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IT projects driven by regulatory forces

- A case study of project management execution of regulatory IT projects within Nordea

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Abstract

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Information Technology (IT) projects suffer from high failure rates, a fact that could not have escaped organizations. The increase of IT projects is evident within the financial sector, partly due to the regulatory landscape that has evolved after the financial crisis in 2007-08, resulting in that large IT projects are initiated. To facilitate the managing of IT projects, project management is commonly incorporated as support for the execution. Through conducting a case study of two large on going regulatory IT projects within Nordea, this study answers the questions *"How is project management executed in regulatory driven IT projects?"* and *"What factors are of particular importance in the studied context?"*. The empirical findings were analysed by using theory from the field of project management that emphasizes the use of people- and tool factors in the execution, which were found applied in Nordea. The findings also found the project manager, possession an retention of IT- business- and regulatory knowledge, communication, Time Management, Quality Management, Risk Management and the Business Case to be of particular importance to comprehend in regulatory IT projects. However, some of the factors of the project management execution are not utilized to its full potential, which further inhibits the possibility of achieving project management success.

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1 Introduction

Large banks in Sweden are currently facing great challenges due to high regulatory pressure, mainly as a consequence of the financial crisis started in year 2007. The regulatory requirements have since the crisis advanced noticeably on behalf of European, American and local regulatory authorities, affecting actors operating within the financial sector (Quartz, 2013). The requirements involves for instance mandatory reporting of certain types of data, mainly to increase monitoring and mitigate operational risk of organizations (Hsu et al., 2013). Accordingly, the large banks in Sweden are all exposed to these initiatives and need to fulfill the requirements to retain banking licenses and avoid penalty fees.

Banks are inevitably exposed to this regulatory pressure, which most often result in initiating regulatory IT projects entailing development of vast IT systems that can manage automatic reporting of the required information. Development of IT systems imposes additional costs of compliance and investment requirements, which are not compensated by future revenue streams as these regulatory IT solutions only entail reporting functionality. However, an important aspect of the regulatory initiatives is to minimize possible future credit losses over time, thus positive for the bank. Nevertheless, revenues will further remain under heavy pressure within the financial sector (EY, 2012). This implies that the actors need to manage their organization and consequently their regulatory IT projects more efficiently in this demanding regulatory landscape in order to stay compliant and competitive. Regulatory IT projects are therefore a top managerial concern according to a global survey by Luftman et al., (2013) including 750 companies.

In order to comply with requirements the financial sector is subject to, *project management theory*, generally referred to as project management, is most often integrated within organizations in order to manage IT projects (Clarke, 1999). In the traditional view of project management execution, the Iron Triangle is often applied, thus managing the project through time, cost and quality constraints. Accomplishment of these factors is commonly referred to as *project management success* (Olsen, 1971; STG, 2013; Atkinson, 1999). However, nowadays researchers mean that these factors alone are not enough in order to attain project management success, but must incorporate people related factors when executing project management (Sukhoo et al., 2005).

Even though recipes exist of how to manage projects in a desired way, projects suffer from a high failure rate, which in particular applies to IT related projects. This supports the fact that these types of projects are most often of a complex nature (Sukhoo et al., 2005; Somanchi and Dwivedula, 2010; Atkinson, 1999). Organizations have lost billions of dollars due to poor IT project implementations and according to STG (2013)[1] only 39 % of software development projects are successfully developed on time, within budget, and with desired functionality. In that sense, organizations seem to face difficulties within the field of IT project management and consequently implies a need to study project management execution of IT projects.

Project management execution within the banking industry is of particular interest as the regulatory environment is becoming increasingly challenging. This leaves no room for compromising in terms of deliver on time with required functionality. In addition, increased investments in complex IT projects are advocated due to regulatory initiatives, without bringing any direct returns. Therefore, banks are becoming increasingly sensitive to further failures of IT projects and since the regulatory environment is quite novel and undeveloped in theory, there most likely exist an area within the project management field that is unexplored. Accordingly, the purpose with this thesis is to describe and analyze project management execution of regulatory driven IT projects. This gives a possibility to generate knowledge to the project management field of what factors in the project management execution that are found to be of particular importance in the achievement of project management success. But also what factors that are found to be difficult to perform given the regulatory aspect of IT projects. To fulfill the purpose the following research questions will be answered:

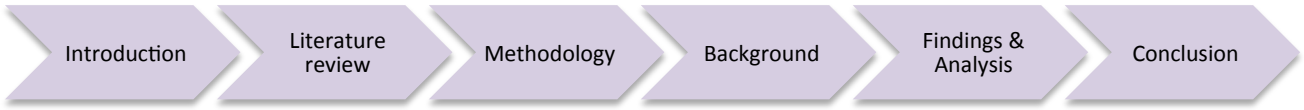
- **How is project management executed in regulatory driven IT projects?**
- **What factors are of particular importance in the studied context?**

This study was conducted within the Swedish banking industry by exploring how Nordea conducts project management execution of two of its largest IT projects, FINREP and FATCA, implemented due to regulations initiated by authorities.

[1] STG (The Standish Group) analyses project case information on real-life IT environments and software projects, where the database

1.1 Disposition

The disposition of this master thesis will follow the outline given below. First, in section 2 the literature review will be introduced along with a conceptual framework. Next, the methodology for this study will be described in section 3, outlining the underlying reasons for selections, discussion of limitations and generalizability of the study´s results. Section 4 entails background information of Nordea, its project management framework and the studied projects. Subsequently, findings and analysis are presented in section 5 and finally the conclusion drawn from this study is given and the research question answered in section 6.



2 Literature Review

This chapter includes the theoretical field of project management and explains the factors that should be emphasized in order to achieve what researchers describe as project management success. Finally a conceptual framework including factors determined to be of particular importance for achieving project management success in regulatory IT projects is presented.

2.1 Regulations following the financial crisis of 2007-08

The global financial crisis started in 2007 resulted in devastating consequences for the world's economies and left many banks and non-financial firms insolvent. The crisis was followed by a financial regulatory response on behalf of governments and other various authorities, affecting the financial sector. These initiatives are actions to mitigate the operational risk banks are exposed to, by establishing supervision and reporting requirements. (Valencia, 2012) Thus, intending to prevent an event causing such serious consequences again (Valencia, 2012; Porter, 2014; Goodhart, 2008).

The regulations are statutory and yet powerful, affecting financial actors to different extents. In order to implement and manage the regulations in the banking systems the consequence is an effort that cost large amounts. New regulations as FATCA (U.S. Department of Treasury, 2013) and FINREP (ESRB, 2011) consisting of reporting requirements do for instance most often require developing vast IT systems that can manage automatic reporting of the requirements (Graham et al., 2005). The consequences are that large IT projects must be established to comprehend the requirements and to be compliant.

2.2 The distinction between IT projects and projects in general

In the field of Information Technology, there is a tendency towards project failures. Although multiple actions have been attempted to address the reasons causing the high failure rate of IT projects, the rate are not descending. In fact, the opposite is rather evident, as IT investments increase and organizations report losses of billions, indicating an increasing failure rate (Stoica and Brouse, 2013). The reason for that particularly IT projects suffer from higher failure rates may have its foundation in that they somewhat differ from projects in general i.e. not including IT development. Since IT projects have a more complex and systemic nature, they require extensive knowledge in order to comprehend, in comparison with more general

projects (Hornstein, 2012). In addition, different strengths and weaknesses are apparent in different project types, which may result in that project management teams of IT projects are not fully aware of the inherent strengths and weaknesses they face. This could be explained by IT projects being relatively novel compared to non-IT projects, and thus are identified as any other project (Sukhoo et al., 2005). An issue most often underestimated is the risk exposure, which is said to be higher in IT projects (Scales, 2011). For instance, an increased risk may be found in the difficulties faced in knowledge- and experience sharing within IT projects (Newell, 2004; Robertson and Williams, 2006; Petter and Vaishnavi, 2008).

2.3 Applying Project Management on IT projects

The use of project management is common within organizations, especially nowadays when change constantly coming into force due to the dynamic and ever-changing environment organizations operates in (Bernerth, 2004). Executing projects often involve managing many complicated factors and activities, which are particularly evident in IT projects due to their complex and systematic nature (Luftman et al., 2013). Project management consequently helps to manage and facilitate the achievement of the requirements of an IT project. In Project Management, the Iron Triangle plays an important role and this cognitive map is a support to control and coordinate projects (Munns and Bjeirmi, 1996; Caccamese and Bragantini, 2013; Atkinson, 1999). However, many of today's researchers argue that the constraints of the Iron Triangle alone are not enough to manage a project and to attain project management success. Additionally the social context must also be incorporated in the execution of project management. (Sukhoo et al., 2005, Akgün et al., 2014) This implies that a focus on both tool- and people related key factors are of importance to achieve project management success of IT projects.

2.4 How to achieve Project Management Success within regulatory IT projects

In order to control and manage IT projects initiated due to regulatory forces, actors and structures are fundamental. Factors connected to these fundamentals, most commonly discussed in the research field, could be divided into tool related factors and people related factors, with the latter referring to the social context of project management. Through focusing on certain factors, problems that may arise in executing projects could be avoided according to Clarke (1999), and thus counteract the fact that many IT projects fail.

The concept of Project Management Success

Project management success is achieved with emphasize of tool- and people related factors within the project management execution (Cooke-Davies 2002). Project management success must however not be mistaken with project success i.e. pursuing project specific objectives (Markus et al., 2000). It could though exist alignment between the objectives for the specific project and for project management. Even if the objectives are not aligned, achievement of project management success can contribute to and facilitate project success. This means that absence of project management may increase the risk of projects to fail, implying the importance of applying it successfully. (De Wit, 1988; Munns and Bjeirmi, 1996; Cooke-Davies, 2002)

Another distinction between project management success and project success is the point in time when evaluation takes place. Measures of project management success are done during the execution of project management and these measures can only be carried out until the delivery. In contrast, project success continues to be evaluated after the project delivery, as the outcome of the project will be used going forward, hence further measured. Thus, project management success can be evaluated as successful, while project success is evaluated inversely. (Markus et al., 2000)

2.4.1 People related factors – The importance of the social context

The social context is as mentioned of importance when executing project management, thus emphasize on people. People related factors are of an intangible kind involving for example team learning, knowledge- and experience sharing, management support and communication, which permeate all people factors. Even though people related factors is a part of reaching the objectives of the tool related factors, they are not given much attention in the traditional literature, as the tool related factors are more comprehensible in terms of measuring, quantifying and evaluating (Munns and Bjeirmi, 1996). In recent research these factors have, however, received more consideration. According to Sukhoo et al., (2005), the focus on people related factors in the project management execution could improve the success rate of IT projects. It could, however, exist interdependency between the people related factors, meaning that a too narrow focus on one factor can exclude the highlight of another (Caccamese and Bragantini, 2013).

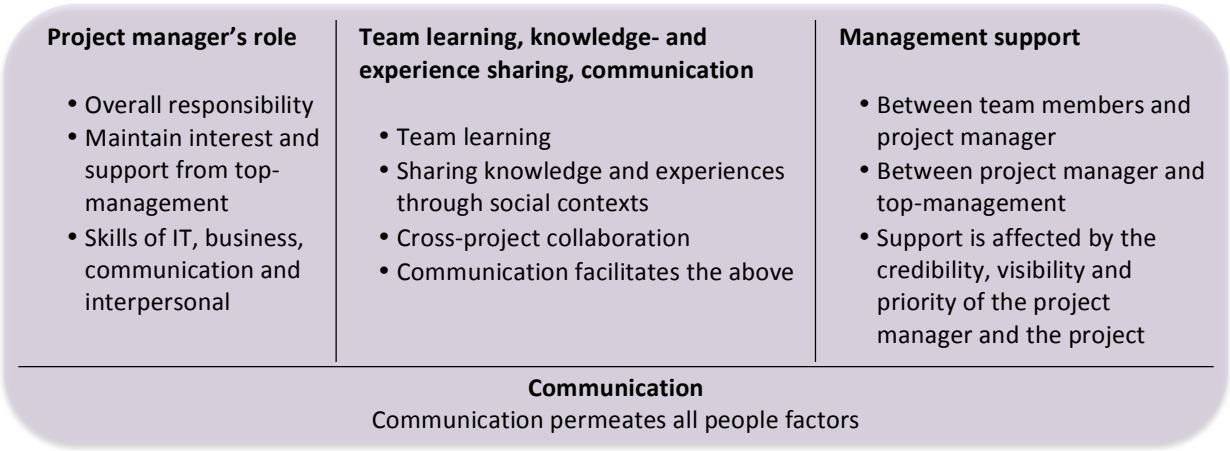


Figure 1. *The aspects of People related factors*

The Project manager's role – Responsibilities and Skills

The project manager's role is crucial in order to manage well-performed project management (Haggerty, 2000; Petter and Vaishnavi, 2008; Cerpa and Verner, 2009; Verner et al., 1999). The project manager is responsible for coordinating and integrating activities across functional lines. The activities performed include integrating activities to develop a project plan, execute the plan and make changes according to how the project is proceeding.

The project manager also has a responsibility to the organization, the client and the project team members. Therefore proper allocation of resources, timely and accurate project communication and competent management of the project is required. The project manager is obligated to inform the project organization, supporting functions and top-management about the project's status, cost, timing, prospects, risk and future problems in order to maintain credibility. (Meredith and Mantel, 2011) However, project managers often face problems due to increasing responsibility, but little authority, forcing them to negotiate with top-management for decision-making and to acquire sufficient resources according to Kerzner (2013). Kerzner (2013) further states that a major goal for the project manager is to maintain continued interest and support commitment of top-management, but also emphasize that top-management should become an integral part of project review.

Further, it is shown that the project manager's skills could affect the project outcome. According to Kerzner (2013) the project manager need to become familiar with the operations and have sufficient knowledge of the technology being used. In a study by Haggerty (2000), a linkage between IT project manager skills and the result of IT projects was found. The skills that project managers should employ are both management skills including business- and relationship competence as well as technology skills in order to manage the project properly.

The ability to communicate and having interpersonal skills are also fundamental. (Kerzner, 2013)

Team learning, knowledge- and experience sharing

In order to carry out a well-performed project management the project manager has to encourage team learning. Team learning is important when implementing IT solutions due to its complex and systematic nature. According to Akgün et al., (2014) team learning contributes to ensure that sufficient and diverse information can be incorporated which may facilitate the delivery of the project. This is needed as IT projects often require more tacit knowledge and hands-on experience relative to other projects. They further found that team learning is positively associated to other people related factors such as teamwork, communication, commitment, trust and manager support.

The importance of team learning goes in line with sharing knowledge and experiences gained from previous projects that further transfers to other project team members, but also to other on going projects (Yeong and Lim, 2011). The movement of knowledge is central to an organization in order to comprehend integration across boundaries (Carlile and Rebentisch, 2003). By sharing knowledge and experience, valuable insights of various tasks, best-practices of how to perform as well as causes of failure can be identified and consequently be useful for future projects (De Wit, 1988). Organizations effectiveness in integrating knowledge across boundaries will additionally distinguish them from its competitors as the complexity increases, partly due to the regulatory environment (Carlile and Rebentisch, 2003).

One way of sharing knowledge and experiences is through social contexts, which according to Newell (2004) is preferable in comparison with sharing by documentation. Newell (2004) further argues for reusing and sharing best practice processes and procedures within IT projects, which could benefit other IT projects in the organization. Petter and Vaishnavi's (2008) study also confirms the use of social contexts for sharing knowledge and experiences by incorporating storytelling i.e. letting people share their stories of experience. Knowledge and experience sharing further require adequate communication within and between projects. The use of narratives allows individuals to better communicate their experiences about situations. This implies that communication is an important factor as it facilitates the

knowledge and experience sharing as well as team learning, supported by Clarke (1999) and Petter and Vaishnavi (2008).

Management Support

Management support is an additional important people related factor. Verner et al., (1999) states that management support and control is fundamental since their involvement in the project management execution contributes towards achievement of project management success. In their study almost all of the failed projects were affected by the lack of higher-level management support and/or support structures. Lack of support could be evident when no feedback is given or when incommitment from senior management exist (Kerzner, 2013).

Kappelman et al., (2006) also identified the importance of management support in their study and states that it is needed as employees often tend to focus on what top-management deems important. This is also confirmed by Kerzner (2013) who argues that a strong project manager backed with senior management is needed to prevent development of unfavourable biases within the project organization. The latter may be a risk to occur when diverse interests and many ways to perform exist within projects. It is the project manager who is responsible to build and maintain the relationship with senior management, which is why senior management should be part of project reviews. This relationship is impacted by the credibility, visibility and priority of the project manager and the project. (Kerzner, 2013)

2.4.2 The use of tool related factors - Structures

In combination with people related factors, tools must be incorporated to achieve project management success. Tool related factors refer to tools that may be applied in project management in order to support the achievement of the objectives connected to the Iron Triangle. Additionally, tools for controlling risk most often is used which is especially important when dealing with IT (Cerpa and Verner, 2009), but are not initially included in the traditional Iron Triangle.

The Iron Triangle

In the traditional view of project management, tool factors are displayed in a triangle (See Figure 2), consisting of objectives regarding time, cost and quality. The Iron Triangle is an instrument to manage projects and, as mentioned, plays an important role within the field of project management. Even though it is an almost 80-year-old supporting instrument for

projects it is still commonly used among organizations (Caccamese and Bragantini, 2013; Munns and Bjeirmi, 1996; Atkinson, 1999; De Wit, 1988).

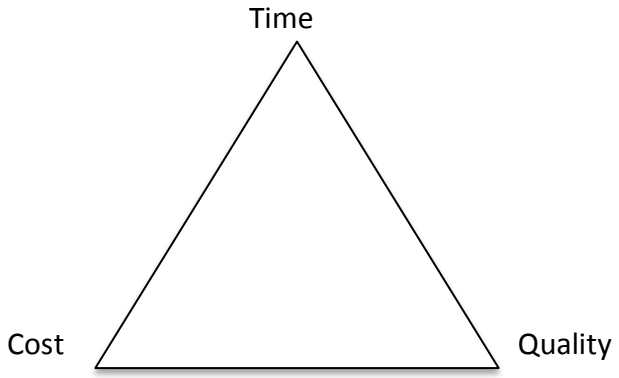


Figure 2. *The Iron Triangle*

These objectives desire to be achieved by the use of tools that measures and controls how a project is proceeding. However, critic against the Iron Triangle exist due to the fact that the constraints can be interdependent, meaning that achievement of one of the objectives often is gained at the expense of another, causing difficulties in achieving them all simultaneously (Brooks, 1975). For instance, keeping the time frame of a project can be related to increase in cost (Might and Fischer, 1985). This system of constraints requires that the project manager establish and maintain a trade-off between them (Kerzner, 2013). Consequently, the Iron Triangle should be used with carefulness according to Brooks (1975)

Extension of the Iron Triangle – adding a risk factor

Risk is often taken into account together with the traditional objectives of the Iron Triangle. Initiating projects implies that organizations are more exposed to risk and especially projects involving IT as earlier mentioned. The financial sector is particularly dependent on IT in the execution of transactions and the processing of authorities as the requirements advances. Therefore it is of importance that organizations in the financial sector exercise risk management along with project management in order to protect itself from operational risk. (Hsu et al., 2013)

2.4.3 Applying tools of achieving the objectives of the Iron Triangle

To accomplish objectives linked to the Iron Triangle and mitigate and manage encountered risks, tools such as Time Management, Cost Management, Quality Management and Risk Management are commonly adapted within project management execution. Incorporating these tools may further contribute to the achievement of project management success, which are summarized in Figure 3 below.

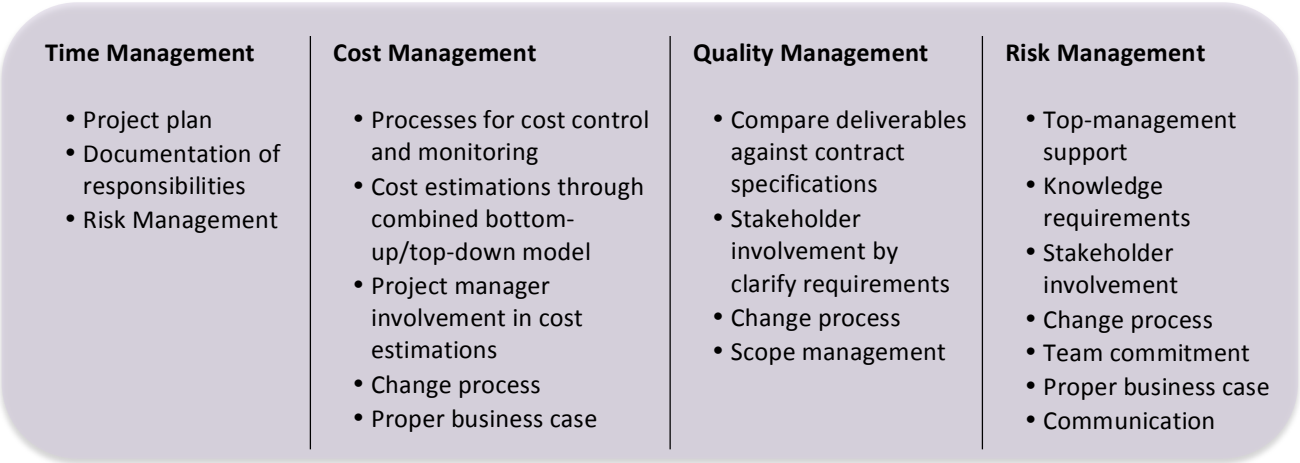


Figure 3. *The aspects of the tool related factors*

Time Management – complete in time

In order to ensure timely completion of the project and to be efficient, Time Management should be applied (Sukhoo et al., 2005). Time Management is one of the most difficult chores to face due to the continuous stream of unexpected problems that may arise. To accomplish an effective Time Management, a well-established project plan must be incorporated and appropriate priorities must be assigned to the project members. (Kerzner, 2013) It is additionally important to have adequate documentation of the organizational responsibilities, so as to clarify what is expected of the members. Moreover, in a study by Cooke-Davies (2002), factors connected to risk were pointed out to have an impact on on-time performance. The study emphasized the importance of having an adequate education on the concepts of Risk management together with an established process of assessing risk and an up-to-date Risk management plan. Consequently, in order to reach the time objective activities such as risk handling, clear role and responsibility descriptions, use of documentation, project plan and business case should be applied.

Cost Management – stay within budget

In order to reach the cost objective, processes regarding cost control and monitoring are important to comprehend i.e. cost follow up processes. To do so, it is crucial to initially

establish reliable cost estimates for effective project control since accurate predictions facilitate development of realistic financial plans. Kim and Reinschmidt (2011) suggest a combined bottom-up/top-down method in the budget process for estimating project targets. The method is based on statistical models of historical project costs as a benchmark in order to estimate costs with an accurate result. It is also argued that the estimates should be revised as the project proceeds by applying information of the actual costs in order for the estimations to be accurate. The persons calculating the cost-estimations are also meaningful within Cost Management, which is shown in a study by (Cerpa and Verner, 2009). More specifically, the involvement of the project manager is therefore crucial in the forecast of processes in order to get accurate estimations.

Besides accurate cost estimations, a proper business case is significant as it provides the project manager with a support to evaluate the objectives of the project e.g. cost objective. Other activities related to on-cost performance are the adaption of a mature change control process when changing the scope of a project, keeping the established schedule and apply proper Risk Management (Cooke-Davies, 2002; Kim and Reinschmidt, 2011). This implies a possible existence of interdependency between the time- and cost objective because when changing the scope, the manager see tendencies of not reaching the initial time objective, thus the solution may be to add manpower (Verner et al., 1999; Brooks, 1975).

Quality Management – Ensure desired functionality

The purpose of Quality Management is to satisfy the needs undertaken (Schwalbe, 2010). A way of measuring and ensuring quality of the project outcome is to incorporate the use of quality performance indicators. The latter means measuring how well the product appears to conform to customer requirements by comparing deliverables against contract specifications (Somanchi and Dwivedula, 2010). In recent research Quality Management is said to be a part of Scope management, which then consist of product scope i.e. the quality of the outcome and project scope i.e. the extensiveness of the project. Therefore both Scope and Quality sometimes says to be considered in the Iron Triangle, while sometimes they are interchangeable. (Westerveld, 2003)

In Cerpa and Verner's (2009) study, they found that the time objective of the Iron Triangle might impact the desired result and thus the quality of the project outcome. This derives from time constraints as well as that the receiving stakeholder most often spends insufficient time

in clearly defining the desired requirements. Both time constraints and a delivery date set based on inadequate requirements may further result in scope changes and an undesirable outcome. This implies that proper requirements from the receiving stakeholders point of view is of importance in the planning phase as the delivery date otherwise might be based on wrong conditions. Scope changes could thus also be connected to time escalation, as described above, and may further contribute to cost overruns (Kim and Reinschmidt, 2011). In order to cope with scope changes coming into force by different reasons, a proper change process needs to be applied, most often referred as Change management. Change management involves keeping the established schedule of the project and the application of Risk Management as previously mentioned, according to Cooke-Davies (2002) and Kim and Reinschmidt (2011). The lack of Change management may otherwise lead to project failure (Lawrence and Scanlan, 2007).

Risk Management – Identify warning signs

Handling the risk aspect within IT projects is an area that is quite undeveloped (Taylor et al., 2011; Kappelman et al., 2006). Effective Risk Management is, however, crucial in order to identify early warning signs, which facilitate the achievement of project management success. Risk Management contribute to the identification of risk drivers and focus on behavioral aspects (Hsu et al., 2013) such as incorporation of top-management support, stakeholder involvement, team commitment and knowledge requirements (Lawrence and Scanlan, 2008; Cerpa and Verner, 2009). There is also a need for a proper change control procedure as well as establishing a proper business case. The latter is of great importance to outline the rationale of undertaking the project, the problem that should be addressed and thus how the project should be conducted and what to deliver (Tasevska et al., 2014). By having awareness of the potential risk drivers and apply proper change control as well as proper business case, risks could be identified in an early phase and prevented before impacting the project adversely. (Kappelman et al., 2006; Lyneis et al., 2001)

The risk signs are seldom connected to the particular IT itself, but rather to people and tools. In order to prevent and identify possible risks, it is suggested to develop risk assessment procedures and establish a company-wide risk database. This in combination with a proper communication culture to enhance risk awareness may decrease risk encounters. (Hsu et al., 2013) Consequently, by applying these risk assessment tools and activities, potential risks

might be identified and action could be taken, facilitating the project to proceed as planned and thus avoid yet another IT project failure.

2.5 Our conceptual framework

The theoretical discussion above is elaborated to create a narrow understanding of *how project management is executed in regulatory IT projects?*. IT projects suffer from high failure rates and researchers are trying to define what will counteract this fact. The application of successful project management including emphasize on certain key factors could potentially bring more positive IT project outcomes. Over time, the discussion about what brings project management success has changed and today a greater emphasis on people related key factors in combination with the tool related key factors is most truly what will generate project management success and potentially regulatory IT project success. This discussion narrows down to a conceptual framework that will be used when analyzing project management execution of regulatory IT projects within Nordea. The framework displayed in Figure 4 shows the theoretical concepts that can be of particular importance in the execution of achieving project management success.

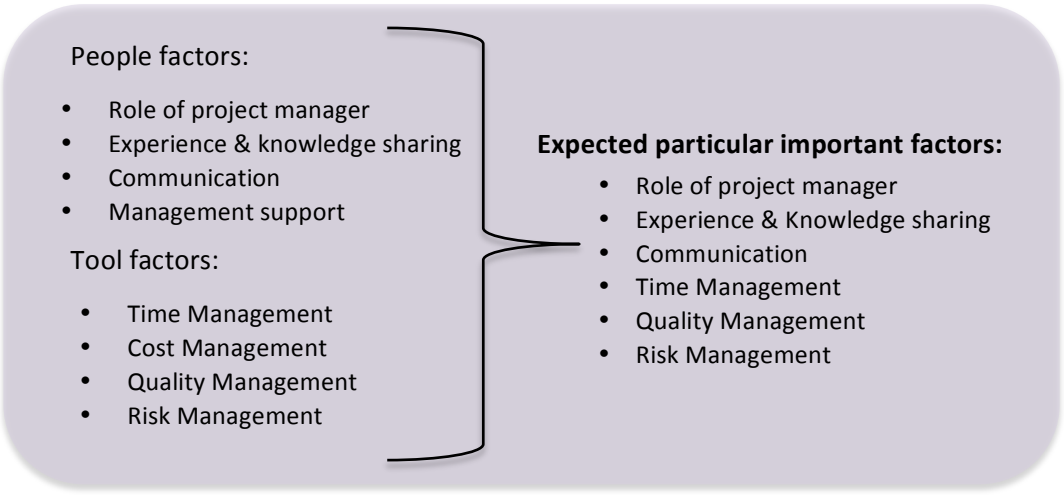


Figure 4. *The conceptual theoretical framework for achieving project management success*

The expectations given through studying IT projects coming into force by regulations is that people related factors are of greatest importance and particularly the project manager as the project is dependent on how the project manger drives the system, the people and tool components of the project. Additionally, the interpersonal and communication skills can be expected to be of importance in order to simplify the complexity IT projects entail. It may therefore become significantly to share knowledge throughout the organization, but also to retain it in house since the financial reporting will proceed over time. Finally, due to

complexity of IT projects, communication is expected to be of great importance in order to keep everyone informed, get an increased understanding of the project and what it entails as well as encourage the team.

As stated earlier, it is the combination of people and key related factors that potentially will lead to project management success. Regarding the tool related factors; Time Management and Quality Management expects to be prioritized in the studied setting, i.e. being compliant, due to the fact that the studied projects are of regulatory nature. Failure in these factors would cost the corporation a great amount of money and also its license to operate. Another expectation concerns the IT aspect of the studied context, as IT projects often are exposed to risk and therefore often fail, aspects related to risk could be expected to be of significance. This implies that several factors are expected to become particularly important in regulatory IT projects in order to handle the complexity and to carry out well-performed project management.

3 Methodology

This chapter discusses how to fulfill the study's purpose and answer the research question and reveals how this study was conducted as well as research strategy, research approach and selection. Thereafter, the data collection methods are presented. Finally, reliability, validity and generalizability are considered.

3.1 Research Approach

This study's aim was to gain a deeper understanding of project management execution of regulatory IT projects and determine factors that are of particular importance in order to carry out well-performed project management in the studied context i.e. achieve project management success. Thus, contribute to the field of project management. To fulfill the purpose of this study a qualitative research was considered the most appropriate as the study aims to get an in-depth understanding of a phenomenon. The research questions were answered by doing a snapshot study of two on going regulatory IT projects within Nordea. To further develop the understanding and address a specific issue of Sweden's largest bank, Nordea[2], performing a case study allowed to explore a single phenomenon in a natural setting using different methods to gain and generate knowledge (Collis and Hussey, 2009; Yin, 2003). A multitude of evidence was used in this research such as interviews, documents and articles.

3.2 Motivation of selections

3.2.1 Nordea – a bank that is highly exposed to regulatory pressure

The case study object Nordea was chosen since it is the largest bank of Sweden, and is an actor in the financial sector that is highly exposed to the regulatory demands coming into force constantly on behalf of various authorities (Moulange, 2011). Nordea is further the only bank in northern Europe that is appointed as a Global System Important Bank (GSIB), thus more exposed to regulatory pressure than other Swedish banks. Accordingly, Nordea has initiated several IT projects due to the required demands, which entails additional resources and costs. Consequently, Nordea face big challenges since IT projects have a high failure rate and are of a complex nature (Atkinson 1999; Somanchi and Dwivedula, 2010; Sukhoo et al.

[2] NORDEA. 2014. *Facts and figures of Q1* [Online]. Nordea. Available: http://www.nordea.com/About+Nordea/Nordea+overview/Facts+and+figures/1081354.html [Accessed May 14 2014].

2005). Therefore Nordea was of interest to examine and chosen for this study. Considered the chosen research method, a deeper understanding of one company was ideal, especially as full access was granted which was the reason why one company was studied.

3.2.2 FATCA & FINREP – Two large on going regulatory initiatives

In this study two IT projects of quite similar character were investigated, Financial Account Tax Compliance Act (FATCA) and Financial Reporting (FINREP), in order to create an in-depth understanding of the execution of project management in regulatory IT projects. These particular projects were chosen since both are initiated due to regulations, they involve IT development and are both on going with a delivery date during 2014. Studying two projects of similar character potentially gives higher validity of the result in comparison to only study one. The reason why not studying more than two projects was due to the time limit of this study, hence the authors also considered the two projects to provide sufficient information to gain valid findings and conclusions, as both projects are among the largest regulatory driven IT projects in Nordea. Furthermore, two projects still allow interviewing all positions required in each project.

3.2.3 Respondents connected to Project Management of FATCA & FINREP

The authors focused on finding key persons from different levels in the organization, rather than come in contact with a large group of respondents. To gain access to the correct and necessary information a careful selection of respondents was made. When choosing respondents both working externally and internally with the project management of FATCA and FINREP execution, each project's organization structure was reviewed together with Nordea's organizational structure. A meeting with an employee on group level gave further information about how the structures looked like and facilitated the choice of respondents. The result from the mapping showed that the following positions were appropriate to be interviewed: project managers, project team members (including consultants), employees in the Project Portfolio & Project Management (PP&PM) unit, controller and head of the Regulatory Reporting unit. It was considered important to interview those who are responsible for the execution of the projects as well as the ones who are experiencing the execution. This allowed attaining a holistic picture from different point of views in order to get an accurate picture of how project management is executed on the projects. Only one asked external consultant wanted to participate in the study despite the promise of anonymity. Although only one consultant participated, the information needed in order to answer the

research question was still thought to be sufficient as the external consultants works full time with the project just as any other internal employee.

3.3 Data Collection

The primary data was collected through interviews held with the different roles involved in the project management execution, as described in the former section. Secondary data were obtained through the company's databases and archive searching in the form of text and documents through full access to Nordea's intranet pages. In addition, secondary data was collected through external reports, articles, SAP and documents for further understanding of the phenomenon studied.

3.3.1 Pre Study

In the initial phase of this study a pre study in the form of secondary sources was made before studying the specific IT projects in order to find out what direction the study was going to take. The objective was to acquire knowledge regarding existing models and frameworks for how to execute IT projects in general within Nordea. The pre study revealed that Nordea do have a developed framework for how to execute internal projects, called Project Management For You (PM4U). The framework was benchmarked to the literature review in this study and further investigated if communicated throughout the organization and applied on the project execution of FATCA and FINREP.

3.3.2 Interviews

The primary data collection of this study consisted of semi-structured face-to-face interviews, as it is preferable when as many details as possible sought to be attained and gives an opportunity to ask further questions outside the interview structure according to Bryman and Bell (2007). Moreover, it is suitable when the study requires information on how the respondent interprets and perceives specific things. In order to get a fluent discussion with the respondent, the questions did not have a specific order and the interviews kept an open direction as long as all issues were discussed. The interviews helped collecting data regarding how project management is executed within FATCA and FINREP, together with other insights needed to draw conclusions on the research topic. This facilitated creating an overall picture of the particular important factors in achieving project management success in regulatory IT projects.

The interview guideline (see Appendix 1) was based on the conceptual framework of this study, origin from project management literature, in order to collect sufficient information to manage the aim of the study. In Table 1 the theoretical concepts and what questions in the interview guideline that are connected to them are presented.

Theoretical Concept to be captured	Questions from the interview guideline
Time Management	3, 4, 5, 26, 27
Cost Management	6, 7, 8, 9, 10, 11, 28
Quality Management	12, 13, 14, 15, 23
Risk Management	16, 17, 18, 19, 20, 21, 22, 23
Communication	21, 29, 38, 39, 40, 46
Knowledge/Experience sharing	30, 31, 32, 33, 34, 35
Management Support/Project Manager	36, 37, 44

Table 1. *Theoretical concepts to be captured in the interview questions*.

The questions were of an open and clarifying nature followed by more specific questions to get the information that was aspired in order to capture the essence of the phenomenon (Collis and Hussey 2009). The interview guideline was adjusted and shortened before each interview depending on the position of the respondent i.e. customized questions. The questions were also tested in a test interview on a respondent who gave feedback, resulting in that some questions were re-formulized before conducting the remaining interviews.

In total, 13 interviews were performed (see Table 2 below), which were held to collect data about how project management execution takes place in FATCA and FINREP. Critiques mean that there is a risk of the respondents not revealing the complete truth or producing cautious responses, as there is always party submission and due to that the interviews may address sensitive issues. Therefore reliability must be questioned. In addition, individuals have different abilities to express themselves in speech, which can affect the interpretation of the answers. Romantics may also occur, meaning that the respondents are guided by expectations of what the researcher wants to hear. (Alvesson, 2010) By establishing a close personal contact these problems may be minimized, therefore an email was sent before the interview to the respondent as well as a physical meeting was suggested rather than a telephone interview. To further overcome interview biases, the respondents were anonymous as it might result in more openness in the answers provided. The respondents were not named with their exact title in order to not expose them; instead the respondents were named with their general position. For instance, respondents working within the project organization are

mentioned as “Project team member”, including the project managers, while people working outside the project organization are referred to as “supporting function”. The project managers are mentioned by position when needed i.e. explain responsibilities of the project manager. Additionally, through all of the interviews carefulness existed of not becoming too dependent on a particular respondent, but instead having a critical approach and looking for evidence of their responses in other kinds of data sources. An attempt to not ask too guided question was also made, as it could have affected the respondents’ answer according to Yin (2013).

Interview Respondents		
Respondent	**Project**	**Role**
1	FINREP	Team member
2	FINREP/FATCA	Support function
3	FINREP/FATCA	Support function
4	FINREP/FATCA	Support function
5	FINREP	Team member
6	FINREP	Team member
7	FATCA	Team member
8	FINREP/FATCA	Support function
9	FATCA	Team member
10	FATCA	Team member
11	FINREP/FATCA	Support function
12	FINREP	Team member
13	FATCA	Team member

Table 2. *Respondent List*

Before conducting the interviews an email was sent to the possible respondents in order to explain the aim of the interview and also describe what the interview was going to emphasize. With this approach a possibility for the authors to introduce themselves was given and a more personal contact was established. The interviews were held in various group rooms were both authors was participating at all interviews. The authors were prepared in advance and both authors asked the prepared questions at the time of the interview.

3.3.3 Data Documentation

All interviews were documented through a recording function and were stored digitally, with the consent of the respondents, except one respondent. In the latter case notes were taken, summarized and sent for approval by the respondent before using the results in the thesis. In addition to recording, the interviewers took notes during the interviews in order to aid the discussion steering but focus was still on the conversations itself since the interviews were recorded. The notes were analyzed immediately after the interview and the interviews were

also re-listened immediately or the day after the interview to achieve a simultaneous analysis. Transcribes was not considered research economically defendable as it was not considered to further improve the compilation of information.

3.3.4 Archive Searching

Since Nordea is a large and established actor within the financial sector, much information through internal web pages and systems are to be found. The archive search was pointed to find the content of the project management framework, PM4U, which has its own internal web page and also is documented in written form. All information in the PM4U framework was reviewed. Second, the projects Intranet pages were screened, which provided information about the objectives of the projects but also the project organization including team members. Third, an IT-tool for IT projects in Nordea called Clarity was used for searching information about the studied projects. The Clarity tool regards information about business case, phases, milestones, budget, scope and financials etc. Financial monthly reports were also screened and together with the access to SAP a deep insight in the projects financials was provided. All this information was used to create an understanding of Nordea's overall project management approach, as well as information about the chosen projects to study.

3.4 Data Analysis

According to Yin (2003), there are no well-defined techniques or strategies when analyzing case study data. However, the analysis of data was conducted for one study object and hence limited to *within case* analysis. This requires complete understanding and familiarization – becoming one with the data to be able to draw relevant conclusions (Collis and Hussey 2009).

Shortly after the interviews, the collected empirical data was compiled in order to not lose spontaneous impressions, interpretations and questions to our mind. The authors separately clustered the interview data into the concepts from the literature review in order to limit researcher errors. For instance, when respondents explained the use of milestones, material was put in the "Time Management" sector and when the respondent described the culture of feedback and contact with the immediate manager, that material was placed under the "management support" section. In that sense, two separate views and interpretations existed and differences in the clustering were discussed. Consequently, the data were compared to the theoretical discussion together with the secondary data.

In order to give a holistic picture over how Nordea apply project management execution on regulatory IT projects, an analytical summary is conducted in the end of the analysis. The summary aims to simplify the view of how well factors in the execution are applied. Each factor from the conceptual framework has been given the rating "Very good", "Good" or "Less good", depending on how the application of the factors is perceived based on the empirical findings. The summary also specifies what currently is working good and less good, respectively, in the execution in order to contribute with insights of the potential improvements for achieving project management success.

3.5 Data Quality

In interpretive studies of a qualitative nature, reliability is often of little importance or interpreted in a different way compared to quantitative ones. Qualitative measures do not need to be reliable in the same sense according to Saunders et al. (2012). Instead, it is of importance that interpretations could be explained and are understood due to the fact that researchers can influence research and complement the existing research, which in that sense makes replication difficult (Collis and Hussey, 2009). Therefore, the reasons behind choices of respondents and interview questions have been described as narrow as possible, thus facilitating transparency in order to attain the level of reliability that is conceivable.

According to Bryman and Bell (2007) interpretation and perception of the collected data could be viewed differently. To diminish differences in interpretations and perceptions, carefulness when analyzing the data existed, by analyzing separately (as mentioned) before discussing and finally drawing conclusions. If there were any hesitation regarding the data collected from the interviews, the respondent was contacted again with control questions and the interviews were re-listened in order to validate the interpretation and perception.

The reason why multiple sources was used, explained in the data collection part, was to attain internal validity of data (Collis and Hussey, 2009), which enhance the possibility of that the gathered material is not biased by the respondents (Forza, 2002). In example, the primary data collection in this study exists of semi-structured interviews, which according to Saunders, et al. (2012) could give the study high validity given that the questions asked are clarified and that the study are conducted correctly. Furthermore, different researches were used for the theoretical conceptual framework and the findings were compared in order to evaluate the research findings as valid.

However, generalizability of results obtained from case studies are often questioned as only one study object is investigated (Saunders et al., 2012). The results in this study may be somewhat generalizable to cases in a similar environment, implying that the results could be useful for actors within the financial sector facing the same regulatory situation as Nordea i.e. other large banks in Sweden. Although the results may not be fully generalizable in practice, the results may contribute with further insights to the research field of project management by contributing by the regulatory aspect of the IT projects studied. The study also provides new sources for further research questions, which is facilitated by the chosen case study approach. The findings may for instance contribute to a deeper understanding of what factors, both tool- and people related, that is proven to be of greater importance in the studied setting i.e. regulatory IT projects.

4 Nordea, the projects and the project model

In this section an introduction of Nordea and the studied projects, FATCA and FINREP, are given as well as Nordea's Project Management framework.

4.1 Nordea

Nordea stated in its 2013 annual report that cost cuttings will be made by 5% between year 2013 and 2015 in order to be able to respond to the increasing regulatory environment. Cutting cost in the organization will enable investments in mandatory regulatory projects and IT infrastructure, implying the enhanced importance of managing regulatory IT projects efficient. Currently, two large on going regulatory initiatives driving the costs in the regulatory portfolio are FATCA and FINREP. The project management execution in these projects thus affects the writings in the annual report and the organization as a whole. (Nordea, 2013a)

4.2 FATCA – Foreign Account Tax Compliance Act

FACTA is enforced by American law, but applied worldwide, affecting financial institutions. The U.S. tax authority Internal Revenue Service (IRS) in cooperation with the U.S. Department of Treasury (Ministry of Finance) is responsible for the regulations around FATCA. Proposed FATCA regulations are coming into force 1 July 2014. Complying with FATCA means that financial institutions must enter into an individual agreement with the IRS, to report information annually on U.S. owned assets. For Nordea this means identification and reporting information of U.S. persons' accounts. If not succeeding in being compliant, Nordea could be subjected to a 30% withholding tax on U.S. sourced incomes. (Nordea, 2013b)

Nordea has established a program including several projects in order to develop systems and processes to be used in order to comply with FATCA rules. The Nordea FATCA program's objectives are described below. (Nordea, 2013b)

The objectives have the following priority:

1. Be compliant in time
2. Minimize customer and internal resources impact
3. Act cost efficient within the frame of the first and second objective

4.3 FINREP – FINancial REPorting

The European Banking Authority (EBA) has developed Implementing Technical Standards (ITS) that aims to uniform reporting requirements. These requirements are necessary to ensure fair conditions of competition between comparable groups of credit institutions and investment firms. These ITS will cover reporting of financial information, referred to as FINREP. Currently EBA requires the first FINREP reporting to be delivered by Nordea in Q3 2014, but local Financial Services Authorities (FSAs) such as the Finnish one have interpreted the reporting required to be delivered in 1st of June 2014 on the Q1 data. Accordingly, Nordea in Finland has to deliver earlier than rest of the branches. The data needed to be reported covers an extensive set of data points both from the balance sheet and income statement. (Nordea, 2013c)

In order to comply with FINREP requirements, Nordea has initiated the FINREP program. According to the project manager, the objectives for FINREP go as follow:

1. Stay compliant with the regulation
2. Minimize effort and attention from stakeholders
3. Perform within budget

Currently, FINREP got the highest priority of the on going mandatory projects in Nordea, partly due to that FINREP has clear instructions from the authorities in comparison with other projects (R11).

4.4 Nordea's project portfolio management framework

Theoretically, there are various arguments supporting the use of project management to manage and facilitate achievement of objectives related to projects (Cooke-Davies 2012). Accordingly, Nordea has incorporated project management within the organization to achieve the desired objectives of its IT projects and further developed a framework to support the project execution. (Nordea, 2012) The framework named "Project Management For You" (PM4U) is grounded on standards based on recognized best practices, developed by the project management institute[3]. The framework is designed to primarily secure effective

[3] The project Management Institute, founded in 1969, is the world's leading professional membership association for the project, program and portfolio management. PMI. 2013. *About us* [Online]. Project Management Institute. Available: http://www.pmi.org/About-Us.aspx [Accessed May 22 2014].

allocation of human- and financial capital to different kinds of investment. PM4U consists of various components in line with the theoretical suggestions for how to achieve what researches within the field of project management call project management success. Thus, PM4U includes information about knowledge areas, processes, activities, role descriptions as well as supporting tools. Examples of supporting tools are; Scope Management, Time Management, Cost Management, Quality Management, Communication Management and Risk Management. Beside these tools, Project Management Documentation needs to be incorporated in projects to ensure efficient communication and decision-making, particularly in IT projects. (Nordea, 2012)

PM4U could be seen as Nordea's main support for project management execution and is therefore suggested to apply to all projects within Nordea in order to attain best project management results (Nordea, 2012). An example of how a temporary project/program organization may look like, including support functions, is described below:

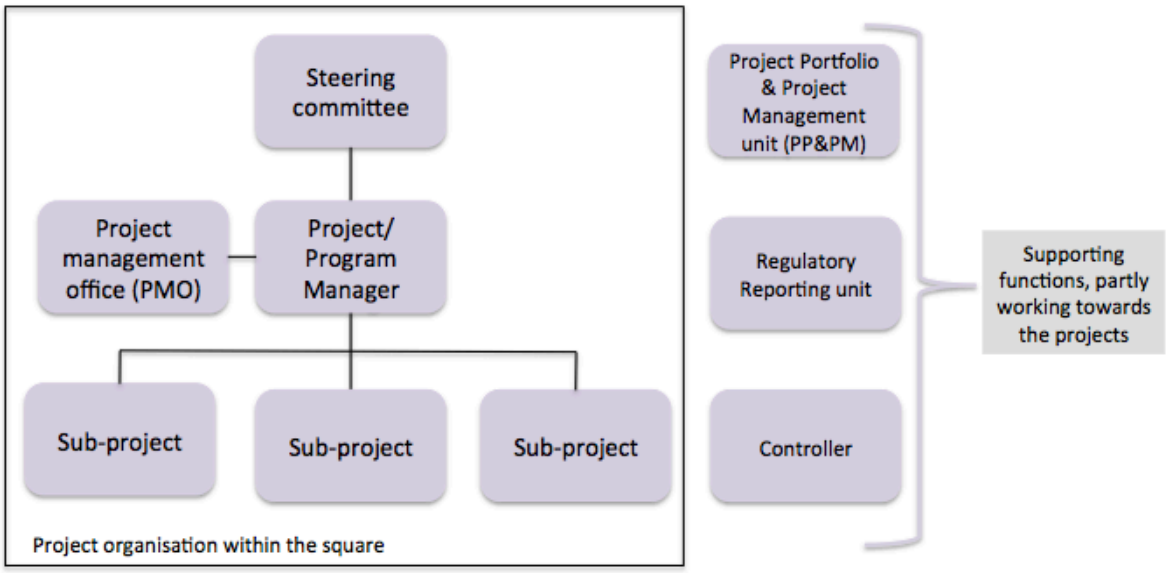


Figure 5. *Example of a temporary project organization, including related support functions*

The project organization includes team members working in different sub-projects, headed by a project/program manager and further supported by the project management office (PMO). The project manager and PMO further reports to the Steering committee, which includes stakeholders affected by the project, such as the sponsor of the project and representatives from the receiving business unit. The latter consist of the ones in the organization that will operationally work with the outcome of the project when delivered. The project organization

further has connections with support functions such as the PP&PM unit, regulatory reporting unit and controller. The supporting functions have responsibility towards several projects, but are dealing with additional tasks as well. (Nordea, 2012)

5 Project Management execution of regulatory IT projects

In order to carry out well performed Project Management, project tools drives the execution, but cannot be performed without the use of people. The factors to apply in order to get a successful project management execution are related to the Iron Triangle, risk and people (Atkinson, 1999; Sukhoo et al., 2005). Project management success and success for the specific project is achieved simultaneously given that the objectives for the specific project and for project management are aligned (Munns and Bjeirmi, 1996). This is recognized within Nordea, as the primarily project goals in FINREP and FATCA are in line with the components of the Iron Triangle i.e. be compliant as well as people related factors i.e. minimize the involvement of customers and employees in the reporting solution (Caccamese and Bragantini, 2013). Consequently, the achievement of project management success at the same time as achieving project success is obtainable in Nordea. However, one should not forget that the projects are still on going, therefore the measurement of project management success nor project success cannot yet be done (Markus et al., 2000). The presented findings in the following sections, however, give an indication if project management success is obtainable based on current performance on the factors that need to be fulfilled.

5.1 Nordea's use of people related factors in the project management execution

Within project management execution, people are a central part in order to achieve project management success as previously mentioned (Sukhoo et al., 2005). Within PM4U, different areas are suggested to support the people aspects of project management execution. (Nordea 2012)

5.1.1 Project manager

The project manager possesses an important role in the project management execution in Nordea, which is in line with Kerzner's (2013) findings. The responsibilities assigned are described in PM4U and involve for instance ensuring that processes and activities are in line with the desired outcome. Additionally, the project manager is responsible of monitoring the team functioning and their needs, the communication of important information as well as developing and executing the project plan. Also, the project manager must revise the project plan depending on how the project proceeds, supported by Kerzner (2013) and Meredith and Mantel (2011).

Consequently, the project manager is responsible for the final delivery of the project outcome and thus accountable for the result against the sponsor of the project. This means that the project manager should fully inform about the project and notify top-management about identified problems such as overspending, risks or other issues connected to the achievement of project management success (Meredith and Mantel, 2011). Within FATCA and FINREP, monthly steering committee meetings are held where the project manager, the sponsor of the project and other stakeholders participates. At these meetings the group discuss how the projects are proceeding in order to identify if corrective actions must be taken, as suggested by Kerzner (2013). This is thus a setting for information to reach top-management and allows them to intercede as Meredith and Mantel (2013) state is important. Hence, a forum of information sharing among project managers and top management exists in both projects.

Another important factor of the project manager is the competences and skills possessed. According to Kerzner (2013) the project manager must have communicative and interpersonal skills in order to drive the project in the right direction as well as be able to motivate and encourage the team. Furthermore, due to the IT solution that the requirements often entail, IT competence is important since a link exists between the project managers' IT skills and the outcome of an IT project according to a study by Haggerty (2000). Also business skills are of importance as these kinds of projects also affect the underlying business (Kerzner, 2013). The project managers' knowledge is crucial as it can endanger the final outcome of the project. One project manager considers oneself to be very competent and possesses IT knowledge and strong business orientation, but also strong affiliation of the finance processes and banking processes. The other project manager also holds earlier experience from a banking- and IT environment and possesses strong business skills. Consequently, the project managers for FATCA and FINREP are believed to possess sufficient IT knowledge as well as business knowledge as emphasized in project management research. This is further confirmed by the respondents, which believe that sufficient knowledge of the project managers exist in order to deliver on the project objectives. It gives the possibility to manage the projects both properly and efficient in line with Kerzner's (2013) thoughts.

A problem that project managers often face concerns increased responsibility without being given authority. This means, for instance, that they need to negotiate with top-management if more resources are needed (Kerzner, 2013), but also how to prioritize when facing scope

changes. The former is found in one of the projects, where the project manager explains that an on going discussion with the sponsor exist concerning the insufficient budget expenses. The consequence of not receiving the money applied for is a need for re-evaluation by the project manager of what is possible to perform given the funding offered. Subsequently, the steering committee gets to prioritize and make decision on how to change the execution or the scope of the project based on the project manager's evaluated possibilities. An impact could for instance be a delivery within desired functionality but with impaired quality. This can be somewhat problematic for the project managers as they still are accountable for the delivery but with less authority to affect the project in terms of resources.

Although the project managers appear to possess the skills needed in order to execute a well-performed project management, a project manager state that huge complexity exists due to the many processes that must be performed. This can have a great impact on the project outcome "especially when lacking authority it is hard to influence to the extent wanted" according to the project manager. Also, the project manager states that the business environment in Nordea is not of a simple kind, which hampers the execution. This may be a problem as the project managers are highly important within the project management execution of FINREP and FATCA since they own the ultimate responsibility of the delivery.

The project managers in the studied projects in Nordea conform to research by having the responsibility of driving the project and the project outcome. Also, in line with research the project managers possess communicative and interpersonal skills as well as IT and business skills, needed to manage these projects. However, their responsibilities increases without being given any authority, in conformity with Kerzner's (2013) study, which can affect the project outcome adversely.

5.1.2 Communication channels

PM4U involves Communication Management, which should provide critical links and necessary information among employees (Nordea, 2012). Nordea uses different communication channels for sharing information and documents, for instance Sharepoint, which is an internal web site where persons with access could view and upload information. It also exist a project manager community where meetings are held consisting of the project management team and the PP&PM unit. The purpose with the community is to a have a forum where people can connect to each other to share knowledge, discuss problems and get

individual coaching (R 2, 5). Unfortunately the experiences shared are only re-created in projects and not throughout the organization according to respondent 2. “It would be very valuable for large projects such as FATCA and FINREP if previous experience would be shared to the Nordea organization when new projects are supposed to be initiated”, respondent 2 continues. The most important communication channels are however the internal meetings with different group constellations of project members that occur regularly, as information from various sources then are shared (R 9, 13, 11). Communication does not only take place in formal settings, but also in more informal settings such as e-mailing and other daily contact.

Communication is also an important mean in sharing information (Akgün et al., 1999) and learning from each other. As seen above, communication channels exist within the projects, but there are no guidelines for how to communicate (R11, 8). Respondent 8, who works outside the project organization, states that many people are involved in many processes in the project, which implies that guidelines might be helpful as it happens that information get lost along the way. Respondents within the boundaries of the project organization (see Figure 3) do have access to all communication channels, but supporting functions outside these boundaries are not always included in the flows of communication i.e. low transparency. For instance, respondent 8 has several times not been included in important communication flows regarding tasks concerning respondent 8’s daily work, which has resulted in unnecessary work and time-consuming information seeking.

Nordea follows research by using internal website, a project manager community and internal project meetings to communicate necessary information. However, it appears that information does not reach everyone concerned, suggesting that the communication throughout the organization may be reviewed to prevent unnecessary work, but also to enable and enhance learning.

5.1.3 The need for IT knowledge within FATCA and FINREP

In accordance with Hornstein (2012) many of the respondents agree that IT knowledge is important within IT projects (R 5, 6, 11, 1). An understanding of IT regardless of background is important and a genuine interest of IT is crucial as basically all processes are IT related, respondent 3 claims. Having an IT background helps a lot to identify what requirements that is possible to incorporate in IT solutions (R 6, 5). With an understanding of the complexity

and the common difficulties with IT Projects, the risk of actual failure is minimized (Lyneis et al., 2001). In contrast, other respondents rather highlight the importance of a business understanding (R 9, 4) in line with Kerzner (2013). Respondent 9 believe that everyone in the team do not need to understand IT, yet all need to have a business understanding as business resources are important and could not be replaced to the same extent as IT people. In conformity, respondent 4 believes the IT managers are rather lacking financial knowledge than IT knowledge. According to respondent 13 it is the collaboration between IT and business people that is of importance to be able to manage the IT project properly.

The general view among respondents is that they possess sufficient knowledge of IT, even though they have different backgrounds (R 9, 2, 7, 1, 4, 13). However, if more knowledge is required or if one encounters a problem, you need to search for the desired understanding, "a lot of in-house competence exist", according to respondent 7, 5 and 11. Because of the individual responsibility to search for IT knowledge, respondent 5 thinks that one should have more time in the beginning of the project to gain an understanding of IT. However, respondent 5 believes that the lack of time is the reason for why training has not been prioritized. Respondent 11 says, however, that new employees are given the possibility to sit with IT developers in order to learn IT and internal IT educations exist if needed.

The people involved in the projects conforms with research by having the opinion of that IT knowledge is important for managing these kind of projects, knowledge which they believe they possess or can gain from the existing in-house competence. However, some respondents seek more IT education, but it appears that the communication regarding the education possibilities are inadequate and not known in the organization.

5.1.4 Knowledge- and experience sharing and retention

Many researches speak of the importance of sharing knowledge and experience throughout the organization (Yeong and Lim, 2011; De Wit, 1988; Carlile and Rebentisch, 2003). In FINREP and FATCA, knowledge- and experience sharing takes place to a certain extent through communication channels such as internal website, project manager community and internal project meetings as previously mentioned. Furthermore, more informal, respondent 13 share obtained knowledge from earlier IT projects and also teaches others about gained understandings i.e. storytelling, in line with Petter and Vaishnavi (2008). Respondent 12 follows that best practices are transferred through participation in former projects and that

experiences matters much more than models within projects. In line with Akgün et al., (1999), learning from each other is important within IT projects due to its complex and systematic nature, which further is connected to hands-on experiences. However, issues exist regarding the knowledge factor, particularly regarding the retention of knowledge. The latter concerns the fact that many project members are external consultants that will leave the organization when their tasks assigned are accomplished. Thus, knowledge is not sustained within the projects or in the organization. According to respondent 9 and 11, a process for how to transfer knowledge between consultants and internal resources exists. Information and knowledge for each role is collected and documented so it can be reused when internal resources replace consultants. Hence, "knowledge nevertheless gets lost when transition takes place", says respondent 9, confirmed by respondent 11.

The fact that Nordea is cutting its cost base will also result in a reduction of external consultants, as they are a critical point of the budget due to their high cost. Because of this reduction, the knowledge loss could be evident in both FATCA and FINREP when consultants are leaving, thus having a major impact on the organization (R 7, 11, 6). In addition, the knowledge loss does not only concern IT and business, also regulatory knowledge may be lost. Earlier experiences regarding the specific regulatory competence within the organization do not exist as these projects are incurred by regulations that are recently enforced (R 12, 13, 11). Due to the impact of the regulatory dimension in FATCA and FINREP, the project team does not only need to possess IT and business knowledge, but also need to understand the requirements as well. If such knowledge gets lost, Nordea could be heavily affected by this situation, as the knowledge that might disappear with consultants cannot be replaced to the same extent as IT knowledge due to its rapid evolvement. It is therefore of high importance to keep such knowledge within the organization. This issue can further affect the cost objective, as the disappearance of knowledge probably could lead to an increase in costs, as consultant may have to be hired over again. Thus, inhibit the achievement of project management success.

In line with research, the knowledge- and experience sharing do somewhat exist in the projects, but they face difficulties regarding knowledge retention. This is a challenge that may be reviewed since knowledge is of high importance also when the project outcome is taken over by the operation, particularly concerning IT-projects and the regulatory aspect (Hornstein, 2012).

Cross Collaboration facilitate knowledge- and experience sharing

A mean to facilitate knowledge and experience sharing is cross-project collaboration (Yeong and Lim, 2011). In FATCA and FINREP, respondents say that they have not experienced any collaboration or formal benchmarking (R 7, 6, 13), "I do not even know who my counterpart is in FINREP" says respondent 13. According to respondent 6, the competence is so fragmented across the organization and you can for instance not access the same systems, which inhibits collaboration. An attempt to increase the knowledge- and experience sharing across projects has been made in Nordea by establishing a regulatory reporting unit i.e. a community for support and knowledge- and experience sharing (Petter and Vaishnavi, 2008). The unit's task is to gather project processes in order to facilitate improvements across projects and further work as a forum for cross-project collaboration through social networks (R 1, 11, 6), which is in line with Newell's (2004) thoughts. The PP&PM is, however, not operating as desired, which can be due to the fact that the unit is still undeveloped due to that it was recently established. Petter and Vaishnavi (2008) emphasize the need for knowledge access to everyone involved before one could realizing a community in a good manner. The knowledge access is, as earlier stated lacking in the organization, which could be an explanation of why collaboration does not work as desired.

Lack of cross-project collaboration could potentially lead to repeated mistakes within projects (De Wit 1988). For instance, one problem described by respondent 1 regards not finding the right competence or the right people at the right place. This problem could possibly be encountered in other projects as well. Thus, through collaboration, potential or existing problems faced by various projects could conceivably be avoided or solved. However, according to Carlile and Rebentisch (2003), Petter and Vaishnavi (2008), Haggerty (2000) and Robertson and Williams (2006), the sharing of IT experiences and knowledge across boundaries is difficult, which can explain the found difficulties in Nordea.

Nordea conforms to research by having a new community established for knowledge- and experience, but as currently do not work as desired. A view exists among some project members that no formal benchmarking and collaboration exists between projects. Thus knowledge sharing could be improved on many levels, both to supporting functions, between projects and among employees, the regulatory reporting unit may, however, be an attempt in the right direction.

5.1.5 Management Support

Support given from outside boundaries to Project team

According to Nordea's ambition stated in the PM4U framework, management support should be given to the projects from upper management and from supporting functions (Nordea 2012). This is in line with Verner et al., (1999), who say that support from top management is an important factor in order to attain project management success. The PP&PM unit, the controller and the regulatory reporting unit serve as support functions outside the project boundaries. However, according to respondent 10 the support from PP&PM is mainly given to smaller projects and perceives that the PP&PM unit currently is undeveloped. Respondent 12 says that the PP&PM unit is building standards, but is also supposed to have the role to support and looking over the projects as well as giving an overview and monitor dependencies. However it is more of a controlling- and a monitoring function rather than a supportive one according to respondent 12, who therefore would like more support being given rather than monitoring. Respondent 12 is especially seeking support on cross-portfolio resources, solutions and environment dependencies. The same perception applies on the support from top-management, thus the steering committee of a project, according to respondent 12 and 10.

In contrast, the PP&PM team see themselves as coaches to project managers and their steering group, supported by respondent 9. They review problems the projects encounter and observe performances in order to support the project manager with hands-on suggestion for better execution (R3). They are however not responsible for the delivery, why they are more of a supportive function than a controlling function according to respondent 3. However, "project managers are strong individuals, who might not need much of a support" respondent 3 continues. This perception might be an explanation why respondents feel the unit's absence.

Lack of management support could lead to project failure according to Verner et al., (1999) and Kappelman et al., (2006). These researchers argues for the importance of support, as top-management are suggesting what the project team should focus on in order to perform well. Thus, no support means no clear focus agenda, which could result in that the project could proceed in a direction that is not desired by top-management or stakeholders. In addition, the absence may affect other components such as identify and handle risk, suggestions of cost

efficiency among others, needed to contrive project management (Verner et al., 1999, Cerpa and Verner, 2009, Kappelman et al., 2006, Lawrence and Scanlan, 2007).

Nordea follow research by having supporting functions that shall support the project managers. Hence, the view from project managers is that they rather serve as controlling functions. Thus, sufficient support is not given and support functions would gain from having a dialogue with the project teams as the perception of their function differs between receiver and provider of the support.

Support given from Project Manager to Project Members

The support given from project manager to the project team seems sufficient based on respondents' perception. The project managers hold meetings on a weekly basis with some members while everyone are participating on a monthly basis. At these meetings information is shared and a possibility for support is given (R 1, 5, 6, 7, 9, 10, 12, 13). If one would need more support, respondent 7, 1 and 9 believe support would be provided from the project manager. One project manager also emphasize that the ambition is to be supportive to his staff, which also is the perception among respondents. However it has to exist a balance between demanding and supporting.

Nordea conforms to research by having meetings on a weekly basis held by project managers, where support is enabled. A view also exists that more support is given when it is needed, also facilitated by having the ambition to be supportive of the project manager. Management support within the project organizations therefore seems to be sufficient.

5.2 Nordea's use of Tools for executing project management

Tools are often incorporated in project management to achieve the objectives of the Iron Triangle, but also to manage risk according to Munns and Bjeirmi (1996), Atkinson (1999) and Caccamese and Bragantini (2013). In line with these researchers, the PM4U framework involves such tools that Nordea aims to use in order to achieve its primarily goals of its projects, related to the Iron Triangle (Nordea, 2012).

5.2.1 Time management within FATCA and FINREP

The framework PM4U suggest that time management should be incorporated as a tool in the projects of Nordea. According to the framework, time management mainly consists of

establishing clearly defined time objectives of the project phases as well as the final delivery to ensure timely completion of the project (Nordea, 2012), which is in line with Sukhoo et al., (2005). To be able to run an effective time management a well-established project plan including milestones must also be incorporated as well as adequate documentation of project responsibilities. The latter is of importance to clarify what is expected from the members and so as they focus on the right things (Kerzner, 2013). In FINREP and FATCA, a project plan is designed with set milestones, which are communicated throughout the project (R 11, 12, 7). Also, documentation of role responsibilities exists in the PM4U framework, but communication of such material, does however not exist (R 1, 5, 6, 7, 9, 13). The result of deficiencies in communication of responsibilities may be an incorrect focus and unclear expectations of the team members.

In both FATCA and FINREP the possibility to get an update regarding the performance of the project and performance according to plan is given, in the mentioned weekly status meetings. Also, during the steering committee meetings once a month, the project managers set a color (green, yellow or red) reflecting the status of comprehensive milestones in relation to the project plan and thus the time schedule (R11). At the moment, both projects are in line with their schedule and will deliver on time according to project managers. However according to respondent 3 and 2 the timeframe is very aggressive and it is generally known within the organization that the projects lack resources, but that fact is neglected. This will impact the costs since it exist tendencies of bringing extra consultants upon deadlines in order to reach the time objective (R 2, 11, 3). In that sense, there is an interdependency between the time and cost objective, as when bringing in extra resources, the time objective is reached at the expense of the cost constraint (Verner et al., 1999; Brooks, 1975).

In line with researchers suggestions, Nordea applies time management as a tool for reaching time objectives. A project plan is established and performance of projects is communicated to team members through weekly meetings. However, even though documentation of responsibilities exists, awareness among respondents is not existing which implies that communication can be improved.

5.2.2 Cost management within FATCA and FINREP

Cost management regards cost control including the processes of *planning, estimating, budgeting and controlling costs* in order to achieve the cost objective of the project (Kim and

Reinschmidt, 2011). Within PM4U, Nordea has established such processes in order to be cost efficient and manage the projects to be completed within approved budget (Nordea, 2012).

The Budget process

In the established budget process, yearly fixed cost targets are set in the beginning of the year and are further revised based on rolling financial forecasts (RFFs) conducted every quarter if needed. Cost targets and RFF calculations are based on historical costs together with inputs and estimations made by project managers, but with the sponsor determine the final target, thus a combined bottom up/top down process as suggested by Kim and Reinschmidt (2011). This is also in line with Cerpa and Verner (2009) who argue that involvement of the project manager in the cost estimations of the budget process is crucial to get accurate forecasts. One supporting function member who calculate the targets do, however, experience low transparency in the projects and often has to ask for additional information than the one given. This implies that project managers do not reveal the complete information their estimations are based on.

In accordance with research Nordea's calculate its cost targets by a combined bottom up/top down process with involvement of the project manager. However, low transparency is experienced in the estimation process. This can question how reliable and valuable the cost estimates are for the projects, as sufficient information not is given.

Cost follow-up processes

In order to control how a project is proceeding in relation to the cost objectives, cost follow-up processes are established in Nordea, in line with Kim and Reinschmidt (2011). Several processes exist of this kind, such as status reports, deviation reports and cost reports from different units and management reporting systems such as the Clarity tool (R 4, 10). Nevertheless, all costs of a project are not included in these reports e.g. the costs related to the various business areas. This is problematic for the organization, due to that all information could not be found in the same system making it difficult to get a holistic picture (R4) and rather gives a skewed picture of the project's cost (R 9, 10). This implies deficiencies of reliable cost estimates for an effective project control since estimations are not based on the complete historical cost picture. In addition, due to the fact that multiple reports are produced, too many people get involved in the processes an by not having a holistic cost picture, it easily gets wrong and information gets lost on the way (R8) This has been a problem during a

long time according to respondent 8. Despite the wide range of standard reports that exist, one project manager has developed an own standard model to follow up costs "since there is no other fully integrated tool with both forecasting simulations and actual data". This has been proven to give one of best financial controls that seen around the bank according to the project manager. Consequently, an improved cost-follow process is sought.

Based on the follow up processes, actions should be taken if deviations are detected. For example, the controller communicates directly with the sponsor, telling him when overruns in FATCA and FINREP are evident. This could consequently lead to cost cuttings. It is therefore important to have the correct basis of the decisions taken since it will affect the execution of projects. However, in FINREP, one project member states "it don't seem to be any cost constraints as the project is high prioritized", whereas project members within FATCA lately has perceived an increased focus on costs coming from above, which is apparent due to the decrease of consultants (R 7).

In line with research Nordea has established several cost follow up processes for an effective cost control. The large amount of follow up processes do, however, rather inhibits the control than make it more efficient and may further lead to information overload[4]. The absence of a holistic follow up process is also substantial impacting for instance revision of cost targets as well as assurance of that all necessary information is taken into account when making decisions. Thus a report where all costs are determined might be preferable in order to comprehend and effective project control to reach the cost objective.

Reaching the cost target

The project manager is accountable of keeping costs within targets approved by the division head, i.e. the sponsor (Kerzner, 2013). However, when definite cost targets are set, some respondent say that they are not communicated throughout the project organization and costs are neither brought up on the weekly status meetings (R 1, 13). When an overall awareness does not exist, difficulties in reaching the cost target may be apparent and further implies a problem of information sharing. When this thesis is written, both project managers' states,

[4] Information overload is a well-known phenomenon, which according to research may have severe effects on employees' ability to manage their jobs and on decision making as irrelevant information may be considered. STROTHER, J. B., FAZAL, Z. & ULIJN, J. M. 2012. Wiley-IEEE Press.

however, that they have control over their figures and are trying to keep costs as low as possible. The support function's opinion is conversely that tendencies exist among project managers to work against higher targets than the official ones. This implies that overspendings will be evident in FATCA and FINREP in year-end 2014 according to respondent 2. The controller does not fully agree as information about decreasing activity level within the projects in Q3 and Q4 are reported from project managers, meaning that an impression of keeping the target is given. Nevertheless, historically FATCA has overspent their total budget and FINREP has overspent the use of business consultants (R 8, 2, 4 & SAP) as seen in Table 3, hence a similar scenario might be evident also the current year. What should be taken into account is that the expenses below are not the holistic cost picture, since, as earlier mentioned, such a report does not exist and not to be found in Nordea's management report systems.

mEUR	**FATCA**		**FINREP**	
	Target 2013	**Actual 2013**	Target 2013	**Actual 2013**
Business Consultants	5.9	**6.3**	2.4	**2.7**
IT Development, gross	4.6	**4.9**	7.1	**5.7**
Total expenses, gross	11.9	**12.1**	10.2	**9.4**

Table 3. *Target and actual expenses for FINREP and FATCA (gross cost, i.e. excluding capitalizations)*

One cost driver contributing to the historically overspendings is the use of external consultants (IT and business consultants) resources that represents approximately 80 % of the project organizations. One project management team or stakeholders handpicks consultants from different consulting firms, units and partners in order to get the best person with the best competence for each role. This is mainly due to that in house competence not always exists, especially when special skills are needed (R 3, 11, 13). This contradicts the fact that Nordea only want the quality absolutely required by authorities and might consequently lead to problems of reaching the cost objective due to the additional costs consultants bring. This implies that actions to make the project execution more cost efficient are conceivable since handpicking of consultants is an expensive process. Thus, a focus on internal resources could improve the budget problem, but building up a competence base is then required.

To reach the cost target, adaption of a mature change control process is also needed if the scope changes. A mature change control process involves keeping the established schedule of the project and to apply proper risk management to mitigate negative impact, according to

Cooke-Davies (2002) and Kim and Reinschmidt (2011). Nordea conforms to research by having a established project plan as previously mentioned, but also by having instructions of a proper change and scope process in the PM4U framework, which is used in the projects (Nordea, 2012). However, the fact that targets are not properly communicated throughout the project organization and the large number of consultants used may hinder reaching the cost objective

5.2.3 Quality Management within FINREP and FATCA

In PM4U, Quality Management is included and involves activities that determine quality policies, objectives and responsibilities so the project will be in conformity with the required functionality (Nordea 2012) as suggested by Schwalbe (2010). This should be done through quality planning, assurance and controlling, in line with Somanchi and Dwivedula (2010). In both FINREP and FATCA quality checks are made through Quality and Risk Assessments (QRAs) every week. At these occasions quality- and risk issues are considered and possible solutions are discussed to ensure the desired quality requested from authorities. In FATCA, the main responsibility of this assurance of quality lays on a specific person. The quality ensuring means that all possible changes need to go through a so-called change process where evaluations and decisions are made (R13). Change requests are handled daily and requires extensive knowledge since they may affect the functionality, thus cannot get lost on the way (R13). This change management process is according to Lawrence and Scanlan (2008) important to comprehend in order to have sufficient Quality Management.

According to Somanchi and Dwivedula (2010) Quality Management also includes comparing the functionality with customers' requirements. However, as the customers of the FINREP and FATCA projects are authorities, such comparison is not possible to perform. Instead, technical test-runs of the IT reporting solution are done in both projects in order to evaluate the functionality and quality of the data. But, these test runs are always not performed to the extent wanted and is given lower priority since they sometimes conflict with "live-deliveries" in the IT environment (R 10, 12). This implies that all quality issues might not be intercepted thus not identified, consequently affecting the final delivery. Furthermore, the IT reporting solutions are built on interpretations of authorities requirements (R 6, 12, 13, 9, 7, 10). The reason for interpretations and exceptions is that that multiple sources in the bank must be used in order for the delivery to include all requested information. In that sense, exceptions must be made in the process of sourcing all information, since handling all the requested information

by automation is either very expensive or not available due to the complexity of the data definitions to be applied in existing legacy (R12). The fact that requirements are interpretative might be a risk that could influence the quality of the final delivery, if interpreted incorrectly. Such risk need however to be accepted according to respondent 10, as for instance laws are not yet established for the FATCA initiative. Cerpa and Verner (2009) found in their study that unclear requirements from stakeholders potentially could harm the delivered quality when the date of the delivery was fixed, which is the case for FINREP and FATCA. Team members of the project do also need to actively search for changes of the requirements, as authorities do not inform the actors affected by the regulation of such events (R 1, 6). To overcome these interpretation and assumption problems to the extent possible, a dialogue with the law initiators is conducted and benchmarking is made on other countries within the FATCA project (R10). In addition, FINREP collaborates with other banks in interpreting the requirements (R6). The problem of not having clear and set requirements from authorities does not only affect the risk for misinterpretations but may also create scope changes, as both FINREP and FATCA have encountered. Scope management is also included in the PM4U framework in line with Westerveld (2003). When scope changes happen the projects, nevertheless, need to stay within its boundaries in line with Cooke-Davies (2002) and Kim and Reinschmidt (2011) and thus need to "cut costs on other parts in the project in order to allocate to where it is primarily needed" (R2).

Quality is of high priority in the projects, since Nordea needs to deliver reports and data with many validation rules as authorities are requesting (R12). One project manager explains that since the project is mandatory quality of the reported information is more important in comparison to other projects of internally used information, as being compliant is the license to operate. Still, the attitude is not to overdo things, but rather deliver only the quality required as no gains is given by performing "too good" says respondent 10. Even though quality in these projects are considered the most important and are prioritized, a need of improving efficiency over time is evident as everything is not running as smoothly in a complex set of rules and information flows (R12). The delivery will, however, be in time, according to respondents 5 and 12, but with the help of manual work. For instance, in FINREP the deliveries will not be in accordance to the dream scenario regarding quality (especially data quality) and it will take a lot of man hours to control the data, find missing values and fulfil the reporting requirements (R 12, 5). The latter implies additional costs and

might therefore impact the cost objective of the project, showing for the trade-off between the quality and cost objective of the Iron Triangle.

In accordance with research both projects apply quality and change management by having quality and risk assessments on a weekly as well as change processes where evaluations and decisions are concerning projects quality and scope. However, due to inadequate requirements from authorities, interpretations must be done regarding the solutions, thus quality could potentially be affected. The latter is however beyond Nordea's control.

5.2.4 Risk management within FATCA and FINREP

Nordea applies risk management, which takes shape in Quality Risk Assessments (QRAs) used in both projects as previously mentioned (R 10) The risk tool first collects and concludes high priority risks, which are further ranked during the QRAs (R 2, 9, 10, 13). These sessions give an overview of how to assess risk and an opportunity of what actions and solutions that should be applied in order to overcome the risk factors (R 13). This is in line with Kappelman et al., (2006). The QRA's exist on different levels within the projects and across functions, but respondent 9 says that risks are not particularly shared with other projects, but there exist a culture of sending an email to other projects if you face a problem. Kappelman et al., (2006) further argue that risk management needs to be incorporated in order to identify early warning signs in projects, which facilitates the achievement of project management success. However a culture of collaboration and sharing encountered risks is not executed at is fullest potential in Nordea. If risks were discussed jointly instead of in silo processes, risks might be minimized for future projects and solutions could be shared if projects face a similar problem.

Another part within risk management concerns the importance of documentation (Kappelman et al., 2006). There exist different opinions among respondents if risk documentation exists. According to respondents 12 and 9, documentation of risk factors exists while respondent 1 and 5 are not aware of documentation and states that risks are rather shared at the weekly meetings (R 1, 5). It is also unknown if there exists any risk handling plan documented if one should encounter a risk sign that could affect the project (R7). The information from QRAs is documented, but not communicated throughout the organization, meaning that those not participating in the sessions are not aware of the risks discussed. This could potentially result in that risks are not shared to members, whom might find it relevant.

The identification of risks is good within the projects according to respondent 10, but less good when it comes to making an action plan of how to handle the risks (R 10, 11). In the PM4U framework, no support exists for how project members should handle risks they encounter (R10), which could explain why people fail with action plans. Respondent 12 agrees and says that there is sometimes too much control instead of take actions on for instance risk. There are many controls groups with the same people, which consequently do not allow different point of views and the tendency is towards standing idle instead of taking action (R12). Consequently, it is difficult to have a good risk management strategy and could further harm the risk objective since researchers emphasize both identification of risk and a risk-handling plan being applied (Hsu et al., 2013).

Identifiers of risk could differ among projects, but one common thing is that risks seldom is connected to the IT itself, but rather associated with people (Hsu, Backhouse et al., 2013). This could be seen in FATCA since errors occurring in the project are connected to not having the right people with the right competence in place rather than error connected to the IT itself. Drivers that need to be incorporated in risk management to achieve potential success of project management are top-management support, stakeholder involvement and required knowledge of the team members, which are already discussed in former sections. (Kappelman et al., 2006; Lawrence and Scanlan, 2007; Cerpa and Verner, 2009) Additionally, team commitment is important in order to achieve the desired objectives. In both FINREP and FATCA the respondent perceive themselves as committed. However, one respondent experience that a common view of regulatory projects is that they do not benefit the company or provide any individual advantages, such as promotion. Therefore the interest of being part of regulatory projects is less than other more beneficial projects for the bank say respondent 10. On the other hand, respondent 11 says that this historically has been the fact, but currently it is a turning trend towards an enhanced interest in regulatory demands. Thus, before the commitment may have been lower, which could harm the project outcome, but may not be a problem anymore in the organization.

Nordea conforms to research by having risk assessments, where risks are identified, assessed and solutions discussed. However, a view exists of the projects lack in tacking actions. Nordea further follow research by documenting risk, but lack in the communication of these. Finally, commitment is perceived as sufficient as suggested by Lawrence and Scanlan (2007) and Cerpa and Verner (2009) to reach the risk objective.

The importance of Business case

The PM4U framework communicates the importance of business case, which is mandatory to be established before initiating a project, which is in line with Kappelman et al., (2006). Different views on the business cases in FINREP and FATCA exist. Some believe a business case has been established, but has not been introduced (R 7, 2, 12), while others say it exists and is documented in the Clarity-tool. The common view, however, is that the business case is not done in a proper way.

The business cases also differ when it comes to regulatory projects according to PP&PM respondents. When regulatory projects are done, there are a lot of noise on the authorities and many people takes plan that "we have to do it" (R4). Therefore, they do not have time to create proper ideas and consequently skip the part of establish a proper business case. Respondent 10 was told that a business case was not needed when FATCA was initiated, as it is a mandatory project and respondent 4 continues "If you ask for a business case you might get a one-pager where it is stated that the project is mandatory". One problem with a lacking business case is that what is going to be achieved is undefined, hence project members do not understand the problem that should be addressed and thus what the project should deliver (R4), in line with Tasevska et al., (2014) thoughts. Additionally, It is very hard to prioritize and follow up projects that do not have a proper business case. FATCA and FINREP can be seen as typical examples of this issue, resulting in more expensive projects. The organization is being immature and lacking the knowledge of the importance of a proper business case (R2), "we should not put any money to any kind of initiative if we don't have a proper business case in place" (R4).

Nordea do not conform to research, as a proper business case is not established within either FATCA or FINREP. Valuable information about the purpose of the project, and how it should be conducted is therefore absent. This could lead to that assumptions are made instead of "sticking to the plan", which potentially could result in doing unnecessary things bringing additional costs or not executing the projects in an efficient manner.

5.3 Summing up

Based on the findings of this thesis, an analytical summary is presented below over how well (ranked from less good to very good) people and tool related factors from the theoretical project management framework are applied in Nordea's project management execution.

Furthermore what are applied good and less good is outlined, in order to provide an understanding of what may be improved in the utilization of each factor. This can consequently contribute to achieving project management success. The expected factors to be of particular importance from the theoretical framework are marked purple.

Factor	Application	What is good	What is less good
Project Manager	Good	• Overall responsibility • Sufficient knowledge	• High responsibility but less authority
Knowledge/ experience sharing	Less good	• IT knowledge in house • Informal knowledge/experience sharing • Forums for knowledge/ experience sharing	• Knowledge re-creation • Knowledge retention • Cross-collaboration • Communication of education possibilities
Communication	Less good	• Several communication channels (meetings, intranet page etc.)	• Communication guidelines • Access to communication channels • Information does not reach everyone involved
Mgmt. support	Less good	• Support from project managers to project team members	• Support from outside project boundaries
Time Management	Good	• Project plan • Meetings to follow up on plan	• Documentation of responsibilities • Proper business case
Cost Management	Less Good	• Combined bottom-up/ top-down estimations with reviews • Project manager involvement • Follow-up processes	• Multiple follow up processes • No holistic cost overview • Low transparency in project costs • Proper business case • Tendency to work against higher targets than set
Quality Management	Good	• Quality assessments • Test runs • Change process	• Unclear stakeholder requirements • Benchmark against stakeholders requirements
Risk Management	Less Good	• Risk assessment sessions • Identification of risks • Culture of sharing risk if needed • Documentation of risks • Team commitment	• Actions to identified risks • Risk handling plan • Proper business case • Formal risk sharing between projects • Communication of documentation of risks

Table 4. *Analytical Summary of the People and Tool related factors*

6 Conclusion

The following chapter concludes and summarizes the findings of this research. The research question and purpose will be answered followed by suggestions for future research.

6.1 Project management execution in regulatory driven IT Projects

This thesis examines how project management is executed in regulatory IT projects and the potential of achieving project management success within FINREP and FATCA, by answering the question "How is project management executed in regulatory driven IT projects?". Regulatory IT projects are within Nordea executed with the use of project management and the application of a designed project management framework. Nordea's project management framework covers almost every factor of how researchers say a company achieves project management success. Although the formalities exist for how to accomplish successful project management, the findings of this study show that the project management execution does not completely work as sought in comparison to what researchers and also Nordea's framework emphasize (Table 4). By studying the execution, the factors difficult to perform in achieving project management success could also be identified. The findings indicate that Nordea fails to fully utilize some of the important factors in the execution (Table 4). As the projects are on going, the measurement of project management success cannot yet be done. The findings indicate, however, deficiencies and in that sense, project management success will most likely not be achieved on the projects end. Hence, by improving the factors that work less good presented in the analytical summary, the achievement of project management success might be feasible for further projects within Nordea.

6.2 Factors of particular importance in the studied context

This thesis also aimed to identify factors that are of particular importance in the project management execution by answering "What factors are of particular importance in the studied context?". Our expectations of the factors believed to be of particular importance (on page 20) were found to be in line with the outcome. The findings indicate that the project manager and the skills possessed play a central role in the projects. How the project manager drives the project, act as a leader and supports the members determines the outcome of the projects in Nordea (on page 34). Additionally, IT- and business knowledge are, as expected, vital to comprehend by both the project manager and the project members (on page 37). Also, knowledge regarding the regulations and requirements was found significant but particularly

the interaction between the IT, business- and regulatory competences, play a fundamental role of the project outcome. The knowledge- and experience sharing as well as the retention of knowledge within the organization was also found crucial due to the complexity regulatory IT projects entail (on page 38) and wide competence base these projects require. In addition, communication was also found vital in this study, as it is the foundation of knowledge- and information sharing and to increase transparency within the organization.

Time- and Quality Management, as expected, were no doubt to be of particular importance since attaining compliance is the license to operate for organizations in this kind of environment. The risk aspect was additionally found significant as Risk Management allow identification of early warning signs that can be solved before causing a great impact on the project (on page 49). One factor that was not part of our expectations and which has not received the attention deserved in the theory of project management is the importance of business case (on page 51). The theory do mention the business case within some tool related factors, but does not highlight its true importance as serving as a guide, a benchmark and a base for evaluating projects. This implies that the business case should get an increased attention within the field of project management and particularly in the aspect of regulatory IT Projects.

6.3 Reflection and Contribution

One should not forget that Nordea is a large organization with many elements to consider. This implies difficulties when executing extensive IT projects like FATCA and FINREP. In addition, IT projects are complex in its own and the fact that this thesis has found many interdependencies difficulties arises to comprehend all the factors in a proper way simultaneously. Thus, the opportunity to achieve project management success is hampered. In the studied setting, also unclear requirements set by authorities and when that is a fact the management of regulatory IT projects is not an easy undertaking. The result of this study could therefore be seen as a piece that further demonstrates the complex nature of IT projects driven by regulations. The findings emphasize, however, what should be focused on in order to obtain a well-performed project management within IT projects forced by regulations. Thus, the thesis generates knowledge to the field of project management.

The findings do not only generate knowledge to the research field, but also contribute to actors facing a similar regulatory environment. The requirements from authorities are

advancing noticeably, implying that the findings of this thesis may be useful and beneficial in order to comprehend the complexity of regulatory IT projects, also in the future. Consequently, the results of this study could to a certain extent be representative for other actors within the Swedish banking industry and facilitate well-performed project management.

6.4 Future Research

This study focused on gaining an understanding of how project management execution takes place within IT projects driven by regulations. For further research, an additional study of regulatory IT projects could be performed, but in the view of knowledge management since knowledge is found to be one of the most important factors in succeeding with these kind of projects. Another study of interest could be a comparison between regulatory IT projects and an ordinary IT project to investigate the regulatory aspect in a deeper manner. This would be beneficial since a comparison could identify differences/similarities between the contexts. This might further contribute to an understanding of how to execute regulatory IT projects successfully and can also benefit the ordinary IT projects. Furthermore, if access is granted a comparison towards other banks in Sweden would be of interest to study in order to grasp if similarities exist in execution and if the impact of regulatory IT projects is approached differently. The latter could be of certain interest for practitioners, as the way of managing these kinds of projects will be an important competitive advantage as the regulatory requirements escalates.

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8 Appendix

8.1 Appendix 1: Interview guideline

General, introducing questions:

1. What is your role in the project? Do you have any responsibilities assigned to you? Is there any documentation of your responsibilities?
2. What are the objectives for the project?

Time:

3. Would you say that you have any objectives connected to time?
4. Do you have any knowledge about time management? Is that applied in your project?
5. If you have time objectives, how are they followed up and by whom?

Cost:

6. Would you say that you have any objectives connected to cost?
7. Do the project have cost objectives? How are they communicated?
8. How is the cost objective for the project established? Is it revised?
9. How does the cost control process look like? Who are involved?
10. How often do you measure costs? Consequences?
11. Is there a need for more/less resources? Why? Are you within the targeted budget?

Quality:

12. Would you say that you have any objectives connected to quality or the functions of the outcome from the project? E.g. for the IT solutions you are developing?
13. How do you measure quality during the project?
14. Do you have any change process, and how is that process performed?
15. How do you ensure functionality within the time and cost frame?

Risk:

16. Would you say that you have any objectives connected to risk?
17. Do you have any knowledge about risk management?
18. Have you got any education of risk management?
19. How do you work with risk-handling plans?
20. Do you have any database where you store risk information?
21. Is there any policy for how to communicate about risk? For instance, if you discover something that could be considered riskful, what do you do?
22. If the project is facing any problem, how do they solve it? Thus the process, do you ask people from other projects? Is there any documentation of this?
23. Has there been any change of the projects scope during the project lifetime? Do you have any change control process?

General:

24. Is there any of these objectives (cost-, time-, quality- and risk related) that are more important than the others? Why?
25. Are the project compared/benchmarked to other projects? How?
26. Who is developing the business case and who is responsible that the project follows the right direction?
27. Is there any other documentation or designed project plans that you work with. If so, who has the main responsibility for the plan being followed?
28. How does the staff structure look like? Consultants or in-house? Is there in certain periods you need to add more manpower? If so, why?
29. How does the meeting structure look like in the project?

Experiences/Knowledge

30. Have you worked in other projects before? Do you experience any differences from other projects you have worked in? How do you perceive the mandatory factor of the project and is it noticed that the project is mandatory?
31. Do you have experience from other IT projects? Are you sharing that experience? How? If not, is someone sharing his or her experience with you?
32. After the project is completed, how utilizes the project employees' gained knowledge?
33. Do you perceive that you have enough knowledge in order to understand the IT that the project is developing? Is there a need for understanding of the IT, and why?
34. Is there a community etc. for experience re-use? Or how do you work with knowledge sharing? Is there any incentives connected to it?
35. Is there a culture of sharing knowledge in the project and over project cross-borders?

Support

36. Who do you consider as the top management? How often and in what way do you get support from them?
37. Who are the stakeholders of this project in your opinion? Are they involved in the project, is there any collaboration with them? How do you work with knowing that they are satisfied?

Collaboration/Communication

38. Is there any cross-project collaboration? Thus, are you sharing experiences with other IT projects? Within GCI, or from other Business Areas as well?
39. How do the communication look like inside and outside the project?
40. Do you get feedback and do you give feedback to co-workers?

Other people related questions

41. Do you perceive your co-workers as committed to the project or the project team?

Additional questions to project managers and PP&PM respondents

42. How did you design the project structures before initiating it? Are you using the standard processes in the project model?
43. Do the PP&PM unit have any objectives for their execution?

44. How do the PP&PM unit supporting the project?
45. How often do you measure how the projects are proceeding? And how do you coop with deviations from the project plan? Are you getting top management support in terms of with suggestions of project improvement?

The Nordea Project Portfolio Model

46. Nordea has designed a project model for how to execute projects? How is this model communicated in the organization? If so, do you know what the model consists of? Is the model used in this particular project?