key area, Gupta (1991) identified that many CEO's are skeptical and unfamiliar with the nature and capabilities of IT, a situation which made it difficult for the CIO to prove him/herself. These findings are further supported by the views of respondent R5 who acknowledged that his current CEO was not interested in IT and did not largely recognize its importance in the same light. Respondent R5 added that IT to his CEO meant simply another function which was expected to just work and ought to be relegated to the back office type of processes.

These complementary perspectives depicted in the literature and the empirical data appear to actualize the claims of Gottschalk (2007) who believed that CIOs visualized their own roles and contributions in a more positive light, whereas CEOs tended to be more critical. The situation in the end affected how both sides viewed the relationship between business and information (Gottschalk, 2007). What however remains clear is that all CIOs work for a CEO, either directly or indirectly resulting in a causal relationship which is more or less symbiotic (Smith and McKeen, 2012). All our respondents had a binding relationship with their respective CEO in one way or another in the organizational hierarchy.

### 5.3.2 *Relationship with Peers*

Earl and Feeny (1995) argue that it is important for CIOs to recognize the importance of establishing and maintaining executive relationships in order to successfully implement initiatives in the organization. Based on the empirical data, respondents R1, R3 and R5 had a different reporting structure compared to the other CIO respondents. Respondent R1 reported to the COO. Respondent R3 in contrast had the task of balancing his reporting responsibilities between his Swedish management and also the group CIO in the company headquarters. Respondent R5 on the other hand reported to the CFO. From this we can deduce that the reporting structure for the CIO varies from company to company. Kwak (2001) identified technology background of the CIO's peers as the most important factor in determining whether the CIO's influencing tactics would be successful. Looking at the empirical data, the validity of his claims seem to be true because the contrasting reporting structures present a challenge for the CIO in terms of influencing decision making. Respondent R3 for example, he is tasked with a double role reporting to a CEO who views him as an IT Advisor relegated to the back office and a group CIO who sees him as an influential player on both the business side and the IT side. More importantly, respondent R3 also regards himself as present at all levels, being able to think ahead about everything in the company.

The disparity in reporting also means that respective CIOs are expected to forge relationships with their direct superiors who are also their peers as seen in the hierarchical model (see Figure 2.3) showing the CIO in relation to superiors, peers and subordinates. Interestingly, the



CTO position seems to be in decline because out of all the companies we interviewed, only Respondent R3 said that his company had a functioning CTO who was tasked with investigating the technology side of the business and then presented his recommendations to the CIO. The CIO then compiled these recommendations in to business processes and then tried to direct the commercial part of the business in line with what the CTO had proposed. This can be aligned to the findings of Schubert (2005) who claims that the CIO needs to promote collaborations with peers in order to open new opportunities for either side. Schubert (2005) also argues that the CIO is probably the only senior executive whose peers are his/her customers in the organization because of the fact that CIOs and the IT team are enablers of the company. Respondent R5 more so agreed with this claim when he stated that the CIO is very much an enabler of the company and should be able to see and sell opportunities. Respondent R6 acknowledged it as well by stating that the CIO is important as an enabler working with competitive advantage in companies and being a driver of IT in organizational management.

Another peer relationship presented in the literature is the peer relationship between CIOs and external peer CIOs (see Figure 2.3). This seemed to correspond with our empirical findings. A number of our respondents said that they associated with external peer CIOs for the purpose of knowledge sharing and self-development. Respondent R5 stressed the importance of networks and said that he was part of a network which included other CIOs from other large Swedish organizations which involved sharing ideas and challenges. Respondent R4 acknowledged that help from other CIO peers was necessary otherwise one would be lost. He also said he has always been active in a couple of networks.

### *5.3.3 Expectations of the CIO from Superiors and Peers*

As depicted in the literature, the expectations of the CIO from superiors and peers vary from organization to organization. The comparisons we made between the literature and the empirical data led us to realize that some of the expectations sometimes exceeded the CIOs own expectations whereas other comparisons appeared to project an ideal balance. In some instances however, the mismatch between performance metrics and expectations (see Section 5.1.2) appeared to manifest. Respondent R3 for example stated that his CEO saw him as an IT support person and often asked him things about his laptop on that level, something he felt did not directly relate to his job role, whereas the others in the organization saw him in a different way. Respondent R4 (see Section 5.1.2) revealed that a research survey some years ago had revealed that 71% of the CEO's did not know what to expect from their CIOs. This can be aligned to the findings of Lieberman (2010) and Gupta (1991) also discussed in the literature who discuss these discrepancies in expectation.

Respondent R5 stated that his CEO was not interested in IT although supported him whenever the need arose. Respondent R6 and R2 in contrast felt that they knew what was expected of them and their roles were clearly defined. These scenarios portray the inconsistencies in role demands of the CIO, something Chun and Mooney (2009) highlight in their research.

While evaluating the model presented by Smith and McKeen (2012) with the empirical data, (see Figure 2.2), we discovered that all CIOs have to fulfill a number of expectations and needs in the organization which include basic needs, regulatory needs, governance needs and enterprise user needs. These are expectations that the CEO has of the CIO. Under the first two requirements, the CEO adapts a role of regulator balancing the capital and operating costs. The CIO on the other hand takes the role of executor ensuring that the IT is in place and all regulations concerning the business are adhered to. Respondent R5 described this adequately referring to the CIO as the bridge and the translator between the technology and the business. Respondent R2 also presented himself as a bridge managing the different demands from project departments about matters concerning cost based efficiency and managing the expectations of his CEO. Respondent R1 described to us that he worked in four streams; with vendors including suppliers, sourcing and finally management and tech management. Respondent R1 thus appeared to adapt the role of an enterprise tactician having to manage multiple expectations of different stakeholders in order to deliver value. We see however that there is an evident contrast with the expectations of respondent R3 who appears to have been relegated more to a role of IT Advisor (see Figure 2.1) in the eyes of his CEO (Preston et al., 2008). As observers, this is interesting because at the same time respondent R3 appears to have the most demanding reporting schedule out of all the CIOs interviewed for this study and also described his role as one that involved having to be present at all levels. This is also an aspect respondent R6 touched upon when he described the CIO as an enabler.

What we noted to be interesting was that the demands and expectations from peers seemed to be much less as compared to the demands from the CEO. We noted that in company structures where the CIO reported to a peer such as the CFO or the COO, there appeared to be more teamwork demonstrated at this level reflected in regular governance meetings and discussions. We also observed that the level of autonomy and ability of the CIO to influence decision making seemed to be much less in these organizational structures. It also appeared that CIOs in these structures seemed to have limited knowledge of the core business processes in their organizations for example respondent R5 knew that the company key business driver was liquids. However he could not recommend the CIO as a potential candidate for CEO because he felt that the CIO did not have that much knowledge of the company products compared to a product manager in the products department. Respondent R3 also stated that because his role did not necessitate that he be involved in the core business, he considered himself to be more of an internal and back office executive.



## 6 Conclusion

*The sixth and final chapter presents the findings that have emerged from this study. We briefly discuss the objective of the thesis as well as the problem we are addressing, followed by the answer to the research question we presented in the beginning. The chapter is finalized with a suggestion for further research.*

As we explained in the beginning of this thesis, the aim of this study was to explore the role of the CIO with a specific focus on the perception that the CIOs have on their own role and responsibilities. We identified and recognized the need to clarify the perception of the CIO role using empirical data retrieved from practicing CIOs themselves, due to the lack of clarity identified in the academic literature combined with the ambiguous description surrounding the CIO role which has ultimately resulted in uncertainty about the expectations, behaviors and consequences associated with the CIO role. Thus, we have conducted in depth, semi structured interviews with six CIOs from Sweden with the purpose of answering the following question:

- *How do Chief Information Officers perceive their own role and contributions within their organizations?*

The empirical findings led to the conclusion that CIOs perceive their role as business enablers mainly responsible for identifying and guiding the most suited IT-related solutions that support the overall business objectives of the organization. In order to achieve this, the CIOs believe they must possess a deep understanding of the organization and its business objectives as this is more important to the CIO role than deep technical knowledge. CIOs believe technology-related skills are required to understand the job, but the main role of the CIO is to understand the possibilities that technology can add to the business. The CIOs view themselves as corporate executives with some level of decision-making authority, depending on the strategic goals and the position of IT within that particular organization. They consider themselves different from IT Directors or IT Managers and believe there are significant differences between the two in terms of positioning in the organization and the role they have to play.

The CIOs believe that to be successful in their role, one must primarily possess strong leadership competencies and proper communication skills. A proper, continuous dialogue with superiors, peers and members of your team is required of the CIO, as well as keeping your word and delivering on your promises because the CIO needs to build trust and respect in order to be successful as a leader. The CIOs perceive their role as important to the existence of the organization, but crucial for the overall development of the business. They view themselves as the bridge between technology and business which makes them coveted. CIOs believe other stakeholders in the organization, mainly C-level executives, have many expectations from them which make their role unique.

The CIOs believe they have the necessary skills and knowledge required to make valuable contributions to the firm. First and foremost, they make contributions to the overall IT-strategy and business-strategy of the company as they are responsible for aligning these two together. The corporate strategy is not part of the CIO role as this is the main responsibility of the CEO. However, it is important to emphasize that the contributions and the strategic decision-making authority of the CIO very much depends and is dictated by the acceptance of technology across the organization. The CIOs perceive their role as less influential if the executive management team does not fully recognize IT as a key element of the corporate strategy.

## **6.1 Implications for Future Research**

The CIO relationship with superiors and peers is one of the main themes in our theoretical framework used throughout this thesis and has been studied in the academic literature throughout the CIO evolution. In order to gain a clearer understanding of the CIO role, the strengths and weaknesses of the CIO in particular, we suggest the development of additional studies aimed at exploring the perception of the CIO role from subordinates or members of the organization who report directly to the CIO. This would be useful and interesting for the purpose of understanding the CIO role from the perspective of all stakeholders in the business who are connected to the CIO, and ultimately benefit the academic and practitioner community by not solely being limited to the CIO relationship with other C-level executives.

## 7 Appendences

### 7.1 Appendix A – Interview Guide

<i>Theme</i>	<i>Questions</i>
<b>Background Questions</b>	<ol style="list-style-type: none"> <li>1. What is your educational background?</li> <li>2. Tell us about your professional background?</li> <li>3. How many years of experience do you have as CIO?</li> </ol>
<b>CIO Role</b>	<ol style="list-style-type: none"> <li>1. What would you say is the role of the CIO today?</li> <li>2. What are your key responsibilities as CIO?</li> <li>3. What do you actually do? How do you spend your time as CIO? Describe a typical day/ week /month; tasks, activities, people networks you deal with?</li> <li>4. How do you think the role of the CIO will evolve in the future as it has been in constant evolution over the past few decades? If the role will change, in what ways?</li> <li>5. What do you think are the biggest challenges for a CIO today? How do you deal with this/these challenges?</li> <li>6. Do you believe there is a lack of clarity surrounding your role as a CIO? Are you perhaps unsure about the role that you are supposed to play?</li> <li>7. As CIO, do you think you are actively involved in the running of the company? If so, how?</li> <li>8. As CIO is it necessary to stay current on IT technology trends? How do you stay current on IT technology trends and innovations?</li> <li>9. Given your job description, do you set the technical direction, or does someone else. What process do you use to set the technical direction. Please develop your answer.</li> <li>10. As CIO, how do you provide value to the company and how is your performance assessed in the company</li> </ol>
<b>CIO Leadership</b>	<ol style="list-style-type: none"> <li>1. What is your view of your leadership style/profile? Give an example that illustrates it.</li> <li>2. What is the most difficult decision you have had to make as a leader? Why was it difficult? What was the outcome?</li> <li>3. According to you, what makes a successful CIO/IT-leader? Key attributes?</li> <li>4. Do you consider yourself a business leader or IT-leader?</li> </ol>
<b>CIO Relationship with Superiors and Peers</b>	<ol style="list-style-type: none"> <li>1. What is your relationship with the CEO?</li> <li>2. What does the CEO expect from you? Does he expect too much/too little?</li> <li>3. Do you report to other C-level executives e.g. the CEO, COO or CFO? Do other C-level executives play a role in the management of IT resources in your company? If so, in what way? If not, why not?</li> <li>4. Does the CEO/organization recognize the importance of IT?</li> <li>5. Do you believe that CIOs should be considered as potential candidates for CEO roles?</li> </ol>

## 7.2 Appendix B – Transcript Interview 1

*Date: 9<sup>th</sup> of April, 2015*

*Duration: 54 minutes*

*Interview format: Telephone*

*Interviewee: Respondent 1*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	Ok, Let's start. So, just as a first question. Could you please tell us a little bit about yourself like what is your educational background, tell us a little bit about your professional background perhaps?	
2	R1	Alright. Well, my background is not a strange background at all. My education is in journalism and communication side and then I started out in the late 90's with being a consultant leading training programs for computers. There was a lot of end-user training, Windows, Word, Office, as a lot of people were supposed to get education around working with PCs; from that I educated myself in parallel and I got from Microsoft, degrees. I had Microsoft Certified Solution Developer, something. And I went on having more than program educations; training courses for Learning Tree International, system development, architecture, data modeling, and things like that. And I also took more roles in a consultant company as a system developer. From that I learned more about selling so it ended up that I worked more with selling solutions, and I went on to work with software companies as a sales manager. From that I started to realize that the real after sale was to sell management consultant work. So I started to learn about management more often and went to work with the PA Consulting Group as Management Consultant where you both were delivering the solutions and selling the solutions. And somewhere from about 10 years ago, I started to work with IT strategy and IT strategies and growth and especially outsourcing situations. So I've been working as a management consultant for the last 10 years and so on. And I came to [Company Name] in 2010 initially working as director sourcing and cloud services. And I took the role as the CIO two years ago.	
3	JG	Great, that was our next question. How many years of	

		<p>experience you have as a CIO, so it's two years. Ok, so that was a little bit about yourself. We are going to go on to the roles and responsibilities of a CIO which is kind of the main topic of our thesis and as we have understood it, the role of the CIO has undergone very fundamental changes over the past decades and there's a lot of different descriptions of the role of the CIO today? What would you say is the role of the CIO today in an organization?</p>	
4	R1	<p>It would be interesting to understand what changes you have seen on that but let me start. I see this as a factor. I saw it in the 90s or late 90s when I first entered the market. There was not much to say about the CIO; then there was more of such titles such as the IT Manager. We bought a kind of system or an HR system and told the business that now we are building HR systems so now you need to work. Then there came a change where they said that the IT should not decide any issues. It should always be business driven. So what happened then was that it went to another extreme in the beginning of the 2000s where the IT managers were always handling requests but the business said well if you want to build a crappy house you know and that's what you will require; we are going to live with a crappy house. If you want a larger house or whatever we are going to live with it. We have no insight of what needs to be done if you describe and we deliver. And then what then changed was in 2005, or later on about the CIO role; that should have ok; we need to have something in between there; we want to have a CIO who should be part of tech management; who should be involved in the business strategies and also be able to understand the impact of IT and apply the drivers. Then what's happening there is that in many cases that's been a CIO role and then you have a CIO with a small staff of 10 people and then you still have the operational IT manager underneath that group like thousands of people and if it were turned out that the biggest body where the decision actually is it's been hard for the CIO to have that kind of control and then what changed is the financial crisis in 2008; however we must understand that it was certainly interesting to have a CIO in tech-management; IT was certainly seen as a cost so then it was put down to the CFO in that case. Then you were looking back to that you deliver what the business requires from you. In parallel, it's turned out that it is very expensive to commoditize IT and you actually</p>	<p>BIL</p> <p>BIL</p> <p>CL</p> <p>CRP</p> <p>CRP</p>

		destroy off the shelf solutions by commoditizing that too much. So what has happened in recent years is to claw as much standard as possible with position. So if you buy a CRM solution from Salesforce you expect to work with those type of standard processes hence that, so the interesting thing is now you are leaning back to what happened in the 90s; you actually want to buy a solution off the shelf and that's the way the business needs to adjust to work with to assure cost efficiency in that and the CIO in many cases is behind the CFO.	CRP
5	JG	OK, just drawing on what you said right now. It seems like the role of the CIO has according to you grown in importance, would you agree with that?	
6	R1	I think it really is from company to company. It's about the position you as a person have in that company. Right now, I'm running a transformation agenda with my IT department. We have the ambition to be the best IT department in Sweden 2017. There's a long list of choices we've made to conduct, with my IT department. I have a strong belief from top management going forward with this. And to that ambition I see that for instance we can deliver a lot better project management. Why should we only be technical project managers if there is no place in the firms where there are good project managers. So let us have an IT. If we are going to have the best IT support, why aren't we talking about service desk as an issue and then we can take care about finance support, we can take care about switchboard and so on. So what am saying is that I believe I have a quite strong drive in how to enhance the IT organization and I think that there are a lot of positive effects that can be broader than just an IT organization. That means that from my position I believe that we have a strong position or I have a pretty strong position being a CIO currently whereas in other companies you might not have that type of relationship with top management; there isn't that great need for change and things like that so it differs; it's very hard to say.	SC ECSP CL SC RA
7	JG	OK	
8	R1	OK	
9	JG	Just looking at yourself as a CIO, how would you say that you spend your time? Describe a typical week, maybe, or a typical month, the tasks and activities you do; what kind of people do you work with within your organization or outside of your organization?	

10	R1	Well, I think, I work in four directions so I work with our main vendors. I try to work with our suppliers and solutions when it comes to sourcing. That means that all our infrastructure vendors are below our main outsourcing effort. So I spend time on the key count relationships, the dealings and things related to our main outsourcing effort. The other thing is that I spend time with what we call function heads; we have four function areas; that is my management team; then I spend time with tech-management; and other key stakeholders in the business, try to involve them, listen to them, have lunches, report regularly. We have business models that also drift to strategic issues and top management and so on. And then the fourth direction is the global issue. [Company Name] Sweden is one of 20 member firms in the Balkan strategic council in [Company Name] global so there's a lot of IT-work in that relationship to that level.	RC RC RC CRP CRC BIL
11	JG	OK, Very good. So, you talked a little bit about the others in the company. So do you like report to other C-Level executives in your company, like the CEO, CFO?	
12	R1	In the [Company Name] structure, there are the CIO, and we have the CFO, reports to the COO, Chief Operation Officer, is my; so and he reports to the CEO, so I think I leveled that for you.	CRP CRC
13	JG	OK, would you say that these others, do they play a role in the management of IT in your company?	
14	R1	These others, which ones are you talking about?	
15	JG	CFO, COO?	
16	R1	Of course the COO has an important role since that is my boss, in that. But I think you could take other core functions. You can have a head of divisions, you can have a head of business services functions, and so on. We have built a business model where we have five business areas and three business support areas built together as 8 customer areas for IT. At the top of each customer area is some kind of partner or main responsible for that area. These are my key stakeholders that I try constantly to show that they are satisfied with what we deliver in that, and they are demanding for my team what how we should evolve with their system portfolios as has been taken care of.	CRP CL CRP
17	JG	OK, let's go to your speculations and thoughts about the future of the role of the CIO. How do you think it will evolve looking	



		at yourself for example, do you think it will be crucial, more crucial than what it is, do you think it will disappear a little bit, what do you think about the future?	
18	R1	<p>OK, there are some trends that you need to take in to consideration when you looking at the future for that. The first thing is the cloud and app trend, apps; which actually means that it's so much easier to get started with some kind of IT functionality than previously so that is putting a lot of pressure on the IT manager to get a grip of the architecture landscape. So I think, there we have a main impact that the cloud journey and the apps and all that. The second thing is that IT is more and more expected to be outsourced on the operational level but it's hard to find a need to have an IT organization larger than 50 to 100 people going forward in that and their long term capacity on the operational level; developers, technicians, offsite support whatever; is mainly delivered by off-shoring companies. The first impact of this is innovation so the business is driving innovation but it's very hard for the business to actually understand innovation. It's hard for everybody but I would say innovation are three things, one thing is actually bringing in new functionalities and so on, consolidate application landscapes and so on, the other thing is automization and the third thing is new business ideas. If you take either as for example; something that is innovative, is it an app, for a taxi; that is a totally new business idea. That is one type of innovation. Another innovation is a manual process that's automized. So I think innovation is the third impact on the IT role going forward. And then I think its centralization of IT functions so I think it's more and more IT functions become centralized so, we previously had a lot more freedom on local bases and local territories to do your own thing. There's now a more impact on standardized IT, and then you also can monitor and manage that from one central place. So these are the four impacts. The cloud thing, the outsourcing thing, the innovation thing and the centralization of IT functions and I can't risk to say exactly where that is going to end up but I think that's the key impact of that and as everything if you want to challenge that by being pro-active, you can have a big role as I tried to do all the apps you bring in to [Company Name] Sweden is considered for me to be an application and it should remain in the application portfolio being taken care of by our IT security managers, our enterprise architects and so</p>	<p>CL</p> <p>CCR</p> <p>RC</p> <p>RC</p> <p>RC</p> <p>SC</p>



		on. We have taken the steps of soft outsourcing; it hasn't been modest for the business. We have invested in people that help the business with innovation; and we have engaged globally on how we can work on a global goal without losing the way of managing things as well so it's ideal.	
19	JG	Another one of our respondents answered very similarly when it came to innovation, but he also said that the role in the future of the CIO would be less technical; would you agree with that?	
20	R1	Both yes and no. Of course I guess you can't rely on a platform today for instance if you take a crow bolt and work with that you don't really have any patches at all to the braking system. It is just a bad tool for that. Today in our windows 7 platform we have what is it, 50 patches constantly that need to be implemented. So in that case you have to simplify, but on the other hand it is so many pieces in IT that need to work together to make a service work. Of course you can buy services from outsourcing vendors but still I just want to say that the complexity of IT is growing because the demand of IT is growing and if complexity is the exact same thing as technical am not sure but it's not that we can just lean back and then start driving new processes and then new types of innovation that will be important but it is a complex thing. Just look at information security and so on. It's complex to understand all through what it can take.	RC
21	JG	OK, so let's go to challenges. What do you think would you say are the biggest challenges for a CIO today? And how do you deal with these challenges?	
22	R1	I think it's a challenge to have very good skills in your IT organization. To be able to recruit and keep very good people in your IT organization. Because if you don't have the good staff you are not able to deliver what the business is expecting. So you need to have acceptance from top management in recruiting people from consultant backgrounds, program oriented, very professional in the way of delivering and so on. So that is the challenge. To ensure that you have very high skills in your IT organization in that. The other thing is to actually ensure that you share the innovation agenda with the business and to be able to share you need to deliver something to the business. You need to come up with new solutions where you can see that happening and then they will come up with new solutions. So it's important that you have access and	CCR CCR BIL CCR

		bring something new to that. To give you an example, we could consolidate our branch servers and that could be a better technical solution or we could implement something in an iphone where you can see exactly the photograph and the name and number of everybody who is calling internally. The last thing would give the business a lot more than the first thing. And what I'm saying is a challenge to be involved in the innovation agenda is to constantly to live with those type of new functionalities in the business which invite you to the innovation room I would say. I think that is a big challenge. The second is a challenge on the financial part. To ensure that you get the right budget to be able to actually drive technology and not just view technology as something that costs less.	BIL CCR  CCR
23	JG	OK, so the next question is. We have done some research on the CIO and it appeared for us at least from an academic perspective that there is still a great lack of clarity around the CIO role. There are some researchers who described the role as very ambiguous meaning that it's very open to interpretations and there are a lot of uncertainties about the expectations and behaviors sometimes even consequences associated with the CIO role and according to some sources we have there is also a high CIO turnover rate. So drawing on this information, would you say that there is a lack of clarity surrounding your role as a CIO? Or would you say that it's pretty straightforward and you know exactly what to do, yeah.	
24	R1	In my role, maybe the CIO title is a bit unclear since I am a local CIO and not a global CIO. That's not as common that you have many CIOs in organizations. That's something to judge from this case. But I agree with what you said about the uncertainties about the CIO role. I feel the way I've been when I was a strategy consultant advising others; the way I've seen it is if you do have a clear access to top management and you are in the top management team then you should be considered as a CIO in that. But the problem is that it's a lot more fancy for everybody on a team to call themselves CIOs and IT Managers, so I think that there's been an inflation in the titling. There are too many people titling themselves as CIOs and want to increase the balance or whatever which don't really have that mandate and I can see that. I've been in several networks and I meet people on very different levels in that so as I said I think the way in theory that as I well can describe that being the integrated part in top management, driving	RA  RA  CL  RA  RA  CRP CRC CL

		innovation and technology and digitalization of the company. That is for me quite clear but the way it's been implemented has given a lot of different javers on that.	
25	JG	We've seen like; drawing on the reading we've done. The term CIO doesn't seem to be. It seems to be more American. In Europe we use IT Manager or IT Director. Would you agree with that?	
26	R1	I can understand that it is very American so that does make sense but from a Swedish perspective we were all taught to be Americanized; we; most influenced; I can't really say maybe you are correct on the other European countries as well but I see like all main companies that have look all large enterprises that have a CIO and I would say all would say to me contact the CIO so once I see somebody called an IT director, I usually would slap on that as, OK , here is somebody that is out on the lift of becoming a CIO but don't really have the full mandate yet. That's the way I would interpret it.	CL RC
27	JG	So, and that kind of brings us to the next question. And I think it was interesting what you said about that the term is kind of used loosely; people calling themselves CIO even though they may not be. So according to you, what makes a good CIO, What are the key attributes to a good CIO?	
28	R1	Well, I hate to bring up something that I always brought up. But it is to be really the top bridge between technology and business. So you know just pretend that you and your friends are sitting together on a Friday night drinking beers, coming up with great ideas and one of these is a programmer and I mean you just decide you going to start a face book and two of you know exactly how to market this and what it should be like and you have a third guy who is just putting it all together and making it work. If you take the bigger picture having the CIO and being on the business planning conference, setting the business strategy for next year. And we need to enter new markets, the CIO can come in and say well we can assist you with that, we have great business analytics in the background that we can deliver to you. If you give me 2 million I can also ensure we have a better seriate, whatever. You see what I mean, when you have that tight collaboration-ship with that. I think that that is where CIOs will come in mainly. But then of course, it is a huge job to take care of the things in your own place, to make sure you have the stakeholders that are satisfied with the IT department, to make sure that you build a budget,	RC  BIL

		to make sure the vendors are doing what they are supposed to do. You know, it's not that you can stand all days in there but, I think the bridge is a description.	
29	JG	OK, do you think it's necessary for a CIO, for yourself to stay active and updated on IT technology trends?	
30	R1	Yeah. Yes. Very important.	
31	JG	And how do you do that?	
32	R1	To be honest, you know that was my main job when I was a strategy consultant; to always bring cutting edge trends to clients. What I do right now is that I'm trying to execute on that and implement them myself so it's not; you can't change your agenda too much but you need to understand bigger traps that are coming on that. So I've tried to stay updated, but maybe I don't want to do the changes practically being a manager professionally; it takes time in change management to make people understand where you are going but of course I think it's important to be updated on trends; for instance we are going to go with Google now so I started a project where we actually tried to learn everything about Google tools ourselves because I want to be ahead of the business. I don't want the business to come and say didn't you know that there is something called Hangout that we could use for video conferencing. I want to be ahead of all that so trends and new technologies is important.	RC
33	BB	OK. Just one last question on the roles and responsibilities, As CIO how do you think you provide value to the company and if any, how is your performance assessed in [Company Name] Sweden?	
34	R1	How I add value and how I measure my success?	
35	BB	Yes.	
36	R1	Well in my case, it is that we have a transformation agenda if you like that in 6 streams, we have a cost model, we have governance, we have enterprise architecture, and we have the organization and sourcing service delivery. We have plans for what we need to do in all these extremes. We have a clear deadline which is 2017. So for me, it is to show top management that we are delivering on that journey. That's one thing. The other thing is the feedback we get from especially my business relationship managers as regards relationship for the business so how they view IT and a way of being professional to them. The third thing is our budget, if we can deliver on the; if we can stick to our budget, it is very, very	CL CRP

		important on that, so that's it. Then I would like to; under overall success, the thing is that we are going to be the best IT organization in Sweden in 2017; you know it's also important to understand what is the confirmation on that and I think we haven't seen a reality with that type of thing yet but that will be also important to make the department feel that we are taking steps in that direction.	
37	BB	OK. Thanks very much, moving on to leadership. Well, we just want to find out what your view of; what your leadership style is and give us an example that illustrates it?	
38	R1	Well, I just want to say it is hard to be a leader in whatever role you have. I think you need to, there are two types of leadership: One is leadership in building up something and another type of leadership is maintaining something. That means that if you should build a house and you have all those carpenters and people who try to do that; you might be the one who is going to live in the house and therefore be very involved in all the details. Where are they going to put your refrigerator or did they really paint it the right color or whatever. Once the house is there, you want some team or something to take care of it, then you know, you are not in to the details, you tell them what to do and they will just do that and you can take the stuff back. And I think that that's been the most tricky thing as CIO; I have a very strong idea or a clear picture of where I want to go with this organization how I want us to evolve in those 6 streams that I described so how can you do that without being too much in to the details without really passing by the door or top managers in that. So it's hard to; the way you should do this is to be very coaching and ask them; how would you want to do that but it's hard to be very coaching when you know, or at least believe, you have a lot of answers yourself so that's something that you constantly need to work on in your leadership style; how to say, to make the people feel that they have the ability to bring something to this, that their ideas are listened to and that they take care of it because you still have a very strong journey on where to go. It's like working a lot with trying to build a culture of leadership. In far more simple terms, I've worked a lot with the soccer team's view on this; we need to be a team and I've spent so much time in recruiting very good talents in this. You need to be very careful in your leadership style so that these people feel that they are being listened to.	CL CCR CLS CL
39	BB	Drawing on that, moving further still on leadership, what is the most difficult decision you have had to make as a leader? And why was it difficult? If you could, you could also maybe let us know what was the outcome?	
40	R1	Well...	

41	JG	Maybe you haven't had any difficult decisions yet or...?	
42	R1	Well of course it was the big decisions that we decided to do the outsourcing, parts of our organization and it was a lot of; what was happening was that the leads that were pretty much aligned in our management to do this; there were issues about which people should be in scope for the outsourcing and doing that; and there were also some issues on how we should be able to manage the workload that will be left on us when we don't have as many people left. And it was quite tough on wanting to; how to say; there was a lot of people in our organization previously; there were people who said the firm won't work without these people. They knew everything in certain areas and as it was a tough decision to decide that we can't have this single point of dependence on these people. We need to oversee more services and functions. And setting these people on new tasks and new roles has been a tough decision and that's been something I need to work hard with my management team to understand.	CL  CCR
43	BB	OK, Thanks a lot. Moving on. The first question here is how do you deal with stakeholders that want to break away from a shared service for example you mentioned the cloud earlier in your discussion. How would you deal with stakeholders that wanted to break away from a shared service such as cloud computing?	
44	R1	So that would be that if the marketing department said we don't want to involve IT we just want to go out there and buy new applications ourselves for iphones or market research or whatever. Could that be the case?	
45	BB	Yes. Exactly.	
46	R1	This is very interesting. You know if you want some other subject; it could be the role of IT in the cloud and app era because I actually wrote an article on that myself. There are two views on that. There is one view that you know the technology competence will increase in the business the generation X and Y for example will have so much incompetence themselves and will definitely need to be translated by IT departments and so forth. It could also be that there is less technical going forward so that's the view where you try to minimize the IT to just be the one who holds things up as the old legacy. Then there's another view on that and that could be the view now has a very fast moving landscape. You will have data and a huge amount of applications and it is no problem actually to start these applications but there will be demands from the business saying well, now we would like Salesforce and office365 to talk with each other. How can we make that happen? We will have great security issues, the boid concept, and other concepts; there will be a lot of pressure, raising information, securing information and so on, in that; you will have a lot of support issues so you have like 100 different phone call, phone numbers to call if each of these applications doesn't work so the other thing is that now more than	BIL  CCR

		<p>ever you need an IT department that can get the grip around this to have an enterprise architecture in this environment to have a security principles on strategy on this and have service desk on these issues and so on; so how to say that; to view that of course I'm supporting the last view.</p>	
47	BB	<p>Thanks. Moving further. How do you gain agreement and cooperation from a diverse set of these stakeholders for example? Do you have maybe an example from your experience as CIO to elaborate further on this answer?</p>	
48	R1	<p>Could you explain that quite a little. How I gain understanding or?</p>	
49	BB	<p>Yes, because you mentioned marketing and then enterprise architecture. You do need to gain agreement and co-operation from these stakeholders right, when making these decisions so?</p>	
50	R1	<p>Yeah. It comes back to the fact that you need to deliver value to be the one involved. So it's coming back to you know; let's say that you have somebody taking care of your house, and they are the gardener. You have the money and are taking care of them. If that person constantly comes up with ideas to you, you know what about cutting this tree or what about doing this thing and so on. You know it will be very natural for you to start to talk to that person once you have an idea of what they want to change in the garden. But if you have somebody who is only reactive; you know he is not very communicative towards you; just reacting on what you want to say that he should do and so on. It would not do you service. So if you want to gain understanding, you need to be very professional to the business. You have to have very good transparency on the IT costs. You need to have the principles that are governed in top management that you can ride on in other operating costs and so on and you need very professional people in the IT organization and I see very little IT organizations that actually work with business relationship managers so I think it is very important. So if you for instance here, we have invested in people to have monthly meetings with each business area where they have a budget and a business plan and where they have an innovation meetings together so that's been a way to gain understanding. In parallel I have strategic meetings on a higher level with the business on these things. I've been able to try new policies about cost allocation. I've changed on cost transparency such that it is more transparent where the cost goes and so on to the business and I demand more innovation from IT. So a long answer but what I'm trying to say, you need to deserve those things</p>	<p>RC BIL</p>
51	BB	<p>OK. Thank you again. I just want to touch on one thing you mentioned earlier on in this discussion. That is outsourcing. I just wanted to ask, for us at least to know; how do you decide what to</p>	



		outsource and what to keep in-house?	
52	R1	This used to be my main profession previously. But there are different views of that but you can say that first of all you should never outsource a drive receipt. That means that you need to have people driving all the functions. So in my IT function we have 18 service areas so you have one service area for end user services, one service area for data center, service desk, and network and communication, development, test, whatever. And I believe all these service areas need to have a driver that remains in your IT organization that drives the strategy, the vendor management, the budget and so on for that area. So that's the main thing. Then of course you have, usually in the infrastructure side there used to be end user services, data center services, network and mainly those, maybe access. Previously you used to outsource them one by one but I see more and more now go over to a single sourcing supplier model because this is actually mounting them together. So I think there is one big commodity in outsourcing in that area. The other area is maintenance and development of applications; development and maintenance. There I think is the view where previously it was that outsourcing maintenance personnel to the outsourcing vendor. Nowadays that is changing gradually due to large system implementations and the consultant companies or the vendors implementing that most often say that we will take care of everything the maintenance of the system; and the hosting, so it's like gradually moving out of the house project by project.	RC
53	JG	OK, yeah. So just one simple final question before this is over. So, do you believe that CIOs should be considered as potential candidates for CEO?	
54	R1	Yes	
55	JG	You do. And why?	
56	R1	I just believe that the CIOs have gained that understanding of the business that is needed and that technology is such a big part of the business. I think that they could be a candidate. I don't say that they always will but why shouldn't you have them as a candidate.	CRC BIL
57	JG	OK, Thank you very much. We are done. We don't really have any questions left. I want to just first of all say thank you for answering. You have been the one who's answered the best so far. Would you like to be anonymous in our thesis or we could use your name.	
58	R1	Well I think you know before you finalize your thesis I just would like to review or have a draft on that and if that's ok I would have no problem to be with my name and company.	
59	BB	We will send you an email. After we transcribe, before we add it to the thesis we will make sure you get a copy and review then let us know.	
60	R1	So let me confirm by then. If it is in line with what I've said. I think	



		there is no problem to have my name in that.	
61	BB	Alright. Thank you so much.	
62	JG	Thank you a lot, nice to talk to you.	
63	R1	Bye	
64	BB, JS	Bye	

### 7.3 Appendix C – Transcript Interview 2

*Date: 15<sup>th</sup> of April, 2015*

*Duration: 50 minutes*

*Interview format: Face-to-face*

*Interviewee: Respondent 2*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	I don't remember how much I told you in the email but we are writing our thesis on the role; the changing role of the chief information officer and our focus so far has been in the lack of clarity in the literature. We have read a lot about CIOs both from when it started, during the 60's, 70's and today and what we have found out is that people have a lot of different opinions about CIOs, a lot of different types of perspectives so, the focus of our thesis is on the perception of the CIOs themselves because that seems to be lacking in the literature. They talk about it from observer point of view and we are trying to bring in the perspective of the CIO. So the first question is very simple, about yourself, can you tell us a little bit about yourself, your educational background, professional background?	
2	R2	My educational and professional background. I studied at University reading about Information Technology but not in a technical way more in a what do i say, software so it's between information and journalism. So I wound up as a journalist for a couple of years so I've been working as a journalist.	
3	BB, JG	OK.	
4	R2	So I started to work as a journalist and then I was a head of different departments on different newspapers and news organizations. I worked up in Solna a hundred kilometers from Stockholm and then I moved and worked here at [Company Name] first as a reporter, then as a head of a couple of different departments; picture, text departments etc. And after that I worked at the Swedish Television Broadcasting company for 4 years. I then came back to start building up a separate division for digital media and you could say that was when I first got to work more hands on with Information Technology in a way. So during these	

		years, I got more and more IT then I ended up as head of IT so I don't have a typical technical background more that, as a general boss, you could say. This is much of my profession and as a project leader and I guess as a person that can manage things and work with changes in organizations and so on. Is that some kind of answer to your question?	
5	JG	Yes, it's perfect. So you are the CIO of [Company Name] right?	
6	R2	[Company Name]. They merged during the last year.	
7	JG	OK.	
8	R2	So it's one company now.	
9	JG	One company. OK, Perfect. First of all, before we get in to the roles and responsibilities of the CIO which is what our thesis is mainly about. Do you think it is a different thing to be a CIO for a newspaper company than an IT company?	
10	R2	In a way, yes. It depends but I have a lot of users. Perhaps if you work at an IT company, you have a lot of personnel that is pretty skilled in IT themselves. Here we have all kinds of people that say, No, no. I don't want to, why, why do I have to learn this computer to some people that know everything about a computer almost more than an IT department., so that might be a difference from IT companies.	
11	JG	They are not experienced here with technology I suppose, IT?	
12	R2	Well, in a way they are, but some people still refuse to get more skilled.	
13	JG	OK	
14	BB	I just want to get a specific of exactly how many years of experience you have as CIO?	
15	R2	That's about. I've been working at the IT department for 3 years, and I have been a CIO for 2 years. But then I've been working with IT related things mostly in digital media for a couple of years, a bit; the last 10 years, perhaps a bit more than that. Also some technology, IT technology at a broadcasting company too although I worked as the managing editor there so.	
16	JG	That was about your background. Now we get in to the roles and responsibilities and the first one is a very open question. What would you say is the role of the CIO today?	
17	R2	The role of the CIO is to be close to the to the business, close to the user. To understand and help the users and the	RC

		company to develop, to function, to feel safe in the changes and of course to save money but still make the company efficient. Its, since, especially in the newspapers, under such heavy pressure from the changes that are occurring now. Everyone is more pressed. Everyone working at the newspaper has, how do you say, every person is more important. It's more important that every person's equipment is always working. There's not much time to just sit back and wait and do other things and wait for a computer to work again. You have to have the systems and you have to have the equipment working all the time. I think that's a difference that is more obvious today than a couple of years ago.	
18	JG	How much does IT because you didn't mention IT there, how much does IT have; how much does IT play a role in the CIO role?	
19	R2	It plays a big role because what I meant is that the systems people are working with is IT I'm responsible for. If they are working, I'm responsible for their Macs working, I'm responsible for their phones working. Right now, we have this issue with the operator Teleflora; so everyone is very dependent on everything with IT is working all the time.	RC
20	JG	That was actually our second question. Your key responsibilities. So you would say like, everything that is related to IT here is your responsibility.	
21	R2	Yes.	
22	JG	So, a typical day for you. How would you say that you spend your time as a CIO, some usual tasks you do?	
23	R2	A lot of questions from my personnel. Right now we are about 15 on the IT department. We will be 11 from next new year. A lot of communications with my personnel discussing how to solve problems; that is something we do every day. We solve together and a lot of mailing, contacts with cooperating partners. Some contacts with, sometimes the readers so it's a wide range of contacts with different people inside and outside the company, my personnel and then decisions to be made and sometimes negotiations with suppliers, etc.	RC
24	JG	It's a busy title, CIO.	
25	R2	Yes it is. It's as I mentioned from the start, its sometimes very operational and sometimes a bit more strategic to conduct. It can be changed in a couple of minutes. So since	BIL

		we are not that many people working here everyone has to be able to do a lot of things and it comes back to the fact that we have to do operational work as well.	
26	BB	Just to follow up on that question. Do you report to other C-level executives; for example the CEO, COO or the CFO?	
27	R2	Yes, I report to the CEO.	CRC
28	BB	OK, so you directly report to the CEO himself.	
29	R2	Yes	
30	JG	Do you have a CTO?	
31	R2	No. I wouldn't say we have. Well, in a way we do. I have one person in my staff who is responsible for all the technical infrastructure that all the systems are running. So he's very much into deep tech.	
32	JG	We have read that in Europe, we have a tendency to call the CIO the IT Director, IT boss, IT Manager but in the United States it's always the CIO. I don't know why that is actually. But, just looking at the future how do you think the role of the CIO will evolve in the future because it has been in constant evolution all the time.	
33	R2	Well, I usually say to my staff that we are not here to work with technology. We are here to work with psychology and pedagogy. So a lot of our work is to explain to people why are we doing changes, how are the systems working, why are they working the way they do. Why do we have to save money on this and how come that you can't have special treatment that you have to have the same as everybody else. So a lot of our work is about psychology to understand the user, to help the user and not just think that the user is an idiot. Sometimes they are but not all the time, sometimes we have to think OK, if we believe they are idiots perhaps we have a problem explaining what we do why we do so we have to be better to understand the reader, understand the user, understand the ones using our technology so we have to adjust to be a lot better teachers and a bit more understanding of how humans work and how they work in different ways. And that is usually a much bigger issue when you change something than the technology in itself, to get people to understand why you do something and how it works and etcetera.	RC
34	JG	You think it will still be a very important position in the future?	
35	R2	I guess so. Considering that everyone's more and more	RC

		dependent on IT technology, whatever you do. You have more and more screens surrounding you and you have more and more things you are supposed to do in a company like ours. We have to produce in many ways. You have to work in many ways. You have to understand different systems. But the IT is eating in always, around us.	
36	JG	Looking at the past, as much; the more we use IT the more we get dependent on IT, the more the CIO role gets important; so what do you think are the challenges for a CIO today?	
37	R2	It's about psychology and pedagogy. From our perspective working as the IT department and it's also to understand for the rest of the organization and a newspaper that when resources are getting more scarce and we have to cut off people. How do you say, fire people because the economy is tough and we are working in different ways; we are parallel to this, we are driving a lot of projects and all these projects need a lot of resources that since we are getting fewer in the department it's tough for us to serve everyone in different projects so the rest of the organization must understand that you can change things but it comes with a cost, in people or in consumption from outside so you can do a lot of changes but you have to go through some costs to get there. I think there is still a belief in a lot of organizations that IT is something that will work by itself in some way and since everyone is getting under more pressure people must understand that the IT is a big part in their projects and it will cost the company money to make changes. I think that it will be a challenge, perhaps not a big challenge but it's an issue to raise more and more.	RC  CCR
38	JG	How do you deal with these challenges?	
39	R2	I try to say these things to my superior. I try to say to my personnel and I try to explain it to my colleagues and bosses, in the organization.	CCR CRP CRC
40	JG	Communication?	
41	R2	Yes. And going back to what I said at the start. We are supposed to and we want to be close to the users so if we are close to the users and know what they are working with. We can also anticipate that something is going to happen. We are rolling out these projects and then I have to have someone from my staff in the project groups, sometimes they don't think about it, people forget a lot of things and then perhaps	RC

		they understand, oh, we have to have this server to do this and we have to have this network to do this so communication might be the common word but it's all a lot about human relations; very much about human relations between, in the organizations	
42	JG	So, going back to what I said earlier; a lot of researchers think that there is a lack of clarity surrounding the CIO role. Just yesterday I was writing about what actually a CIO was and it seems like a lot of people have a different idea of what a CIO is. Do you think there is a lack of clarity on the CIO role? Have you maybe sometimes been unsure about what your role is in the organization?	
43	R2	No. I think it's pretty clear for me what to do and what not to do. So I don't think that's a big issue for us.	RA
44	JG	Do you think that's more like an organizational problem?	
45	R2	Yes, absolutely.	RA
46	BB	So it depends on the organization?	
47	R2	It depends on the organization and it depends on also their own psychology and how they understand and communicate with the rest, that you see if there is unclarity on something, OK let's talk about it. Is it my problem, your problem or a common problem, How do you solve it? Who solves it? So also it goes back to communication and of course making out from this communication to make as clear an organization as possible. That's it.	RA
48	BB	That's a very good answer. I just wanted to say drawing upon that; what do you think makes a good CIO?	
49	JG	Some attributes? Is he/she supposed to be very technical?	
50	R2	No. I can only say it for myself. I'm not that technical. I understand most of the things my personnel are working with but they are the experts. I'm more a team leader for a bunch of experts I would say. They are specialists on different systems or different architecture or different flows in the company, how different servers communicate with each other, how the users access the system and work with it so I'm more there to help them and to make as good decisions as we can considering how to be effective, how to save money etcetera so for me it's not that important to be the expert, I have experts so it's more a team leader for experts but of course you have an interest and an understanding for technology. You have to be a bit curious I think, to think wow this is fun, more like that.	CL CL



51	JG	More also like maybe a leader like some more about you. Do people maybe look up to you or?	
52	R2	I would say some people say that more to be; it should not be worrying for the personnel how their boss is going to react today or how he will act and I am a pretty, how to say, you can be pretty predictable. You can understand how I work. I can have a pretty good mood most of the days. They know how I react, how I work, I'm predictable to them. I think that makes people more safe, comfortable about how to work; what do I expect from them, what do I not expect, what's there responsibility what's my responsibility. So predictability is properly I believe one key issue.	CLS
53	JG	Are you? Do you think you are actively involved in running the company as a CIO?	
54	R2	In some ways, yes. It depends on the projects. It depends on the issues sometimes.	RC
55	JG	IT related issues probably?	
56	R2	Yes of course, but I know also there can be other things perhaps working in, in more like a board responsible for projects perhaps it's not an IT project but its developing the newspaper, developing sites, developing our sales department. I might be a part of the board of directors or what do you call it; board of advisory or something or styrgrupp, someone directing the project. We might be, me or some of my personnel might be the point of how we deliver for the company.	BIL
57	JG	Do you think it's necessary for a CIO to stay updated and active on IT technology trends?	
58	R2	Yes.	
59	JG	And how do you do it?	
60	R2	Perhaps not utterance all the time, I would say mainly through my personnel but also by reading, yes. I think so. It might be blogs. It might be seminars. It might be when you go to visit other companies, a different wedge.	
61	JG	Or just like media. It seems like if a new Twitter or something comes out. Everyone will see it.	
62	R2	Yeah. Yes.	
63	JG	I was actually thinking about a question we do not have here. I was actually writing about it yesterday. And I read that CIOs they are often blamed in their organizations for decisions; they are often blamed for something they cannot	

		control because IT is a little bit tricky. Would you agree with that?	
64	R2	You mean the user cannot control it?	
65	JG	No, if the company cannot control it. If something happens in the company; an IT related problem and if it doesn't work out or something, can you be blamed. Do you think you are blamed?	
66	R2	I wouldn't say blamed but I am responsible so you could use the word blame. Perhaps sometimes we make mistakes of course so then we should be blamed but anyway either way if I can't do something or cannot do something immediately about. It's still my responsibility to make things change in one way or another in a fast way or a more patient way that might take months but still it's my responsibility so in a way yes I can be blamed but anyway, it's my responsibility.	RC ECSP
67	BB	Have you implemented any new emerging technologies in the recent past?	
68	R2	Well, when we merged with [Company Name] last year, they went from PCs to Mac so that's a change for them of course. It's a bit different to work with a PC or work with a Mac not that dramatic but still it's a change. What more technology. We changed systems for the users; advertising systems for the webs and then personal work under that. It's not that new a technology in that way it's the same technology with another interface embedded on their computers to. I'm not sure how good an example this is.	
69	BB	I think the PCs to Macs was a good example but, were there any risks critical to day to day business operations especially like during the merger or?	
70	R2	No, I wouldn't say there were big risks in that because they had their old computers standing so they could use them for a couple of days until we felt sure they knew what to do with the new computer so we could take away the old computer so we could have it back in a good way same way we changed the VPN from a VPN installed in the computer that you had a password for you had to get the password through a telephone such; people very easily learned how to do so we could let people test things before we let them go on their own so most of the time we can sit aside with people. We can help them or we can make a classroom and educate people in big changes like when we changed to Exchange as the main platform then we had big classes and were lecturing	BIL

		how it works always in outlook and exchange.	
71	BB	So its tutorials. You actually have presentations?	
72	R2	Yeah. Sometimes we have. Sometimes it's ourselves running the presentations. Sometimes it's some expert from outside coming in and helping us. So it differs	
73	BB	So just to ask, just to pick you on that; in what circumstances do you have an expert come over and do the training?	
74	R2	Well, usually if we do not have the time ourselves or if we feel that we need some other; really an expert perhaps we haven't had the time to be fully experts ourselves so sometimes it can be a consultant that helps us, teaches us more specifics about the system and then we can give a bit more lightly to users; adjust the lectures for the users. So it can be both for ourselves as the IT department and for the users.	
75	BB	Well, you touched on this earlier but, given your job description as CIO, do you set the technical direction? Or does someone else?	
76	R2	We do together with [Company Name] and [Company Name]. We try to cooperate on for example, the licenses for programs, we try to share the same hosting for our IT services. The different newspapers find different techniques for example we have a system for managing the Macs which now the rest of the newspapers are using. We have a system for the IT department for handling issues from users that is also the rest of the newspapers in are using. In that way we try to cooperate. We have a good system here and others want to try it out then perhaps we have the mandate on all the newspapers so we try to get to a couple of systems that are all the same so we can help each other and save some money and make business with just one supplier instead of four or in some cases the same supplier makes four different businesses with four different newspapers so now we try to bring them together. So in a way; I do that sometimes very directly if something is only concerning us here and when we can share the costs with the other colleagues in Stockholm which I do so sometimes yes, sometimes No.	
77	JG	You said and [Company Name] other newspapers like you don't see each other as much as competitors?	
78	R2	No. We have the same owners. In some way we are competitors, still; but in some things you can still cooperate, you can share things and it's not something you have to	

		compete on. There are a lot of things to save money from.	
79	JG	Just a last question for the roles and responsibilities? I think you have talked enough about how you provide value to the company? How is your performance assessed in the company? You talked a little bit about the predictability?	
80	R2	I think we have a pretty good reputation. We try to be close to the users and I think people notice that and we try to be quick. We try to help them quick. We try to solve their problems quick so that they feel that we see them and if we can't solve the problem; we understand that and we explain to them why not so they can understand so we try to be fast, try to help them quick, try to respond and also it comes back to communication. Perhaps we can't help you right away but if you understand that we can't help you right away. OK. You can say fine, I know you're doing your best. So as long as there is no silence, people are pretty happy with what we do and they understand that they are trying to help me fast, they can't do it this time but I know they tried. So I think people most of the time feel that we help them pretty fast.	SC RC
81	BB	OK well, Thanks for that, moving on to leadership. We just wanted to ask; what is your view of your leadership style? And if any you could just give us an example of how maybe you could illustrate that for us?	
82	R2	I let people work very freely with their own responsibility very much. I'm not interested in details. I'm confident that they can solve problems. If they have a suggestion of solving a problem that is usually a good suggestion and a good solution and if there's not something that I feel Ok this is going to be very expensive or it will be very dependent on perhaps one person, would be very complicated to set up and we are the first ones to do it perhaps then; we try to find another way but usually people know what we need to accomplish. So they try to find solutions within that frame you could say so usually am not bothering them much with what they are doing. I know pretty much what they are doing but I'm not in to details. They have an own responsibility. They are supposed to take responsibility and to act.	CLS CLS
83	BB	Alright. What is the most difficult decision you have had to make as a leader?	
84	R2	Well we had a last round of cutoffs. To tell people that I have had to make the decision that they could not stay in the company anymore because we don't have the economic yet.	CL

		That's a part of my role as a manager in a company but it's not a very nice one.	CCR
85	BB	You talked about costs earlier on. I would like to pick on that especially since you mentioned the cutoffs. Doesn't that affect you as well? Do you sometimes find yourself in a position where you are also concerned?	
86	R2	Yes of course. I feel sorry for people that have to go because some of them have worked for many years but still.	CCR
87	BB	Alright, well we are moving on to strategy and planning. So the first question would be, how do you deal with stakeholders that want to break away from a service?	
88	R2	I say no. Alright. Usually they understand. We have a couple of systems. We can't just go do anything. I'm responsible for all the IT related issues and I am also economically responsible because all the bills related to IT ends up with me so they can't just go out, buy something that we don't say is ok; that's not in the budget more that we don't say, OK, Let's put it in to the budget so people know that they have a framework they must work in; they cannot just go out to buy things. They can have a good opinions about something we should get and perhaps with that good opinion we try to get some research in to that and then perhaps we go along with the suggestion but sometimes people have suggestions from their perspective and perhaps they don't have the whole picture. It might be very good for them and their colleagues to have system X but if we start working with system X we will have problems exporting advertising to perhaps to [Company Name] to [Company Name] then we will be the only ones with this supplier. It might be other differences and difficulties that they don't think about. They see a beautiful system, wow it works so well. Yeah it does but there are other implications that we also have to put in to the picture before we make the decision.	RC
89	BB	Alright. Then you mentioned suppliers and vendors, I just wanted to find out how you gain agreement and cooperation from a diverse set of these stakeholders? How would you gain cooperation from one supplier to another?	
90	R2	To make them work together?	
91	BB	Yes	
92	R2	That is usually an issue that the suppliers are blaming each other for problems. So the best is if you have one supplier that is the main supplier for a setup. That supplier can in its	

		turn make the deal with a sub supplier if you understand what I mean but the classical problem is that we have one supplier here in one part of the system and another here then they start blaming each other and that happens sometimes. It is hard to get around but you have to make it as clear as you can. This is what you're supposed to deliver and this will need this API here perhaps and this is what you are supposed to deliver but it's easier if you have one main supplier having sub-suppliers or we can say you are supposed to deliver this to us but you can work with this supplier too and we will be holding you as responsible for everything to work. That makes things a lot easier for me. And it makes it more clear for everyone. I think.	RC
93	BB	OK. Well, then another question is do you outsource?	
94	R2	Yes. Running of the services for the web and for the IT systems etcetera. We have different partners doing that [Company Name] for the traditional IT and [Company Name] is another company running the web services. So, yes we outsource.	
95	BB	Are there times you have to decide on what to outsource and what to keep in-house. How do you make those decisions?	
96	R2	Well, we'll discuss this within the bonding group within the bonding newspapers and say that we want to be able to have; we must have our own experts in different systems because otherwise we can't buy systems, we can't make demands on the suppliers if we don't have the expertise ourselves and we have people who are close to the users and we have to have people who are experts in the systems. That we have to have on ourselves or otherwise we don't have the knowledge. Also we believe we have to have IT support which is not from the outsourcing company which we have had partly before which is not something we enjoy because it gets very unpersonal it gets very; they are not engaged in our issues, they don't feel for the company; they don't make any extra efforts, they don't know who Tina, Mina and Emma who are sitting here are. They have no relation at all. They are not loyal. So I think that's a key question to have them close.	RC
97	BB	I just wanted you to provide an example of what you did like you just had this problem of the telephone system going down. What you did when there is more demand for IT than resources fulfill requests?	
98	R2	I have to talk to either the CEO, my boss or I have to work	CRC

		<p>with the department. Perhaps we have a department like the sales department and they have a list of issues. We want this fixed and this and this and this. And then we have to talk to them; Ok, We have money to do this or we can do about 3 of your projects that you want to do. That's our limit. Otherwise we have to take in personnel; we have to take in consultants which will cost a lot of money. Then I will have to go to the CEO to ask for more money. So either way you will have to make your priorities very clear. They can't make the; it's not realistic to make a very long wish list. They have to be realistic too. And they cannot make their wishes my problem. It must be very obvious to them that resources are limited. They can't get everything. But if they insist they want everything; OK, then I have to go to the CEO and tell him, Ok this will cost us 5 million Kronor. Do you think that's ok? Yeah, OK go ahead. But I don't think he will say that. He will say, No, they have to make priorities. Or we have to look in to this or perhaps they can pick one more important project but it comes with a lot of other issues too because then you can get a complexity in the system, you will have to rely on a few experts etcetera. Besides the money, it might be very complicated to run too many projects at the same time.</p>	<p>BIL</p> <p>CL</p>
99	BB	<p>When you talk about complexities. Could you help explain more on the aspect of complexity in the system?</p>	
100	R2	<p>Complexity in the system might be our system for advertising. It is a pretty complicated system involving working with economic reports, statistics, with production and ads, with salesmen in the field, with orders etcetera. So that might be a very complicated system commuting with other systems surrounding it and they have a lot of dependencies so you cannot just go in and make a change without knowing what you're doing. So that's a typical complexity for us. And also if you want to do something quick in a system, you might wind up with a lot of problems at the other end because you have created a problem solving another so you have to be careful with these systems because they are complicated and it might also be that you make a change in a system that gets the result that you have to have more manpower operating the system. We want this feature. Ok, there is no system for that, it costs a lot of money and time to develop it and perhaps sometimes someone wants to</p>	<p>CCR</p>



		do something that will take more personnel to operate. So there's a lot of issues to think about when you; it's not that easy to make a decision of changing systems.	
101	BB	You talked about having to discuss certain key decisions with the CEO. In this event, do you have to actually sell a concept or an idea before going to him or you more less first sit down with your team, discuss and then see him.	
102	R2	Yeah, we usually discuss, me and my colleagues discuss issues, different issues. It could be just five minutes or something or it could be half a day sitting down with the whole department discussing something or different issues and I might have a continuing communication because I meet with the CEO at least once a week, often more and perhaps I'm telling him this issue is coming up and we have to deal with it in some way. Ok, good to know. Now we have come this far and we have these issues. What do you think about that? OK, I think this and that and you should talk to [Name] and [Name] perhaps, find out their opinions etcetera. So it's not unusual, it's a process between me, my personnel, the CEO, or perhaps a stakeholder out in the organization. So it's again, communication, moving the process forward.	CRC  CRC
103	JG	So, yeah. I mean that was pretty much all the questions. We had one little extra question in the end and do you believe that the CIO should be considered for potential candidate for CEO?	
104	R2	No, not automatically. It's very much. Not in my case anyway. It's a matter of personal interest and personal backgrounds so I can't really say that. Perhaps you get a certain routine for handling complex things, questions and you have to work in a wide space so I wouldn't rule it out but not automatically. But some qualities perhaps.	CL
105	BB	Ok, well you actually lead, you have a team. You are head. You are CIO. Since you have direct contact with the CEO, maybe it gives you more position?	
106	R2	Well it might perhaps. Yeah in a way.	
107	JG	Yeah. That was pretty much all we had for the questions so yeah that's it.	
108	R2	Yeah Ok, ok.	
109	JG	Did you think the questions were good?	
110	R2	Yeah, I think so. Pretty interesting. I had to think for myself so overall that was good.	

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111	JG	So, just one thing we haven't decided yet if we are describing the respondents in our thesis as anonymous or not. Do you want to be anonymous or is it ok if we use [Company Name] CIO?	
112	BB	Because what we wanted to do is after transcribing the interview; you could have a look at it as well.	
113	R2	Yes. If I can have a look at it, it's fine and ok to use my name.	
114	JG	Then we will send you the transcription when we transcribe it basically.	
115	R2	Yeah. Yes. That's great.	
116	BB, JG	Thank you very much	
117	R2	OK. You're happy. I'm happy. Great.	
118	JG	I'm happy if the recorder works	
119	R2	Then we will have to do it again. Thank you.	

## 7.4 Appendix D – Transcript Interview 3

*Date: 17<sup>th</sup> of April, 2015*

*Duration: 52 minutes*

*Interview format: Telephone*

*Interviewee: Respondent 3*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	Ok, So the first questions we would like to ask you are about yourself. So what is your educational background? Can you tell us a little bit about your professional background	
2	R3	I have a Master of Science in Mechanical Engineering actually. Are you referring to my work experience as well?	
3	JG	Yes.	
4	R3	I was first working as an IT consultant working with [Company Name] in the orderly billed manufacturing business, production, production flow, engineering stuff. And from that consulting period which lasted for about 10 years, I then worked with [Company Name]. I worked both internationally with new factories in US. I worked with integrating Europe. We had lots of overlapping systems and my role was to be the architect in bringing it together both from a technical standpoint but also to make people think in the same way, changing their mindsets. I did that for about 8-9 years going from being a developer, project leader and Enterprise architect. After that, I joined some colleagues called [Company Name] and we; They founded a company working with the BPO business, Business Process Outsourcing firm, so our mission was to; going from the manufacturing business like [Company Name] had trying to optimize administrative processes for all other things. We built the company with; we had to manage the logistics, financial services, customer service, document handling. I was the first employee in that company and for three years we worked with those employees. So that was a pretty amazing thing I was a part of so those guys they sold the company to a private equity company and I was working locally where I live within Skåne with partly logistics and after a while I didn't feel like working with them anymore so I started as a management consultant in [Company	

		Name]. System was one of the companies that was merged in to today's [Company Name]. I worked as a management consultant for one year and then they wanted me to be the CIO for [Company Name] Sweden, not for all the group of [Company Name], just [Company Name] Sweden. I've been doing that for now 2 and a half years and the main focus for me is to realize the verge of the company both from a technical standpoint but also creating processes and tasks to all over there, all over Scandinavia. So that is the short story about me.	
5	JG	Ok, you are by far the most experienced respondent we have had so far. And have you only been a CIO at [Company Name] or have you worked as a CIO before and if so, like looking at your experience as a CIO, how many years of experience do you have as a CIO?	
6	R3	Ten	
7	JG	Ten	
8	R3	Yes. I was the CIO in the company that was in the BPO business and then I was there for 7 years and now have been close to three years here in [Company Name]. Actually I was the CIO, it's a little bit more. When I took the role working with [Company Name] I was also the CIO but that business is a little bit different. It is very deep and operational. I mean you work with systems and computers and you are in the management team as you see so it is a little bit different from being a CIO with [Company Name] to that business.	
9	JG	OK, Perfect. That was about your background and we will move on to the roles and responsibilities of the CIO which is the main focus of our thesis. The first question is a very general question. What would you say is the role of the CIO in organizations today?	
10	R3	If you look at the I in the CIO title, it stands for information and that is; you are responsible to create a secure way of handling information and that spans across a quite wide area because if you look at the IT stack from bottom-up the CIO should actually be involved in network infrastructure and that part, you should also facilitate the organization with getting information in a secure way when they want it. It is a little bit fluffy description. I will see if I can find a better description but very commonly the CIO is a member of the management team. That was my original description as a CIO but in [Company Name] I am not a member of the management	RC RC CL

		<p>team, I report to another low level management team and that is not correct as I see it considering the importance of providing the right information to the organization. You should be a member of the management team. It depends on what kind of business you are in so I am responsible for all infrastructure and I am responsible for security regarding information. I am responsible for the application portfolio. I am responsible for the processes that govern access roles towards systems. I am responsible for securing the assets we have in the IT/IS parts, something like that is my description.</p>	RC
11	JG	<p>Yes. That was actually our second question. What are your key responsibilities? But you just said that so that was good. But you mentioned that the CIO position is very important today and that is something that we have found. We have found so many different types of research on this. There are researchers who believe that it is very important, there are researchers who believe it's not as important as it should. There are researchers who believe it's not even important at all. Looking at the future just briefly, would you say that the level of importance of the CIO; will it be bigger or will it decline.</p>	
12	R3	<p>I'm thinking., it's still a majority process within information management so I hope it will decline so because the purpose of information systems, IT etcetera is really to have it govern the process almost rather than having a central person coordinating everything and that is something I am trying to drive it to, instead of having me as the coordinating person, I'm trying to establish governance so that different process owners take their responsibilities but it's hard to say whether it will decline or increase, the role. It depends really on what kind of business we are talking about. I am the CIO of [Company Name] Sweden but that does not include all effective processes. It's just recording the internal IT/IS part of [Company Name]. I am not in control of what we deliver to our customers. If you look on a kind of manufacturing business, the CIO is, depending on the size of the company, he will have different roles. But if it's a small/medium company, the CIO is more like an IT manager responsible for the daily operations in part. If it's an enterprise company, or a big company, I think it will</p>	<p>CLS</p> <p>RC</p>

		increase because someone has to coordinate and bridge everything together between the different process owners, the different business areas in a company otherwise it won't happen.	
13	JG	Yeah. That was a very interesting answer. It sounds from my point of view that you believe that the CIO has too much responsibility today. And this is something that we have actually found a lot also in the research and would you say, do you think that this responsibility should be how should I say “delad av flera” in the organization?	
14	R3	Yes. That was a little bit what I meant by putting the responsibility more to a process oriented organization because IT is a part of every kind of delivery process in every company and every business. So instead of having IT/IS at a central layer, it should be in each vertical of the company so to say. Do you understand what I mean?	RC BIL
15	JG	Kind of, yes. Do you have a CTO at [Company Name]?	
16	R3	Yeah, we have.	
17	JG	OK. Do you believe that the CTO should incorporate some of the responsibilities that the CIO currently has?	
18	R3	We work hand in hand so what I put to our CTO is to investigate the new technology and present his recommendations on certain things and maybe the CIO would, because we have 2 CIOs in Scandinavia and we try to compile those recommendations in to business processes and then try to direct the commercial part of the business intact in that the CTO proposed. So you cannot have everything, both big technology in to the CIO and have the business perspective and the enterprise architecture and put everything on the CIO's shoulders, it's too much in an enterprise company.	CRP
19	JG	OK, could you describe a typical day for you at work. What kind of activities and people do you work with?	
20	R3	70% of my day consists of meetings, various meetings. That can be single meetings. That can be project meetings. That can be trying to establish something that I would like to happen if I am the one who is calling for a meeting so that takes a part of my time. And 20% is email to people. I answer emails and 5% is the staff I have. I have to talk to them and the remaining part is to think strategically and tactically so in total I project an overhead time in my work keeping everything flowing.	RC CLS
21	JG	Yes. You kind of touched on this next question but looking at other C-level executives such as the CEO, the COO, do you	

		report to them?	
22	R3	Currently No, internal IT/IS is not the key thing in the company I work for. It's the delivery to our customers so that's why I do not report to the CEO because his main focus is the market. You see what I mean. So I'm always in the staff group on a central level. So it's one level between me and the CEO.	CRC
23	JG	And do other C-Level executives, do they play a role in the management of IT? Or is it just you?	
24	R3	On a group level, yes. Because we try, but not in Sweden, and it's a little bit tricky to explain why. On a group level, the management team is also more focused on also the internalizing but in Sweden we are "underordnat". So, we, I have a double reporting both to the Swedish management team and also to the group CIO in the headquarters so I try to balance. For group level questions, I go to the Group CIO and in regional matters regarding Sweden, I take action by myself or try to stick to the management team of Sweden or my boss. My boss is not that detailed in to what I am doing because I know what to do.	CRP
25	JG	OK, so looking at the challenges, what do you think are the biggest challenges for a CIO today?	
26	R3	It's a challenge when there is a major change in the company like creating a new solution. You do pre-studies and you find that it may be the best way to find a solution but the key thing to have is sold in to the organization. So in a small group you can take decisions about ideas, if you're a major company it is tricky to avoid the not invented here syndrome that always exist in all giant circle organizations and as a CIO you have to put in a lot of effort in order to get the organization ready to receive changes and so forth. And that is the tricky part.	CCR
27	JG	How do you deal with all these challenges?	
28	R3	Building internal networks with people. You have to have a lot of parties in the organization that understand what you need, an agent to communicate sort of; the organization can also write some articles on the intranet but that is not good enough, you have to have a network.	SC
29	JG	OK, The next question is important for our thesis because in the beginning I said we have identified that there is a lack of clarity in the literature surrounding the role of the CIO and I guess the question for you is do you believe there is a lack of clarity surrounding your role as a CIO? Are you perhaps	



		unsure about the role you are supposed to play in the organization?	
30	R3	I mean, it's dependent on where you try to recruit a CIO. It's seldom clear what you are expected to do so I believe it is not a fixed role by default. It very much depends on the business you end up with and for example the CEO of our company, he often asks me things about his laptop which is not my interest so he sees me as an IT support person on that level but the others below me in the organization they see me differently so it's a wide area of things that have to pass the CIO for instance if we have a problem with our uptime in some way, I mean day and night it will involve being a member of the crisis team that works with that problem. That is part of our role also, to be present in that kind of work. So it's everything from strategic, tactic to operational parts. And if you compare that with a CEO, he works mostly with agreements which is not a fair comparison. But I think I am at all levels, all layers, I think five years ahead. I think two weeks ahead about everything in the company. I like the role. It's exciting and you have to know a lot about the business. It's not strictly systems and networks and cables. You have to understand all the business needs. And it's really hard to create a stretch for the CIO today. To be a good CIO, you have to understand the business. That is the key background.	RA RA RC RC BIL
31	JG	It seems today that the focus of the CIO is more on business that actual technology. And the business aspect seems to be more important than the technology factor today. Would you agree with that?	
32	R3	Yeah, but you can't forget security because the cloud strategy is everywhere nowadays. You have to be very careful since you are responsible for all information as a CIO. It's not easy to foresee what will occur if you put everything in the cloud and the combination of having information stored on premise or in the cloud and if you trade some kind of information there between. That is tricky so even though the business important, security and information are key things for the future. If you look on the demands, the daily demands you have today, if you have within, IT service, if you have customer data in your environment for test purpose and that comes out to	RC

		someone “som inte är behörig till den informationen”, then you have to pay a fee, a commission that is affecting the total turnover. That can make the entire company collapse going bankrupt.	
33	JG	OK, so do you have some key attributes of what makes a good CIO?	
34	R3	Just one word or...	
35	JG	No. What makes a good CIO, like what kind of skills does a good CIO have?	
36	R3	It must be something around taking the business demands in to good IT/IS solutions. It's within that scope.	SC
37	JG	OK. Let's move on. As CIO, do you think you are actively involved in the running of the company?	
38	R3	No, not currently, no. I'm more of a back office guy.	CL
39	JG	Do you think it's necessary to stay active and current on new IT technology trends?	
40	R3	Yes.	
41	JG	And how do you do that?	
42	R3	I just read a lot and you have to have good guys and girls surrounding you that present other opportunities with new technology. So you can be prepared in the market and try to take a roadmap for introducing it. And it's always about automizing process flows something I learned from the manufacturing business and its good training coming from there because in that business you always triangulate efficiency per cycle and it is the same in all businesses you should always find a way to make things more efficient so you don't do overhead work and I'm trying to work with that so it's more and more automized. It's easy to get information. Closing the books each month should be reduced by 6hours because if it takes 3 days now it should take one day because that can be uptime for all the staff to work on basic improvements and that makes the company more strong and so on and so forth.	RC RC
43	BB	Have you implemented any new or emerging technologies in the recent past? I remember you mentioned the cloud and yes...	
44	R3	As I said, I work with internalized systems so regarding the customers I don't have full control about what is happening since we are a large enterprise but internally we are working with the latest technologies from Microsoft, from I grant so we are within Azure combining. Do you know anything about Azure?	RC
45	BB	Not really. But I know they are coming up as far as technology goes. That was the focus. I wanted you to address your role internally and well its good you	

		mentioned Asia, how do you do this, how do you address it since your role is mostly internal. How do you cover those other continents?	
46	R3	First I just want to clarify; we work with Azure, what I said about Microsoft that works with Azure. So did you mean Asia the continent?	
47	BB	Yes, I meant Asia, yes	
48	R3	Yeah. So, we have, largely one third of the company in India and I don't personally talk that much with that part but that is all belonging to our production than it is to customers. But we have operational infrastructure sent from India and so on.	
49	BB	Ok. Since you're more internal, we just want to find out how you provide value to the company and how you assess your performance in [Company Name]?	
50	R3	It maybe depends on the day you have. Today I think I am a key figure, person trying to create a one company approach. I am trying to create solutions within a large company that consists of several local CEOs in to one company approach so I think we can work together in a way and that must be of great value for the company instead of having more islands of customers that you can use the competence and people around the world in a certain manner. That is an important thing for [Company Name].	RC
51	BB	Now we move on to leadership. We just want to find out what your view of leadership is. What your leadership style is. And if you could, give us an example that illustrates it	
52	R3	Yeah, There are two dimensions of it. If you have staff, you have to have a leadership that is similar to all managers. You have to develop your staff continuously getting better and better and have a good development in the company because that attracts people to the company. That is one part of the leadership. The other part is you have to be clear and deliver according to your promises otherwise the trust for you will decline, and definitely everybody remembers a failure for a long time but a successful delivery is forgotten in a week. So what you promise, you should keep precisely and that comes with all executive roles in a company because if it was not good, it would get bad repute so being a CIO you have to	CL SC

		active and interface with so much information and create value to the organization in a way. So that can be within the leadership, shouldn't it...	
53	BB	Yes	
54	R3	Its, I'm sorry I can't be really precise. But it was something about it	
55	JG	Just a quick question on that leadership. Do you think leadership in IT differs from other types of leadership	
56	R3	Yes, I mean if you have a large group of people that you're a leader of, you have to be more. If you are in business, you have to have more charisma in order to get a bunch of people following you. The CIO has a, it's a little bit different, you have to come up with good solutions that the organization believes in then you can, then it's ok, then it depends a little bit. You don't have to be that much of a sales person externally as the CEO but you have to be selling in the mission you want to promote in the organization so it is as I mentioned I was in the logistics business then you have to be a tougher towards the staff. In the business I am in now, you have to be more listening, what does the business need and then trying to help the business with good solutions so it varies a lot	CL ECSP RC
57	BB	Do you have a team you work with at [Company Name]?	
58	R3	Yeah. I have 3 guys reporting to me.	CL
59	BB	OK. What is the most difficult decision you have had to make as a leader and why was it difficult.	
60	R3	It includes problems with the staff which always is a hassle to deal with for all persons.	CL
61	JG	You mean fire?	
62	R3	Yeah. Because it's not acceptable if you are in a key role and you mess up, then you have to deal with it because maybe it's allowed once and never twice and so then its replacement or fire.	CL
63	JG	It happens a lot?	
64	R3	I haven't had that kind of situation where I am now but previously yes.	
65	BB	Moving on to strategy and planning. Do you deal with stakeholders internally say for example another department wanting to stop using a shared service for example the cloud?	
66	R3	Yes	
67	BB	How do you deal with this kind of problem?	

68	R3	You always have to set policies, guidelines regarding how to use solutions within IT/IS and they will be approved or sanctioned by the highest level and then you can lean against those policies so if someone is trying to do something that is in contradiction to those guidelines then you can stop them. It is very simple because you have that behind you. The other part is it is always nice to invent solutions by yourself because then you have a speedy project that you can implement and have up and running more fast compared to if you trade a solution that should be used by several parties. In the latter you get more scale of economy if you trade solutions that are good for many and to balance that is tricky. The scale of economy are not squeezed down by the local ideas, that is tricky because if someone is inventing something good which really is a good solution, should you let them run it or should you take control and make it a good solution for the company. And that is tricky. Sometimes you have let them do what they want even if it will cost twice as much in the long term. Did you follow what I mean?	RC  CCR
69	BB	Yes. And it's good. But for the next question, it's slightly related to the first but I just want to exploit your vast experience being a CIO. I do not want to limit this to [Company Name]. We just want to find out how you would gain agreement and cooperation from a diverse set of stakeholders.	
70	R3	It's no different from being a CIO or being anyone serving because the CIO should be seen as supporting the business. You have to have a good relation with the stakeholders otherwise you won't get the investment, you won't get the decisions you believe in and so on so you have to be a part of all the decision stakeholders within your network otherwise nothing to happen so that is a major point in the role on every road, a chance to work for yourself.	BIL
71	BB	Another question. Do you outsource, at [Company Name]?	
72	R3	Yeah we do.	
73	BB	Being CIO, how do you decide what to outsource and what to keep in-house?	
74	R3	This answer is not related to [Company Name] where I work now because we are an outsourcing company. So but being a CIO I outsource the operations of the network and servers based on storage etcetera so everything that was within the operational infrastructure was outsourced. And today we have	RC

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		outsourced part of the network infrastructure so that is how the global economy works. And you cannot do everything by yourself.	
75	JG	Ok. Yeah. So this is the final question before we will leave you so do you believe that the CIO should be considered as a potential candidate for CEO?	
76	R3	It depends on the person, how good you are. But it's a good way to learn about the company so why not.	CL
77	JG	Yes. OK. That was it. We don't really have any more questions than that.	

## 7.5 Appendix E – Transcript Interview 4

*Date: 28<sup>th</sup> of April, 2015*

*Duration: 1 hour*

*Interview format: Telephone*

*Interviewee: Respondent 4*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	OK, let's start. So our thesis is about the roles and responsibilities of the Chief Information Officer and we are specifically, we have identified a gap in the academic literature that there is a lack of clarity on the roles and responsibilities of the CIO. That is the main focus of our thesis but before we get in to those types of questions, we would just like to know a little bit about yourself first, so could you tell us a little bit about yourself, your educational background, your professional background?	
2	R4	Yes, My training was at the Royal Technology Institute in Stockholm. And as a civil engineer in electronics so that was quite a lot of programming as well and also an economy exam at Stockholm University so that's my background in terms of training. Then I worked at first with product development and business development at [Company Name] and after that I had like 28 years as Head of IT, CIO, Business CIO, and so forth. They were mainly 5 companies, [Company Name] firstly as a CIO then [Company Name] as the Head of IT for the industry part and then the CTO of Stockholm where I was the CEO of the IT department and then number four was Head of IT in [Company Name] for six years '93 to 2000 roughly and then [Company Name] 1 year as Head of IT but also five years in parallel as head of chart services which is back office a little inside purchasing and so forth. That's my background. And then I worked as business alien since 2009. So that's my background.	
3	JG	OK, you are by far the most experienced man we have in the thesis so far but just looking as a CIO, how many years of experience do you have specifically as a CIO?	
4	R4	As a CIO, the title wasn't invented when I started so I would say [Company Name] Business CIO for like five years, [Company Name] a couple of years; I would say	



		roughly 10 as a CIO. But again, the title has evolved over the years so it wasn't really defined from then when I started so but if you take all the; the policy function, the responsibility in top management, I would say 10 years. If you take the 28, then part of them were running the IT operations, development and running the machines, IT services and so forth	
5	JG	OK. So let's move on to the roles and responsibilities of the CIO so first of all one thing that you can do which our other respondents cannot do is that like you said, you started in this industry when the title of CIO wasn't even introduced yet, correct?	
6	R4	Yes	
7	JG	Yeah. So can you just go through the evolution of the CIO from when you started and specifically the role, can you like go through for me, like the role of the CIO when you started and how it looks like today?	
8	R4	Yeah. I would say there are some general tales but it's also a little bit you could say, business or company specific because if you take the five organizations I've worked with they define it in it's like a different way but if I try to describe it from where I started. I started as a business CIO at [Company Name] and the biggest business area was in, that was I think telephone exchanges. I was reporting to the Head of Administration and my title was in fact didn't include IT; it was how can you be more effective in your workflow, that part of my responsibility was that I was the system owner of the systems that were on the initial level of the sales, I was the system owner of that, I was responsible for putting forward the technical requirements, I was responsible for the major SLAs towards the then IT department at [Company Name] so I was a business CIO at that time. And you could say that I was responsible for the applications, and for the data and for all the requirements. And that is pretty much in line with how it has been over the years. There have been periods that I think were dependent on where I worked whereas if the focus had been pretty much on I mean the application and the innovation side. How can you help the business innovate and that was really part of my job at [Company Name] then it disappeared a little bit in the 90s. It was more focused on when I was at the city of Stockholm; then it	RC             CCR



13	JG	You kind of touched on the next question which was the key responsibilities as a CIO. What would you believe are the key responsibilities as a CIO? You mentioned security..	
14	R4	Yeah. This was more like you could say, like examples. If you wait, I have, If you wait a second.	
15	JG	Yes, sure. No problem	
16	R4	So let's see. I mean you can make. If I take back the areas of responsibility, they are really broad you could say. It is like you have to read them through. You should be responsible for the technology; you should have a customer focus. You should be active in the IT governance where you have part, where you have responsibility. Talk about responsibility for the IT infrastructure, where you have responsibility for the delivery of IT, whether it's in-house or outsourced. And you have responsibility for the IT strategy which could be a document that you have or a couple of documents as governance. And you have a responsibility to help the business side with providing the business cases, you have a responsibility for the IT architecture, you have a responsibility for the choice of technology, you have some kind of responsibility for IT projects should be run well. Even though the business side is normally responsible for the application development. You are supposed to have a competence and help them. You're supposed to be good at purchasing especially outsourcing. What should you have in-house or what should you buy outside the company. You should be good at operation and excellence in terms of running the development process for instance or having an efficient IT services, running the machines. You should be good at delivering also the other requirements in the united services like uptime and security as well and you should be of course working well aligned with your colleagues in your organization. These are just a brief list of things you are responsible for but if you really down to it, I would say its IT infrastructure, having an efficient IT operation and you are responsible for the IT strategy and of course that this is aligned with the business strategy. If I take three keys, yes, I would say those but there are very many other areas and part of the job is to see which one should you give priority to and which one should maybe put aside and take that next year maybe. You can't work with everything.	RC RC BIL RC BIL

		It was a long speech but I tried to answer your question.	
17	JG	It's very good. It's, like you said a very long list you have. So do you think it's too much responsibilities?	
18	R4	Yeah. In theory, it's too much and just to give you if I could make a U-turn and give you an example. We wrote this book in 2010, IT leadership, that is how to be a good CIO and head of IT. We had within these areas and some areas as well, we had like 105 good advices and you can't live with that I mean it's too much. Then the key to this is you ought to have a dialogue in your organization within IT of course but also with your peers I mean the COOs, the CFO's, marketing guys and so forth and discuss. Ok, which areas should I really give priority to for the coming three months, six months, twelve months and so forth so I think and then you could normally conclude that ok this area takes the architecture for instance, the architecture is OK so that means we don't really have to put specific effort in to that, security is ok but we got to do something on outsourcing or whatever it is so I think it's very important to make a yearly agenda or to do a list out of all these areas otherwise it's a very tricky thing. Maybe I mentioned to you when we talked a week ago or so that there was basically this survey where they asked us a couple of years ago when they asked, they asked the CEOs, did they know what to expect of the CIOs and 71% said they didn't know what to expect. This is for me a very clear signal that Ok you haven't had this dialogue because it is a bit fussy and you haven't figured any handshake. And then they asked the CIOs if they know what the CEOs expected of them and I think about 50% said that they didn't know which shows really. That's a high number and they have a tough job because if you don't know what's expected of you, it's hard to deliver.	CRP CRP  ECSP
19	JG	Exactly. And that was...	
20	R4	Yeah?	
21	JG	Sorry. Continue...	
22	R4	No, No.	
23	JG	OK, I was just going to say that that was actually one of our questions later which is really good like what does the CEO expect from the CIO? So, that was very good, you kind of touched on that. But, would you like to add anything on that before we move on?	
24	R4	No, I just want to, I can give you an example and you can't	

		<p>really decide to quote this but when I worked at [Company Name] in my last position for 9 years, I met the chairman of the bank, and he said ok, I asked him what are the important topics, and he said this and that must work and that was pretty much about availability of the system. He wasn't too proud of the uptime when I joined the bank and then we had zigzag, I mean we couldn't have worked with that 100% over the nine years I was at [Company Name] but it was time for the next discussion and say, OK what's up now? What is your priority? And over the time there we had about let me see three CEO's over those nine years and they had a little bit of different priorities in fact, one focused more on the customer orientation, the other on technical solutions so they had a little bit of different perspectives so again my summary is that you really need to have a dialogue about this and you can't really expect things to be static over the years because the agenda changes and after solving one problem, there is probably another one waiting for you to act so yeah dialogue is what I wanted to add on this.</p>	ECSP
25	JG	<p>Yeah, OK. Nice. Just looking at a typical day for you as a CIO. What would you say like your activities are, tasks, what people do you work with?</p>	
26	R4	<p>I mean there's if you take the stakeholders. I mean it's nothing new of course, everyone would say like that but of course it's your own team. In [Company Name], they were like 850 and you need to plan on that and of course it's the users I mean the CMO, the marketing guy, the sales guy, the COO, the CFO and so forth. And the third is the vendor community in a very broad sense that could be advisors, it could be your network with other CIOs, people selling hardware or software. These three I would say are the main arenas. The first and third come quite naturally because there is always a pressure in the organization that you should make decisions or consider something or whatever but also the vendor side is very active so what you have to fight for is to put in your agenda that you have a good arena for meeting with the business side and that you also have the informal contacts and really put that in to your calendar. The percentage differs over time but there's over; if you have something, such as an urgent problem in terms of projects or availability of course that takes quite a lot of</p>	RC  RC

		time and then you work in your organization quite a lot then it might be that there is a more easy period and you work with the business side. OK, what are the important questions for the coming 3 or 6 months and so forth. I would say the percentage between these 3 groups varies a bit. But I think you have to forge in to your agenda that don't forget the rest of the organization outside the IT and really be active there.	
27	JG	OK. Nice. So, the future, how do you think the role of the CIO will evolve in the future?	
28	R4	I think we are in a very exciting time. I can see that if you take innovation based on IT and you could talk about the digital transformation or whatever, you can see that there are two types of players entering the, or have entered the arena in recent years. One are the big really IT based companies like Amazon, Google, Apple. They are often American though, some Chinese and some European as well and they can really go in to any area, they can build a driverless car or they can work with the drones, try to sell parts from Amazon or whatever 22.38 and they are very inventive and they have IT everywhere at the top so they are big, they have big resources. I read an article from Citibank and they said the biggest worry was that Google would say we open a bank in the next quarter. I mean they can really change the arena. I will come to that part in a bit. The other group are the startups. I mean they are in the US and many European countries as well, Stockholm, quite a lot and I've seen them now as business angels. There are quite a lot of very good startups that take a very small portion of a business idea and they are born global and they give full spin and they have quite a lot of time, they have a good network, they have some money and they really push the agenda, they could be like, take an American example online banking, peer to peer lending but they say that you and me we can lend money to each other, we don't need a bank and that is a challenge. And coming back to the CIO he or she is the one who can see these two groups diverging or growing rapidly you could say and how can he working at for example [Company Name] or Atlas Global how can he really position his company that is not in that sense born digitally developed like Google because they have it in their genes; digital natives; how can	RC

		<p>he really get the company going for example [Company Name] or whatever and if I would like to add something, there will be an increased focus on security in terms of cyber-crime and those kinds of things both in companies, individuals and states. These are two areas that are growing very rapidly and that of course changes the agenda for the CIO, I would have spent much more time on these two issues especially the first one about innovation. And that is a trend for the better I would say for our long term information tech in a couple of years I guess. After that I don't know. But this is like a 1 to 5 year or 1 to 10 year plan. I think the CIO must be very much more understanding the business of Google and Amazon, and making partnerships with the startups because they might have a bright idea that you could buy or incorporate in your solution so this is the biggest change as well. That could be like finding the right competence. These things that are happening right now, where you are pretty much more on the net forces you to have other roles in your IT organization where you could analyze data, work with architecture in different ways and so forth so this is promising, and very exciting I would say.</p>	
29	JG	<p>Yeah. OK, so moving on to challenges. What do you think are the biggest challenges for a CIO today?</p>	
30	R4	<p>I think I touched upon two of the more specific ones like innovation and security. The third might be then to which I think is an ongoing question is to have a good dialogue with the rest of the organization. When we wrote this book, we looked at the people who had lost their jobs as CIOs. Someone said it was “career is over”. When we looked at the people who lost their jobs, I think most of them, I think six out of ten or something, they had lost because the governance didn't work which is a funny thing because the governance shouldn't be decided by the CIO or maybe it should but it could be the CEO or the CFO or someone else who should say we should govern IT in this way but they lost because of lack of respect or understanding or that they didn't, hadn't aligned the agenda and weren't delivering towards the expectations that top management had. So the third item if you have innovation and security and some specific more technical areas then I would say IT governance is still very high on the top because, I can give</p>	<p>CCR SC CCR</p>



		you an example we had, when I joined [Company Name], they implemented an IT Governance board and we had meetings every month which was a really good thing to have because we discussed all matters and over 9 years, we had about 110 meetings or something and without that I would have been lost, so having the right governance or the right platforms I would say is still important	CL
31	JG	Yeah, we identified also in the literature that there is a high CIO turnover rate. And it was funny when you mentioned, "career is over", I found that too in the literature.	
32	R4	I think it's a bit better now. People stay there longer in the posts so maybe it's better but I haven't done a calculation but it's still a tough job.	CCR
33	JG	You said 6/10 tight. It's pretty high. It's pretty high.	
34	R4	I will give you an example of last week or this week that is the CIO of Stockholm left and they told him that the reason was that they wanted to push someone from the school side and they had been critical about the IT department not listening to the users good enough. What is this? This is governance of course and then there was some infighting and then he had to leave the job and then another woman came and she came from the school side so I think, you have this, it is less frequent but still is very important to consider.	CCR
35	JG	OK. So the next question is about the lack of clarity and as I described earlier in the literature. It's a very, it's an ambiguous role, the CIO position like a lot of people have very different interpretations of what they are supposed to do and just looking at yourself, do you think there is a lack of clarity surrounding your role as a CIO? Are you perhaps unsure about what role you are supposed to do and what role you are supposed to play in the organization?	
36	R4	I mean. Yes. I think I answered it before. I said dialogue and I think it's also a dynamic thing where the priorities change over the years or over the months sometimes so yeah, again it's stellar. I wouldn't say that there is one final description because this is depending on the situation, its depending on the company, its depending on especially the business strategy that has got to have an impact on the IT strategy of course so yes, from a starting point, it's very unclear. As a CIO, in order to be successful and survive, you have to clarify the role.	RA  RA

37	JG	Yeah. So do you think, CIOs are actively involved in the running of the company?	
38	R4	I think that, I haven't read the statistics but I think that if I go back in the autumn or so where they said that 50% reported to the CEO position or the top manager and another 50% reported somewhere else mostly to the CFO. And if you report to the CFO, it could be a very good CFO but then it's tougher to be part of the management team. You can be a part of the management team in many ways, you can sit in, you can actually sit in the management team which some people do but you could also have an IT governance board where you meet top management. There are different ways but in general I would say they are a bit too far away from the top management field especially as innovation is so rapid now so the organization will matter as a general clause but it differs pretty much between companies.	CRC CRP CL
39	JG	So, do you think it's necessary for CIOs to stay updated and active on IT technology trends?	
40	R4	CEOs?	
41	JG	CIOs	
42	R4	CIOs, yeah. Yes.	
43	JG	Yes, and how did you, how do you stay current on trends and innovations?	
44	R4	If it is an important area that varies over time and things are a bit urgent and a little bit subtle, you need to have some in-house competence like having to work with technical architecture or whatever. You can have the help of your vendors and companies like Gartner. You can have good help from your CIO peers. I've always been active in a couple of networks. There are also networks in Stockholm where I've seen this, but the area where the CIOs meet and discuss what is on the agenda in fact as an example I'm running the network for CIOs in the computer societies of Sweden with 30 people mostly from Stockholm. Next week, we will discuss how we can more successfully run a project. As an example we heard a very good project and a very large project that we presented and we discussed, OK, how can we improve in terms of tools or whatever, so this is technology of course but it is also the way we work so these are some answers within organizations having good rapport with the vendors, types	RC

		like Gartner, having an open mind also to the startups to see what things are happening there. And having your network which constitutes a couple of peers because if you could solve every question by yourself, you would not have time to do that and you would be lost. You need to have that good input from others.	CRP
45	BB	OK, As CIO, did you implement any new technologies during your tenure?	
46	R4	Yes	
47	BB	And were there any risks critical to the business day to day operations? And if so, how did you deal with these risks?	
48	R4	We changed platforms or added platforms. We moved big applications from one platform to another, technical platforms. We developed also the core system, core banking systems during my time in [Company Name] and the answer is this really needs planning and if you have the possibility to make a preliminary pilot where you can test it on a group of people first and then implement it. That could be part of it so I would say the answer different because when we put in new technology we started with some not so dangerous applications as a technology and we saw if we had knowledge and backup from the vendors and so forth. This needs a very long answer but the answer is yes, there were risks and yes, we tried to plan for it. I happened not to have any major failures but there are examples of course, yes.	CCR
49	BB	OK. Given your job description, did you set the technical direction or did someone else? You mentioned peers earlier.	
50	R4	Yeah. We set the technical direction, yes, in terms of platforms. This was also handled in the IT strategy and this was also handled in the IT governance board. Yes, so there were I mean the business side was free to comment in. As part of the decision, they needed to know that there was a good business change for them, if we moved from one platform to another one then they needed to know that the business change for them were good. I remember when we changed the total architecture in [Company Name]. The payoff wasn't that impressive for the business side. That really changed the implementation, the way we implemented things. We took it much more step-wise, over many more years till when we had the application development so yes you have to reconsider that you will need to take inputs from the business side as well so they	BIL  BIL

		feel comfortable that you have a good, efficient and orderly platform. But the decision is the CIOs I would say.	
51	BB	OK. Was there a process you used to set the technical direction? Or a hierarchy?	
52	R4	I didn't get you now.	
53	BB	Was there a process you used while setting the technical direction?	
54	R4	Yeah. before we tried to make, firstly we started a technology as you mentioned assessed what are the advantages, what are the risks in many, many aspects technology risks, competence risks and so forth and then how should we implement this and we tried to make some kind of business case for the changing of the infrastructure saying, OK, what will we gain with this, sometimes we were forced because the platform was on its way out, then we had to move anyhow but then we had different alternatives and we tried to put these two alternatives towards each other to see OK, which one should we implement. And then we had the formal decision in the IT Governance Board but then again they didn't know, they normally drew towards what I had suggested so this was more a formal decision later.	RC CL
55	BB	So, how did you gauge how you provided value to the company? And how was your performance assessed in the companies you worked for as CIO?	
55	R4	I would say there are two angles. If I start with the one. Not so much. We had like, over a year we had like; take [Company Name] which is a most recent example. We had like 200 business ideas over a year. 150 to 200. And we did like 30-40% of those and this was strictly on a basis. Sometimes we were forced by the regulators saying we should provide risk specific information to the customer but normally we had a choice and then we calculated and we had a rule of thumb particularly over a year, then it should be payoff time. That was the project. Then there were some; How was I judged as Head of IT or CIO. There were some pretty well defined parameters like cost decisions, development between the years, how much more efficient were we in IT operations and how much more efficient did we develop the projects and we for instance we had obviously a decision to issue and be 30% more efficient in the development of projects. In IT operations, we should increase the efficiency with 15 to 20%. Then we	ECSP

		had also a very operational clause that was availability for some core systems. And then we had, I had which was a bit curious but well it worked well then, the CEO said OK, I will make an overall judgment about how well it works and then I will let you keep that as a part of the evaluations. He discussed with some of his other managers and they gave me some kind of board and said OK, this is how well it worked. This was very subjective so some very fun parameters but also soft evaluation. I remember others but these were some of the key ones. So the answer is yes, we had.	CRC
56	BB	Alright. Well, we are moving on to leadership. And in this we want to exploit the experience you actually have including your experience as CEO, first we want to see how you viewed your leadership style as CIO and then how it extended to your roles as CEO?	
57	R4	Leadership style. I think. When, if you move before my time, you could be the one who would understand the technology more in-depth because there were not so many technologies. I mean they were, like IBM. There wasn't terminals and so forth for some kind of communication. It got more and more complex and I think the leadership style then must, I think in my case I was forced or happy to whatever, to put forward the questions and that was mostly in business terms, how can we be more efficient, how can we be more innovative, or whatever. At that time, we worked with a couple of technical experts. They provided the material and we judged which solution we could take and that means I think you should have a very open and listening attitude and you should also have some kind of, either be a very good civil engineer or be very good in understanding the business case. It will obviously take time, the decisions of course but I think you need a very open style, because it's pretty complicated and involves many people. The good ideas, you won't get them if you give orders. If you say "do like this now!" You need to let people explore the possibilities and the risks themselves. so that's the way I think it was but I mean, people are different and there are different styles but this is my answer.	CLS  CLS
58	BB	OK. I like that you mentioned letting people explore the possibilities. And in that regard, what was the most difficult decision you had to make as a leader, and why	

		was it difficult?	
59	R4	I would say, and this wasn't really only my own decision. The most difficult decision we had in [Company Name] I think if I take that as an example, the 9 years there. We had a core system that was built in 1971, very old, difficult to maintain and we had to change that to a new system and this was I mean roughly it was like 800 man years and when we changed it we could have a little bit of a piloting but it was a big bang change and this was a difficult decision to decide on, OK should we do this, how should we do it. We started with taking out functionality, exporting things in small pieces and starting them up so we took off functionality of the big systems but that was 600 man years in that big project and that was the most difficult decision. Yeah, so but this was, I wasn't solely responsible for this. I mean this was really a CEO decision but he had to trust me with a lot of important functions and see that we could handle it in this way. This was the toughest because if things would have gone wrong, we would have been in a hell of a position.	CCR  CRC
60	JG	Yeah. I would just like to say that most of our respondents have said that the most difficult decision they had to make as a CIO is to fire someone in their team. Have you ever done that?	
61	R4	Yes. We have reduced, in [Company Name] again; we have reduced the number of people working there because we worked efficient enough. So you had 30 people that had to leave which was a big thing. I've had lots, of course over the years, lots of, many work very well; I've got many examples of people who had to change their roles. They were managers and were not working well enough and they had to go back to more technical roles and those kinds of things. Maybe this is, I remember the first time I had to do this when I was like 31 years of age or something then it was difficult but if you don't know how to do it then it is difficult. It is not an easy task but I would say this system development project was much tougher because there was a lot of risk for the bank if we didn't handle it properly.	CL
62	BB	OK. According to you, what makes a successful CIO or IT leader. Are there some key attributes you could describe for us?	
63	R4	Yeah.	

64	BB	What would those be?	
65	R4	I'm just thinking how to formulate it, I talked about it a lot. I would say, have a, I touched upon them at least one of them quite a bit. Have a good dialogue of what is the best agenda for the firm you work for and discuss it; have a good dialogue. Second, if you have decided something, you need to do it. If you have decided to say OK we can improve efficiency, then do that because that gives you respect. If you have a disturbance in the operations, fix it quick as hell because that's your impression, so the first thing is have a good dialogue, second is act on the things you have decided and thirdly which is the strongest area I would say still is being a good communicator. IT is pretty lousy in terms, still I would say in terms of communicating especially when a project is running. I will give an example in [Company Name] we had like 200 projects active over many years and 20% of them were not performing according to plan meaning that 40 of them were not 100% on track and we had to move them back on track. But that means that every week, there was some problem somewhere and if you hear only the problems, then you don't hear the old story that 80% of the projects run very smoothly. That's not so bad. That's very good in fact so you should communicate, not entirely of course but also especially externally in terms of with your peers in the organization and that will be improved.	SC SC
66	JG	OK. Perfect. So moving on to the final step like, category, which is the relationship with your superiors. What is, you kind of touched upon this a couple of times in the beginning the CIO's relationship with the CEO. What was your relationship with the CEO like?	
67	R4	It differed quite a lot depending on the personality. And, I've heard like 20 bosses over the years and I would say all of them are different. Some of them gave very big trust. They said, OK run this, if you run in to problems, tell me so that I'm the first to know. But I trust you. And then we had a very broad scope of responsibilities. I communicated when there were problems or some slow progress in some important areas. You could say it was a relaxed relationship. Then I had someone who was not that interested which was a problem because then how could, this was a she, how could she understand when I was	CRC



		performing or for example she help me to govern it. Then I've had someone who was very detail oriented and wanted to know all the details. That means more details than I wanted to know and that changed the reporting. So again, I can understand that also that is dialogue, discuss how you should work together, people are very different. So I don't have a very good answer, one answer could be that have again something like an IT Governance Board where you meet monthly or quarterly so you have the CEO who we had at least sometimes over the years, and also do some informal contacts; talk to them in the elevator, send them an email it can be tough but formulating forward communication in this role. This is item number 2, communicating as I mentioned. Yeah. I wouldn't say that it is a universal answer but we are human beings.	CRC
68	JG	So, looking at all the CEOs you have worked with over the years. Do you think they see and recognize IT in the same way as you do?	
69	R4	No. Because normally the CIO has more detailed knowledge in those areas. I would say the best relations I've had is with people who understand quite a bit about IT. They understand some of the facilities and some of the restrictions, yes. But they also could in some way help with the business perspective and we were a good match you could say where they provided input in terms of this is useful for the business, please help with this and you had a discussion and said OK, what kind of changes do we need. So, you don't need your boss to be having the same characteristics as yourself but you need to have a good match of when they provided a business perspective of you, providing possibilities and the other things I mentioned. A very general answer.	CRC
70	JG	I know. The reason why I asked that question is that we identified in the literature that during the 90s a lot of CEOs like they didn't even believe that there should be a technology executive because they believed that IT wasn't really as important as they made it look to be.	
71	R4	I can mention that when I worked for the city of Stockholm which was a long time ago. IT was 22.5% of the cost and the head in Stockholm, he said, how can we make it 2.8% of the total cost. That was his only question. And then you're very far away. And in the 90s, there was a focus on	

		efficiency; please be more efficient, do things cheaper and they didn't really care about the content. That has really changed now 20 years later so it's a big change. Cost efficiency is still important but it's much more innovation as we discussed so and I think those CEOs, they will not survive. They are on their way out. They will have to understand that it is people's ideas not only inside your company. I mean it's also in your products, I mean it's in your service products, it's in your robots, whatever you do so. It's in the cars now. There are I think 30 PCs or PC boards in a car now so you have to understand it so I think they are on their way out, hopefully.	CRC
72	JG	OK. So do other C-level executives play a role in the management of IT resources in the companies you worked for?	
73	R4	Yeah.	
74	R4	It very much was stemming from their interest in the knowledge and also which area they worked. There are some very good examples yes, that have really played a big role, yes?	CRP
75	JG	OK, so. I guess we only have one final question left and that is do you believe that CIOs should be considered as potential candidates for CEO? And why?	
76	R4	Yes. There are very few but not too many examples I suppose. If you go back to about half an hour when I discussed Google and Amazon, I mean they have IT guys at the top; I mean the chairman, CEO. They are IT guys. They know both IT and market guys so they are very well aware of the possibilities of IT so I think it could be a certainly good knowledge to have. And I think you will see more CIO people entering CEO positions.	CRC
77	JG	OK. Perfect. Thank you very much. That was all we had	
78	R4	Yeah. Good.	
79	JG	I think you have been the best respondent so far which we expected given your background.	
80	R4	That's nice!	
81	JG	So I need your email, so I can send you the transcription so you can look at it.	
82	R4	OK	

## 7.6 Appendix F – Transcript Interview 5

*Date: 4<sup>th</sup> of May, 2015*

*Duration: 1 hour*

*Interview format: Face-to-face*

*Interviewee: Respondent 5*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	OK. Perfect. So our thesis, I don't remember how much you remember, but our thesis, it's about the Chief Information Officer and we are focusing on the perceptions that the Chief Information Officers have on their own roles and responsibilities because we have identified a gap in the academic literature that a lot of it is from an observer point of view. We want to emphasize it from the Chief Information Officer's perspective. So, but first things first. We want to know a little bit about you so if you could just start off by telling us about your background, your educational background, your professional background?	
2	R5	OK. In brief, yes. [Name] is my name and I was heading the CIO position in this company for some 15 years and since one and a half years back I am heading one of the major change programs we have in place here which relates to PLM Product Life Cycle Management so I'm leading basically with technical Information Systems Development and RnD organizations and down streams. Prior to that, I spent, yeah my whole life in automotive, not in automotive but in mechanical industry I would like to say, I mean dealing with automotive for quite some years, working with [Company Name] and a few others. So, yeah, education that's interesting because I was actually studying finance, economics back in the early 70's. And there was a new course on the agenda. In those days IT was not even a known abbreviation. We referred to it as ADB in those days.	
3	JG	ADB? What does that stand for?	
4	R5	Automatisk data behandling yes. Sounds interesting. There were some courses in programming, Cobalt, PL1 and God knows what. But, rather it was sort of a four runner that was run during a period of four-five years so trial education and it later came up in to something more formal, more full blown Systemvetenskap linje. So, but that is more than forty years back. Holy smoke!. But, I stumbled in to it and I've stayed there and I mean by occasion, it was the right thing to do. And of course in those days, IT applications were more focused on	

		<p>what you refer to as back office type of things, very much finance focused and it was not a coincidence that we who studied finance in those days got in to this. It's not a coincidence that many CIOs report to CFOs because that is where it all started so it is basically owned by heritage. I mean today, I definitely claim that CIOs should not by default report to the CFO if he's not a member of the group management himself as a separate discipline. It should rather be the Chief Operational Officer or something like that; someone who is heading manufacturing, supply chain and product development. I think that's a better hallmark for the CIO role going forward and yeah, that's about it.</p>	CRP
5	JG	<p>It's very interesting that you talked about finance because, I think you are our fifth respondent right now and what we have noticed is that, what we identified in the literature also is that CIOs often have a varied career history. One CIO we talked to studied journalism, one studied mechanical engineering, now finance.) You would think maybe they studied IT or technology or something like that but just looking at; as a CIO, how many years of experience do you have as a CIO?</p>	
6	R5	<p>Well, CIO in its true context is 15 years. Heading IT organizations is around 30.</p>	
7	JG	<p>OK, So, we then move on to the roles and responsibilities which again is our main focus so just a general first question. What would you say is the role of a CIO today?</p>	
8	R5	<p>I mean it's very much about trying to connect the traditional line of business type of activities with Information Technology, sort of bridging these. Well, IT has a historical background as technology and business in both companies, not particularly technology factors; business factors. So, I mean to create awareness, to be able to see opportunities and sell the opportunities and very much be an enabler for the business to do better. That's very much the role of the CIO. And, I mean the CIO in most cases has a background as myself with IT, with Information Technology and it's not a disadvantage to have that but it's not enough. I mean, very often I've seen CIOs who have absolutely no background with Information Technology. Somebody who has been in pure finance or pure supply chain for a number of years as somebody heading a IT organization and they are labeled CIOs. It may work. It doesn't by default work and the advantage of that position or that background is of course is that you have a broad business understanding. Beyond that, when you have defined the projects you start to think about solutions. If you are not capable of asking the right questions, the technology people can screw it all up. You must, as I said again be a translator, the bridge, the person a little bit</p>	RC  RC

		in between because you seldom find brilliant business people who are also brilliant system developers. I mean that's a unique combination. It doesn't exist basically. So to be able to sort of not only be able to understand the answers, one should actually be able to go beyond that and ask a critical number of questions. That is extremely important and if you're not capable of doing that yourself, you had better have some people around you with who you have trust with and can do the job for you.	RC
9	JG	So, would you say, as time goes on the role of the CIO is getting more business-centric than technology-centric?	
10	R5	We have said that for decades, or media has said it for decades. Analysts have said it for decades. And gradually I think it's getting somewhat true absolutely. And, I mean it all started out as I said with back office type of processes, in finance, ledgers, order handling systems and things like that supportive to the business but to a very large extent technology driven. And, in those days I mean if you think about it, finance processes; I mean the whole finance area is full with regulations. It has a heritage of many, many hundred years. There are so many things this is why it is. There are rules, there are frameworks but when you go in to other disciplines and processes like core processes like you have in product development, in sales, in manufacturing, you don't have those frameworks. Its more up to business practice I would rather say, and then you need to understand the business in a totally different way compared to if you can rely upon the framework that comes out. So, it also illustrates a difference which I think is very obvious is that rather than being supportive and do good things for the internal business processes, Because I mean, again, finance background; what are the benefits of the system; of the solution, reduce cost, typically, take out people from processes, shorten lead time, stuff like that. It's also gradually evolving in to the direction of creating new business opportunities to be able to point, or explore solutions which were not there in the past, deal with information management in a totally different way. And so, more from back office processes to front-end to customer supportive systems and more from being an order taker with difficult or hopeless prioritization situation because that's what it is and more in to trying to point at new opportunities. I mean the connected world is really what is challenging us. It is not yet that connected, but it's going to be, absolutely. Long answer?	BIL
11	JG	That's good. That's what we want, and you kind of just answered our second question which was what are the key responsibilities of the CIO; you touched upon that. But, if you	

		look at a normal day. What do you actually do? Like normal tasks?	
12	R5	<p>If I looked at my normal day until one and a half years ago, I can tell you it was so frustrating from time to time that I actually decided I will do something different during the last years because I mean it is, your, I think most of them, most of us, feel exactly the same. You run between meetings which are a totally different nature. You cope with so many types of the organization, different processes, different types of functions from a business point of view and then you have all the internal stuff which is about salaries and vacancies and admin types of things and meetings are often thirty minutes, forty five minutes, two hours. So the day from 8.00 till 5.00 was full with meetings and I was actually doing my administration on the weekends or evenings or a whole combination of it. So I think most CIOs work at least fifty, fifty five, sixty hours per week. I think they do, in most organizations. Today, I can feel that I am focused on technical information. I work with RnD organizations and the supply chain down streams and I have very little administration and I just love it. The ability to focus, that's the important thing; that is so difficult when you are a CIO, to do that and you also very often. I don't know any CIO who don't find a big struggle on prioritization because there is so much more to be done and there are so many unexplored opportunities and unfortunately it is, still very difficult in many organizations to get enough funds to do what you really like to do. You are strangled by budgets, you are, and of course, what do you need to do, you need to try to explore the opportunities which are the most profitable, at least ones which are most likely to be profitable. Not necessarily more profitable because here I can again feel we are sort of, the heritage is too strong per say because if you can reduce costs, it is likely that you will get an approval for that compared to if you can, not prove but if you can point at increased sales volumes for instance. The cost side is often more, how to say it, it is more obvious. You can very often afterwards prove; OK, we actually took out five FTE's in this process and they are doing something else somewhere else or they left the company. The success on the sales side, you can never isolate that. Was that because of that new product we launched last year? Was it because of a good business cycle? What was it? It's very difficult to isolate the business benefit side when you're on increased gross margin type of thinking.</p>	RC  RC
13	JG	Do you think the CIO has too much to do today? Because it seems like a very busy schedule.	

14	R5	<p>It is busy. It is busy. Yes, it is and I think it depends; CIOs they are of course differently organized. It is not unusual that you have a CIO who has just very small staff organization which is taking care of project portfolio management, prioritization, governance, these types of things and that is separated from the IT organization. You have a separate IT organization which is taking care of IT build, IT operations and infrastructure. If you have that situation, I'm sure the CIO will, could spend 60-70% of his time on the more strategic stuff, work closer to the business. The drawback with that is that you gradually will lose the contact with the engine room if I put it like that and you will gradually be more and more unable to ask those critical questions which I mentioned before. You don't understand consequences to that level which I personally feel is quite important to do. I mean, I need, people are different, I personally need to at least a reasonable level to understand a solution, to be able to ask the critical questions and if I don't have that insight, I don't feel comfortable. I don't even care about how they are coding it at the end of the day but I want to be able to understand the information model and try to figure out what could be the drawback with this. And in small simple things.</p>	<p>RC  BIL CCR</p>
15	JG	<p>So, you kind of talked about how the role of the CIO has changed a lot. It's been in constant evolution and if you try to look at it in the future, how do you think it will evolve in the future? How do you think it will change?</p>	
16	R5	<p>I mean it's very much a question of whether IT is supporting the business or being part of the business. If you go to a bank or a pure internet company. I mean without IT, it won't exist, so in those companies, it's a given that the CIO is really part of the business or is in the business if I put it like that. For companies like ours, where IT typically is supporting the business. I mean we don't have a big element of IT in our products, in our solutions. It's hardcore IRM which is put together in a smart way doing wonderful things in terms of liquid treatment, pumping and separating it, God knows what they are doing with it. On the other hand, if you think about it, all our products are dealing with liquids in one way or the other. For us, I think the challenge comes with getting the business to understand that knowing about these liquids and our machines, what that can do to the business to have that knowledge is a big challenge. To try to point at, yeah, but if we know about these heated changes, how they behave, you have a certain range within which it is supposed to operate and when you run outside that range then OK, now it is time for preventive</p>	<p>BIL  CCR</p>



		<p>maintenance rather than waiting for a breakdown call. So it's going into new types of businesses where some people in line of business can of course foresee this and they are overly enthusiastic about it maybe and that is for this type of company the true challenge to get acceptance at a high level, at a top level, yeah, we can actually do business and things we never thought about in the past. That is the critical part. Those were already there, there I don't foresee the change that dramatically. If you go to banks, If you go to whatever type of companies where IT is part of the business or is the business. They will not have the same type of transformation.</p>	CCR
17	JG	<p>The pattern seems to be, if you look at it from the 80's that the more we become dependent on innovations in IT, the more the CIO role becomes crucial and you would say that pattern would remain in the future?</p>	
18	R5	<p>Yes, I'm sure. Yes.</p>	
19	JG	<p>OK.</p>	
20	R5	<p>And then I also think another thing which, I was at a very interesting conference a few weeks back. There was a juror there who said a couple of few things that really stayed at the back of my head. One thing was that we had never ever in human history known so little about the future as we actually know today. And the future he meant, two, three, four, five years ahead not a hundred years, just the nearest five years. That's one thing because technical evolution is so fast and the other thing I picked up was that I think we will see a shift in how we do things, I mean those meager projects where you sort of try to fund 200 million sync projects for doing some things and you work on it for two years and suddenly something comes out. He used the term "fail fast, fail cheap". Rather than using the 200, use 10, create something, put it out there, have people to give feedback on it. It failed, it didn't work but you still have 190 left, so put another 10 in there, do something different, test that, it flies, it works. OK, let's bank on that concept and develop. That will change the whole development and implementation cycle drastically if we can apply that way of working.</p>	SC
21	JG	<p>Trying and error. What is, what have you said?</p>	
22	R5	<p>By trial and error.</p>	
23	JG	<p>Yes, something like that. So, going back to today, what do you think are the biggest challenges for the CIO? How do you deal with these challenges?</p>	

24	R5	<p>I'm part of a network with CIOs from other Swedish large organizations. We typically meet 3-4 times per year, spend a day or two together and there was one of them in the last meeting we had just a few weeks back and said, there are two different ways you can get fired as a CIO. The most common, there are many different ways but the two most common, one is to take on a large SAP program, that spans across the whole enterprise, the second is to initiate and drive a very large outsourcing project where you have a very large owner of the IT organization and you decide, OK, let's do this in India. We will keep a sort of only a demand organization internally. These are probably the two most difficult tasks you can take on. They are very different. The first one is very much business focused and the second one is very technology focused. Technology in change management on people so it kind of illustrates both the spread in the type of questions you are supposed to be not dealing with but you are supposed to take decisions on and also the enormous consequences they may have for the company particularly they of course if you go in for a full blown ERP implementation. At the same time you always have this changing world in the sense that you have mergers and acquisitions. Even if you have been able to obtain this perfect streamlined world where all and everybody is using the same systems or business processes are streamlined, optimized and suddenly there is an acquisition and in comes something with two thousand employees from the left working on totally different systems, different business processes, different everything, how the heck to get that in to our organization. It never gets finished. To be able to balance these things is I think very challenging. There are so many things that constantly come to the surface and need to be dealt with and you can't just take a quick decision and just hope for the best.</p>	<p>CCR</p> <p>CCR</p> <p>CCR</p> <p>CCR</p>
25	JG	How do you prepare yourself to them?	
26	R5	Sorry?	
27	JG	How do you prepare yourself for these challenges? How do you learn more about them? Deal with them?	
28	R5	You involve yourself to a very large extent and try to leave	

		<p>more expert type of things to people who you have trust in as I said because you can't cope with it all. There's no way. And of course I mean one thing that is truly important is to build relations, build relations with I would say all levels, not only top management, I mean in the past that has been a typical flaw or drawback, that the IT managers didn't build relations with top management. That's truly important. Don't expect them to be informed to the level that you maybe would like them to be or involved but they should be aware that they must understand things to an extent, what is the business impact, why is this important for your division. They should be able to know that or tell that and middle management are always the ones who are carrying the change through. The guys on the top take the decisions and probe the budgets but those who really do the hard work. They are a couple of levels down the ladder so to say. And if you don't get the end-users with you. If they don't understand the reason for change. If they don't buy in to it, you're still stuck even if you had a good relation with the upper levels. So that's another very important part of the message, you need to work with all others.</p>	<p>CRP CRC CCR</p>
29	JG	<p>Going back to what I said in the beginning about the clarity, lack of clarity and as in the literature it's very observer focused and they don't really focus too much on the perception that the CIOs have on their own roles and, do you think there is a lack of clarity surrounding your role as a CIO? Like are you maybe unsure about what role you are supposed to play at times in the organization.</p>	
30	R5	<p>I won't say that. Not really. Not really. I mean I think it depends a little bit about who you are and what you want to do really. Well, one of my colleagues in this network, is a CIO of Volvo cars and I mean he came to a company four years back, traditional car manufacturer, which was under heavy stress financially and newly acquired by Chinese owners and I mean the role he went in to four years back is totally different from the role he has today. And it depends in his case I think very much on himself. Because the car is now really getting connected. Of course if you look at the spend, the IT spending on cars, still probably 90-95% of total spending goes to the traditional things. To supply chain, to finance, to order handling, God knows what. What they are doing now with the functions in the car, the connected car, that is, I mean he has been able to point out what you really can do with all this information. You had a GPS system in the car already, you had a lot of computing power, what you really can do with that going forward. He has really been able to, he's on his way I feel to transform the perception of IT in the CIO role in that</p>	<p>RA</p>

		company and very few people are able to do that. I think you can do that as a newcomer. It's extremely difficult for somebody who has been in the company for, like myself decades. I think you have an advantage if you come from the outside.	
31	BB	You mentioned perception. In your perception, what makes a good CIO? Some key attributes?	
32	R5	Yeah. I mean if you, many different things in a way but it deals with, building trust is what you have to do at the end of the day and how do you do that. First of all you need to, you can't have a problem with those things in the engine room as I put it. It should just work. If you have major problems that relate to unstable networks, and unstable this. If the infrastructure and existing applications which you are using on a daily basis, if you have trouble with that, forget about the rest. You need to fix that in the first place. It's kind of a hygienic factor and if you can't fix it yourself, make sure you get people on board who can do it for you. When it comes to changes and development. To build a credible record on delivery, delivering on promise is not a bad thing either. And to deliver on promise means time, cost and functionality. And typically we are reasonable in this company on the cost side. We are very poor on time and we tend to compromise with functionality. It may look different in different companies. We are much more money box than time boxed if I put it like that. Time boxed means, OK, make sure you deliver on the date, I don't care about cost. So, there are two very different sides of that. It's the run side and it's the developed side. And of course what gets developed will be on the run side later on so you had better make sure that the transition there works well which is not necessarily the case either. You may have one different solution but they can't operate it the way it was supposed to be done. And also the third element is this more future looking thing, be able to help the business in the prioritization process. They should prioritize. The CIO should not. The CIO shall be involved in trying to prioritize but at the end of the day, it's a question of, shall we do something which is heavily supporting sales or shall we do something which is related to supply chain. You always have these conflicts between functional parts of the organization, the different components.	RC  RC  RC  SC
33	BB	Earlier when you mentioned the aspect of being a bridge, and if we were to juxtapose this with your vast experience, the 15 years you mentioned, do you think you are actively involved in running the company?	
34	R5	No, I won't say that. Actively involved, supportive yes, actively involved, no. Indirect, absolutely.	BIL

35	JG	You kind of just touched upon like they prioritize. So you help them prioritize?	
36	R5	Yes.	
37	BB	OK. Interesting.	
38	R5	And that's the main reason for why I'm saying that the COO, if you have that, not many organizations have that but I think that's the perfect place to put the ownership, Chief Operating Officer who is typically responsible of supply chain, product development and then you typically have sales and marketing and finance. Then you are sitting on two cores, I mean the core business process is to develop, to produce and to sell. And if you're sitting on two of these, you have a very good position to take the right decisions. I've never seen an organization where you have all three under one and the same responsibility then you typically end up at the very top. And then you also have to realize that, I mean people are different and CEOs are different as well. Some of them are extremely interested even though it is not the core thing for the company. They may be very interested and have ideas and it may be a critical thing for the company not that I'm particularly interested.	CRP CRC
39	BB	Well, coming down to technology trends, IT technology trends. As CIO, do you think it's necessary to stay updated with IT technology trends?	
40	R5	Yes	
41	BB	And, how do you stay current on these trends?	
42	R5	Yeah. I used to read a lot. I was travelling the world for a number of years. Not so much in the last five years but during the first 10 years in the role, I was travelling the world basically, and that means you have a lot of time in airplanes, you have a lot of time in hotels, I mean, lounges and whatever, then I was reading, reading, reading a lot. Being active in research is another way. Not only read research, also actually participating in it. Gartner is sort of the standard today when it comes to Information Technology. I've always spent a lot of time with Gartner, seminars and stuff like that. That's very useful.	RC
43	BB	Well, you're the second CIO to mention Gartner. I just want to move on to the aspect of new or emerging technologies. Have you implemented any new technologies in the recent past?	
44	R5	New technologies, new, brand new, more less frontier technologies. No, I won't say that. [Company Name] like so many other companies in this type of industry are not forefront. We are not laggard either but we are followers rather. Absolutely. I mean it's, I visited a Danish company, manufacturer two years back, [Company Name]. They are I	

		think number one in pumps, dry pumps. And they said, we, today, we have in all our new products we have sensors who can detect a number of things from the pump. They are connected or they can be connected. We don't have a clue what we are going to use that information to. We don't have the business case but it doesn't make the product that much more expensive, and we are assured that in a few years, maybe five years whatever there will be business opportunities which we can't think of today. I think that is the type of thinking you need to apply. New technology, they don't even know what technology they are going to use to use that information today. But the infrastructure needs to be there in the first place and the infrastructure was those sensors and the ability to connect to internet with the device. If you think about big data and stuff like that, no I don't regard that to be new even today. There are some interesting I would call it experiments ongoing with visual recognition systems, etcetera in the manufacturing but that has been around for a long time now. So no.	
45	BB	OK, we are moving on to leadership. What is your view of your leadership style? profile?	
46	R5	What it should be like or who I am?	
47	BB	Who you are.	
48	R5	Yeah that's a difficult one. You need to be honest. You need to be honest with everything particularly in this case. Yes, I think people receive me as rather open and honest, am a little bit too straightforward for some people to feel comfortable with it sometimes. I mean working in a company like this is of course to be, also in a multicultural environment so I would say most things 90% of what we do that relates to information technology is very Swedish or Danish based [Company Name] is from that point of view a Swedish-Danish organization. It's also a company where people typically kind of stay for good and bad so it means that the company culture tends to override the culture of geographies quite frequently. Even if you go to Vietnam or Chile or wherever. OK, I've been with [Company Name] for fifteen years. I know what it is like. So that, that you need to adjust your leadership style due to cultural differences is not that apparent. It's not that important as you may think because there are so many who are used to the [Company Name] style of working or managing. We are a, if you don't, if you can't work in a matrix organization, you'll have problems here. And by that I mean that you have the traditional silos if you call it like that, RnD, manufacturing, sales but then you have sales segments which spans across this. And you never know really, where is the decision made so to compensate for this, there is a lot of boards around where you take an	CLS

		enterprise you want things from and you put people together for different parts of the organization so that is what I call navigate in the matrix. So, you can't just rely upon the functional structure. OK, he's the head of that organization, you better make sure that it will also be supported from the board somewhere which has an impact on this. So that's a very critical component. To be able to navigate the organization's structure and the matrix. To be able to do that, you need to be able to reach compromises from time to time. Outspoken, straightforward, perhaps to, straightforward on some occasions I mentioned. Trust with other people is important. I mean as I said in the beginning, I'm personally interested in solutions because I want to understand that to a certain level but at a certain point, you must say, OK, I understand enough, I need to trust the guys on this, that. Yeah.	SC
49	JG	Do you think the people at this company and the other C-level executives, do you think they know what to expect from you	
50	R5	Yes. Absolutely.	
51	JG	Do you think they expect too much?	
52	R5	Not really, they, I mean they have unrealistic views on, unrealistic views on timeframes, time schedules and costs. More than one and too frequently, they are asking for a solution, technical solution when the problem is not the existing solution itself. The problem is the poor business processes and a poor discipline to live according to the poor business processes. I had a wonderful situation three-four years back. I was a member of a group and the group management called me. There was one of them. He was calling. He said. What would it take in terms of cost and time to implement or develop and implement a new install based solution? Install based is where you keep track of all your delivered machines around the globe. Yeah I said, I mean how long is the string? and if you like we can fix the application in a few months. It will probably take a year to get it implemented or we can spend one year on developing it and it will take still another year to implement it but your problem is not the existing solution. But we have too poor quality in the system!. Yes, because the sales company don't work according to the business principles or the business processes. I mean we know it works perfectly well in Germany and Belgium and also in some other countries. That is shit when we get to Asia. You know why, same system, so there is a tendency to believe that the IT solution itself is the holy way. And they oversee the need for the importance of having business processes which spans across the entire enterprise that people deploy.	ECSP



53	BB	What is the most difficult decision you have had to make as a leader?	
54	R5	Most difficult decision. That is actually to say no to something in which you are a strong believer. That's awful. I mean you're sitting there. You have a good idea. Not only you. Maybe somebody else has a very good idea and he has a solid business case. But for some reason we can't get it done. We don't get the right resources or we don't have the financial faculties or whatever and you need to put it in the background for a while. That's, that's tough. I don't like that.	CL
55	JG	Have you ever fired people. Many CIOs we've interviewed said that the most difficult decision they made was to fire people in their team.	
56	R5	Yes the answer is yes but it's not a situation which you look forward to. It's rather of an of course. In most cases, it is not in all cases I must say there has been still some sort of neutral understanding for the situation. I've never been in a situation where I had to fire somebody who really felt I am perfect, you are stupid. I have never met that. Sorry. But then you have, of course you have those situations where you have financial restrictions, limitations and the tab from top management says we need to get rid of 500 people in the Nordic countries. That happened from time to time. I mean 2008-2009 was such a situation and that is more difficult I would say. If you have somebody who simply doesn't behave the way that is expected. They know it. But when you have good people or reasonable average people or whatever and you still have to lay them off. That's more difficult. Guys like me, my age, that's not a big deal , OK, because you're still going to retire in two years, you will have a good package. They may still say I would prefer to continue to job but still financially they are reasonable off but somebody who is 35 years old with 2 kids and a wife and doesn't have a job. That's awful.	CCR
57	BB	Considering the interplay between the business-centric nature of IT and the techno-centric nature of IT. Do you consider yourself as a business leader or an IT leader?	
58	R5	That's a tricky one. No, I think I have gradually become more and more on the business side. But as you may understand from it, I have never had the intent to get rid of the other part. I still want to have a foot down. I would say 50-50. That's not the answer you would like to hear probably.	BIL
59	JG	Actually, it's an interesting answer. I think most of our respondents would just say business. The technical part is more in the past but 50-50, that's an interesting answer. We like it when we have different answers.	



71	JG	Do other C-level executives play a role in the management of IT? Or is it only you?	
72	R5	No, I mean the CFO is, on top of the fact that he is heading the finance area, he's also heading information technology but he's also heading the IT board which is the forum where initiatives are prioritized, where the IT frame is decided upon etcetera. So he is the guy who is in lead of this on the C-level. Then we have of course the operations, supply chain where you have the order factories and distribution centers. That person is also very much involved. And then we have the three business divisions, equipment division, process technology and marine, those three together with the operations. The ones who are outside the IT board and outside the let's call it the inner circle and are still part of group management is HR and communications which I from time to time have found a nuisance particularly in communications. You can do so much more going digital to a larger extent than we have done in the past. On, the other hand, we have at least an information officer, a guy who is heading corporate communications, very interesting but it tends to be that things are coming in through the back door. They find they are not part of the IT board, but still want to have things done soundly, there is a solution at the doorstep yet we were not even involved, we were not aware.	CRP
73	JG	Yeah, I think we have only one more question left. Do you think that CIOs should be considered as potential candidates for CEO?	
74	R5	In this company, no.	
75	JG	OK.	
76	R5	I'm not saying it could not be possible but it's definitely not the first place where I would look for it. Because if you don't know the products, if you don't know the technology and sales. I think you have a major problem in this type of company. You should have a background from sales or product development to really earn it because I think the CEO has a critically important role in the connection in relation to the customers. I mean he needs to be able to discuss technical solutions like I need to understand the solutions from an IT point of view, he needs to understand the products in the dialogue with the customers. Because at a certain point when you're sitting there and you're negotiating a big deal with Maersk or Shell or Epson or whatever, they simply expect the CEO to come to the table and finally have a discussion about, the contract. And if he's not knowledgeable about the solutions. That's a very tricky situation. But of course the main role is to be a very good leader. That is the most important thing. But the background	CRC

		from information technology in this type of company is not by default the first place to look for a candidate. Am not saying impossible but it's difficult.	
77	JG	Just, something I remembered, like, have you experienced like in Europe we don't normally use the term CIO as much as in America for example. We use more IT director or IT boss. Is that something you have experienced here, like because we have been calling a lot of companies and respondents and they say; I'm not a CIO, I'm an IT director. And we were like, is there a difference there?	
78	R5	Honestly, I think if you're really true. I mean it all comes from America. If it's really, really a true CIO, he's part of group management. And it used to be as you said, IT director but then the CIO term as such came around and got very much, it was picked up. So I started to refer to myself as CIO even though I was never an ordinary member of group management. All my colleagues did, everywhere, but in the true sense, I think you are supposed to be part of group management. Very few CIOs in Sweden are that if they are in these types of companies. It's different if you're in banking because. This is really where IT is really part of the business or is the business. So, but there is a gradual change. I remember there was one person in this network many years back. That was when the CIO started to get around in Europe and she was IT director for a large Swedish corporation and she had sort of a conference with all the different IT; members of the IT community from all over the world came for a one week conference, whatever it was and she figured out that there were something like 30 CIOs in the company because the local guys named themselves the CIOs. She was only IT director.	CL BIL RA
79	JG	I think we had another respondent who also said people are calling themselves CIO too easily these days.	
80	R5	I agree. I recognize that.	
81	BB	And then he actually was similar to you in terms of mentioning that you do have to be involved with top management to be some kind of C-Level executive.	
82	R5	Yeah. That's true.	
83	JG	Yes. I don't think. Do you have anything more?	
84	BB	Well, not really. But it was a very good interview.	

## 7.7 Appendix G – Transcript Interview 6

*Date: 6<sup>th</sup> of May, 2015*

*Duration: 45 minutes*

*Interview format: Telephone*

*Interviewee: Respondent 6*

*Transcribed by: Brian Buggah (BB)*

*Transcription checked by: Jan Gadimzadeh (JG)*

<i>Line</i>	<i>Speaking</i>	<i>Text</i>	<i>Code</i>
1	JG	OK, so our master thesis is first of all about the CIO, the Chief Information Officer, and the evolving role the CIO has undergone over the past decade. So before we get in to the roles and responsibilities of the CIO, we would just like to know a little bit about you. So could you just like tell us about your educational background, your professional background first?	
2	R6	Yes, I have a degree, a master degree in Engineer physics from Uppsala as well as a bachelor's degree in Economics also from Uppsala. That's my education background. And then after university studies I worked for 10 years at Accenture as a management consultant. And when I left Accenture, I was responsible for Accenture's IT in Sweden. And then after that I worked three years as a CIO at B&B Tools, a company that is selling industry supplies in the Nordic region. And then in 2011, I started at [Company Name]	
3	JG	OK, nice. So, you said you started at [Company Name] as CIO in 2011 so that was four years ago and then you had three years of experience prior to that so you have been a CIO for a total seven years, correct?	
4	R6	Yes. yes.	
5	JG	OK, because that was our third question, how many years of experience do you have? Seven. Ok, so, let's move on to the roles and responsibilities of the CIO, so, first of all you are the CIO of a pretty, like different company like its governmental, [Company Name]. It's a lot different from all the other respondents we've had so far.	
6	R6	Yes, but I would say that it's not actually. Because, [Company Name] is actually like a retail company if you change to two perspectives. We don't aim to maximize our profit because the whole structure of [Company Name] and the whole structure of the alcohol politics in Sweden is to minimize the damages of alcohol and what we do believe in Sweden is that you can	

		<p>reduce; how do you reduce the damage of alcohol is that you have; and research has shown that you have high taxes and you restrict the availability. And taxes is a government controlled system. It has nothing to do with the pricing of alcohol to begin with because of the taxes but what we do work with is take on the responsibility so we actually have a regulation about the opening hours, set tough regulations on whom you sell alcohol to etcetera. And that is the aim of [Company Name]. To handle its availability. So in that case, if you take away that, we don't aim to maximize our profits. We are a retail company overall. And so, if you look at my responsibility, I have the same challenges and the same things I work with, with some of my colleagues that are CIOs at other retail companies. The only difference then is that in our business cases what we do, when we do. We should develop something and do business cases. We don't have maximized profits as a permit in the business cases. We aim to maximize how satisfied our customers are with the service we can provide</p>	
7	JG	OK. What would you say is the role of the CIO today?	
8	R6	At [Company Name] or in general?	
19	JG	Let's start from a general perspective, what would you say is the role of the CIO from a general perspective?	
10	R6	<p>In that, I think it is something that changes and has started changing in the last couple of years and you agree the role of the CIO will change much more in the next coming years. So being an IT specialist and responsible for the infrastructure in the company. The CIO role has actually evolved in to become a business enabler for how you could actually treat competitive advantages and that move has been enabled by the fact that IT is much more integrated in the core processes and for example in a manufacturing company, a lot of the things you actually manufacture contain a factor of IT and a couple of years ago we had different types of IT departments. The IT department had a research and development department that actually handled IT. But that merges much more now and what you also see is that; what you can, a lot of companies, most of their money is not anymore from actually selling products, it's from selling services. That's also much more integrated in the IT development so I mean you can hear it sold; I mean there are actually not product providers anymore, there are now service providers. And that actually makes it much more important to have IT in companies more than the past. There has actually been a change now and the CIO class is now a part of the management team and that's actually an important change for IT. IT has been like a</p>	<p>RC</p> <p>RC</p>

		support function even now it facilitates competitive advantage, you can add IT services to your car and actually then you can make a fine decision about which car you should buy. You actually are looking at how well connected it is to Spotify etcetera which is quite a change. And this is the same at [Company Name] because the process of development makes it much more important in the way that decisions are taken; the development projects that we are, we are, working with IT as a very important part of it. So the importance of the role as a business enabler is changing the CIO role.	CL  RC
11	JG	Just out of curiosity, would you say that your role as a CIO at the company you worked for before and the company you work for now, would you say that they are two completely different roles?	
12	R6	Not two completely different roles. But my responsibilities are different. In my previous company, I had a role as CIO and I also had responsibility for some of the large development projects but today I have the role of CIO which includes setting the IT department as well as being responsible for all our major development projects so there's not a big difference.	RC  RC
13	JG	So, could you tell us about how you normally spend your day, like a typical day. What do you do, some activities, tasks?	
14	R6	Very good question. But it's hard to say what a typical day is. If we should rather talk about what I spend my time on, in percentages then it can change a little from day to day. I would say that 20% of my time is dedicated to more being, heading, having a functional responsibility. I mean I have a number of functions I am responsible for and I need to have, it's all about; Today for example we spent four hours in a meeting. Every second week we have an IT management team meeting so we spent four hours with that today for example; it was 5 hours actually. And in that I have a meeting at 7 consisting of administrative important things to do. But still, another 20% I have to spend being a manager and then I spend some time being; working with the development of IT and also some of the large development projects that we have and I would say that is mainly 40% of my time. And then I also spend some time, because I'm part of the executive management team at [Company Name] and then therefore add about 10% of my time taking part in the things that we do as a management team so it could be that visiting some stores etcetera or it could be taking part in some official things such as management meetings etcetera. And then it's not like the border line because somewhere along the way, I have some	RC  CL CRC



		<p>other things that I do as part of the management team. And then I also have the responsibility right now with working with the whole business planning, strategy planning for the whole company. So I also spend also maybe of 20% of my time on that right there. So a typical day is working with those different areas and on a day to day basis 4-5 hours with the IT management team and then I work with the business planning. I had a meeting with the CEO over that.</p>	BIL
15	JG	<p>It sounds pretty busy. Would you say that it's a busy position to have?</p>	
16	R6	<p>It is. It is. In a way that. It is a busy position in the way that you have a lot of things to work with. But at the same time, what is also very motivating and stimulating is that I don't think in any other position you have so much insight in to what is happening in different parts of the company because IT is very much integrated in everything we do so you also get insight in to how it works and developing it. So that makes it become quite stimulating. Then of course it's all about how efficient you are; working I wouldn't say that this role is much more different than the other role. But it's about how do you position yourself as well.</p>	RC
17	JG	<p>OK, so moving on. If you just would look further ahead in to the future a little bit, how do you think the role of the CIO will evolve?</p>	
18	R6	<p>Yeah, I think, looking at what I talked about earlier that the CIO is important as an enabler and working with the competitive advantage in companies will be more and more important to have the IT really as the management team. So I think we are going to see a change there. And then if it's the CIO role or if you create, I know that some companies actually create a new kind of role where they had like someone who is responsible for the development of the company and they have integrated IT in other functions within this where it's also seen but it's not necessary that you take the current CIO and make them that person. I mean you have CIOs today that are really IT persons. And if you won't have persons that are working with the business, developing the business, maybe you need to have some urgent kind of competence for some of the people or persons but I see that the role of the CIO will evolve furthermore towards the creation of competitive advantages, better offerings for the customers and also to use and take advantage of the digitalization to make your companies and business processes much more efficient, and define ways where you can manually, transform manual processes to automated processes</p>	BIL

		and that makes this way very important.	
19	JG	Do you think it will be more business centric or technology centric?	
20	R6	Business-centric.	BIL
21	JG	Would you say it's more business centric today as well?	
22	R6	Yes it is.	
23	JG	OK. So, what are some of the challenges you face as a CIO?	
24	R6	Of course, there is a time constraint. You want to do so much. You have to find time to work with all things you want to work with which is the biggest challenge. Then it's a challenge of I mean to be able to understand the business and the technology. I mean even if it is more business centric and business driven, you still need to understand the technology side because we also see a change that a lot of things are getting more and more driven by technology changes as well and then it's important to keep, to make yourself, that you understand enough of what is happening on the technology side, be more aware of it and also get updated, sufficiently updated and things like that. And have a balance between, don't make technology decisions only but you need to have the business side but also so that you can drive changes on the business side to technology as well so, and then of course some other challenge is handling the different demands because you have a demand of having an operation that are stable and cost efficient etcetera and the whole IT platform must become more and more efficient. At the same time, develop more new I mean as I said that you have a lot of opportunities to automate business processes and that means maybe that you need to have new tools and different IT systems to do that and at the same time you drag down the costs in the operation side and also again when you develop, for example in [Company Name], I mean we have our different stores and we have a cost on that but at the same time now our customers require that we have a lot of digital capabilities as well and we have costs with that without reducing the cost for the stores . So what we will need to now is have to find synergies between that so maybe we can let our customers use the digital tools as sensors tools so we don't have to spend too much costs on the stores and transform that. So there's a challenge to handle the operations at the same time handle the development as you have a lot of demands from the business side for development.	CCR CCR CCR
25	JG	How do you, do you do something special to deal with these challenges?	CCR

26	R6	<p>That's have a dialogue, an open honest and continuous dialogue with the business side and really make sure they are a part of that. I think, in some, especially in the media, I mean if you read IT newspapers etcetera, there's a lot of discussions about the IT and the business and you should have governance to do what in a etcetera, etcetera and I don't believe that term. IT is a part of the business. It doesn't change. And actually this is something that, I think the IT industry actually is created by yourself but they talk about themselves as something outside of the business. I mean you can't have that, you don't have to be separate from the rest of the business. You're a part of the business, not IT and the business, you're one company and you have to work together to meet your goals and objectives and not so long ago, I discussed with my colleagues in the management team as well as the people working in the IT department needed to discuss with their colleagues in other departments and together we can work. But it shouldn't be, we don't have our internal customer, we have only one customer and then we are all colleagues within the company. I think then it's much easier. It's not more complicated than that but at the same time you need to have a structure, how you work with that for example here at [Company Name], we have a business planning process where we all plan together and separate of course and we find ok what kind of development projects and it's a good thing to have to work together and I think that's very, very important and you don't have different planning processes where you know what happens in other companies etcetera where IT do their own planning and try to find out what the rest of the company wants them to deliver. It can't work like that, you have to create it, together.</p>	<p>CRP CRC</p> <p>BIL CRP</p>
27	JG	<p>OK, very good. Interesting. So, one of the things that we have identified, we have done a lot of research on the CIO from an academic point of view and what we have identified in the literature that there's a great lack of clarity surrounding the CIO role. It seems to be a very ambiguous role open for interpretation. Would you say that there is a lack of clarity surrounding your role as a CIO?</p>	
28	R6	<p>Sorry I didn't hear the last, your question.</p>	
29	JG	<p>Are you perhaps, like, do you think there is a lack of clarity surrounding your role as a CIO?</p>	
30	R6	<p>Here in my position at [Company Name]. If it's unclear, No. I don't think so. I think it's, maybe in some companies. No I don't think it's unclear but I think in general it could be unclear because as I said the CIO on one hand can be very technical and only responsible for infrastructure and then on</p>	<p>RA</p> <p>RA</p>

		the other side you have a CIO role which is really involved in the business development for the company. So the spectrum of the role could be quite very broad and that makes it of course unclear in some companies.	
31	JG	Why do you think your position at [Company Name] is so clear? You said it doesn't seem to be like some lack of clarity for you but in general it might be?	
32	R6	I think it's because we have a very good executive management team where we have pure discussions and pure responsibilities. I think it's a good thing.	RA CRP CRC
33	JG	Ok. So are you actively involved in the running of the company?	
34	R6	Yes	
35	JG	How?	
36	R6	As I am part of the executive management team so.	CL
37	JG	Ok. So you kind of touched upon this next question about IT technology and trends. I figure that you think it's important to stay updated and current on those IT technology trends, no?	
38	R6	Yes	
39	JG	And how do you specifically do that?	
40	R6	I read a lot. I try to be curious. You always have to be curious. I, we invite different; most of our current suppliers and partners that work on the IT side, we invite them to come to us and talk about new machines. And as well as we invite other parties to come and have discussions so we try to, we actually started, what happens every second week, I and IT management, we started meeting and discussing actually what happens in the world around us so we try to look at what is happening and not only at the business entity on the inside.	RC
41	BB	OK, earlier you mentioned being focused more on the business side, this is where I come down now to ask you, given your job description do you set the technical direction of the company or does someone else?	
42	R6	What do you mean by technical direction?	
43	BB	Everything technical to do with the business as CIO; the IT technology, for example say the voice systems, that kind of thing.	
44	R6	Yes and No. I will say that the actual decision of. It depends on the question at hand. I mean for example we have identified a need of development that is we can automate a process, how we handle invoices or how we handle scheduling of all the store personnel etcetera. We have the process of how to run them. If we then identify that together as a company to organize a process then the actual decision would kind of, technology as you spotted is actually; how we	

		actually choose is set by me and the IT department. And then if we don't have any tools. If we followed those guidelines, we can actually, the final decision or exactly what we should have is actually a common decision between IT and the business. So I would say that I am setting the guidelines and the principles and then the actual decision is together with the business.	BIL
45	BB	OK. Alright Thanks. Just to follow up on that. You mentioned setting the guidelines. Could this also be a way of how you provide value to the company? If so, how is your performance assessed in the company as well?	
46	R6	Do you mean. No. I don't really understand the question.	
47	BB	OK, how do you provide value to the company and how is your performance assessed at [Company Name]?	
48	R6	We have some key, .I mean my performance and my responsibilities performance is actually measured by we setting some targets for the year and those targets are based on [Company Name's] strategic plan and goals we have there and also we have some goals leading to an IT strategy that's leading to [Company Name's] overall strategy. So we set goals for the IT strategy then we set goals in the year that are linked to this and my performance is actually based on how I can achieve those goals and if I achieve those goals then I create most value for [Company Name]. An example of those goals could be cost efficiency, we also measure actually how successful I am at delivering development projects and then the goals themselves.	ECSP SC
49	BB	OK. Thanks for that. We are moving on to leadership. What is your view of your leadership style?	
50	R6	Yes. I'm quite, I'm quite demanding as a leader and demand a lot from my circles and people that work with me. At the same time, I do believe in their feedback. I'm open. I spend a lot of time in communication with the people who work with me and with other people in the organization. I'm trustful and I have a belief that you develop yourself as well as develop others is important. To be curious and support them.	CLS CLS
51	BB	OK. Are there any difficult decisions you have had to make as a leader?	
52	R6	Yeah, yes. there's always difficult decisions for example scale, I mean the scale can be a lot of investments and of course difficult and tough decisions such as about people, managing people who are; from setting the salary to making the decision for if these people are in the right position they are right now or if we should try to find something else. There's always tough decisions.	BIL CL

53	JG	Have you had to fire anyone. A lot of our respondents said that they had to fire people.	
54	R6	Yeah. Yeah. That's the most tough decision.	CL
55	BB	According to you, what makes a successful CIO, maybe some key attributes?	
56	R6	I think it's important to find the right balance as you discuss a lot about understanding the business as well as understanding the possibilities that technology can add to the business and then you need to understand technology enough and then you need to understand the business in business processes enough and that is maybe the most important. And then, I think you must be a good leader, you need to set up a structure of how you run your responsibilities, how you communicate, how you find the right say ecosystem of suppliers, partners that you work with etcetera so there's a lot of things on the leadership side as well. And finding the right person in your team etcetera.	SC SC CL SC
57	JG	OK, perfect. We are moving on to the last theme which is your relationship with superiors and peers. Could you just talk about what is your relationship with the CEO. Do you report to him?	
58	R6	Yes. I report to her.	
59	JG	Her. OK. What is your relationship like?	
60	R6	It is very good. Very, very good. We, I think we have the right balance between us and she's also demanding and interested that I really understand also the need and the opportunities that technology adds to the business but the thing is that she gives a lot of responsibilities to me as a leader so I think we have a very good relationship.	CRC
61	JG	Does she know exactly what to expect from you?	
62	R6	Yes, I would say yes.	ECSP
63	JG	Do you think she expects too much or too little from you?	
64	R6	No we have a good balance. Sometimes if something is not really clear, we discuss it so I think it's good.	CRC ECSP
65	JG	Another interesting thing we found out about some of our other respondents was that they said that their CEO didn't recognize the importance and potential of IT in the same way as the CIO. Would you say that that is the case for you as well or is it the same type of thought there?	
66	R6	I think, no, no. I would say we have more less the same view on it. She's very open and I think she understands the importance and the possibilities of IT	ECSP
67	JG	Do you report to other C-level executives like the CFO, the COO?	
68	R6	No, no. I report to the CEO.	CRP

69	JG	Do [Company Name] have a CTO?	
70	R6	No	
71	JG	No, Ok. Do you know why?	
72	R6	Because I'm the boss. We are not a technology company And in that sense, but I have one guy in my team that you more less could regard as a CTO in that case. But we don't have that title.	CL BIL
73	JG	Do some of these other C-Level executives play a role in the management of IT?	
74	R6	Yes and No. They always play a part. As I said, we do our planning together and we then also, for example when we decide on the kind of development projects we should work with for a year. Then in some, we define also the responsibilities for those projects and so for example right now we have a project and we actually next week will launch a totally new net at [Company Name] and then it's me and one of the other management teams who has actually been working with that for one and a half years now. So we have, we are all a part of the different development projects that we do and those projects have a lot of IT dependents. I'm heavily involved as myself but for some other projects I'm not so involved and there could be another team heading those projects so they are involved but at the same time, there is no, I mean in other organizations sometimes you have like a IT board or something, we don't have that, IT board etcetera. We have a function under the management team that is called the development board where there are persons from different parts of the company who work with the development and recommends development projects and then the actual decision is taken by the management team. So, that's what I was saying. Yes, decisions have to be made but No, there is not a particular IT board or something like that.	CRP  CRP
75	JG	Another thing we identified in the literature that some of the other C-level executives. They have some sort of overblown expectations of the CIO. Like the CIO would solve every IT related problem in a very short amount of time. Do you feel like you have that position where a lot of people expect too much from you?	
76	R6	Sometimes yes. You always have of course expectations that everything should go more quickly than it usually takes	ECSP
77	JG	OK. We just have two more questions left. The first one is in Europe we tend to say IT director. I don't know if you have noticed this. In Europe it's more IT director, IT boss while in America, it's more they use CIO more of that term. Would you say that there is a difference between the two?	



78	R6	Yeah. I think so because I, I mean CIO was actually implying to some kind of leader. What we mean is that you are a director or you are a senior vice president or whatever title you would have. So actually CIO is more something that you work with not a title in that way I would say. And so there is a difference but we don't really care.	CL
79	JG	OK. Perfect. So the last question is do you think that the CIO should be considered as a potential candidate for CEO position?	
80	R6	In some companies yes and organizations, absolutely. Here we have a real independence on the job descriptions of persons so I don't think you would become the CIO just because you have the CIO role. And the reason is important. When you are a functional leader, that you are a CIO, CFO or HR director etcetera. You have a functional responsibility to make the change for functional responsibility to more general management and be able to be CIO. There is a large shift and I think that's more person to person. But then I think in some companies, you're in much more, better positions to take on the CEO role if you're a CIO especially if you're in a very IT dependent company. I would say like for a bank etcetera of course the CIO would be much more chosen. Of course, if I were to look in to [Company Name], I would say no. I would say I'm not from the right role but then of course as a person I would be a candidate for that but I would say no at [Company Name] because IT is not that important for [Company Name]. In other companies it's much, much more important the CIO.	CL
81	JG	OK. Perfect. That was all we had. We would like to thank you for participating in our interview. We could send you the transcription when we have transcribed everything if you would like.	
82	R6	Yes.	
83	JG	Yes. Perfect. So thanks and we wish you a good day.	
84	R6	Yes. Thank you.	

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