HÖGSKOLAN
I GÄVLE

FACULTY OF ENGINEERING AND SUSTAINABLE DEVELOPMENT
Department of Industrial Development, IT and Land Management

Readiness to Change in a Project-based Organization

Factors supporting change implementation at individual level

Maja Fresk
Martin Magnell

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Supervisor: Ioana Stefan
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Maja Fresk

Martin Magnell

Abstract

Problem - The challenge investigated in this present study is for a project-based organization to create a well-planned implementation by knowing the current state of the organization and its readiness for a change. This while also taking the time for unexpected events and communicating the issue while also taking their organizational structure into consideration.

Purpose - The purpose of this study is to analyze the readiness to change for the case company with focus on three aspects of readiness: information sharing, common views and implementation approach, while also taking into account the distinct features of a PBO-structured organization. The study aims to identify supporting factors for successfully managing an implementation of a new business system at the individual level.

Method - This study is a case study based on a single case company: Sweco, which is a Swedish technical consulting firm that is about to change their business system. A literature review was conducted in order to collect previously conducted research within the research area. The primary methods used for data collection in this study have been semi-structured interviews and a questionnaire, the data was mainly analyzed though thematic analysis.

Results – The readiness for change for the case company is affected by their organizational structure. The results of the questionnaire show that collaboration within Sweco works relatively well, but there are some aspects that can be improved, such as communication and information sharing. The results of the conducted interviews show that most employees at the case company perceive the change of business system to be good, but they were unsure about why it would be carried through. Guides on how the change would affect the specific individual and knowing where to turn for feedback and information was pointed out as a suggested improvement by the employees. A lot of responsibility of implementing the new system was put on the unit managers.

Conclusions - The study strengthens the existing theory regarding change readiness and individual supporting factors for successful change implementation. It confirms some of the strengths and drawbacks for organizations working with projects. The study also concludes how the case-company and other companies in a similar situation can utilize some advantages of being familiar with working in projects.

Keywords - *change management, change implementation, project based organization*

List of Abbreviations

ERP - Enterprise Resource Planning

PBO - Project Based Organization

QA - Quality Assurance

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1. Introduction

This part of the paper will introduce the research content as well as its background, purpose and research questions. A deposition of the contents of the report is also presented.

1.1 Background

The ability to change can be crucial for the business survival and its success, as well as being able to grasp the continuous changes and stay flexible (Rowden, 2001). When managing a fruitful change it is important to consider the soft sides of the implementation, as argued by Jørgensen et al. (2009). They continue to point out the fact that the soft values, which includes social and communication factors, is the most difficult to handle. Lautrentiu (2016) argues that it is important to make sure that the both the top management and the individual employees feels included in the process of change in order for it to be successful. The individual's readiness for a change can be affected by the type of culture that the organization prospers (Haffar et al., 2014) and people who work within organizations need to be prepared to make changes in order to move forward and learn (Smith, 2005). There are certain themes that will affect the change readiness, both on the organizational, group and individual level. Vakola (2014) highlights that communication and information sharing tends to have a positive effect on the individual's readiness to change. Creating an alignment and engaging everyone in the organization is crucial according to Smith (2005) and Stanleigh (2008) who states that being unable to engage all the employees for an upcoming change can cause a change management crisis. Even the approach for the implementation is vital, as Denic et al. (2016) states that a success factor for an implementation is active support from the top management. In this thesis, we have used the definition of Weiner et al. (2008) for change readiness, which is to the extent to which the members of an organization are prepared both behaviorally and psychologically for the implementation of organizational change.

It can be a challenge to manage a well-planned implementation, as there are many factors to keep in mind. The structure of the organization can be significant when managing change, as structures can sometimes be more or less flexible, as explained by Turner (2014). A temporary organization or a project based organization (PBO) tend to be more flexible and adaptable for managing changes (Turner, 2014).

The connection between change implementation within PBO's is still lacking in studies, how PBO's react to managing change and its distinguished features. This study aims to close the gap by examining the role of the PBO structure while implementing a new ERP-system.

The case study was conducted at Sweco, which is a Swedish technical consulting firm that is underway of replacing their current business system. Sweco has decided how this change will be handled at organizational and group level, but there is still room for adjustments at the individual level. This is an important factor as there is a need for the individual employees within an organization needs to be included in the change in order for it to be successful (Lautrentiu, 2016).

The currently used business systems sometimes have difficulties in working together in synergy, which can create some problems for Sweco and their internal collaborations. This creates some drawbacks for Sweco as they have similarities to PBO's, as a large part of their business is done by working in projects. Hansen et al. (1999) claims that PBO's generally have difficulties in managing knowledge sharing as their structure disables them from sharing as the information tend to stay within the project groups.

1.2 Purpose

The purpose of this study is to analyze the readiness to change for the case company with focus on the themes information sharing, common views and implementation approach, while also taking into account the distinct features of a PBO-structured organization. The study aims to identify supporting factors for successfully managing an implementation of a new business system at the individual level.

1.2.1 Research Questions

- What is the change readiness of the studied case with focus on themes involving information sharing, common views and implementation approach?
- What supporting factors can contribute to make the change to the new business system as smooth as possible for the involved individuals?

1.3 Structure of the Paper

This paper will follow along the basic IMRaD structure with introduction, method, results and analysis.

The following chapters is presented as:

Chapter 1: The introduction presents and summarizes the chosen research topic and introduces the purpose and objectives for the study.

Chapter 2: The theoretical framework presents relevant theories based on scientific articles and other types of literature to be compared and analyzed in the analysis chapter (chapter 5).

Chapter 3: The method presents the chosen methods to gather and present the results. Criticism towards the methods applies including reliability, validity and research approach, as well as a case-company description.

Chapter 4: The findings includes the results collected from the interviews and the questionnaire.

Chapter 5: The analysis evaluates the results and strengthen them with suitable theories gathered from the theoretical framework in order to be able to discuss the findings.

Chapter 6: The conclusion presents the concluding remarks for this paper, implications both practical and theoretical and suggestions for further studies.

2. Theoretical Framework

In this chapter relevant theory for answering the purpose of the study is presented.

According to Murray (2008) a literature review should include an overview of the current research done within the subject which should be evaluated and the shortcomings should be illuminated as well as the contributions. In order to find reliable articles and studies the search engines Google Scholar and Discovery was used, where articles, books and journals from academic publishers and universities could be attained. The key search words for this study was “change management” which acquired an overwhelming number of hits on the search engines, therefore the search was focused on search words such as: “Change management strategies”, “Change management implementation” and “Change management plans”. A number of books within these fields has also been screened.

2.1 Project based organization

As a way of incorporating different specialized and diverse intellectual resources and expertise companies can form projects in order to deal with certain issues such as innovational actions and searching for new markets (DeFillippi & Arthur, 1998). Edmondson (2012) explains this concept as teaming, where experts within different fields, divisions and disciplines gather in a temporary group in order to solve a problem or utilize an opportunity. These can also be considered as project based organizations (PBO), which according to Sydow et al. (2004) is an efficient way to organize knowledge resources, as it is both relatively quick and flexible. This is because a permanent organization can, relatively risk-free, launch several project-based organizations or teams that work on a certain project, as the team or PBO is known on beforehand to be a limited time enterprise. This results in the main organization not being very affected if a PBO goes badly and/or is canceled, as a PBO generally does not have any fixed costs. Brannick et al. (2000) explains that coordination for working together in teams involves using strategies and behaviors that aims for connecting and managing the actions, knowledge and objectives of the members of the team to achieve the set common goal. O’Dell and Grayson (1998) states that the success of a project largely relies on the actions from independent project managers and another crucial part is the coordination inside and across the organization.

Hansen et al. (1999) engages more in the problematic parts of working in projects, as he explains that the high levels of focus, fast and independent knowledge that exists within projects has its drawbacks. Being focused means that you do care less about what happens outside of the project, working rapidly means that you do not have the time to spend on reflections and documentations, which means that the gained knowledge will stay within the project group and not travel any further. Even though you can learn a lot during the execution of a project, there is always the risk of reinventing the wheel over and over again within the organization. In order to be able to transfer knowledge about inter-project learning across the organization, strategies for knowledge transferring should be implemented.

2.2 Change Management

A definition of change management, as highlighted by Moran and Brightman (2000:66), is "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers".

The reason as to why the change is done can vary a lot, Edmonds (2011) lists some examples as being change of legislations or regime, acquisitions and mergers, global ventures and its challenges, change of structure, exit strategies, introduction of new processes and strategic reorganizations.

Turner (1990) highlights the fact that a project should bring forward a change. The difference with a PBO and a traditional organization is that a PBO is constantly working with changes. The traditional organization structure embraces projects as a change agency to move forward. Creating temporary organizations in order to reach set objectives, Turner (1990) argues further that projects are more convenient for managing a change rather than as a functional organization. Temporary organizations tend to be more flexible and be more reactive to respond to changes involving uncertainties and objectives, as the functional organization is tilted towards managing routines more than change management (Turner, 2014).

When managing change, Jørgensen et al. (2009) argues that what is most difficult to manage is the soft values, including social, people and communicational aspects. This requires techniques that should be used regularly over a longer period of time in order to successfully change the minds, attitudes and culture within an organization. This can require more projects than just the project of change itself, and the timespans for these projects can be longer then the project of change as well.

Stanleigh (2008) gives a few examples of actions that can cause a crisis within change management; failure to engage all employees, limiting the change management to cover executive level only, claim that the change is necessary due to the current state being crisis, deploy staff to a change program and expecting change only because of that action, not honoring the past and not giving staff the opportunity to vent before the change is implemented. Kotter (1996) also lists eight common mistakes that are done within change implementation. These are:

- Allowing too much complacence;
- Failing to create a large enough indicative coalition;
- Undervalue the power of visionaries;
- Not reaching out with the vision;
- Letting obstacles block the new vision;
- Fail with creating short term success;
- Celebrating the success in advance;
- Fail to establish the changes in the organizational culture.

2.2.1 Change Management at an Individual level

When managing change it is considered a very important factor to include the employees as a part of the process of changing, as Laurentiu (2016) argues that it is important to have everyone within a company on-board for the change. He further that a company cannot conduct a successful change unless it is supported by both employees and management, as it is important for both of these parties to feel that they are included in the change process. Laurentiu (2016) further explains that in order to achieve this it is important for change managers to positively influence the individuals in order to cultivate and develop the human resources of an organization. Laurentiu (2016) also claims that this would lead to positive feedback which would increase the support to the management when it comes to decisions, priorities and changes of policies. These aspects would in turn lead to improved performance for the company.

It must be acknowledged that conflicts can take place, as argued by Sanda (2011). A common problem with conflicts within organizational change processes is the lacking ability of identifying situational problems as they develop, while at the same time use them as tools in order to improve the management innovation. These situational problems can be conflicts or tensions that is based on behaviors on group or individual level (Sanda, 2011). This issue can be addressed by change managers by regularly examining how individuals and groups mediates situations as they occur. Therefore the change managers can in the future identify, isolate and manage these situational problems when they take place in future implementations of change. This enables the organization to more easily control the conflicts and use them in order to energize actions, boost self-evaluation, encourage innovation and adapt (Sanda, 2011).

2.2.2 Change readiness

Weiner et al. (2008) defines readiness to change as the extent to which members of organizations are set to implement organizational change in terms of both psychological and behavioral aspects.

Rowden (2001) argues that the key for business success lays within the organization’s ability to change, grasping the constant and continuous changes. It is vital that the organization is in a state of change readiness in order to be able to make the most of the changes and achieve the set goals. Smith (2005) also agrees with this statement and adds that the people who work within the organization must be prepared for transformation in order to succeed and learn.

The individual state of change readiness is highly influenced by the type of organizational culture the organization prospers. The individual readiness for change grows with the type of leader the organization possesses, a leader that will act like a mentor will be supportive to the individual’s change readiness (Haffar et al., 2014).

Readiness for change in an organization develops according to Fariza et al. (2012) at two separate levels: the personal level and the organizational. The personal readiness level engages in questions of motivation, competence and individual characteristics. While the organizational level includes resources, climate and culture. If failing to estimate the organizations and individual's change readiness it can result in managers wasting important time and energy managing the unwillingness to change. Creating the readiness for a change before one tries to change the organization is crucial for getting everyone onboard and resistance can be avoided (Smith, 2005).

Smith (2005) proposes three key-factors for how change readiness can be accomplished:

- Establish a sense of need and necessity for the upcoming change;
- Communicate and inform about the change, making sure everyone is a part of the change process;
- Provide anchor points and a base for the change management.

Edmonds (2011) claims that there is a link between the levels of change readiness and successful management of change. The management is highly dependent on the same factors as the staff, communication, change management experience, support mechanisms and resources.

The individual readiness to change is determined partly by the perceived impact of the change and also work attitudes. If an employee is confident in regard to their abilities they tend to experience a high degree of readiness for change. Therefore Vakola (2014) suggests that this aspect is important to keep in mind already when employing. Vakola (2014) furthermore explains that it is important to create an organizational climate that has a high level of trust and enhances positive communication has a positive effect on the individual readiness to change. This is due to the fact that satisfied employees tend to be more ready for a change since they see the positive consequences of change as significant, which leads to these individuals embracing the change to a higher degree. Self-evaluation is also an aspect that Vakola (2014) highlights as having a positive relation to the individual readiness for change.

2.2.3 Change implementation

A successful change management strategy consists of three phases according to Altamony et al. (2016). These phases consists of: preparing to change, implementation of change and measuring the impact on the user. Skipping steps within the change implementation can create an illusion of speed, Kotter (2007) argues that it never will produce a satisfying result. Big changes needs to be supported by the head of the organization if they want to be successful. Kotter (2007:6) describes eight steps to transform the organizations and highlights important aspects that could influence the implementation (see figure 1.)

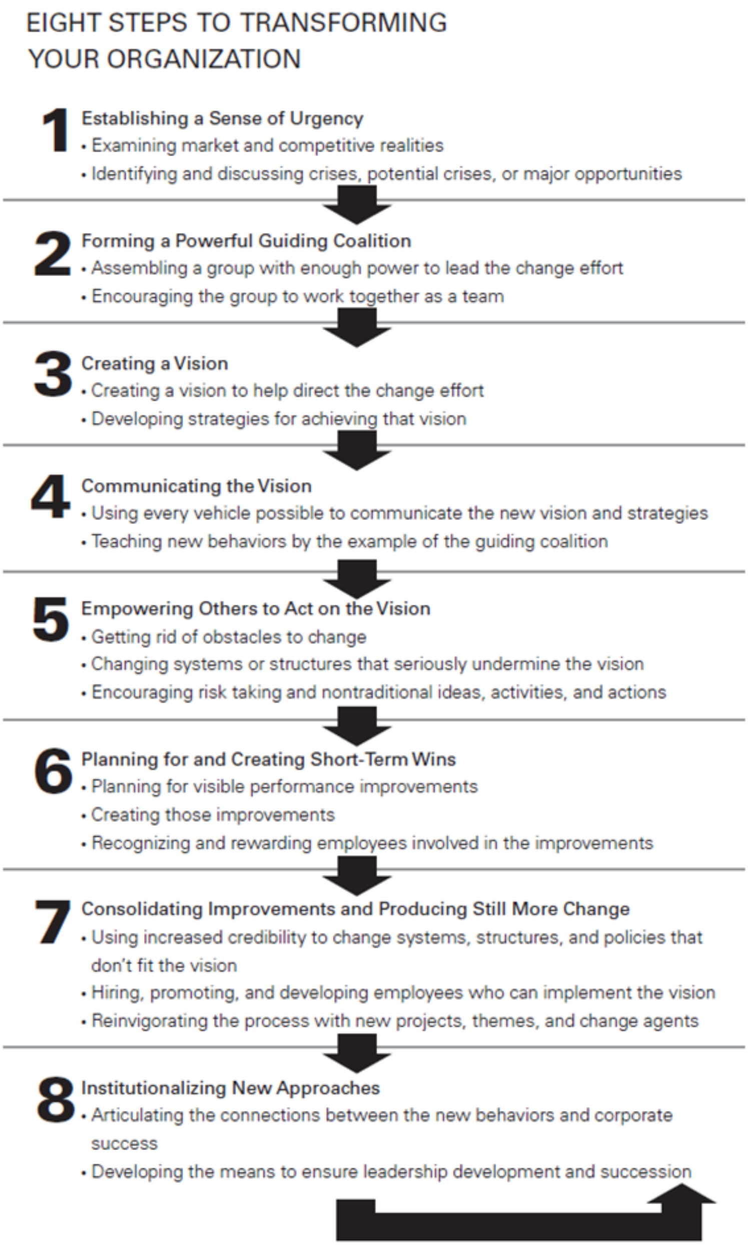

Figure 1: Displays the eight steps to transforming your organization (Kotter 2007:6).

When adopting a new ERP system through change management, it is possible it will add success to the company. The study by Altamony et al. (2016) reveals critical success factors when implementing a new ERP system with change management and found that all key factors is within five main categories: change management, top management support, business process re-engineering, vendor support and user involvement. But they do consider change management strategy to be the number one most important factor. Denic et al. (2016) points out that a success factor for a change implementation of an ERP-system is active support from the top management of the organization.

2.3 Summary of the Theoretical Framework

Working in projects is a way of gathering expertise in a temporary organization (DeFillippi & Arthur, 1998). A way of handling projects can according to Sydow et al. (2004) be to form PBO's. He further explains that it is an efficient way to organize it, as it is both relatively quick and flexible. When it comes to coordination of a project, strategies and connecting behaviors are required to manage the actions, knowledge and objectives in order to reach the set goal, which should be common for all project members (Brannick et al., 2000). O'Dell and Grayson (1998) stresses the need for the coordination to work within an organization in order to successfully complete a project, but they also points out the important role played by the individual manager and its actions. A risk of working in projects, as pointed out by Hansen et al, (1999), is that the pace of working is too fast, which can result in lacking documentation and reflections.

Change management means to continually renew the direction, structure or capabilities of an organization in order to serve the needs of the customers (Moran & Brightman, 2000). Turner (2014) points out that since PBO's are based on temporary organizations, they are likely to be more flexible in general and therefore can more easily adapt to a change. Something that is generally difficult to manage when it comes to change, however, is the soft values, and these requires techniques used over a long period of time in order to change for example the minds, attitudes or culture within an organization (Jørgensen et al., 2009).

In order for a change implementation to be successful, Sanda (2011) points out the need for a manager to be able to handle conflicts. The author further on explains that one way of gaining these capabilities is to examine how the individual or group would handle conflicts or other similar situations themselves. Laurentiu (2016) claims that including the employees in the changing process is an important factor for making a change implementation, as it is impossible to do it successfully unless it is supported by both employees and management. Including the employees could be done through feedback for example. Haffar et al. (2014) claims that the organizational culture and the leader type is two important factors that affects the individual readiness for change a lot. The individual readiness for change is defined by Fariza et al. (2012) as motivation, competence and individual characteristics. Smith (2005) argues that it is very important to achieve readiness for change before implementing a change, and continues to explain that the readiness can be reached by accomplishing the following three factors; establishing a sense of need and necessity for the upcoming change, communicate and inform about the change and to provide anchor points and a base for the change management.

Altamony et al. (2016) suggest three phases for implementing a change, these are preparation, implementation and measuring. Kotter (2007) suggests as many as eight steps that are required, and that all are necessary in order to achieve a successful change implementation. These eight steps are; establishing a sense of emergency, forming a powerful guiding coalition, creating a vision, communicating the vision, empowering others to act on the vision, planning for and creating short-term wins, consolidating improvements and producing still more change and institutionalizing new approaches. Denic et al. (2016) points out that active support from the top management down is important for implementing a new ERP-system.

3. Methods

In this chapter the methods and tools for conducting this study is presented and motivated. The case and case-company is also presented.

The study has taken place during ten weeks of full time studies during the spring of 2017 at Högskolan i Gävle. A problem area considered likely to have been encountered by the case company Sweco was presented to them. Together with Sweco and the supervisor from Högskolan i Gävle the aim of the study was established. The study has mainly been done at Högskolan i Gävle and the case company’s office in Gävle.

The data collection was conducted at the case company through semi structured interviews which is described in chapter 3.2.2. A questionnaire was also simultaneously conducted in order to complete the data collection and gain more data about the current state of Sweco. The questionnaire is described in chapter 3.2.3. The data was analyzed through thematic analysis. Throughout the study its progress has been discussed with both the case company and the supervisor from Högskolan i Gävle.

3.1 Case Study

This research has been executed through a single case study, where one company will be reviewed. When aiming for answering “how” or “why” questions within a social phenomenon and where the investigator has limited control over what events being investigated the case study is to prefer. Cohen and Manion (1995:106) cited from (Biggam, 2008:96) defines a case study as “The case study researcher typically observes the characteristics of an individual unit - a child, a class, a school or a community. The purpose of such observation is to probe deeply and to analyze intensely the multifarious phenomena that constitute the life cycle unit”. This study aims to investigate the current state of the case company and its readiness for a change and the supporting factors contributing to a successful implementation.

According to Yin (2009) the case study approach opens up to various sources of evidence and this explains to why this particular approach is the one to be suggested first hand. When conducting case studies, researchers often use interviews as the main method of data collection but many researchers also chose to obtain data and information through a variety of methods in order to be able to form a triangulation of data. Biggam (2008) argues that through a mixture of questionnaires as well as individual and group interviews can be used not only to achieve a rich output, but higher remarks as well. This study will be using semi-structured interviews as the fundamental way to access primary data, but will also include a questionnaire in order to receive a richer output. A case study approach makes the researchers preserve the holistic characteristics of the real-life context, which can include the individual life cycles, group behaviors, organizational and managerial processes and performance for example. The findings from the interviews are analyzed by splitting the applicable information for the thesis into different themes, these are information sharing, common views and implementation approach. These themes are assumed to have a connection with the level of readiness of the case-company and is discussed throughout the thesis as a common thread.

The purpose of the case study approach according to Yin (2009) is to be given the access to be able to expand and generalize earlier theories. Yin (2009) also stated that the main idea of a case study is to shine light to a decision or a set of decisions. This should be able to answer why these decisions were taken, how they were implemented and with what kind of result.

According to Bryman and Bell (2013) there is a correlation between existing theory and research and that the significance of the theory can be viewed upon in different ways. They say that the two most common research models are deduction and induction. There are, however, more research models, one of which is the abductive reasoning, as pointed out by Alvesson and Sköldberg (2008). Bryman and Bell (2013) explains that inductive reasoning means that the theory used in the study is based on the gathered empirical evidence, while deductive reasoning means that a researcher develops one or more hypotheses based on the existing theory in order to empirically examine them.

When research is based on a particular case that is being studied and interpreted it is common to use abductive reasoning according to Alvesson and Sköldberg (2008), therefore this approach is very common to use for case studies. The case is then interpreted and explained based on a hypothetical overall pattern. The abductive research contains parts from both inductive and deductive research, as it is based on empirical evidence but does not ignore previous research.

As this study is a case study where empirical data has been interpreted and reviewed it is based on the abductive reasoning. The empirical data has then been compared to previous research within the subject field in order to deepen the knowledge of the identified situation. This process has then been repeated in order to create interaction between theory and the gathered empirical data.

This study follows an abductive reasoning, due to the fact that the authors are able to use methods and techniques from both inductive and deductive reasoning. This can possibly broader the view of the studied subject and provide new suitable approach angles.

This study uses a qualitative research method in order to be able to support answering to the purpose and research questions. The qualitative and quantitative research is two opposite types of research strategies, where the quantitative strategy is more involved with quantities and measurements and the qualitative type is connected to deeper exploratory studies where researchers seek for quality responses (Biggam, 2008). Denzin and Lincoln (1994:2) cited in Biggam (2008:86) argues that a qualitative research associates with “studying things in their natural settings, attempting to make sense of, or interpret a phenomena in terms of the meanings people bring to them”. This particular study will answer if the case company is ready for the upcoming implementation and uncover supporting factors for a successful implementation. This study follows a qualitative research method with the aim of making sense change readiness and supporting factors which means that this study’s goal is to interpret, not to measure.

3.1.1 Case Company

Sweco is a Swedish technical consulting firm that offer advanced technical consulting services within engineering, environment and architecture. These products includes offering the development of sustainable buildings, efficient infrastructure and enabling access to electricity and clean water. In order to fulfill this broad spectrum of products Sweco is divided into several affiliate companies. These are Sweco architects, environment, civil, structures, management, rail, systems, energuide, society and position

(Sweco, 2017). As these consulting services are conducted in temporary internal project groups, Sweco has a lot of similarities to project based organizations (PBO's) in many aspects.

Sweco has 14 500 employees spread out over offices in 14 European countries while their customers are spread out over 70 countries around the globe. Of the 14 500 employees 5 600 are employed in Sweden at one of their 50 locations in the country. This is a part of Swecos strategy to be close to their customers in order to understand the customers' needs in-depth. The company has a turnover of 16.5 billion SEK, of which 6.8 billion comes from their business in Sweden (Sweco, 2017).

3.1.2 Model

The model used in this case study has been "Eight steps to transforming your organization" by Kotter (2007). This model was chosen because of its simplicity and because it is relatively straight forward. Sidorko (2008) points out that said model emphasizes actions needed for successful organizational change in a logical sequence. It can be argued though that this model can be considered to be too linear and mechanistic, but the authors has decided to use this model anyway since all of the eight factors could be applied to and/or discussed for the case company. And as clarified by Sidorko (2008), the key to a successful change implementation might not be to follow a specific model in to every detail, but to adaptively and selectively use it in order to best suit the specific situation or organization. It is in such a way the model by Kotter (2007) has been used in this study, as a checklist or guidelines rather than a set model. Appelbaum et al. (2012) highlights further limitations with Kotter's eight step model as having a too rigid approach, as Kotter (2007) argues that the eight steps within the model should be followed in order and each step should be done before moving to the next one. Having this kind of structured approach to change does not agree with Burnes (1996) as he argues that organizations rather chose a suitable approach to change that roots from their culture and is hard to change. Appelbaum et al. (2012) further argues that some of the steps within the model are not relevant in some contexts as some of the transformations do not need or are capable of going through certain steps. Furthermore Appelbaum et al. (2012) points out that the model is not detailed enough to provide help during the change management, all possible scenarios are not accounted for as the resistance to change and commitment to change are considerable aspects of the change management.

3.2 Data Collection

The starting point for all data collection is an identified problem that the researcher wants to solve or a question that the researcher wants to answer (Lantz, 2013). In order to then gain more information about the case data collection is needed. It is common that several methods are used to collect the data. In the cases where several sources states the same thing independently from each other, triangulation has been achieved (Biggam, 2008).

3.2.1 Primary and Secondary Data

There are two different main categories for gathered data, these are primary and secondary data according to Biggam (2008). He explains that primary data is data that is collected by the researchers themselves, through for instance observations, questionnaires or interviews. Secondary data on the other hand is data that has been previously collected by others. Secondary data used in a study should be relevant to the subject field in order to achieve a basic understanding and knowledge of what previous studies has shown. Biggam (2008) also points out that gathered secondary data can be compared to gathered primary data and then be analyzed.

The secondary data used in this study is documents provided by the case company Sweco. The primary data gathered in this study has been collected through interviews and a questionnaire.

3.2.2 Interviews

One of the most critical sources of information for a case study is according to Yin (2009) the interviews. The interview is seen as a guided conversation which means that the researcher aims for a consistent line of inquiry, but will be able to have a dynamic form of the interview with a semi structured form. Helping with keeping the interviews on the right track, an interview protocol was conducted, based on the literature review and gathered under three themes within the interview: Information sharing, common view and implementation approach. These themes were chosen due to the fact that they were discussed in most of the scientific articles, pointing towards that the change readiness of the company needed these factors in order to success. Table 1 explains and strengthens the reasons why these themes were chosen to study further. See appendices 1, 2, 3 and 4 for interview questions.

Table 1: Clarifies why the themes in the study affects change management.

Interview themes	References
1. Information sharing	”Communication have a positive effect on the individual’s readiness to change” – Vakola (2014)
2. Common views	“In order to change the organization it is crucial to get everyone onboard” – Smith (2005); “Failing to engage all employees can cause a crisis within the change management” – Stanleigh (2008)
3. Implementation Approach	“A success factor for a change implementation of an ERP-system is active support from the top management of the organization” – Denic et al. (2016)

The authors chose a semi-structured type of interviews when conducting this research as it allows accessing to a broader perspective as it can go outside the interview protocol with follow up questions. In order to obtain rich answers from the interviewees Yin (2009) writes that the interview should include a well-structured interview protocol as well as a competent interviewer. Regarding choosing suitable interviewees, our main contact at Sweco suggested suitable employees which could provide us with valuable information. It was indeed important to choose employees with different types of jobs and tasks within the company, as the authors aimed to collect as much data as possible to reach a higher level of understanding and gather other types of approach angles. The types of employees that were chosen for these interviews were: project worker, project manager, QA-leader and unit managers. A total of seven interviews were conducted, six of them were a sit down interview face to face at Sweco’s office in Gävle and one was conducted via Skype. Information and conditions for the specific interviews can be found in table 2. The interviews were with the respondent's consent recorded and key-words were written down as notes. In order to protect the anonymity of the interviewees no direct quotes from the interviews are presented in this thesis.

Table 2: Displays information and conditions for each conducted interview.

Interview order	Position of the interviewee
1	Project worker, recorded and conducted face to face
2	Project worker, recorded and conducted face to face
3	Project manager, recorded and conducted face to face
4	Unit manager, recorded and conducted face to face
5	Quality assistance, recorded and conducted face to face
6	Project manager, recorded and conducted face to face
7	Unit manager, recorded and conducted through Skype

3.2.3 Questionnaire

A questionnaire is explained by Polit and Hungler (1992) as a method for collecting data from respondents in written format. They explain further that a questionnaire can be used as a single method of data collection for a study, but it can also be used together with other research tools. A questionnaire was used as a complementary tool for the interviews, as a questionnaire accommodates opinions from a broader group than interviews would have allowed. This because of the tight 10 week schedule for completing the thesis.

The questionnaire used within this thesis aims to identify the collaboration's strengths and challenges in order to determine the best type of action in order to achieve its identified goals. The questionnaire was considered useful for this study as it shows how well internal collaborations work for an organization and since the business system partly manages the internal collaborations within Sweco. The current systems sometimes has difficulties in working together which has resulted in that the systems that is currently being used at Sweco does not foster internal collaboration, and in many cases does the opposite.

The questionnaire used for this study is called "Assessing your collaboration: A Self-evaluation tool" developed by Borden and Perkins (1999) and consists of 13 factors that shall be rated. In order to not lower the reliability of the questionnaire it was not altered in any way from its original except for translating it to Swedish. The 13 factors in the questionnaire all have influence on the collaborative process and are rated using the following scale: 1 = Strongly Disagree, 2 Disagree, 3 = Neither Agree or Disagree, 4 = Agree, and 5 = Strongly Agree. The average score on these factors adds up to a total that describes what actions the organization should do in order to improve its collaborative process. A score of 0-30 means that the organization likely needs to reorganize their goals and leadership. A score of 31-48 means that the organization has some of the factors required to successfully collaborate, but that some changes on how the collaboration members work together is required. A score of 49-65 likely means that the collaboration members work successfully together and has clear and working goals and a strong leadership. The questionnaire was conducted online, using the browser based tool Google Forms, and it was obligatory to respond to all 13 questions in the questionnaire, otherwise it was not possible to submit. The full questionnaire can be seen in appendix 5. Conducting the questionnaire online provides a few advantages according to Wright (2005), such as the ability to reach and access individuals that are at distant locations or are difficult to reach in general, as well as having the data collection automated. Wright (2005) also points out that the validity of the data collected through an online questionnaire can sometimes be questioned, as well as its sample size.

The presented questionnaire within this thesis were sent out to all employees working at the Sweco Gävle office, except for those on long term leaves. The authors did not consider the employment type nor which affiliate company the respondents were working for. This resulted in a total of 156 employees being asked to take part. 31 responses were gathered which makes the respondent rate equal to 19.9%.

3.3 Data Analysis

After each conducted interview the authors compared and discussed their interpretations of the gathered in order to summarize them, making sure nothing were left uncovered. The data from the individual interviews were then analyzed by comparing it to eachother. As qualitative data gathered from interviews is difficult to analyze in a systematic and structured way and there is no clear rules or guidelines as to how that kind of data should be analyzed according to Bryman and Bell (2013). Holloway and Jefferson (2000) also claims that qualitative data analysis is diverse, complex and nuanced, but a method that can be considered as fundamental for qualitative data analysis is thematic analysis. According to Braun and Clarke (2006) thematic analysis means that data is analyzed by identifying and reporting patterns or themes. Therefore the authors decided to analyze the data that were collected from the interviews by categorizing and sorting it into the three themes within change readiness used in this thesis. These are information sharing, common views and implementation approach. The results from the interviews were then compared to the theoretical framework which resulted in several aspects and factors that could then be applied to Kotters (2007) model.

As the questionnaire used in this study was pre-made (Assessing your collaboration: A Self-evaluation tool, by Borden and Perkins (1999)) it was stated how different results from the questionnaire should be interpreted and there was therefore no need for any kind of analysis of the data gathered from it.

3.4 Study Quality

A common way to discuss the quality of a study in a scientific context is to make a distinction between reliability and validity. That means that a study that has a high degree of reliability does not necessarily have a high degree of validity (Alvehus, 2013).

3.4.1 Reliability

The reliability of a study specifies the credibility and certainty of the study. It can generally be said that the reliability of the study is likely to be increased the more structured methods are being used (Kylén, 2004). A study that has a high degree of reliability has used stable measuring and has not been much affected by random influences, as explained by Trost (2012). He explains that a study that has high degree of reliability should get the same results when conducting the same data collection at a different time. He also exemplifies that this can be achieved on interviews by conducting the interviews the same way to different interviewees by asking the questions in the same way and conducting the interviews in the same or similar situation. Trost (2012) also stresses on the need to make the questions understandable and to register the answers from an interview or questionnaire in a correct way in order to achieve a high degree of reliability.

All primary data collection conducted in this study has been done by the same individuals throughout the study and the interviews has been done by the same two interviewers. All interviews has also been conducted in the same way and it has been strived to keep the interview method structured. In cases where interviews with two different individuals with similar positions has been interviewed the same interview guide has been used, and the questions asked has been as clear and understandable as possible. All interviews has also been recorded with the interviewees' permission and shortly after it has been transcribed. These measures are likely to have increased the degree of reliability in the study. In cases where different independent sources has stated similar claims, triangulation has been achieved, which increases the degree of reliability in the study.

Since all data collection in this study has been conducted in Swedish, while the thesis is written in English, it is possible that some degree of translation errors or misinterpretations has occurred.

3.4.2 Validity

The validity specifies the relevance and value of the collected data according to Kylén (2004). Alvehus (2013) adds to this by clarifying that the validity explains the practical usefulness of the research. Kylén (2004) explains that in order to achieve a valid study it should utilize suitable methods for collecting data to fulfill the purpose of the study. He also exemplifies three questions worth reflecting on in order to ensure the validity of the collected data, these questions are: *"Have we received the information we need in order to fulfill the purpose of the study?"*, *"Is there any data missing that would make the results of the study more useful?"* and *"Have we received any data that was not part of the task?"* (Kylén, 2004:140). These three questions has been reflected over in order to ensure the validity of this study.

3.4.3 Generalizability

A case study that studies a single case company is not representative for the situation in all companies, and Bryman and Bell (2011) is very clear that a case study with a batch size of only one company is not directly generalizable in any industry. However, as explained by Biggam (2008), there are researchers that argue that this kind of criticism is too harsh, as similar critique can be aimed at any kind of research. One argument used is that experiments are often repeated in order to achieve generalizability of its results, and in a similar fashion case studies can be repeated in order to generalize their results. Bryman and Bell (2011) also clarifies that there are researchers who argue that the particularization of a case study in a single or few cases is its greatest strength as it provides a detailed picture of the unique case and gives a deep understanding of its complexity. This is supported by Wallén (1996) who claims that while the results of a single case study cannot be applied to another situation, it can be viewed upon as a good example. He also further explains that since new knowledge always develop under certain conditions in a case study, these conditions should be clearly presented and discussed. Wallén (1996:118) also argues that the studied case should be chosen while considering the question "Is the studied situation representative or a common occurrence?"

In this study there is nothing that points towards Sweco differentiating too much from other companies within the same field with the same structure and therefore the answer to Wallén's (1996) question is likely to be yes. Therefore the results of this case study is likely to be considered as a good example for other firms that are in a similar situation. Because the information and data is collected from one single case study only, the generalizability is considered to be vague but could still possibly indicate factors of relevance.

3.5 Ethical and Societal Aspects

In order to be granted access to primary information, interviews were conducted and followed the ethical aspects, as the interviewees were offered the choice to remain anonymous with the publication of this paper. All of the participants were asked beforehand if they were comfortable being recorded during the interview and the authors made sure to have their consent before recording anything. The interviewees were informed about the aim of the study and were met with respect and consideration about what and how much information they wanted to share. In order to grant the interviewees anonymity the result chapter does not contain any information of what information were gained from what interview, and direct quotations were avoided as it would then be easier to figure out who said what, given the relatively low number of interviews conducted. Before this study were published and the result being presented the authors made sure that the case company had given their consent for publishing.

The societal aspects managed can be related to the first two themes within sustainability: the economical and societal part. The economy part for the case company will provide new insights and on how to manage the introduction of a new ERP system which can contribute to a successful implementation. The societal aspects can possibly involve the personnel's wellbeing and workplace environment as the suggested guidelines can provide transparency within the internal actors from the case company.

3.6 Methodological Limitations

The time factor for this project could be considered to be the major limitation, as this project is conducted under a 10-week frame. If more time would have been available it would have been possible to gather more data in order to examine the problem even further. The data collection has been conducted in Swedish and the report is written in English, which is not the native language of the authors. Therefore there is a risk that information has been misinterpreted in the translation. The same applies to the collection of previous research, where most sources are in English and therefore also at risk of being misunderstood. The questionnaire used in the study is also originally in English but was translated by the authors for sending out to the case company, therefore the reliability might be somewhat lowered if there are any mistakes in the translation or failing to include vital key-words or phrases linked to the original questionnaire.

4. Results

In this chapter the results of the data collected in the study is presented.

4.1 Questionnaire Results

The conducted questionnaire resulted in an average score on the 13 factors for successful internal collaborations in general. The average total score is 43.73. The lowest score is found for the factor policies/laws/regulation, which means that the collaborations at Sweco rarely changes policies, laws or regulations in order for their collaborations to function optimized. The second lowest factor was research and evaluation, which could mean that information gathering before, during and after collaborations could be lacking for Sweco. The highest score was found for the factor goals, this suggests that their collaborations has clear goals. History is the factor with the second highest score, it shows that the collaboration members in collaborations within Sweco generally has a history of solving problems. The factor with the third highest score was connectedness, which means that the possibilities for communication within collaborations at Sweco is good. The average score for each of the factors, as well as the average total score, is displayed in table 3.

Table 3: Displays the average score on the 13 factors of the questionnaire, as well as the average total score.

Factor	**Score**
Goals	3.97
Communication	2.94
Sustainability	2.94
Research and Evaluation	2.77
Political Climate	3.35
Resources	3.35
Catalysts	3.71
Policies/Laws/Regulation	2.74
History	3.94
Connectedness	3.77
Leadership	3.35
Community Development	3.42
Understanding Community	3.48
Total score	43.73

4.2 Interview Results

The interview results will be presented under three different themes which the interviews were based upon. For interview questions see appendix 1 for questions asked to project workers, appendix 2 for questions to project managers, appendix 3 for questions to QA-leader and appendix 4 for questions to unit managers. The results of the interviews are presented under the three themes and all of the interviews are summarized together in order to protect the anonymity towards the interviewees. Due to the low amount of individuals interviewed within the different roles and the focus on the Gävle office it could otherwise be possible to reveal the participants identity.

4.2.1 Information Sharing

The common perception to why the ERP system needed an update and change was that it would be easier for staff to be able to collaborate between organizational borders, as the new system would allow a better access to present time schedules and reports. The major part of the interviewees were all hoping for the new system to be more flexible and supporting than the previous ones. The new ERP system will be replacing a number of systems used within Sweco today, therefore the new system would be unified for all of Sweco. The present ERP systems was considered to be outdated and rather slow, but still fulfills the needs of the company. Some employees pointed out the fact that there were not any other option than to change the system though, as some of the currently used systems were not being updated or administered anymore. The new system has already been rolled out and is in use in parts of Sweco, such as their Finnish division and at group level in Sweden.

The information regarding these changes was shared by publishing various kinds of information about the change of ERP system on Swecos intranet. Published items includes articles, guides and general informational documents regarding the implementation. This way of communicating has resulted in that the employee's knowledge regarding the implementation has depended on their interest and their concern over looking for the information themselves. Some of these items have also been sent out to employees and managers over e-mail. This is believed to have led to a situation that even though most people know that the change will happen, it is possible that few know why the change is made. In general, the information that has been published about the change is phrased in such a way that it is not focused on what will get better or worse, but more in line with that the change will happen.

The upcoming implementation of the ERP system will be relying on the unit leader as they are the one introducing it to their team. The unit leaders will be educated in the system before it is launched and will then present the system to their employees and help the group to accommodate to the new way of working. The unit leaders will be supported in this process by members of the QA-staff. As when the interviews took place, the unit leaders expressed some concerns about leading the implementation and being the one responsible, as the information for the upcoming implementation and contact persons were quite vague and unclear. Instructions and information for “what is in it for me” and “how will this affect my daily work load” were suggested as pieces of information sharing that would be appreciated.

The new ERP system is planned to be launched in the autumn of 2017, which is considered to be rather delayed at this point. Interviewees mentioned that preparation for the new ERP system had been done earlier, but not followed through and considered it to lower the motivation. This had led to several interviewees mentioning that they would not start to get involved with the implementation and the new system until shortly before the new system is certain to be implemented.

The knowledge within the organization is a factor that is rather neglected, as one interviewee stated. There is no certain strategies or guidelines for maintaining the knowledge gathered from projects and tools for sharing them with the organization. This should prevent “reinventing the wheel” - over again and offer new insights on how to solve similar problems.

4.2.2 Common views

With the current state of Sweco today it is considered difficult and rather problematic to collaborate over the organizational borders from one Affiliate Company to another. Essential information was sometimes absent or locked and the time spent searching for particular information and knowledge could be spent on other tasks. This resulted in communication difficulties in certain situations. In the same line with this the time plans and schedules should be updated regularly, as the project passes and the feedback should be constant as well. These were recognized as vital factors for success in a project. The problems associated with the difficulties of communicating or collaborating between the organizational borders were often pointed out as limitations in the currently used ERP-system, and as something that would work better once the new system has been implemented.

The emphasis on information and visualization was recurring as the interviews proceeded. All of the project team members needs to have the same approach, attitude and expectations which adds up to the common picture of the project. For a successful project, the common picture should be the same for every member of the team. The need of knowing why, when and where was considered as important questions and therefore there is a need for openness throughout a project. The need of the correct resources in order for a project to be successful was also pointed out during the interviews.

The process of achieving and retrieving information, having a dialogue should be managed in an effortless way. If problem arises during the implementation within their teams, the unit managers expressed the need of knowing where to turn and even suggested a so called “hot-line”, online forums or seminars for unit managers to ask for advice. Alongside with this online forums and seminars aligned directly towards unit managers for discussing the implementation and work with other managers with the same position and task. Similar facilities, but more in the line of easily accessible guides that are clear and straightforward, were requested by project workers and project managers as well.

4.2.3 Implementation Approach

No particular actions in order to motivate the project workers for the change of ERP-system had been conducted at the time of the interviews, while they did still understand the change of system as it appeared to ease the daily work for some a lot, namely for the ones that does a lot of work with the system. The interviewed project workers also felt that they had no direct influence on the transition as it was decided at a higher level. They pointed out that they might get more possibilities to give feedback of the system once it is implemented and established. Some of the interviewed people pointed out that they have the impression that some employees within the organization were likely to be tired of change as Sweco in Gävle recently had been through a few major changes already, such as acquisitions of other companies, as a part of their growth structure, and moving their office to another building. The acquisitions were also pointed out as previous change processes where Sweco gained valuable experience within change management, which possibly eases the ERP implementation.

The assumed key-factors for a successful implementation for individuals would be proper guidelines and information from the management. Information regarding what will change for the individual employees in their day to day work, a time frame for the implementation and emphasize the all the good things that this new ERP system and implementation will bring for all of the employees. Motivating employees by informing about the implementation continuously, continuously were considered to be important as the earlier attempts for implementing the new ERP system has been delayed. Informing about the implementation even though there were no updates were pointed out as being positive: as the employees got the feeling of being up to date with what happened and could prepare accordingly. It was also pointed out that it was important to explain why the change is being made. Most of these aspects were the responsibility of the unit leaders, therefore it was also suggested that each unit leader sets up their own implementation key factors for their unit.

Learning the new system was commonly pointed out as expected to be the most time-consuming part of the transition. Therefore time was requested both by employees in order to learn the system, and also by managers at different levels in order to learn as well as teach the system and also be available for listening to feedback and answer questions. Also aspects such as technical difficulties when the system is newly implemented were mentioned, and the question if the system was suitable for Sweco was raised. It was also pointed out that there were no worries as to if the new system would not be worthwhile to implement, as while the old system is functional and does its job, it does have obvious flaws and therefore the new system is very likely to be an improvement. The general approach towards the implementation were interpreted as positive.

5. Analysis

In this chapter the collected data will be analyzed, discussed and compared to the theoretical framework in order to lead up to answers to the research questions and in turn lead to a conclusion.

5.1 What is the change readiness of the studied case with focus on themes involving information sharing, common views and implementation approach?

The results from the questionnaire that aimed to clarify the current state of the case-company regarding the collaboration concluded that the goals within the organization scored the highest with an average score of 3.97. This score shows that the set goals within collaborations are well defined and clear to understand with the resources available. Another high score was the factor "Connectedness" with 3.77, which implies the possibilities for communicate within the organization. While the communication factor only scored 2.94 which is considered rather low. These numbers implies that the possibilities for communicating is good, but these possibilities are not used to their fullest potential. This is important to note as O'Dell and Grayson (1998) states that coordination within an organization is crucial for the success of a project. The second highest scoring factor in the questionnaire was History with 3.94. As the case-company is used to work with a PBO structure, it is not surprising that this was one of the highest scoring factors as it shows that collaboration is widely used to solve problems and achieve the set goals.

The lowest score, with 2.74, was the Policies, Laws and Regulations-factor. The case-company is considered to be of a PBO structured nature where individuals needs to make their own decisions within the projects. In order to make the right decisions that stands for the case-company's morals, the policies and regulations needs to be well grounded Brannick et al. (2000). This can be a possible explanation for the low score of Policies, Laws and Regulations as individuals feels the need to comply with them and not question. The factor of Research and Evaluation also scored considerably low with 2.77. This is supported by a statement from the interviews regarding the lack of strategies for maintaining, managing and supporting the existent knowledge-base within the organization. This can be interpreted as a lack of clear strategies and base for change management, which is pointed out as a key factor for accomplishing change readiness by

Smith (2005). The total average score of the questionnaire was 43.73 which indicates that the organization could benefit from somewhat rearranging the way collaborations is managed and run within the case-company (Borden & Perkins, 1999).

During the interviews it became apparent that the unit managers at Sweco knows that sharing information and knowledge from one project group to another is difficult and they do have some issues with it. Through the interviews it was also gathered that while a lot of information is often saved during and after a completed project, it is not very structured and it was rarely ever looked at again. Hansen et al. (1999) argues that this is a risk when working in projects as the pace of projects are generally high, and reflection and documentation is not prioritized, which in turn leads to gained knowledge is at risk of being lost after a project is completed. It can therefore be argued that a more systematic approach to saving and reusing data is likely to benefit Sweco and increase the low score of the research and evaluation factor on the questionnaire.

As part of Sweco's strategy for growing their business is to acquire other companies in the same line of businesses. These businesses have their own culture but merges together and forms Sweco's own values and culture. This is considered to be a major change, both for Sweco and the acquired company. But this also points towards to that the organization is used to change and knows how to handle it to be successful. With this it can be argued that a PBO-structure acts as a positive influence for the change readiness because the individuals within the organization is used to constant changes with project groups and different tasks. The flexibility advantage mentioned by Rowden (2001) also relates to the change readiness of the company's change readiness (Haffar et al. 2014).

The individual readiness relies on the type of leader that implements the change (Haffar et al. 2014). The success of the implementation will depend heavily on the unit leader as they will be responsible to introduce the system to their team members. Edmonds (2011) stresses how important the management of change is, communication, change management experience, support mechanisms and resources are seen as contributing factors. The unit manager must realize the importance of informing and talking about the upcoming change and how this change will affect the group members' daily tasks, listen to their concerns and receive feedback.

Figure 2 shows Kotter's (2007) eight steps to transforming your organization. This model is used for analyzing and evaluating the case company's readiness for their upcoming change.

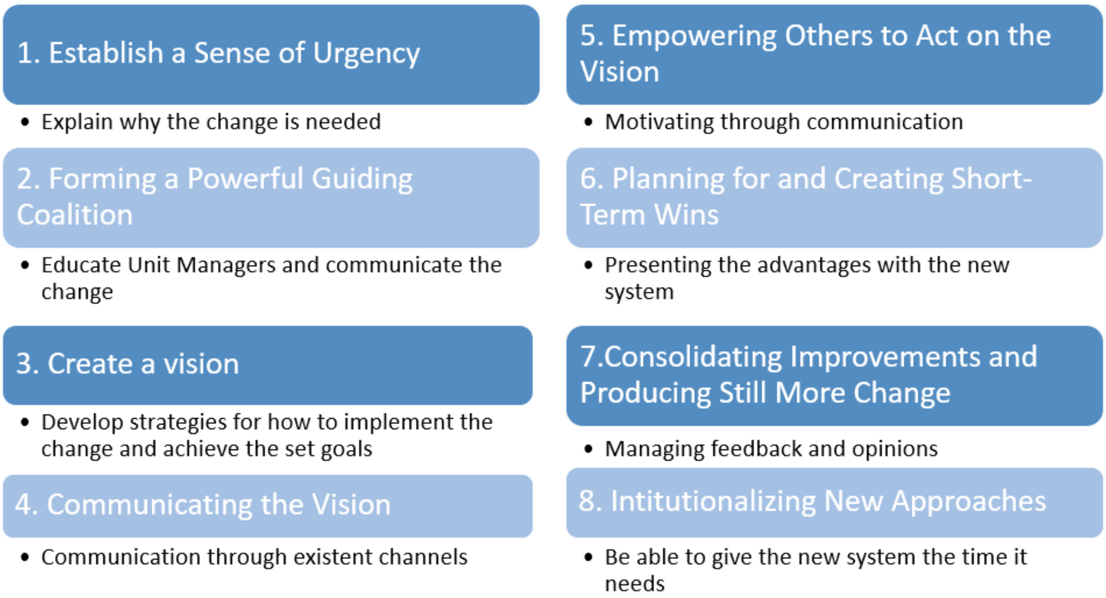

Figure 2: Kotters (2007) 8 steps to transforming an organization, adapted to the case-company.

1. Establishing a sense of urgency

Both Smith (2005) and Kotter (2007) agrees upon the fact that an upcoming change needs to be established throughout a sense of urgency and need for change. This seems to be the case for the case-company as well. The old ERP system needs to go, as it no longer will be updated or administered. This creates the need for a change within the organization. How well this need is communicated is not clear from the interviews as the interviewees answered quite vague when asked why the old ERP systems needed to be changed. The common perception was that the system was old, but still managed to get the job done. But this upcoming change was decided from the top management and down the lines, so employees at this office did not have any opinions on the implementation of the new ERP-system; just that it needed to be done.

2. Forming a Powerful Guiding Coalition

Kotter (2007) calls attention to assemble a group of people with power who should lead the transformation. The ones responsible for leading the implementation at office-level is the unit managers. They are supposed to educate their team about the upcoming change and how the new ERP system is working. In order to be able to handle this task they are offered to take part in a three day education plan. At this point when the interviews were conducted, there was no more information available about this part. The unit managers did suggest supporting factors for successfully achieving to implement the ERP system, such as a help-hotline which only the unit managers could have access to, online forums or seminars where the managers could vent their opinions, questions and implementation strategies with other managers in the same position as them, facing the same problems.

3. Creating a Vision

Kotter (2007) points to the importance of creating the vision for the change. Which is in this case to implement strategies for how to succeed with the implementation and set goals. Common goals and strategies are ventured at the case-company's intranet which is their official communication channel. The question arises how many of the employees who have taken the time to read the existing documents with the strategies and goals, as the interviewees also answered quite broadly about the strategies and implementation goals. This is up to each and every individual of the company to take the responsibility to read and keep themselves updated with the ongoing process.

4. Communicating the Vision

According to Kotter (2007) the vision of the change needs to be communicated and informed about in every available information channel. This particular implementation work has only been communicated through the intranet where all the information is available. Having this kind of one-way communication with the employees hinders receiving feedback and controlling that the information has been seen and read, which is an important factor according to Laurentiu (2016) who claims that it can increase the support to the management and their decisions and priorities.

5. Empowering Others to Act on the Vision

Informing and communication about the change and making sure everybody has jumped on the train is according to Smith (2005) one of the key factors of why an implementation is fortunate. As the case-company is a fairly large organization it is troublesome to be able to empower the pending implementation from top management right down to the project worker face to face. The motivational work will be assigned to the unit managers as well as the implementation. It is up to the unit manager how much of the implementation work that should be communicated and shared at this point. Results gathered from the interviews points towards that the unit managers does not consider this implementation as a big deal and therefore does not communicate it any further with the team members just yet. The implementation process has been delayed a couple of times already and they reveal that they feel discouraged and awaits a clear confirmation until talking about the implementation. This can result in a hasty implementation and team members can possibly feel rushed into something new.

6. Planning for and Creating Short-Term Wins

Kotter (1996) lists eight common mistakes with an implementation and one of them are failing to create a short term success. People have the need to feel the positive sides and advantages with the implementation in order to stay positive with the complex implementation. One of the interviewees indicated that the pros with the new system needed to weigh up for the bad aspects. Preparing and talking about the advantages the new system has over the old one, can bring a positive mindset for the implementation. The case-company has explained the advantages on their intranet. The new system will be easier to understand and less time consuming, which is factors that are highly appreciated. These factors could be informed about and communicated further in order to grant a positive approach from the employees.

7. Consolidating Improvements and Producing Still More Changes

Kotter (2007) highlights the importance of being able to still change the system after implementation as strive for continuous improvements. From the interviews with the unit managers the common approach was to tackle the problems regarding the implementation as they arises. That is, when the new system will be introduced and they have had the opportunity to work with it; gotten to know the features and detected flaws.

8. Institutionalizing New Approaches

When a change is being implemented, Kotter (2007) stresses the need for management support for the change to be successful. At Sweco this was understood by the interviewed unit managers as they pointed out that they would have to be available to teach and receive feedback from their employees at the time of the launch. The launch date for the new system were considered to be at a suitable time: as most of the staff would be back from the summer time vacation and come back with a positive attitude.

5.2 What supporting factors can contribute to make the change to the new business system as smooth as possible for the involved individuals?

The readiness for change on individual level means the motivation, competence and individual characteristics according to Fariza et al. (2012). At the case company Sweco there were no certain actions done in order to motivate the employees, the main responsibility in order to achieve motivated employees were put on the unit managers. It can be argued that Sweco could do more throughout all levels of management in terms of motivation from the top down in order to fulfill the key factor suggested by Denic et al. (2016) that change implementation when it comes to ERP systems requires active support from the top management. This is also supported by Altamony et al. (2016) that mentions top management support as a key factor for successful implementation of a new ERP system through the use of change management. Regarding another aspect of the individual change readiness definition by Fariza et al. (2012), competence, there is a plan for teaching the Sweco employees the new ERP system, both through lessons and guides.

Another key factor for successful ERP system implementation mentioned by Altamony et al (2016) is user involvement, which Sweco likely has not successfully fulfilled as the interviews showed that many employees that will use the new ERP system in the future pointed out that they felt no influence over the change as the decisions were taken at a higher level within the organization. The most important factor pointed out by Altamony et al. (2016) is the need of a change management strategy. This is something that the employees at the Gävle office of Sweco knew little about. The general understanding was that there likely was one, but they knew nothing about it.

Jørgensen et al. (2009) points out the need for focus on the soft values, such as social, people and communicational aspects, when managing a change. He also argues that this focus is required over a longer period of time, often longer than the time assigned for the change project itself. Vakola (2014) also argues that a high level of trust and an organizational climate that enhances positive communication affects the readiness for change for the individuals within an organization. As a lot of this responsibility is put on the unit leader at Sweco it can be argued that the prospects of focusing on this over a longer time period, as suggested by Jørgensen et al. (2009), is good as the units within Sweco are permanent, unlike their project groups.

Sanda (2011) stresses the need for managers to examine how individuals and groups handles conflicts and other situational problems as they occur in order to more easily identify and manage them in the future. At Sweco this was mostly the responsibility of the unit managers, so the result of this aspect is likely to vary from unit to unit. From the interviewed unit managers in this study it was clear that they wanted to be available to their employees in general at the time of the implementation, both for listening to them, gathering feedback and answering questions. This is in line with O'Dell and Grayson's (1998) statement that the success of a project often relies on the actions of the individual manager.

To summarize, a list of the key supporting factors are listed below.

- Motivation;
- Management support;
- User involvement;
- Change management strategy;
- Soft values management.

It can be argued that the identified key supporting factors and Kotters (2007) eight steps to transforming an organization is linked together and possibly overlapping. Motivation can be placed under the steps "creating a vision", "communicating the vision" and empowering others to act on the vision". The factor of management support could and should be applied to all eight steps, and throughout all levels of management. The interviewees at Sweco also believes that a successful implementation relies on the support from the management in terms of guidelines and information. User involvement could be linked to the seventh step in Kotters (2007) framework, which is "consolidating improvements and producing still more change". At Sweco the general consensus is that the employees has not been included much at all in the process of change thus far, but they feel like they will have more say once the system is implemented. Change management strategy and soft values management are also factors that affects all eight of

Kotters (2007) steps. At Sweco both of these responsibilities is mostly allocated to the unit managers, which makes it reasonable to link both of these aspects to the factor management support.

6. Conclusions

In this chapter the conclusions of the study will be presented as research and practical implications. The study limitations and suggestions for further research will also be accounted for.

6.1 Research implications

The study provides information about change readiness and individual supporting factors for successfully implementing change that can be used to strengthen earlier theories about this subject but also provide valuable information for the case-company and perhaps other organizations with similar complex problems. This study suggests that the case-company can possibly accommodate to some advantages of being similar to a PBO-structured organization, as explained by Turner (2014), but also encounter disadvantages, such as the focused nature of a PBO leading to lack of knowledge transfer to the next project (Hansen et al., 1999). Communication and information sharing is proven to be difficult for PBO's and Sweco is no exception. Working on strategies for ensuring the information flow and sharing within the organization is vital, both for the upcoming implementation and in general, as shown in Kotters (2007:6) eight steps to transforming your organization. This model has laid the foundation for the analysis in this study, but it has been viewed upon as guidelines or a checklist rather than a set model. A dimension which is not covered in the model by Kotter (2007) has also been discussed, namely organizational structure. Findings from the study have shown that the information flow and common views about the implementation is somewhat flawed at the case company, not everybody is on board for the upcoming change. Literature within this field (Kotter, 2007) suggests communication to solve the issue. For supporting the implementation at an individual level, the study shows that the ones responsible for the greater part of the implementation work, the unit managers, felt the need for supporting mechanisms in forms of education about the system and online forums to be able to discuss upcoming problems and implementation issues. Having a guide explaining how the implementation of the new ERP-system will affect the group's daily tasks can ease the worries for most of the individuals. Giving them the information they need and being able to discuss the issues with the Unit manager or know where to turn to is considered to reduce the concerns. As the implementation at Sweco had been delayed it was gathered from the interviews that some employees and managers were waiting until the implementation were to happen before preparing for it. It can be concluded that in order for the change management to not lose trust, which is an important factor for having a high degree of change readiness according to Vakola (2014), it is important that the implementation will not be delayed again.

The three themes of readiness discussed throughout the thesis can also be linked to the five key-factors for a successful change, as information sharing is connected to motivation, management support and change management strategy. Common views is associated with motivation and soft values management. Approach is connected to user involvement change management strategy. As shown, all of these themes of readiness is closely connected to each other and affects an organizations readiness to change as well as the successful implementation of change. This paper emphasizes the importance of communication and the right type of communication for managing a change within a PBO.

6.2 Practical implications

The conclusions of this paper may serve as a framework or guidance of factors to take into consideration while implementing the new ERP-system. Both on what the organization needs to focus on today for easing the collaboration between affiliates, but also how support resources can be managed pending change for supporting individuals. The study shows that the case-company's ability to change and change readiness can somewhat be related to the chosen organizational structure, that embraces changes and flexibility.

6.3 Study limitations

The findings in this study is largely based on seven interviews and a questionnaire with employees at Sweco Gävle and they do not necessarily represent the majority of opinions at Sweco. The sample size of the questionnaire cannot provide any substantial findings due to the fact of the minor group it was sent out to and the group that answered. If more time would have been available for this study it would have been possible to investigate how the implementation would have been conducted and evaluate its effect on the individuals.

6.4 Further research

Turner (2014) argues that a temporary organization is more flexible and can respond to changes faster than a functional organization. Whether a PBO is granted smoother implementation of an ERP-system because of its structure must be researched further in order to reach any conclusions and be able to generalize the results. The questionnaire used within this study to gather data about the case-company's collaboration strengths and challenges written by Borden and Perkins (1999) called "Assessing your collaboration: A Self-evaluation tool", suggested that the collaboration and certain factors could be improved. Re-doing the same questionnaire again, a year later could possibly provide new insights on how the collaboration have improved or deteriorated with focus on the new ERP-system, which was promised to facilitate the collaboration between affiliate companies.

References

Altamony, H., Tarhini, A., Al-Salti, Z., Gharaibeh, A. H., & Elyas, T. (2016). The Relationship between Change Management Strategy and Successful Enterprise Resource Planning (ERP) Implementations: A Theoretical Perspective. *International Journal Of Business Management & Economic Research*. *7*(4): 690-703.

Alvehus, J. (2013). *Skriva uppsats med kvalitativ metod - En handbok*. 1st ed. Stockholm: Liber AB.

Alvesson, M. and Sköldberg, K. (2008). *Tolkning och reflektion – vetenskapsfilosofi och kvalitativ metod.* 2nd ed. Lund: Studentlitteratur AB.

Appelbaum, S. H., Habashy, S., Malo, J. L., & Shafiq, H. (2012). Back to the future: revisiting Kotter's 1996 change model. *Journal of Management Development. 31*(8): 764-782.

Biggam, J. (2009). *Succeeding with your master's dissertation: a step-by-step handbook*. McGraw-Hill Education (UK).

Borden, L. M. and Perkins, D. F. (1999). Assessing Your Collaboration: A Self Evaluation Tool. *Journal of Extension*, *37*(2).

Brannick, M. T., Prince, A., Prince, C. and Salas, E. (1995). The measurement of team process. *Human Factors*. 37(3): 641-651.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*. 3(2): 77-101.

Bryman, A. and Bell, E. (2013). *Företagsekonomiska Forskningsmetoder*. Stockholm: Liber AB.

Burnes, B. (1996). No such thing as… a "one best way" to manage organizational change. *Management decision*. *34*(10): 11-18.

Cohen, L. and Manion, L. (1995). *Research Methods in Education*, London: Routledge.

DeFillippi, R. J., & Arthur, M. B. (1998). Paradox in project-based enterprise: The case of film making. *California management review*. *40*(2): 125-139.

Denic, N. M., Vujovic, V., Stevanovic, V., & Spasic, B. (2016). Key factors for successful implementation of ERP systems/Kljucni faktori uspjeha implementacije ERP sustava. (Original scientific paper/Izvorni znanstveni clanak). *Tehnicki Vjesnik - Technical Gazette*. 23(5): 1335.

Denzin, N. K. and Lincoln, Y. S. (eds) (1994). *Handbook of Qualitative Research*, Thousand Oaks, CA: Sage Publications.

Edmonds, J. (2011). Managing successful change. *Industrial and Commercial Training.* 43(6): 349-353.

Edmondson, A.C. (2012). Teamwork on the fly. *Harvard Business Review*. 90(4): 72-80.

Fariza H.R., James L.C. and Peter S. (2012). Positioning change readiness in knowledge management research. *Journal of Knowledge Management.* 16(2): 329-355.

Haffar, M., Al-Karaghouli, W., & Ghoneim, A. (2014). An empirical investigation of the influence of organizational culture on individual readiness for change in Syrian manufacturing organizations. *Journal Of Organizational Change Management*, *27*(1): 5-22.

Hansen, M. T., Nohria, N. and Tierney, T. (1999). What's your strategy for managing knowledge? *The knowledge management yearbook 2000–2001*. 1-10.

Hollway, W., & Jefferson, T. (2000). *Doing qualitative research differently: Free association, narrative and the interview method*. Sage.

Jørgensen, H.H., Owen, L. and Neus, A. (2009). Stop improvising change management! *Strategy & Leadership*. 37(2): 38-44.

Kotter, J.P. (1996). *Leda Förändring.* Malmö: Egmont Richter AB.

Kotter, J. P. (2007). Leading Change. Why Transformation Efforts Fail. *Harvard Business Review*. 92(107): 59-67.

Kylén, J-A. (2004). *Att få svar – intervju, enkät, observation.* 1st ed. Stockholm: Bonnier Utbildning.

Lantz, A. (2013). *Intervjumetodik.* 3rd ed. Lund: Studentlitteratur AB.

Laurentiu, R.M. (2016). Change Management and its Effects on Organization. *Annals Of 'Constantin Brancusi' University Of Targu-Jiu, Economy Series*. (5): 209-212.

Moran, J.W. and Brightman, B.K. (2000). Leading organizational change. *Journal of Workplace Learning*. 12(2): 66-74.

Murray, N. (2008). *Writing up your university assignments and research projects: A practical handbook*. McGraw-Hill Education (UK).

O'Dell, C. and Grayson, J. (1998). If only we knew what we know: Identification and transfer of international best practices. *California Management Review.* 40(3): 154–174.

Polit, D. F., and Hungler, B. (1992). Nursing Research: Principles and Methods. and Study Guide. *Dimensions of Critical Care Nursing.* 11(1): 63.

Rowden, R. W. (2001). The learning organization and strategic change. S.A.M. *Advanced Management Journal*. 66 (3): 11–24.

Sanda, M-A. (2011). Using activity analysis to identify individual and group behavioral constraints to organizational change management. *Journal of Management and Sustainability,* (1)1 111-123.

Sidorko, P. E. (2008). Transforming library and higher education support services: can change models help? *Library Management.* 29(4/5): 307-318.

Smith, I. (2005). Achieving readiness for organisational change. *Library Management.* 26(6/7): 408-412.

Stanleigh, M. (2008) Effecting successful change management initiatives. *Industrial and Commercial Training*. 40(1): 34-37.

Sweco. (2017). *Om oss.* Available at: http://www.sweco.se/om-oss/ Access: 2017-05-09.

Sydow, J., Lindkvist, L. and DeFillippi, R. (2004). Project-based Organizations, Embeddedness and Repositories of Knowledge: Editorial. *Organization Studies*. 25(9): 1475-1489.

Trost, J. (2012). *Enkätboken*. 4th ed. Lund: Studentlitteratur AB.

Turner, J.R. (1990). *What are projects and project management?* Henley The Management College.

Turner, J. R. (2014). *The handbook of project-based management (Vol. 92).* New York, NY: McGraw-Hill.

Vakola, M. (2014). What's in there for me? Individual readiness to change and the perceived impact of organizational change. *Leadership & Organization Development Journal*, *35*(3): 195-209.

Wallén, G. (1996). *Vetenskapsteori och forskningsmetodik.* 2nd ed. Lund: Studentlitteratur AB.

Weiner, B. J., Amick, H., and Lee, S. Y. D. (2008). Review: Conceptualization and Measurement of Organizational Readiness for Change A Review of the Literature in Health Services Research and Other Fields. *Medical Care Research and Review*. 65(4): 379-436.

Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages of online questionnaire research, online questionnaire authoring software packages, and web questionnaire services. *Journal of Computer‐Mediated Communication.* 10(3): 00-00.

Yin, R. K. (2009). *Case study research: Design and methods*, 4th. Thousand Oaks.

Appendices

Appendix 1

Projektarbetare/Medarbetare

Kunskap och informationsdelning

Vad upplever du är orsaken till bytet av ekonomisystem? (berätta om din egen bild av varför man valde att omstrukturera)

Hur upplever du det nuvarande systemet? (Bra, dåliga - förbättringspunkter)

Hur ska ni sedan gå till väga vid byte av ekonomisystem? (Berätta om de strategier och planer ni jobbar efter)

Är anledningen till varför förändringen måste ske välinformerad ut till organisationen? Samt vem som är ansvarig för vad inom förändringsarbetet väldefinierat? Kom informationen ut i god tid?

Gemensamma värderingar och arbetssätt

Varför anser du att ni lyckas eller misslyckas med projekt inom organisationen?

Vilket stöd skulle du behöva från ledningen vid ett förändringsarbete? Vad anser du är viktigt?

Finns det någon som skulle kunna underlätta för dig under förändringsarbetet?

Inställning och inflytande

Hur har du som anställd blivit motiverad till förändringsarbetet?

Vad anser du vara nyckelfaktor/faktorerna till ett lyckat förändringsarbete?

Vad tror du kommer ta mest tid vid detta förändringsarbete? (oro, samarbete osv)

Känner du någon form av eget inflytande på förändringsarbetet?

Vad bör göras för att du ska känna delaktighet, motivation och underrättad om förändringen och dess process?

Appendix 2

Projektledare/Uppdragsledare

Kunskap och informationsdelning

Vad upplever du är orsaken till bytet av ekonomisystem? (berätta om din egen bild av varför man valde att omstrukturera)

Hur upplever du det nuvarande systemet? (Bra, dåliga - förbättringspunkter)

Hur ska ni sedan gå till väga vid byte av ekonomisystem? (Berätta om de strategier och planer ni jobbar efter)

Är anledningen till varför förändringen måste ske välinformerad ut till organisationen? Samt vem som är ansvarig för vad inom förändringsarbetet väldefinierat? Kom informationen ut i god tid?

Gemensamma värderingar och arbetssätt

Varför anser du att ni lyckas eller misslyckas med projekt inom organisationen?

Hur hanteras ett förändringsarbete inom organisationen? Finns det ett satt ramverk som är beprövat och accepterat?

Vilket stöd skulle du behöva från ledningen vid ett förändringsarbete? Vad anser du är viktigt?

Finns det någon som skulle kunna underlätta för dig under förändringsarbetet?

Inställning och inflytande

Hur har du som anställd blivit motiverad till förändringsarbetet?

Vad anser du vara nyckelfaktor/faktorerna till ett lyckat förändringsarbete?

Vad tror du kommer ta mest tid vid detta förändringsarbete? (oro, samarbete osv)

Appendix 3

QA-ledare

Kunskap och informationsdelning

Vad upplever du är orsaken till bytet av ekonomisystem? (berätta om din egen bild av varför man valde att omstrukturera)

Hur upplever du det nuvarande systemet? (Bra, dåliga - förbättringspunkter)

Hur ska ni sedan gå till väga vid byte av ekonomisystem? (Berätta om de strategier och planer ni jobbar efter)

Hur kommunicerade ni förändringsarbetet med medarbetarna? (Fick alla i god tid och tillräckligt med information om omstruktureringen?)

Hur förankrar du visionen om förändring till dina medarbetare? (motiverar, stödjer osv)

Finns det kunskap om förändringsledning inom organisationen idag som används i nuvarande projekt?

Gemensamma värderingar och arbetssätt

Finns det en gemensam syn på varför man lyckas/misslyckas med projekt inom organisationen? Eller finns det delade åsikter om saken?

Finns det speciella åtgärder för hur man ska ta hänsyn till både människor, processer och teknik vid en förändring?

Hur hanteras ett förändringsarbete inom organisationen? Finns det ett satt ramverk som är beprövat och accepterat?

Finns det processer och teknologiska möjligheter som kan bidra till delaktighet inom förändringsarbetet, förse folk med rätt typ av information samt ge möjlighet till att ge feedback?

Inställning och inflytande

Hur var och är din inställning gentemot förändringen? (positivt eller negativt och varför?)

Kände eller känner du eget inflytande på förändringsarbetet?

Anser du dig att ha fått tillräckligt med resurser för att kunna klara av förändringen?

Vad anser du vara nyckelfaktor/faktorerna till ett lyckat förändringsarbete?

Vad tror du kommer ta mest tid vid detta förändringsarbete? (oro, samarbete osv)

Appendix 4

Gruppchef

Kunskap och informationsdelning

Vad upplever du är orsaken till bytet av ekonomisystem? (berätta om din egen bild av varför man valde att omstrukturera)

Hur upplever du det nuvarande systemet? (Bra, dåliga - förbättringspunkter)

Hur ska ni sedan gå till väga vid byte av ekonomisystem? (Berätta om de strategier och planer ni jobbar efter)

Hur kommunicerade ni förändringsarbetet med medarbetarna? (Fick alla i god tid och tillräckligt med information om omstruktureringen?)

Hur förankrar du visionen om förändring till dina medarbetare? (motiverar, stödjer osv)

Finns det kunskap om förändringsledning inom organisationen idag som används i nuvarande projekt?

Gemensamma värderingar och arbetssätt

Finns det en gemensam syn på varför man lyckas/misslyckas med projekt inom organisationen? Eller finns det delade åsikter om saken?

Finns det speciella åtgärder för hur man ska ta hänsyn till både människor, processer och teknik vid en förändring?

Hur hanteras ett förändringsarbete inom organisationen? Finns det ett satt ramverk som är beprövat och accepterat?

Finns det processer och teknologiska möjligheter som kan bidra till delaktighet inom förändringsarbetet, förse folk med rätt typ av information samt ge möjlighet till att ge feedback?

Inställning och inflytande

Hur var och är din inställning gentemot förändringen? (positivt eller negativt och varför?)

Kände eller känner du eget inflytande på förändringsarbetet?

Anser du dig att ha fått tillräckligt med resurser för att kunna klara av förändringen?

Vad anser du vara nyckelfaktor/faktorerna till ett lyckat förändringsarbete?

Vad tror du kommer ta mest tid vid detta förändringsarbete? (oro, samarbete osv)

Appendix 5

Enkät

Mål - Samarbetet har ett mål som syftar till att uppnå ett önskat resultat vid en viss tidpunkt genom att utnyttja en bestämd mängd resurser.

Kommunikation - Samarbetet har öppen och tydlig kommunikation, det finns en fastställd process för kommunikation mellan möten.

Hållbarhet - Samarbetet har en plan för hur medlemmarna och resurserna ska hanteras hållbart, detta inkluderar riktlinjer för behörigheter och utbyte av medlemmar.

Datainsamling och Reflektion - Samarbetet har utfört en behovsanalys eller har samlat in information för att fastslå dess mål, och samarbetet fortsätter att samla in data för att mäta om målen uppfylls.

Politiskt Klimat - Klimatet kring beslutsfattande och befogenheter är historiskt och i dagsläget positiv.

Resurser - Samarbetet har tillgång till de resurser som behövs.

Utlösande Faktor - Samarbetet påbörjades på grund av existerande problem eller krävde ett övergripande tillvägagångssätt för att påbörjas.

Policyer och Regler - Samarbetet har ändrat policyer och/eller regler för att tillåta samarbetet att fungera effektivt.

Historia - Samarbetets medlemmar har en historia av att arbeta i samarbeten och lösa problem.

Förbindelser - Medlemmar i samarbetet är sammankopplade och har upprättade informella och formella kommunikationsnätverk.

Ledarskap - Ledarskapet underlättar och stödjer teambuilding och drar fördel av mångfald och individens, teamets och organisationens styrkor.

Samarbetets Utveckling - Samarbetets medlemmar valdes för att lösa viktiga problem, det finns ett kommunikationssystem och formella informationskanaler som tillåter spridning av problem, mål och inriktning.

Samarbetets Förståelse - Samarbetets medlemmar förstår sig själva och dess personer, kulturer, värderingar och vanor.