

How to Introduce and Manage Organizational Changes

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Abstract

With the ever increasing speed of today's industry, handling changes within companies has become more important than ever. This master thesis has evaluated which aspects are most important when carrying out such changes. It has also looked at how an organization shall manage and measure changes within their organization. The thesis has been performed at Saab Aerosystems and the conclusions are therefore adapted to this specific organization. However it is the author's hope that other organizations may also find this study of interest and use when developing methods for carrying out organizational changes.

This thesis began with a study of existing literature within the area of organization and organizational change. Based on the study of this literature, interview questions were produced and several employees within Saab Aerosystems were interviewed in order to obtain information about the prevailing company situation and furthermore how organizational changes are currently managed. This data was then analyzed and important aspects that must be considered when carrying out organizational changes within Saab Aerosystems were identified. The thesis ends with a checklist aimed at helping and guiding Saab Aerosystems through future organizational changes.

When performing an organizational change, it is important to be aware of the culture within the company. The organization at Saab Aerosystems has a huge technical focus, which can of course be beneficial when awakening interest for a change. Another characteristic of Saab Aerosystems is that its employees are interested in being involved in change processes and have the ability to influence such changes. It is therefore important that the leader of a proposed change has a good relationship with the employees and excellent communication skills in order to both inform and listen to them. It is also important to create a commitment to change if a change project is to be successful. Within Saab Aerosystems this commitment can be created by engaging informal leaders within the project team. These employees often have a big influence on the organization as well as good knowledge of the technology and their departments' operations. It is also important to give the organization's members time to think through and accept a change. Without this time, resistance towards a change project can otherwise be created due to lack of understanding for the change. To create commitment to a change, the employees must also feel that they can manage the change and the situation that comes after the change. It is therefore important that the organization's employees receive the necessary tools and education in order to give them confidence and motivation to carry out, and be a part of, the change project.

A difficult aspect during a change project can be to anchor the change within the organization. At Saab Aerosystems, changes can be anchored by involving representatives from upper management in change projects. These persons must in their turn request work that has been achieved according to the results of the change and even more importantly ensure that the change is used even upon completion of the change project. Making these demands can motivate the line managers and other employees to work according to the change and prevent reverting to old work methods and models. Finally, it is important to measure the change project progress. Examples of measure variables that can be used are business cases, questionnaires and lessons learned. These general variables ought to be complemented by specific variables for the actual change.

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1 Introduction

In this introductory chapter, the reader will be provided with a picture of what has been studied and why, commencing with a description of the subject's background. The background is followed by a subject discussion, which then leads to its definition. The purpose of this thesis is also presented.

1.1 Background

Change, change, change... the speed within trade and industry has increased immensely over time and new products are introduced regularly. This demands an increased capability to manage changes within a company. The world has changed and will continue to change. Senior and Fleming (2006) provide a picture of the future and how it will affect people and their willingness to change. They predict there will be a *structural change* with less layers of management and a reduction of the numbers of people working together. There will be a stronger pressure for individuals to work harder and longer. The *working pattern* is also assumed to change. It will be normal to have more than one place of employment and a greater number of people will work from home. The *workforce characteristics* will also change with the rate of birth decreasing and the number of old people increasing, leading to a rise in the average age of people working. The *workforce skills* will also change with a higher requirement for workers to learn new skills during their career due to changing technologies and a more competitive environment. The workers will also have more *employment choices*, with an increasing rate of self-employment and working abilities in small organizations. Due to an ageing population, pension schemes will also be necessary. (Senior & Fleming, 2006)

The organizations of today operate under increasing demands for change. The market has radically changed due to globalization, strong competition, technical development and a customer-driven market. (Härenstam et al., 2004) This high pace of change means that the organization must change behavior and manage to rapidly adapt to shifts in the market (Norrgren et al., 1996 in Nonås, 2005). At the same time, Beer and Nohria (2000) have shown that currently, many change projects and development programs produce unsatisfactory results. To increase the ability to change, the change competence must increase. Change competence is described as the ability to manage change in the environment and to be able to form a continuous renewal of this process. Change competence is also about choosing a change strategy that matches the organization and its member's experience of change processes. (Nonås, 2005)

Another aspect, presented by Wendell and Bell Jr. (1999), is that even though organizations face many challenges and threats today – threats to effectiveness, efficiency and challenges from turbulent environments – increased competition and changing customer demands are of great interest and importance in keeping organizations healthy and viable. To manage a turbulent situation, Svanberg (2007) points out the importance of leadership during the change process. He means that leader's task during change processes is to convey the vision and the goal with the change. He claims that people in general can work very hard and suffer a lot, but to do so they have to know why they should do it and what the goal is. He also stipulates that as a leader, it is important to carry through with a change and be patient; the results will not come immediately.

Leaders interest in how the culture influences the ability to learn and change within an organization has increased. Organizational learning, development and planned change cannot be understood without considering culture as a primary source of resistance to change. (Schein, 1992) The culture has a big impact on a process of change, while the culture is always "the winner" over the strategy. A changed strategy will not automatically lead to a wished change if the culture has not changed in the same way. (Svanberg, 2007) The leader cannot perform organizational changes by using only formal structure and systems as principal instruments. The leaders also have to pay attention to the organizational culture and provide a new basis for cohesion. (Hirschhorn, 2000)

Even though most theorists agree that organizational change is a topic that is central and important within organization studies, there are a lot of different opinions concerning how to manage organizational change and how to study it. Even if some theories can appear to be opposites, they should be seen as complementary to one another. Each approach provide a different but partial understanding of organizational change and by coordinating insight from different approaches, the understanding of organizational change will be richer than adapting only one given approach provided by itself. (Poole and Van de Ven, 2005)

The above described situation and future, is also a reality for Saab Aerosystems. The world has changed after the terrorist attack to World Trade Center, September 11, 2001. Prior to this event, the world focused on the defense of borders, but nowadays the importance is on the defense of streams, for example streams of information, energy, articles and services. In the future, Saab Aerosystems sees a need for systems that protect the infrastructure, warning systems, systems that can manage crisis, and communication systems. As the market will change completely, so also will the customer for Saab Aerosystems. (Svensson, 2007)

In the past, Saab Aerosystems has had only one customer, FMV (Försvarets Material Verk) and when Saab Aerosystems required money for development etc., the Swedish state often invested what was necessary. This gave the company a protected situation where common market rules did not exist and competitor awareness was not necessary. (Interviewed employees at Saab Aerosystems, 2007) The Swedish defense force budget has been greatly reduced since the end of the cold war in 1990. At that time, the Swedish defense could mobilize 730 000 men but by 2004 this amount had decreased by 96 percent to 31 500 men. (Holmström, 2005) This changed condition has motivated Saab Aerosystems to find new solutions, products and clients in order to assure a future position within its market sector (Svensson, 2007).

The new global situation for companies combined with the specific change of situation for Saab Aerosystems has forced the company to introduce a number of change programs. According to the description of the future above, this trend will continue and many more changes will be introduced. This thesis has, with this starting point, investigated Saab Aerosystems current methods of carrying out organizational changes and which company aspects are deemed most important when performing these changes. Three specific changes have been studied and from this research a model that could function as a checklist for the company when dealing with future changes has been produced. These three ongoing change projects have been studied at Saab Aerosystems and are the base of this thesis. These three projects have been chosen because they will have a great impact on the company as a whole and were running when this thesis were

carried out. The projects are also widely different and therefore interviews with representatives from these different projects were carried out in order to provide a general understanding of how such projects are managed within Saab Aerosystems.

The three studied change projects are:

- **BCAM** (Business Control And Monitoring process) where Saab Aerosystems has integrated a common, uniform process for control and monitoring business. Everything, from business winning to project execution shall be handled according to BCAM directives. Nearly all 17 companies within the Saab group have implemented BCAM in their organizations during the first half of 2007.
- **Gunder** is an improvement program that will run from 2006 to 2009. Its purpose is to improve Saab Aerosystems profitability, to reduce the cost level and increase international competitiveness. It shall also increase the company's ability to adapt their business to new conditions and increase flexibility within the organization. Gunder includes eight different sub projects.
- **nEUROn** is an international project with collaborative partners from six different countries, Saab Aerosystems being one of these partners. The goal of the project is to develop a stealthy unmanned combat air vehicle. Saab Aerosystems predicts that this kind of multinational project will be an important part of the future for them as it is not likely that they will solely develop a new air vehicle, such as Jas 39 Gripen, again. For the first time in the history of Saab Aerosystems, the company is involved in such a multinational collaboration project.

1.2 Discussion of Problem

Senior and Fleming (2006), Norrgren et al. (1996) in Nonås (2005) and Svensson (2007) are unanimous about the fact that the need for changes will be highly important in the future and even today, and Goodstein and Burke (1991) claims that change in organizations today is a way of life. But how should an organization handle all these changes? And can an organization be too adaptive to changes? If an organization changes in response to all external signals, it is not an organization. The essential conditions of organizational life – recurrent cycles of behavior, predictability and internal coordination would disappear very quickly and the organization would lose the properties that differentiate it from its environment. (Katz & Kahn, 1978)

The importance of organizational change cannot be pointed out enough, and a lot of research has been carried out within the subject. Despite this, there are a lot of change projects and change programs that fail. Jacobs (2002) refers to a study carried out by A.T. Kearney 1999, which shows that only 20 percent of change efforts were viewed as successful. The changes that failed had either made some initial improvements but the companies had failed to sustain them, or the change had made no demonstrable improvements whatsoever (Jacobs, 2002). Beer, Eisenstat and Spector (1988) showed in their research that even though a great deal of resources were invested in change programs, they were likely to fail anyway. Beer, Eisenstat and Spector (1990) showed that organizational change is likely to fail as long as companies focus on programmatic change instead of on more fundamental human issues, such as participation, teamwork and

organizational culture. The situations and examples used show the current situation at Saab Aerosystems, according to employees within Saab Aerosystems. Many change projects do not achieve their predetermined results and many changes have faded away without making any real impact. The company therefore feels that it needs to evaluate its current methods of carrying out change projects. Saab Aerosystems is also a company well aware of its need for future changes in order to maintain a competitive profile and industry into new sectors and new ways of doing business. The company will therefore need to have a simple and useful tool that can guide them through future change projects. The tool must be easy to understand and use, even for persons lacking previous experience in change projects. It must also be in line with the prevailing company culture. This above described situation together with the demands from Saab Aerosystems has resulted in the following questions.

How can an organization increase its ability to realize successful changes and which factors seem to influence the change process? The high pace of change makes it impossible for Saab Aerosystems to design a new model for each change because of economical and time aspects. Is it then possible to develop a company specific model that can work as a checklist when the organization carries out changes? Which company specific factors are then important and how can the company's culture influences change projects?

An activity must be possible to measure if it shall be possible to manage (Garvin, 1993). This is also the case for organizational changes. Many earlier change projects within Saab Aerosystems have not achieved their desired results. This proves the need for a method that can help the company measure effects of a change throughout the change project, enabling them to modify the change project as deemed necessary. While this thesis will develop a model that will manage changes, it must also look at the aspect of how the results according to different steps in this model can be developed. What kind of measure variables can be used in order to measure the progress of an organizational change? Even regarding this aspect, it would be interesting with a checklist that could be used in all situations, regardless of the kind of organizational change that is investigated.

1.3 Purpose

The purpose of this thesis is to develop a tool, which can be used when carrying out organizational changes within Saab Aerosystems. The tool shall be in the form of a functional checklist. The checklist shall include identified important factors that influence the success of a change and shall be adapted according to the company's culture. This checklist shall also include a couple of different tools that will help the organization to measure the progress of the change project. The purpose is illustrated in Figure 1.

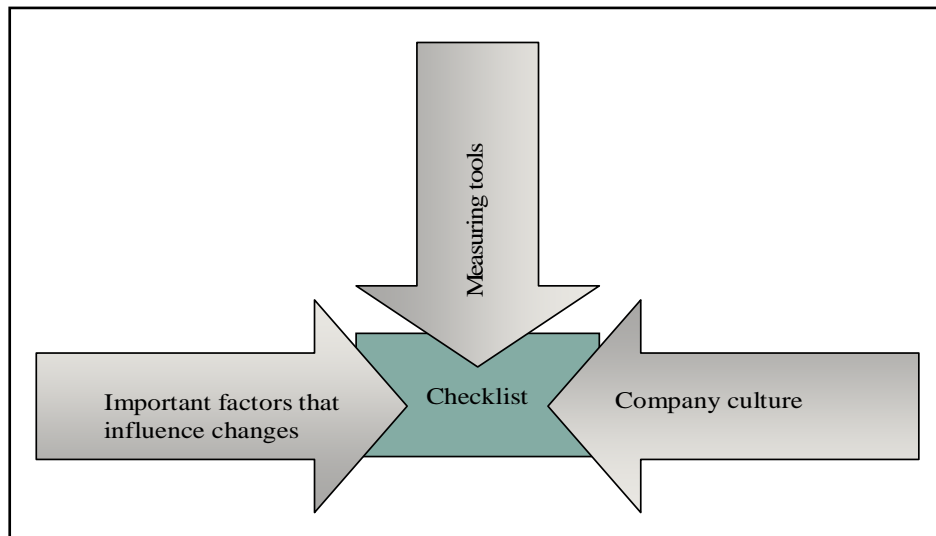


Figure 1 - Model of purpose

1.4 The Issue

The above presented purpose resulted in a couple of questions that this thesis has tried to respond to. The questions are:

- Which factors are important in order to carry out a successful change project?
- How does the company's culture influence Saab Aerosystems ability to change and carry out a change project?
- Which tools can be useful when measuring how change projects are progressing?

1.5 Delimitations

Three change projects are studied and the research is based on interviews with persons who are involved in some of these three projects. This thesis is the completed part within the program of Master of Science in Industrial Engineering and Management and the time is limited to 20 weeks. This time limitation has made it impossible to do a complete research and to speak with all employees within Saab Aerosystems. Consequently, all voices within Saab Aerosystems have not been heard, but people from as many different departments as possible have been interviewed and they represent the company as a whole.

Only large organizational changes, which influence the whole company, have been studied. This means that the conclusions from this thesis are only useful for this type of change project. Changes that only affect one department or other smaller units of the company are not studied and the results are therefore not adapted to these types of changes.

All of the three studied change projects were up and running when this thesis began and therefore no studies were performed during initial project phases. Persons who were involved during these initial phases have however been interviewed in order to describe the adaptation process for changes within Saab Aerosystems. This delimitation means that some initial feelings of resistance or expectations have not been expressed, as these feelings are normal to forget once a project has been up and running for some time.

When identifying measure variables, existing measure variables for evaluating have been used and employees within Saab Aerosystems have been asked their views on measure variables and in suggesting which can prove most useful. It could also be possible to develop free standing measure variables, but there was no time for this work to be carried out in the scope of this thesis. Research has been performed to find literature handling already existing variables that can be used when measuring organizational change's development, however literature was lacking in this area. With more time, many more variables could have been identified and a better tool for assessment of organizational changes could have been evaluated. Hopefully, the identified variables will help the organization to rapidly conclude whether the organizational change is progressing in the right direction.

2 Description of Company

This chapter provides a short description of the company, its different lines of business and its organization. It finishes with an overview of the three changes that have been studied in this thesis.

2.1 Saab AB

It was the need for a domestic military aircraft industry in Sweden that resulted in the founding of Svenska Aeroplan Aktiebolaget, Saab in 1937. Even though the military aircraft has been the most important product segment, Saab also produces and has produced a lot of different products such as cars, trucks, busses and defense systems. Saab has three different business segments, defense and security solutions, systems and products and aeronautics. Saab is a unified group in which business departments work together to achieve common goals and try to find synergy effects. The reason behind having three different segments is that these different markets have various conditions and differ in terms of businesses and customer relationships. Saab has operations and employees on all continents. They meet customers' needs by constantly developing and improving new technology. Saab is Sweden's leading R&D company; putting approximately 17 percent of company profit annually back into R&D. Saab AB normally cooperates with its customers in commercializing new technology. Saab has 13,600 employees and annual sales are estimated at approximately EUR 2,3 billion. The largest owners are BAE Systems, United Kingdom and Investor, Sweden. (www.saabgroup.com)

2.2 Saab Aerosystems

Saab Aerosystems is one business department within the Saab-group. The company offers advanced aircraft systems, related parts of systems and services during the whole lifecycle of the product, to defense customers and aircraft industries around the world. They have four focus areas, fighter aircraft, aircraft systems, support solutions and unmanned aerial vehicles. The main product, for the company and the fighter aircraft area, is the Gripen system. Saab Aerosystems has the overall responsibility for development of the Gripen system and the system incorporates the world's most developed data link. Aircraft Systems have both commercial aircraft systems and different kinds of trainings and simulations. Saab Aerosystems has developed advanced aircraft systems for more than sixty years and examples of products are flight control systems, airborne computer systems and cockpit systems. This area also offers training equipment such as advanced simulator systems, pilot training and complete training systems for fighter pilots. Support solutions offer support for products, maintenance and solutions for everything on the aftermarket. The unmanned aerial vehicle is a new segment and Saab has developed and is involved in some development projects for a couple of different unmanned aerial vehicles such as Skeldar, Filur and Neuron. Saab Aerosystems is a business department of Saab AB, but is run as a free-standing company with one owner, Saab AB and the company had 1664 employees as of the 30th November 2006. (<http://saabnet.saabgroup.com/SaabAerosystems>)

2.3 Organization

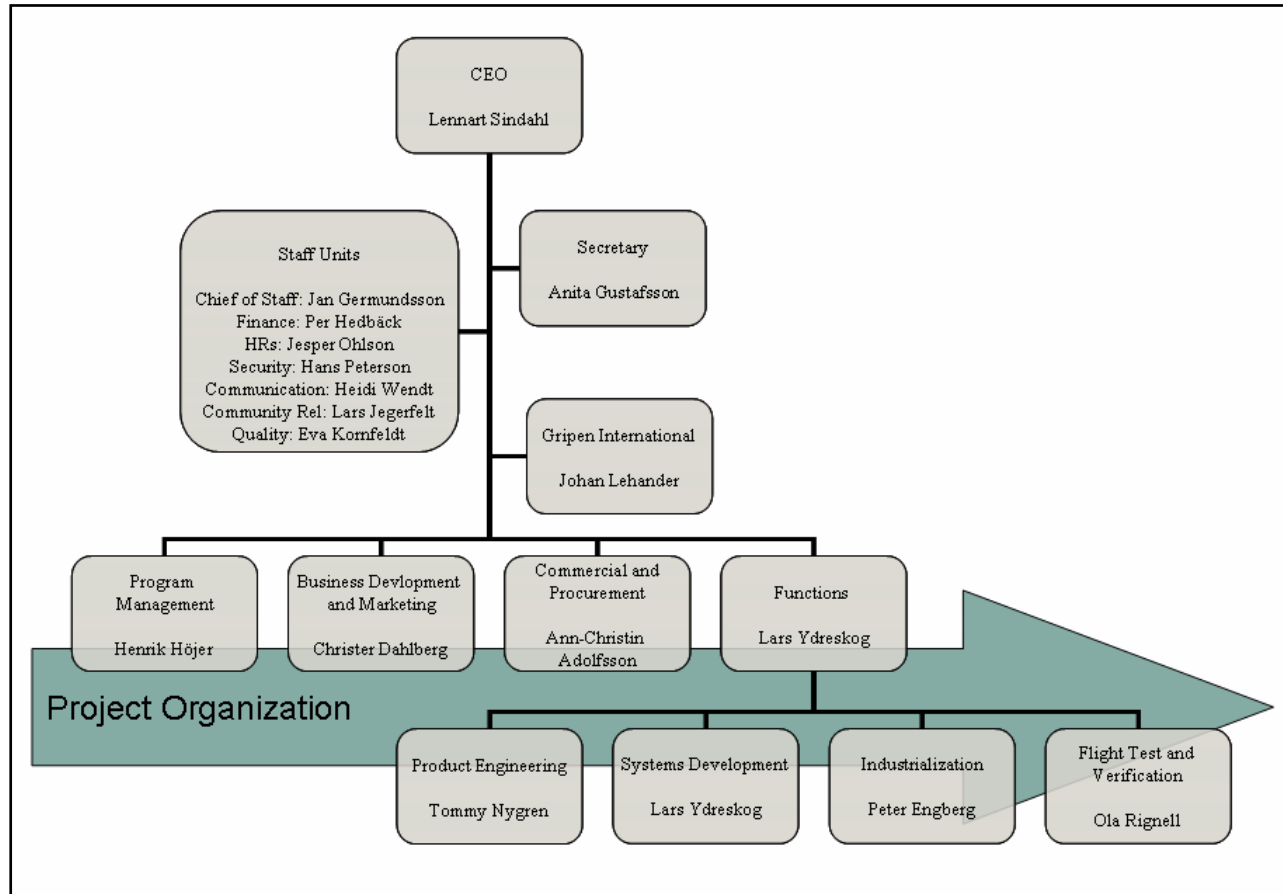


Figure 2 - Organization chart for Saab Aerosystems

Figure 2 shows the organization chart for Saab Aerosystems. This chart shows how the bureaucratic, line organization is complemented with the horizontal project organization which together creates a matrix organization.

It is the business department manager, Lennart Sindahl, who is responsible for the overall management and the results of the business department. Saab Aerosystems have staff departments that support the underlying departments, departments which are sorted according to their functions. These departments are further divided into different underlying groups and departments, according to the activities that are each department's responsibility. The department managers are responsible for staffing and developing the competence of their personnel.

Decisions within Saab Aerosystems shall be taken on the lowest level in the organization which has a complete picture of the decision situation and the effects of this decision. The business department also has guidelines that describe who has the authority of decision and why, when it is a decision of great importance for the department. The *Management Group* (Ledningsgrupp) has the highest authority and is responsible for Saab Aerosystems business and results management. The level under the Management Group is *Program Management* (Program-

ledning) that assures and manages the realization of received orders and contracts. The *Business Management Group* (Affärsledningen) manages the work within strategy, business development, market, to bid and commercial. The *Line Management* (Linjeledning) assures that the business department has the capability to realize the requirements and goals, decided upon by the Management Group and Program Management.

2.4 Current Changes

Many theorists, e.g. Härenstam et al. (2004), Schein (1992) and Wendell and Bell Jr. (1999), claim that the need for change and an organization that can handle change will be necessary in the future. As stated before in this thesis, the companies environment constantly change and demands new solutions from employees within the companies. This also applies to the situation at Saab Aerosystems. Three different projects that will lead to some kind of change for the company have been studied. The results from these studies are presented in chapter 5, *Empirical Findings*. Below, the three projects are described.

2.4.1 BCAM

Saab AB is made up of 17 business departments where Saab Aerosystems is one. Up until now, these different companies have managed projects and business according to their own methods and models and within some departments there have been many different models. These differences have made it difficult for decision making resulting in management having to dedicate much time in order to completely understand the business status. The Business Control And Monitoring process, hereinafter referred to as BCAM, aims at improving the management of business and projects within Saab and introduces a common language, terminology and number of reports across the entire Saab Group. It will increase the visibility of business and project performance to management on all levels as well as increasing efficiency in cross business department prospects and projects due to common language and methods. The latter mentioned will also facilitate changing company within the Saab group due to familiarity with project processes.

BCAM spans over the total lifetime of the project, from business opportunity to disposal. It is a clear decision-making lifecycle process with well defined decisions gates. The business winning and the business execution phases are bound together by BCAM, but the BCAM process does not cover all functions, like support functions, product management, development process etc. The advantage with BCAM is that it is a repeatable method for breaking down any project in manageable stages. It defines major stages in a project life and increases the understanding of each stage. The goal is that it shall be easy to identify the start and end points of each stage.

BCAM includes ten clearly defined decisions gates with clear requirements for each gate. A decision gate includes mandatory documents, check-lists etc. and BCAM also defines criteria for determining who has the mandate to make decisions and who is responsible for monitoring.

Characteristic for business within Saab, are that projects are technically complex, often large-scale, have high value, long lifecycles and include a lot of collaboration, both internal and external. The projects are seldom repeatable and the teams are often delivering a wide range of products and services. Despite this diversity of the projects, there are also many things in the process that are in common during different projects lifetime. With the introduction of BCAM,

Saab will assure that all business departments will manage their projects in the same way. BCAM principles apply to both internal business department's prospects and projects and to cross business departments' prospects and projects. It is although important to note that the BCAM process does not cover the complete operational system that the business departments require. Therefore, the BCAM directive has to be implemented in each business department's operational system.

The decision to develop BCAM was a top management decision taken during the autumn 2006. After the decision was taken, a team with representatives from the different departments was established and they worked during the autumn and winter 2006 to develop frames, directives and guidelines for BCAM. Since January 2007 the implementation phase has been carried out at Saab Aerosystems, including spreading of information documents, meetings, workshops etc. The initial phase was completed on the 30th of June, and BCAM has since then been used operatively.

2.4.2 Gunder

Gunder is a project that exists only within Saab Aerosystems and will be carried out between the years 2006-2009. It aims at helping the company adapt its operations to new conditions and increase flexibility within the department.

This ability to adapt to new conditions will contribute to that Saab and Saab Aerosystems 2016 will:

- become the leading European air vehicle industries, one of two in the world
- continue the development of Gripen in new versions and continue to have a successful export market
- offer a number of UAV-products that can operate in civil air territory
- be one of Sweden's most attractive and exciting places of work where people can work internationally
- establish the company as a producer of systems to the commercial air vehicle market
- undertake development and production of all air vehicles within the Swedish air force

Gunder, also aimed at providing persistent profitability, consists of eight different sub programs which all will save costs or provide other advantages. The purpose of the savings is to be able to stake, which means that saved money shall not increase the profit. The money shall instead be invested within the company in order to further improve operations. The saving will be made in a couple of different ways. The cost level shall be reduced and liberate resources and capital by streamlining and rationalizing. This change process will be introduced step by step and all sub programs will be reviewed quarterly. The goal of the program is to reach a cost reduction of 200 million Swedish crowns.

The decision to proceed with Gunder was taken by Saab Aerosystems management due to the management wish for the department to work more efficiently. Prior to Gunder, many departments could carry out the same tasks and there were approximately 40 change projects being carried out at each subdepartment. Today, Gunder tries to synchronize the improvement programs in all subdepartments, whilst controlling the departments' money intended for

improvement programs. Gunder currently includes approximately 40 change projects. This change, will improve the subdepartments' cooperation and co-ordination and at the same time, the company will save money. Gunder will not only save money and increase cooperation, it will also work for changing the company culture in order to improve in areas of international collaboration.

Gunder's eight different sub programs are presented below:

- "Vår värdegrund" – implement common values within the organization
- "Aktival" – increase flexibility within production in order to keep profitability even when the flow in the production is low
- "PDM" – increase the efficiency of configuration support and compilation of system reports
- "Leverantörskostnad och Logistikstrategi" – secure the subcontractors capacity in the future and develop effective logistics solutions within the Saab Group
- "Projekteffektivitet" – render the project work more effective in order to ensure good profitability
- "Overheadkostnad" – review and adjust the total cost
- "MBSE" – effective products development and higher competitiveness through system development based on models
- "Affärs- och kontraktmodeller" – adjust business- and contract models to new business activities

2.4.3 Neuron

Neuron is a project aimed at developing a stealthy UCAV, Unmanned Combat Aerial Vehicle. An outline of Neuron can be seen in

Figure 3. The project includes industries from six different countries in Europe, where Saab Aerosystems from Sweden is one partner. Dassault Aviation from France is the prime industry in this project and will coordinate the project and all partners. Dassault Aviation has also signed the main contract and Saab Aerosystems has a subcontract with Dassault Aviation. The value of Saab Aerosystems part is approximately 25 percent of the main contract. Saab Aerosystems predicts that this kind of multinational project will be an important part of their future business as it is not likely they will solely develop a new air vehicle again. Saab Aerosystems deems it important to learn how to collaborate with international participants and believe they must adapt their way of working to the international environment.



Figure 3 – Outline of Neuron (http://www.saabgroup.com/en/MediaRelations/ImageBank/Media_bank.htm, 2007)

Neuron will also strengthen Saab Aerosystems position in Europe within the company's areas of competence, which are avionic¹, autonomy², construction of bodies, system integration and airworthiness. Some flight demonstrations are planned to take place in Sweden. The goal for Saab Aerosystems is that Neuron will help them remain the main partner in Sweden for airborne systems. Neuron will also help Saab Aerosystems maintain their competence within the above mentioned areas and transfer knowledge from the generation that developed Jas 39 Gripen to a new generation who will develop the next UCAV approximately 2010-2015.

This change for Saab Aerosystems consists mainly of the new situation where they have to collaborate with representatives from many different companies from Europe. This will be a completely new and difficult challenge, as the companies have different sorts of technical solutions, different company and national cultures, different ways of doing business etc. It will also be a new commercial situation for Saab Aerosystems, as they have to accept market rules to a wider extent. When Saab Aerosystems has carried out business with FMV, they have had shared responsibility for both profits and losses. With Neuron, Saab Aerosystems has a fixed budget and the company has no reserves to cover an unexpected cost increase. This new situation will force the company's employees to be more cost conscious; as the risk factor for the project generating a loss for Saab Aerosystems is greater. Neuron started in 2006 and the first phase resulting in a prototype, will be finished in 2012.

¹ The development and production of electronic instruments for use in aviation and astronautics, derived from the expression "aviation electronics", Encyclopaedia Britannica <https://lt.ltag.bibl.liu.se/login?url=http://search.eb.com>

² The ability for the aircrafts to, by them selves, take own decisions and then take action.

3 Methodology

This chapter describes used research methods when collecting data. It begins with an explanation of the scientific approach. The interview methodology is then described and it ends with an explanation about the theory development and how the company's current methods have been studied. In order to simplify the reading, all sub chapters are summarized and the summaries are presented in the end of each sub chapter.

3.1 Investigation and Science Investigation

The purpose of both investigation and science investigation is to produce knowledge. The major differences between them are that science investigation has much more theoretical support. With theoretical support the idea is to use existing theory and models as a starting point and support the report in them. Investigations do not need to support their results in existing theory. (Patel & Davidsson, 2003) This exam thesis is a science investigation and the importance and need for relevant theory are in focus.

3.1.1 Types of Science Investigation

There are three ways of carrying out science investigation, *explorative*, *descriptive* and *hypothesis searching*. The differences between them are the difference in knowledge when the science investigation starts. When knowledge is lacking the science investigation will be explorative. The purpose of this kind of science investigation is to gather as much knowledge as possible and give a general understanding of the problem area. When good knowledge bases already exist, the science investigation can be an attempt to organize and systemize the knowledge in models. These science investigations will be more descriptive and go by this name. It is possible to do a description of both current situations and situations from the past. Generally, a descriptive science investigation limits the investigated area and tries to explore some aspects that are found more interesting than others and deeply describes these aspects and results. The third kind of science investigation is hypothesis searching where a great deal of knowledge, theories and models already exists. This kind of science investigation extends from the theory and tries to develop an assumption about the reality. The assumption can be of the type "if...then...". It is important during hypothesis searching to isolate the investigated question and eliminate risks that there is something else than the hypothesis which can influence the results. (Patel & Davidsson, 2003) This exam thesis is of a descriptive nature. Saab Aerosystems way of implementing changes today has been investigated. With help from the results from the above named investigation and existing theory, a model that can be used for future changes in the company has been evolved. Apart from the theory, knowledge of the company has been acquired during interviews with a sample of people who work in the organization. This part is called an empiric study and is an observation of the reality. According to Patel and Davidsson (2003), empiric knowledge is gathered by experience of observation of the reality and the world around. A summary of chapter 3.1 can be seen in Figure 4.

- This thesis is a science investigation, as the importance of relevant theory is in focus
- The science investigation is of a descriptive nature, as a model has been evolved from investigations at Saab Aerosystems together with existing theory.

Figure 4 - Summary of chapter 3.1

3.2 Theories Related to Empirical Findings

The task for the investigator is to relate theory to the reality. It can be done in three different ways, *deductive*, *inductive* or *abduction*. A deductive approach is distinguished by the willingness to start from the common principals and existing theory to evaluate hypotheses and models that can be tested in reality. Another way of working is to study an investigation object without gaining approval in already existing theory before the investigation start, the inductive way. With the gathered information, the investigator tries to present a theory. This kind of investigation method can in some cases lose the general objective and be quite specific for the investigated object. The abduction form of investigation is a mix between deductive and inductive investigations methods. It starts with an inductive phase, but is followed by a deductive phase when the hypothesis or models are tried on new cases. (Patel & Davidsson, 2003) The work with this thesis has almost completely followed a deductive approach, while it started with a phase of searching and reading literatures and theories, which together with the following empiric study resulted in a model. The difference is that the model has not been tested in reality, but the test will be performed by Saab Aerosystems in future change projects. In Figure 5 a summary of chapter 3.2 can be seen.

- This thesis has been performed in a deductive manner, with existing theories together with an empiric study resulting in a model.

Figure 5 - Summery of chapter 3.2

3.3 Qualitative and Quantitative Research

In order to understand the difference between qualitative and quantitative research, it is necessary to go back to the concept quality and quantity. Quality describes the sort and quantity decides the amount. Qualitative analyses offer an opportunity to amplify the understanding of a new phenomenon and can also describe this phenomenon in a differentiated way. Qualitative research tries to understand how different parts act together to form a whole. The quantitative analyses are used to give us information about “how much”, in other words the amount. If a qualitative analysis indices that one factor influences the results, a following quantitative analysis will tell how much this factor influences. (Lantz, 2007) On the other hand, it is the qualitative research that can give deep knowledge in a subject, assert Patel and Davidsson (2003). Qualitative analyses are superior to quantitative analyses, that is to say that it is not interesting to know the amount if the relationship is not decided. Results from quantitative research are often shown in diagrams and tables, while qualitative research results are described in text, normally with a mix of quotation and the researcher’s own comments and interpretations. (Lantz, 2007) This thesis is a qualitative research.

It takes a great deal of time and work to realize a successful qualitative analyse. It is important with current analyses, compared to a quantitative analysis where all work is performed upon having gathered information. The advantage with doing current analyses, for example after an interview, is that it can provide ideas on how to proceed with the work. It is also better to do the analyses when the interview still can be clearly remembered. The longer time that passes before the analyses starts, the harder it is to remember all interview details. When the result is later presented in a report, the importance of a described analysis method cannot be ignored. While

there are no definite methods of how a qualitative analysis shall be performed, the reader must understand how the author has proceeded. (Patel & Davidsson, 2003) Chapter 3.3 is summarize in Figure 6.

- This thesis is a qualitative research. A qualitative research can give knowledge in how different parts act together to form a whole.

Figure 6 - Summary of chapter 3.3

3.4 Scientific Approaches

The approach to science can be divided into three categories, *positivism*, *hermeneutic* and *approaches close to empiric*. (Patel & Davidsson, 2003)

3.4.1 The Positivism Approach

The positivism has its origins in the empiric and natural science traditions. It was the French sociologist Auguste Comte who gave positivism its name and he meant that it is possible to generate knowledge which can be positive and developing for human kind. The model for this approach is the physics and the natural science and Auguste Comte, who was active during the middle of the 19th century, wanted to create a science methodology which was equal for all science. (Patel & Davidsson, 2003) While it is rooted in natural science, it supports the thought that no single event is considered interesting unless it represents a general phenomenon (Lantz, 2007). Other characteristics are that the ideal model is a mathematic formula, that it is always possible to study a whole by separating it into its components and then studying them and that the researcher always is completely objective. The positivism is quantitative research with a lot of statistics and model based in natural science and the positivism is based on that science should be exact, verifiable and free from subjectivity. (Patel & Davidsson, 2003)

3.4.2 The Hermeneutic Approach

The hermeneutic is the opposite of positivism. The meaning of hermeneutic is interpretation and it is a scientific direction where the researchers try to study, interpret and understand the basic conditions for human existence. The hermeneutic approach has existed since the 15th century but was then more used as a method to interpret the bible. Nowadays, hermeneutic is used in a lot of science disciplines, like that of human, cultural and society science. Hermeneutic often represents qualitative interpretation research with researchers who are open, subjective and committed to the research. The advocates of hermeneutics argue that it is impossible to reach true objectivity and that it is also undesirable to do so, compared with the upholder for positivism. Instead, researchers with a hermeneutic interpretation should try to understand people and the world they live in. The researcher shall use his or her knowledge and it is therefore of interest to provide a short description of the researcher when using a hermeneutic approach. (Patel & Davidsson, 2003)

3.4.3 The Close to Empiric Approach

There are many different sorts of approaches close to empiric that all have in common their relations to hermeneutic and positivism. The two approaches that have already been discussed

both try to study something that is behind the obvious observed and the approach close to empiric gives an alternative to these two approaches. Grounded Theory is one approach and was founded at the end of the 60'ies and is often called local theory. Grounded Theory starts with an empiric phase and formulates after that a local theory that is suitable for a specific case. When the grounded theory has started and a research question is formulated, the empiric research and data collection proceed parallel to one another. (Patel & Davidsson, 2003)

This exam thesis is a result of a hermeneutic approach. It is a qualitative research based on interviews, which correspond with the hermeneutic approach. The empiric study focuses just on Saab Aerosystems and therefore it does not have the general approach that is desirable for a hermeneutic study. Even though a general approach is desirable for a hermeneutic study, it is however possible to carry out hermeneutic studies within only one company. The researcher and author of this exam thesis has since autumn 2002 studied at the program of Master of Science in Industrial Engineering and Management at the University of Linköping. Her technical direction has been mechanical engineering and her economic directions have been industrial organization and production management. This exam thesis finishes the author's studies and is carried out within the economic direction industrial organization. Chapter 3.4 is summarized in Figure 7.

- This thesis is a result of a hermeneutic approach as it is a qualitative research, based on interviews. The researcher will with this exam thesis finish her studies within the program of Master of Science in Industrial Engineering and Management.

Figure 7 - Summary of chapter 3.4

3.5 Interview Methodology

Interviews and questionnaires are methods used to gather information by asking questions. Generally, interviews are personal with the interviewer meeting the respondent face-to-face. It is also possible to accomplish an interview over the telephone. (Patel & Davidsson, 2003) This thesis is based on interviews and observations. While this thesis has been written in the office at Saab Aerosystems, all of the interviews in this thesis were performed face-to-face with the respondent.

3.5.1 Qualitative Interviews

The purpose of a qualitative interview is to identify and discover a capacity and state of something, for example the respondents' opinion in the searched subject. This kind of interview has a low degree of standardization and the respondent is given the possibility to answer in his or her own words. Both the interviewer and the respondent are participators in a conversation. Their roles are different; normally the interviewer has great interest in the outcome of the research and the interview while the respondent sometimes has no interest or use of the research. (Lantz, 2007) It is an advantage if the interviewer has previous knowledge and is prepared within the research subject. For example, the interviewer can study previous research within the same subject to gather an acceptable level of knowledge. If the interviewer talks with the same respondent a couple of times, it is possible that the respondent changes point of view from one session to another. It does not mean that the previous results cannot be used. Instead it shows the complexity of the subject and that the respondent can change his or her opinion over time. (Patel

& Davidsson, 2003) The interviews performed at Saab Aerosystems have all been qualitative, as they have been performed in accordance with the description above.

During the formulation of questions two aspects must be considered. How much freedom has the interviewer in organizing the interview and the questions formulation, in other words the degree of standardization? It is also important to decide how much the respondent is allowed to interpret the questions according to their approach and previous experiences, that is to say the degree of structuring. For example, interviews with a low degree of standardization and structuring are those where the questions are formulated as they come up and the questions are posed in the order that the interviewer finds most appropriate. On the other hand, interviews with a high degree of standardization and structuring are when the interviewer asks exactly the same questions in the same order to all respondents. Questions are open or unstructured when the respondent can provide alternative answers. The more different answers that are possible, the less structured the questions are. When only solid alternative of answers exist, the questions are categorized as structured. (Patel and Davidsson, 2003) Examples of different types of inquiries and interviews can be seen in Figure 8.

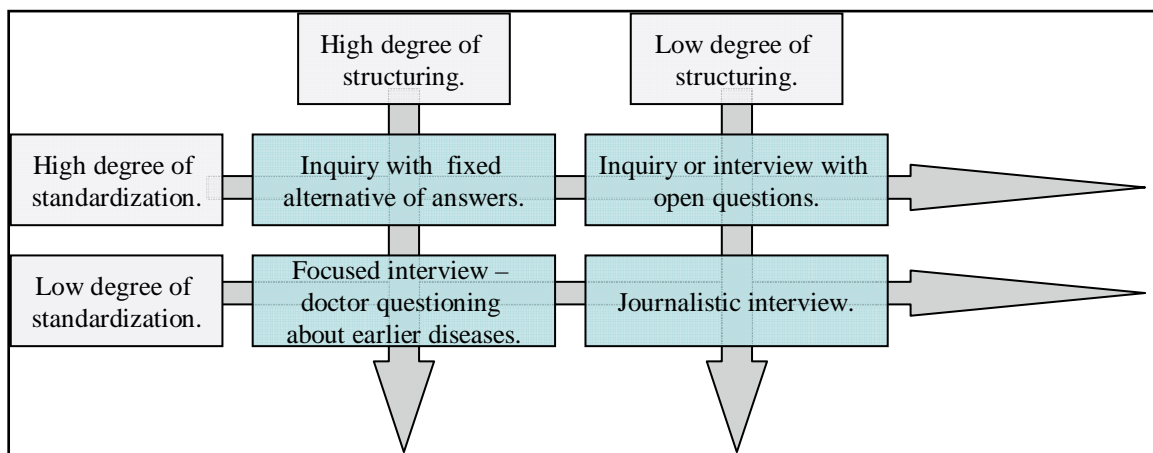


Figure 8 - Examples of different sorts of interviews and inquiries due to level of standardization and structuring (Patel & Davidsson, 2003).

The interviews performed in this thesis have all been prepared but the respondents have had the opportunity to answer the questions in their own words. In some interviews, complementary questions have also been put in, when further information about any aspects was needed. To summarize, the interviews carried out within this thesis, have got a middle degree of structuring and a low degree of standardization.

It is common and recommended to start and end an interview with some neutral questions. A recommended method is the horn-method. The horn-method starts with general, open questions and gradually poses more specific questions. (Patel and Davidsson, 2003) Each interview has both started and finished with some neutral questions. Each interview has also started with the author providing a short presentation of herself and an explanation about the purpose of her thesis. In Figure 9, a summary of chapter 3.5 can be read.

- The investigation has been performed by qualitative interviews.
- The interviews have a middle degree of structuring as they have been prepared but when needed, complementary questions have been added.
- The respondents have had the opportunity to answer the questions in their own words, which indicates a low degree of standardization.
- The horn-method has been used, as each interview has commenced with some neutral questions.

Figure 9 - Summary of chapter 3.5

3.6 Theory development

To create a concrete and comprehensive theoretical frame of reference, a large amount of literature has been read, such as text books, electronic sources, encyclopedias and articles. During the initial phase, the literature covered research methods, organization science and change discipline. These studies provided necessary knowledge within the thesis subject and greatly influenced the formulation of interview questions. The purpose was to find literature that is reliable and gives a general view of the world of science. It is difficult though to make this judgment when not being an expert within the studied area. One way of judging whether the literature is reliable or not, is to investigate if it has been referred to by other researcher. Therefore, most of the literature used in this thesis has been referred to by other researchers. By using the original source, the quality and reliability of the theoretical frame of reference is higher, and because of that, the original sources have been used as far as possible. Chapter 3.6 is summarized in Figure 10.

- The theory development has been made by reading and using literature that has been referred to by other researchers.

Figure 10 - Summary of chapter 3.6

3.7 Empirical Development

The empirical studies gave an understanding of the current situation at Saab Aerosystems in regards to how their organization works and how they currently manage change. Several different methods have been used in order to produce a complete empirical research.

3.7.1 Documents from the Company

Many different management tools and existing documents at Saab Aerosystems have been read. The purpose of this was to receive an understanding of the company and its organization. This study was mainly carried out during the initial stage of this thesis work. Many documents handling BCAM, Neuron and Gunder have also been studied.

3.7.2 Informal Meetings and Interviews

During the initial phase the author joined her tutors in several meetings in order to further understand the current change processes, but also to meet and discuss with different persons within the organization in order to receive an even deeper understanding of the company and its employees. This also gave her an insight in what the employees' view of current change programs is, including program implementation.

The prepared interviews were performed after two months of initial research. The author had then gathered a theoretical understanding of the investigation subject and this knowledge consequently helped to create relevant questions. The author's tutors helped her select respondents for the interviews, and these were selected based on a criterion of covering a wide range of views and phases when the candidates were involved in the change processes. In total, 15 employees at Saab Aerosystems have been interviewed and they represent many different departments within the company. In Figure 11, a summary of chapter 3.7 can be seen.

- The empirical development has been made by reading existing documents at Saab Aerosystems, participating in meetings and informal discussions and performing prepared interviews with employees at Saab Aerosystems.

Figure 11 - Summary of chapter 3.7

3.8 Models Creation

A model is defined as a simplified picture of what is seen as the reality. For example a map is a model of the landscape. It is not possible to show every stone on the map as the purpose of the map is to produce a model of the reality that is easy to handle but shows the most essential factors, like lakes and mountains. Models help people analyze, discuss and make decisions in a lot of different kinds of matters. A good model is easy to use, but only consists of the factors that are necessary for decision taking. (Eriksson & Wiedershielm-Paul, 2006)

Models can be divided into three groups, verbal, schematic and mathematic. In verbal models the relation is described by words. One famous example is the SWOT-model that shows the Strengths, Weakness, Opportunities and Threats, for example within a company. One disadvantage with verbal models is that they cannot be exact. Schematic models show the relation with the help of figures of different kinds and it is therefore easier to get an overview compared with a verbal model. It can be effective to use schematic illustrations for models that are fundamental for the research. Even though it is a schematic model, it is not possible to only use squares or arrows. There must be some explanatory text that describes and explains the models factors and connection. Mathematic models are used for calculating for example product price or how far a car will come when it is driven for x amount of hours with the speed y. They are normally more defined than the other two models. (Eriksson & Wiedershielm-Paul, 2006)

The goal for this thesis was to construct a checklist that can help Saab Aerosystems in future organizational changes. The checklist shall be adapted with respect to culture, organization, kind of leadership and other factors that are important when carrying out an organizational change. The checklist made is of a verbal model, as it will be a model for general changes. For a general

situation it is difficult to develop a mathematic model as change projects cannot be managed in this manner. A schematic model could however be used, but as the checklist will need to include quite a lot information the amount of text would prove too extensive to fit such a model.

3.8.1 Studying Organizational Change

There are two different approaches when studying change, variance research and process research. A variance theory focuses on variables that represent the studied subject's important aspects or attributes. Important variables are identified by the company. This resulted in a model that incorporates these variables. An implicit goal of variance research is to establish the conditions necessary and sufficient to bring about an outcome, see Figure 12. In general terms, the variance theories explain change in terms of relationships between independent as well as dependent variables. Variance theories offer a good knowledge of the mechanism behind the change process and it is also well suited for testing hypotheses related to mechanisms. (Poole & Van de Ven, 2004)

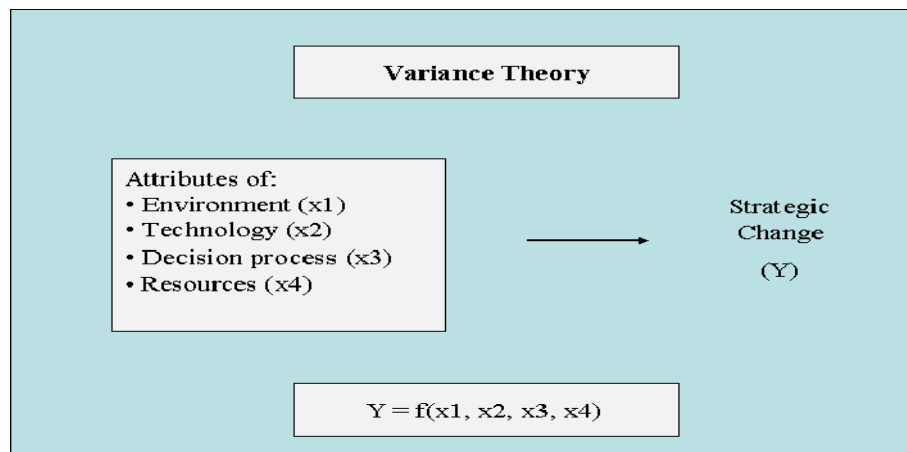


Figure 12 - Variance Theory explanation of strategic change (Poole & Van de Ven, 2004).

Process theory focuses on a series of events that develop through time and result in some kind of outcome. Explanations in process theory are more complex compared with variance theory in regards to the complexity of events, different time scale within the same process and the dynamic nature of the process. Process theories can incorporate many different types of effects into their explanation, like critical events and turning points, formative patterns that give overall direction to the change and causal factor that influence the sequencing of events, see Figure 13. Process research gives a broader outlook when designing models, by identifying or reconstructing the process through direct observation, archival analysis or multiple case studies. Analysis of data within a process research requires methods that can identify and test linkages between events and overall patterns and should also cope with the multiple time scales that often occur in processes. (Poole & Van de Ven, 2004)

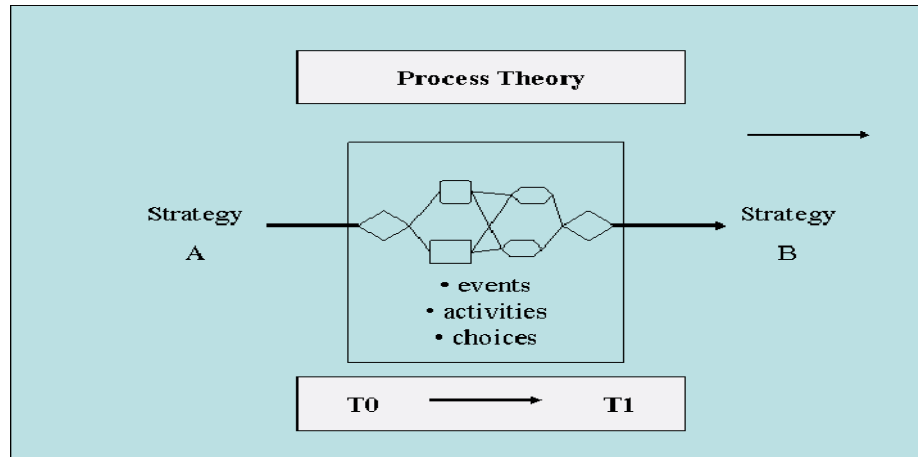


Figure 13 - Process Theory explanation of strategic change (Poole & Van de Ven, 2004).

Because important aspects and attributes have been identified during the interviews at Saab Aerosystems and thereafter been put together in a model in the form of a checklist; this exam thesis has the characteristics of a variance theory. Models developed according to process theory achieve a broader outlook compared with models developed according to variance theory, but this places greater demands on time and requires several case studies to be carried out. Due to thesis time limitations, only one case study has been performed making it impossible to develop a model according to the characteristics of a process theory. The summary of chapter 3.8 can be seen in Figure 14.

- This thesis will result in a checklist which will be in the form of a verbal model. A model shall be easy to use and only consist of necessary factors.
- This thesis has the characteristics of a variance theory as identified and important aspects have been put together in a model.

Figure 14 - Summary of chapter 3.8

3.9 Discussion about Source of Error

When carrying out a study it is impossible to completely eliminate all sources of error. It is however important to contemplate possible reason for errors and minimize the risk of them occurring. (Patel & Davidsson, 2003)

3.9.1 Validity and Reliability

When carrying out a study it is important to know if the study investigates what was intended to be investigated, in other words the degree of validity. The validity in a qualitative research includes the whole research process, not only when collecting empirical findings. In order to perform a research with high validity, it is important that the researcher has good knowledge in the studied area and can construe the object that is studied. It is also important to realize and catch different sides of subjects that have various meanings or are contradictory. Validity can also be related to the ability to communicate what the researchers construe and argue for the most

likely theory. As a qualitative researcher it is important to be flexible, while each qualitative research process is unique and it is impossible to work after decided rules or procedures. It is however important that the researcher is conscious of and reflects over different choices which are made when handling the information and how this can affect the analysis. (Patel & Davidsson, 2003)

In quantitative researches it is also important to ensure that the research is carried out in a reliable manner, i.e. that it has high reliability. In a qualitative study reliability does not have the same importance; it is for example possible that a respondent may provide two different answers to the same question if he or she is interviewed more than once, as stated in chapter 3.5.1. *Qualitative Interviews*. In a qualitative research this will not necessarily mean that the reliability is low. The person can have received new knowledge or understanding between the two different interviews. This results in that many qualitative researchers do not use the reliability conception. (Patel & Davidsson, 2003)

3.9.2 Source of Error

One obvious source of error is that this thesis is made by only one person. If the author misinterprets some literature or misunderstands a responder, somebody with another perspective and understanding was not present to discuss this with. It is also possible that the author has influenced the responder in some way, e.g. by how she acted and what she said during the course of the interviews. The author has tried to eliminate this risk by always keeping this aspect in mind and never providing any answers or trying to finish sentences for the respondents. The author has also recorded all interviews on tape and transcribed them in order to lose as little information as possible. The author has led the interviews whilst simultaneously making notes, which proved quite difficult and the recordings have therefore helped her receive all information from the interviews. The author has also transcribed the same day as the interview took place, in order to not forget the feelings or the body language the respondents transferred during the interviews. A summary of chapter 3.9 is shown in Figure 15.

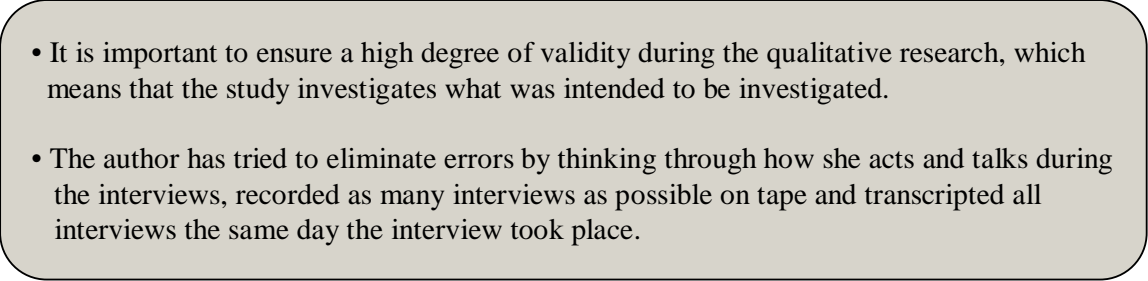
- 
- It is important to ensure a high degree of validity during the qualitative research, which means that the study investigates what was intended to be investigated.
 - The author has tried to eliminate errors by thinking through how she acts and talks during the interviews, recorded as many interviews as possible on tape and transcribed all interviews the same day the interview took place.

Figure 15 - Summary of chapter 3.9

4 Theoretical Frame of Reference

This chapter will create an understanding of the issue handled in this thesis. It is divided into three sub chapters: Organization, Organizational Culture and Changing within Organization. Each sub chapter has a summary in the end in order to simplify the reading. This frame of reference has built the basis for the rest of the report.

4.1 Organization

In order to understand the change process for an organization, it is obvious that an understanding of the organization itself is required. Therefore, some literature discussing organization science is summarized below.

An organization is when people interact in some kind of structured or organized way to achieve a defined purpose or goal and a group of this kind needs managing. There has to be a person who is responsible for the organization and who is in charge of the control and coordination support. When the organization consists of more than ten people, the organization needs a structure for their activities if chaos is not to ensue. The allocation of responsibilities, the grouping of workers activities and the coordination and control of these are all basic elements of what is called an organization's structure. The purpose for any structure must be to achieve the goals of the organization. Besides a formal structure, there normally exists an informal structure that is not designed by management but is rather the output of shared interest and friendship. One important difference between the formal and the informal structure is that the purpose and main interest are not always the same. The formal structure always works for the organizations best, while the informal structure sometimes has interests which are not related to the organization's goals. (Senior & Fleming, 2006)

4.1.1 Organization Structure

There are a couple of different ways of how an organization can be structured. One of the best-known forms is the bureaucratic form. It was the German sociologist, Max Weber, who defined the form and asserted that this was the only effective way of how an organization could be structured. The characteristics for a bureaucratic organization are that different roles are well defined and specialized. These roles are strict, hierarchically arranged and there is a single chain of command from the top of the organization to the bottom. It also has impersonal rules and relationships. This organization structure relies greatly on the use of rules, procedures and written records. The intention of the bureaucratic form was to imply fairness and neutrality in the way the people in the organization were treated, but nowadays the term bureaucratic has a quite negative undertone with a feeling of hard, undesirable rules and a lot of control mechanism. (Senior & Fleming, 2006)

The bureaucratic organization can be tall or flat³. A flat organization needs fewer managers compared to that of a tall organization. One rule is that the more similar the jobs are, the more people a manager can coordinate and control. It takes a lot of time and attention in managing many people carrying out very different kinds of jobs. Another rule is that the more decentralized

³ A flat organization has fewer organizational levels comparing with a tall organization. When a company is flattening its organizational structure, it gets less organizational levels. (Senior & Fleming, 2006)

the decision making is, the broader the span of control. If it is the manager who has to take all decisions, it is natural that the manager cannot manage a lot of people. (Senior & Fleming, 2006) Regarding the number of levels in the organization, these should be as few as possible. If there are a lot of levels, it is harder to understand the objectives and to communicate, both up and down in the organization. In a horizontal dimension, the bureaucratic organization can be organized by function, product or service or by location. (Drucker, 1994)

Nowadays, many bureaucratic organizations complement their organization with teams, network, or project organizations in order to obtain a higher flexibility. When complex tasks arise, the organization is prepared and can easily put together a group with specialists from many different areas, who are then used to collaborate with other specialists (Litteraturkompendium, IPE).

Another type of organization structure is the matrix structure. This form has normally a functionally designed vertical axis, but with a horizontal axis designed in some other way, for example products or regions. This means that there are two chains of command, one vertical and one horizontal, which operate at the same time. (Senior & Fleming, 2006) The matrix organization often is developed by a crisis when the organization becomes too big and complex and it starts to be impossible to manage through normal bureaucratic systems. To succeed with a matrix organization, it is important to have good teamwork with managers who possess both high level behavior and management skills. The focus should be to solve problems through team action. (Greiner, 1972 in Senior & Fleming, 2006)

4.1.2 The Organization Structure Depends on the Environment

A study regarding how the environment affects organizational structure shows that the organization has different structure depending on whether they operated in a stable environment or a more dynamic, changeable environment. The study identified two different main types of structure, mechanistic structure which is suitable for stable environments and organic structure which suits a more unpredictable environment. (Burns & Stalker, 1994) Utterback (2004) agrees with Burns and Stalker's theory regarding the environments influence on the organizational structure. Mechanistic organization is characterized by a well-known business environment and routine operations. Mechanistic organizations often have specified and standardized products and organizational control is provided through structure, goals and rules. A mechanistic organization is quite rigid bureaucratically. Organic organizations live in high uncertainty of both market and technology and they have often limited hierarchy. They also include many people with entrepreneurial roles, and often work with product innovation. Organic organizations often have structures similar to matrix organizations or even loosely coupled organic network. (Utterback, 1994)

4.1.3 Characteristics of a Swedish Organization

Tichy and Sandström (1974) wrote in an article about the characteristics in a Swedish organization and what is important to think about before carrying out any changes. They primarily looked at organizational innovations which purposes were to change the working environment and improve worker satisfaction. They claim that the most common innovation was to increase worker involvement in decision making concerning factors affecting their jobs. They identified a number of factors which are important when carrying out these kinds of changes in a Swedish organization. These are:

- Sweden's strong commitment to democratic values
- Sweden's affluence
- Sweden's high level of education
- The willingness of Swedish labor to get involved in these types of innovations
- Values which support research and development on new social and organizational forms (Tichy & Sandström, 1974)

It is important for Swedish workers to participate in decision making and this influence increases the commitment and motivation to carry out the decision. It is the work group where the employee works that has the most important role for improving the employee satisfaction and performance, not the manager or the individual worker. It is also important with control over the tasks, which the Swedish workers appreciate. The successful way of making changes in a Swedish organization will not easily be transferred to firms in other countries as the political and social conditions are quite different. (Tichy & Sandström, 1974) A summary of chapter 4.1 can be seen in Figure 16.

- An organization exists when people act together in a structured way to achieve a goal.
- An informal organization can exist beside the formal organization. The informal organization does not always have the same purpose and goal as the formal organization.
- The bureaucratic structure shows how the organization is hierarchically arranged. The bureaucratic organization can complement its organization with teams, network or project organization in order to be more flexible.
- The environment affects the organization. A mechanistic, bureaucratic organization suits a stable environment and an organic, less hierarchical organization suits with a dynamic, changeable environment.
- Organizations within Sweden have some special characteristics which are important to think about before carrying out changes. Swedish workers think it is important to be able to influence and participate. They are often highly educated and have a strong commitment to democratic values.

Figure 16 - Summary of chapter 4.1

4.2 Organizational Culture

Organizational culture as a concept has only been used for a short time period and it came first into the forefront when trying to explain why companies from USA did not perform as well as some similar companies in other countries, notably Japan. When trying to explain the differences it was obvious that national culture was insufficient. Researches have shown that organizations within the same society differ, especially in effectiveness and the purpose of organizational culture seems to be one explanation. (Ouchi, 1981) Different researchers have different approaches as to what they mean with organizational culture. (Schein, 1992) For example, Martin

and Siehl (1983) mean that the culture can be analyzed and measured and are then looking at aspects such as organizational stories, rituals and rites, symbolic manifestations and other cultural elements. They also mean that these aspects describe the holistic⁴ aspect of group and organizational phenomena. (Martin & Siehl, 1983) Another model identifies how members of the organization react. Some companies are much more formal and bureaucratic than others, but this does not tell how it affects the members and why these differences exist. For example, researches show that studying organizational symbols, stories and myths can give wrong inferences while the underlying assumptions are not known. Organizational stories are especially problematic, while the lesson behind the story will not be clear for persons who do not know and understand the underlying assumption behind the story. (Schein, 1992)

There are three different levels of culture; observable artifacts, values and basic underlying assumptions. Artifacts can be observed by anyone who enters the organization and it includes everything from the physical layout, the dress code, the manner in which people address each other, products, statements of philosophy etc. In order to identify values, interviews, questionnaires or survey instruments can be used. Values include norms, ideologies, charters and philosophies. Values are then agreed conditions that often are written down and describe how the organization shall act in different situations. Through more intensive observations, more focused questions and through involving motivated members of the group in intensive self-analysis, it can be possible to identify the taken for granted, underlying and usually unconscious assumptions. These assumptions are often hard to change and by understanding them it is easier to understand the meaning in behavior and artifacts that have been observed. (Schein, 1992)

Several identified variables are claimed to be parts that together create the organizational culture. These variables are basic assumptions, values, norms, language and jargon, rituals, history, stories, myths and symbols. (Porras & Silvers, 1991)

4.2.1 How Cultures Develop and the Impact of the Leader

Culture is learned within the organization, but the process of learning something that becomes shared within a group is still only partially understood (Schein, 1992). Norms and beliefs arise according to how members respond to critical incidents. When there are many emotions involved in an episode, it will affect the group. For example, they mean that a members attack on the leader can be such an emotional happening, especially if everyone witnesses it and if the tension is high when the attack occurs. The behavior that follows after a happening like this tends to create a norm. For example, if the leader counter-attacks, the group members concur with silence or approval and the attacking member apologizes and admits his or her mistake and a new norm that says “we do not attack our leader” is created. This norm will after a while become a belief and then a statement, if the same pattern should arise. On the other hand, if the responses to the attack are constantly different, a new norm will arise after each attack and no real statement will occur. (Bennis & Shepart, 1956)

Another mechanism of culture creation is when group members identify with the leaders and internalize their values and assumptions. It is common that there are some dominant persons or

⁴ Dealing with or treating the whole of something or someone and not just a part, like *My doctor takes a holistic approach to disease* (Cambridge Advanced Learner's Dictionary)

founders whose own beliefs, values and assumptions work as a model for how the organization should be structured and how it should function in the starting phase. After a while, when these beliefs are put into practice, it turns out that some succeed and some do not. The organization then learns what part of these person's beliefs and assumption that work for the group as a whole. This kind of joint learning then gradually creates shared assumptions. (Schein, 1992)

Even after this first phase, the leaders continue to have a big impact on the organizations culture and their own views on how things should be still influence the organization. *Primary embedding mechanisms* have the most impact and are the following:

- What leaders pay attention to, measure and control
- How leaders react to critical incidents and organizational crises
- Deliberate role modeling and coaching
- Operational criteria for the allocation of rewards and status
- Operational criteria for recruitment, selection, promotion, retirement and excommunication

(Schein, 1992)

There exists also another sort of more indirect way of influencing the organization, called the *Secondary articulation and reinforcement mechanism* which consist of the following:

- The organization's design and structure
- Organizational systems and procedures
- The design of physical space, facades and buildings
- Stories, legends, myths and symbols
- Formal statements of organizational philosophy, creeds and charters

(Schein, 1992)

When the organization evolves and grows, by expanding with more departments, there are two processes that will exist at the same time. A process of differentiation where the organization develops various kinds of subcultures that will create diversity and on the other hand, a process of integration, where various deeper elements of the culture become congruent with each other caused by the human need for consistency. (Schein, 1992)

4.2.2 The Relationship between Organizational Culture and Individual

The culture has a large influence in many situations, for example when new members should enter the organization. The process begins with recruitment and it is common that the selection is based on if the person has the "right" set of assumptions, beliefs and values, according to the organization. When a person is found, that matches the profile, the person is trained and acculturated, a kind of socialization process. (Feldman, 1988) The socialization process can vary due to the specific company and its philosophy. The result from the socialization process is not uniform, individuals respond differently to the same treatment and different tactics of socialization can produce different outcomes for the organization. (Van Maanen & Schein, 1979 in Schein 1992)

Three different kinds of outcome are possible:

- Custodial orientation, the person accepts completely all norms and assumptions
 - Creative individualism, where the person learns all central assumptions and norms of the culture with importance, but also rejects peripheral ones. These kinds of selections permit the individual to be creative while still maintaining respect for the organization and its culture
 - Rebellion, where the person totally rejects all assumptions
- (Van Maanen & Schein, 1979 in Schein 1992)

At the same time, new members in a group will influence the group by bringing new beliefs and assumptions with him or her that will have impact on existing culture. By this influence, the culture will constantly grow and evolve, but just like individuals, an organization does not easily give up its basic underlying assumptions or norms and change identity. When the organization grows and forms new functional, geographic or other kinds of departments, the culture will also change and evolve. These new departments start to build their own subcultures. The total culture of the organization now becomes a mix of the different subcultures. (Van Maanen & Schein, 1979 in Schein 1992)

Van Maanen and Schein (1979) in Schein (1992) mean that new members can influence culture, but Bennis and Shepart (1956) mean, as can be seen in chapter 4.2.1 *How Cultures Develop and the Impact of the Leader*, that existing members can influence the culture. It is therefore likely to believe that both old as well as new members can influence the company's culture.

4.2.3 How to Identify an Organizational Culture

Many studies point out the difficulties in studying organizational culture, while each research develops new definitions, key concepts and approaches to studying the phenomenon. One possible explanation is that culture lies in the middle between several social sciences and tries to reflect a little bit of each. There are weaknesses in methods of studying organizational culture, while there must be a more clinical and ethnographic⁵ approach. This is necessary if the goal should be to clearly identify the kinds of dimensions and variables that in the end will lead to more precise empirical measurements and hypothesis testing. The linkage between theory and observed data is still not good enough and researchers are still looking for hypotheses instead of testing specific theoretical formulations. (Schein, 1992)

Even though there are many contrary opinions, Douglas (1973) presented a model that has been widely accepted according to Hendry (1999). The model includes two different categories, grid and group. Grid describes the scope and coherence of a dominant system of classification that structures the individual's world view. The more the individual thinks in line with the structured system, the higher that individual is located on the grid dimension. A low rate, below zero of grid dimension means that the individual has an increasingly strong and coherent private system of classification. Zero represents confusion and lack of any system. Group describes the control the organization has of the individual ego. At the right, high rate of group, the ego is totally

⁵ A scientific description of the culture of a society by someone who has lived in it, like *Malinowski wrote several ethnographies of the Trobriand Islands* (Cambridge Advanced Learner's Dictionary)

dominated by others in the organization. At the left, low rate of group, the individual is free from pressure from the organization but exerts increasing pressure on others. In the middle, at zero, the individual is completely free from pressure, either because of isolation or because pressures with different directions, to the right and to the left, cancel each other out. (Douglas, 1973 in Hendry, 1999) The categories of grid and group are presented in Figure 17.

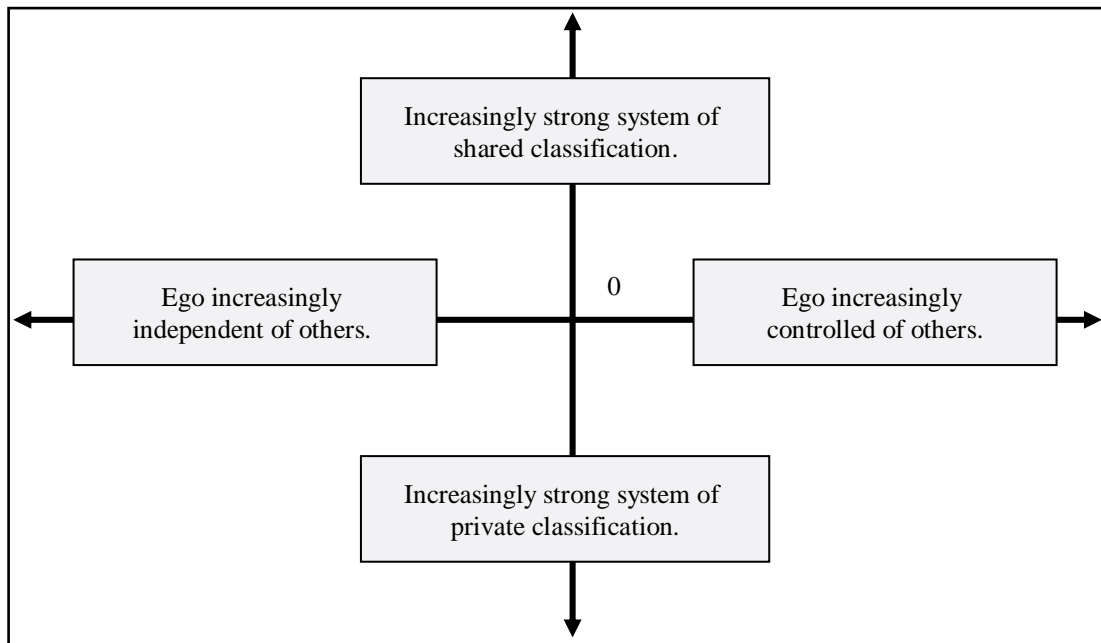


Figure 17 - Categories of Grid and Group (Douglas, 1973 in Hendry, 1999).

To identify the organizations position, individuals within the organization put out their position and all individual positions formed a pattern. This pattern can change when individuals evolve and change. (Douglas, 1973 in Hendry, 1999)

Three different types were identified when Douglas studied African tribes (Douglas, 1973 in Hendry, 1999):

- High classification societies where the individuals formed an absolute majority of high grid and high group. In this kind of group, individuals identify with the classification system. These common beliefs produce solidarity with the authority and the individuals within the group share beliefs in which actions shall be taken when someone must be punished, in other words a common moral universe.
- Small group societies with the individuals characterized by low grid and high group rate. The pressure on these groups is strong and with the organizations values and beliefs focused on the boundary to separate good from evil.
- Two different sorts of strong grid society. To the far left, the Big Men who exploited the classification system for their own use and to the far right, the high group who let Big Men dominate them. Individuals from these groups do not share any religious beliefs. Instead, the high group share a moral pragmatism based on meeting the demands from the

Big Men who compete. For the Big Men, pragmatism also rules in order to achieve personal honor.
(Douglas, 1973 in Hendry, 1999)

In order to identify an organizational culture it can be necessary to use different approaches, according to which part of the culture that is found most interesting. Interviews, questionnaires or survey instruments can be used when studying a culture's espoused and documented values, norms, ideologies, charters and philosophies. When identifying how people feel and think, open ended interviews can be very useful. It is necessary with more intensive observation to identify the taken for granted, underlying and usually unconscious assumptions that base the standard for perceptions, thought processes, feelings and behavior. When understanding these assumptions it is easier to understand how cultures can be ambiguous or even self-contradictory and the meaning with different behaviors that are observed. (Martin & Meyerson, 1988)

When it is possible to access members of the organization, it can be recommended to use issues in Table 1 in an interview and thereby receive a good roadmap of what is going on. These kinds of interviews can show whether there are inconsistencies between what is claimed and what is observed. These eventually identified inconsistencies will form the basis for the next layer of investigation. When trust is established with motivated members of the organization, it can be possible to bring their own underlying assumptions to the surface and describe how they basically perceive the world around them. It is therefore important to combine inside knowledge with outside questions in order to bring assumptions to the surface. (Schein, 1992)

Table 1 - Some underlying dimensions of Organizational culture (Schein, 1992).

Dimension	Questions to Be Answered
1. The organization's relationship to its environment	Does the organization perceive itself to be dominant, submissive, harmonizing, searching out a niche?
2. The nature of human activity	Is the "correct" way for humans to behave to be dominant/pro-active, harmonizing, or passive/fatalistic?
3. The nature of reality and truth	How do we define what is true and what is not true; and how is truth ultimately determined both in the physical and social word? By pragmatic test, reliance on wisdom or social consensus?
4. The nature of time	What is our basic orientation in terms of past, present, and future, and what kinds of time departments are most relevant for the conduct of daily affairs?
5. The nature of human nature	Are humans basically good, neutral, or evil, and is human nature perfectible or fixed?
6. The nature of human relationships	What is the "correct" way for people to relate to each other, to distribute power and affection? Is life competitive or cooperative? Is the best way to organize society on the basis of individualism or groupism? Is the best authority system autocratic/paternalistic or collegial/participative?
7. Homogeneity vs. diversity	Is the group best off if it is highly diverse or if it is highly homogeneous, and should individuals in a group be encouraged to innovate or conform?

Both Martin and Meyerson (1988) and Schein (1992) mention the difficulties that occur when a researcher shall identify underlying assumptions that form the base for the culture. It seems logical that these assumptions are hard to identify. At first, the organization's members are not always aware of their assumptions and then can have difficulties in admitting that they exist. Secondly, it can be difficult for a researcher from outside the company to create the necessary trust within the organization if these assumptions shall be discussed. When comparing Schein (1992) with Martin and Meyerson (1988), it seems obvious that Schein (1992) has based his statement on Martin and Meyersons (1988), because they are extremely similar. A summary of chapter 4.2 can be seen in Figure 18.

- Organizational culture is a modern concept and came into the forefront when trying to explain differences between similar companies when national culture was not sufficient.
- Different researchers have different approaches as to what they mean with organizational culture. Examples of variables that are claimed to be part of organizational culture are: stories, rituals, symbolic manifestation, how members of the organization react, norms, jargon, history and myths.
- Culture is learnt within the organization by experience and critical incidents. The leaders have big impact on the organization's culture. What they think is important influences the culture.
- When new members enter the organization, the culture will be influenced by this person and he or she will go through a socialization process in order to fit into the organization. Different levels of revolution against the organizational culture can occur during this socialization process.
- Douglas (1973) presented a model of organizational culture that has been widely accepted. The model includes two different categories, grid and group. Grid describes how strongly the organization shared classification of the outside world. Group describes the control the organization has of the individuals ego.
- Martin and Meyersons (1988) in Schein (1992) mean that an organizational culture can be identified by using different approaches e.g. interviews, questionnaire and survey instruments.
- Schein (1992) recommends using issues shown in Table 1 in an interview in order to identify the organizational culture and its underlying assumptions.

Figure 18 - Summary of chapter 4.2

4.3 Changing within Organizations

A similarity between the different sorts of changes with the strength of the wind can be drawn. A small change can be as a soft summer breeze that only disturbs a few papers while a big change is like a mighty howling gale which may cause devastation to structures causing a need for rebuilding. The organizational life is much more uncertain today compared with the situation a couple of years ago. The differences are that the pace of change is quicker and the future becomes more unpredictable. Furthermore, this development is predicted to continue and the organizational world will change at a fast rate. To have the ability to follow this fast rate of change, it is important that the organizational managers and decision makers understand and are aware of the factors that trigger the organizational change. (Senior & Fleming, 2006)

What is really meant by the notion “organizational change”? Huber (1991) writes that organizational change means a new position or another position compared to how the organization functioned and how its members and leaders acted earlier. Change is a type of organizational development while the members of the organization change by the input of new strategies, which in turn leads to behavioral change. The change will develop the organization to better fit predicted future environments. (Porras & Silvers, 1991) According to Nonås (2005), Porras and Silvers (1991) theory indicates that the organization has complete control over its development. Organizations are open systems meaning that they are characterized by continuously ongoing processes of input, transformation and output interacting with a surrounding environment. It is impossible to achieve complete control over an open system, while it is affected by external forces consisting of surrounding systems, like customer, supplier, society etc. (Katz & Kahn, 1987)

Change is constant modification that comes about of unexpected events in everyday work. This theory assumes that it is impossible to have complete control over the organization's development and that the result of a change will normally not be exactly as the predicted result. (Norrgrén et al., 1996 in Nonås, 2005) In Nonås (2005, pp 6) the following popular definition of change can be read: “the only thing that can be predicted about a change is that no change follows its original plan”. One main factor in implementing a successful organizational change is that much attention is focused on communication. It is a tool for conveying information and creating understanding for the change within the organization. (Nonås, 2005)

4.3.1 Different Types of Change

Change events come in various forms. First of all, a change can be intrusive or non-intrusive, they can be seen as threats or not. Some changes only affect the environment and not the group while other changes can have a direct influence on the group itself, for example a new group manager. There can be big changes that alter everything or small changes that only concern a few people. Change event can also vary in predictability and controllability. It is only possible for the group to choose the time for a change, when the change is both predictable and controllable. The advantages of these kinds of changes are that they can be done when the group is ready and has time. Changes that are unpredictable or uncontrollable possess potentially bigger challenges and difficulties for the organization. (Poole & Van de Ven, 2004) It seems likely that organizational changes can occur because of planned as well as unplanned events and therefore the theories of Huber (1991), Nonås (2005), Katz and Kahn (1987) and Poole and Van de Ven (2004) seem to be more complete compared with the theory of Porras and Silvers (1991).

Planned vs. Unplanned Change

Planned changes normally are implemented by actors with knowledge about the change and where the change has been thought through before it is implemented. Planned change also always tries to improve the situation and the desired goal is often described before the change starts. On the other hand, unplanned change is not always driven by the will of humans and it does not always move the organization in a desirable direction. Other major contrasts between planned and unplanned change are the degree the change can be choreographed, scripted or controlled. Theories of planned change focus on how processes can be managed or controlled, while theories of unplanned change mean that change is a force that not always can be managed or controlled. (Poole & Van de Ven, 2004) While Saab Aerosystems wants this thesis work to end in a checklist for future change, they are only interesting in changes that can be controlled, which means planned changes. Further, only literature dealing with planned change is studied.

Episodic vs. Continuous Change

Changes can be categorized according to which tempo they have, episodic or continuous change. Episodic change is infrequent, discontinuous and intentional while continuous change is ongoing, evolving and cumulative. Episodic change occurs when the organization is moving from its equilibrium condition. It uses a distinct period of time to be completed and normally involves some sort of shift, like technology change or change in key personnel. Continuous change is an expression that groups together ongoing, evolving and cumulative organizational changes. Normally, the change is described as situated and grounded in continuing updates of work processes. The idea of continuous change is that small continuous adjustments, which are implemented simultaneously across departments, can cumulate and create substantial change. (Weick & Quinn, 1999)

Episodic and continuous changes are treated differently. Episodic changes are often implemented during a short time period. They are often well planned, in detail from an initial to a final phase and are driven by change agents who are responsible for creating actual changes. On the other hand, while continuous changes often include only smaller adjustment and improvements in daily activities that can emerge quickly, change agents try to create an understanding for ongoing changes. One common way to achieve this understanding is by way of dialogues. (Nonås, 2005) During this exam thesis, only big, episodic changes have been studied and the checklist will then with advantage be used during future episodic changes. It is not likely that the checklist will be useful for continuous changes.

4.3.2 Influences for Change

Factors which influence the organization can be sorted into four different groups, and they refer to the political, economic, technological and socio-cultural factors. These factors can influence the organizations strategies, structures and means of operation. Triggers for change can come from all these sorts of groups. For example access to the bank via the Internet is a result of a technical trigger, identified as the enormous increase in the ability to communicate through the Internet. (Senior & Fleming, 2006) Other examples of triggers are when a new competitor appears and takes a big share of the company's market, when an old customer is acquired by a giant conglomerate that changes the sales condition or when a new invention offers a possibility of changing the existing production technology. These were examples of external triggers, but

there are also internal triggers for change. Examples of internal triggers are new CEO or other senior managers or a revision of administrative structures. This means that the organization must handle both external and internal forces for change. (Goodstein & Burke, 1991) Senior and Fleming (2006) assert that small-scale, incremental changes often originate from the internal environment, while changes with more wide-range impact on an organization normally arise from the external environment.

Change is generally motivated by events in an organization's environment, like a sudden problem or by way of a surprise, like a new customer demand or shift in technology. An unexpected problem can show that existing routines are insufficient and this realization in turn can trigger a change. Problems do not always induce change; neither in organization nor in everyday life and an ignorance of problems can many times lead to a real disaster for the organization. It can depend on the willingness to ignore disconfirming or discrepant information by individuals or that the organization adjusts the goal after the outcome, which makes it harder to identify and react to problems. Some argue that small failures are likely to be ignored. (Staudenmayer et al., 2002)

To perform a change, someone in the organization needs to have the power and influence to change the behavior of other people in the organization. The meaning of power is that the person, who has this, can influence someone else's behavior. Not everyone in an organization will agree about which persons have power. Existence of power is to a large extent in the eye of the beholder. It does not need to be the person with the most resources or knowledge who has the power, but the belief by others that he or she has that power of control. (Senior & Fleming, 2006) There are two different categories of power, formal power and personal power. The power related to the persons position within the organization and the ability to have the right information and give rewards is formal power. The personal power derives from the individuals characteristics, such as skill, expertise and personality. (Robbins, 2005 in Senior and Fleming, 2006)

Senior and Fleming (2006) go a little further and identify a couple of different kinds of power that allow one person to influence others:

- *Physical power*: the power of superior force
 - *Resource power*: the possession of valued resources; the control of rewards
 - *Position power*: legitimate power, comes as a result of the role or position held in the organization
 - *Expert power*: vested in someone because of his/her acknowledged expertise
 - *Personal power*: charisma, popularity; resides in the person and in his/her personality
 - *Negative power*: illegitimate power; the ability to disrupt or stop things happening
- (Senior and Fleming, 2006)

How Time and Timing Influence Change

Staudenmayer et al. (2002) write about the importance of time and timing to structure organizational life. They mean that the timing of events has shown to be important to enforce routines, focus energies and attention, shape how people approach their tasks and give meaning to actions and events.

Most organizational literature focuses on how problems initiate or do not initiate change, but there is also another trigger for change, namely temporal shift. When significant changes in rhythm occur, it also provides resources for undertaking organizational change because people can set aside time and attention for the change. The change in rhythm also acts like a coordinating mechanism where everybody pays attention to the change and serves as a credible symbol for the need to change. Examples of rhythm-change events are natural disasters, system breakdowns and an unexpected absence. The reason that temporal shift can lead to change, is that the temporal shift force the organization to find new ways to use time and it motivates them to think in different terms. (Staudenmayer et al., 2002) Figure 19 summarizes Staudenmayer et al.'s findings.

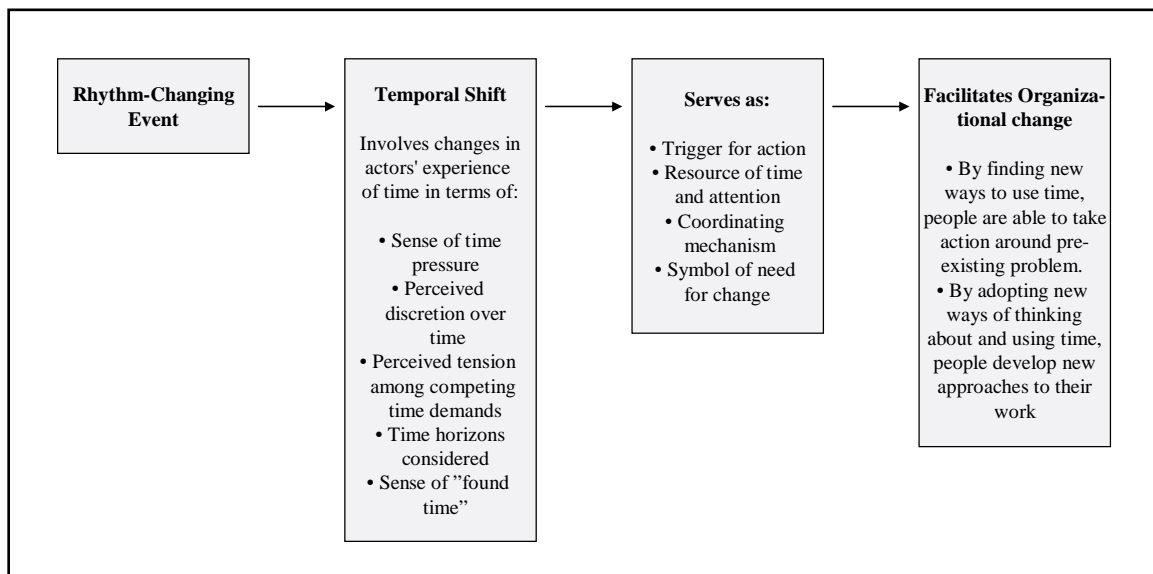


Figure 19 - The role of temporal shifts in facilitating organizational change (Staudenmayer et al., 2002)

How Culture Influences Change

According to Hatch (1993), organization culture is a stable, conservative and resistant force that is against change and normally only changes through management intervention. Another researcher and author, Hendry (1999, pp. 563), claims that "Because of its deeply embedded nature any culture, society, institution, or organization is resistant to change". Hatch (1993) asserts that resistance to change is rooted in cultural stability. Schein (1992) argues with them when he maintains that cultures normally stay stable until leaders act to change them. To change a culture, it is important to change its value set and for leaders it is central that they demonstrate and provide public displays of new values. If the leader's actions are successful, others in the organization will accept the new values on which these actions were based. (Schein, 1992)

Another researcher, Gagliardi (1986) presented a model with three different types of change: apparent change, incremental change and revolutionary change. Apparent change occurs within culture, but without changing it in any fundamental way. An example of this type of change is when strategies align with existing organizational assumptions and values. Implementation of these types of new strategies may cause change but the change is of the sort that the organization

can identify itself with it. Cultures within this pattern of change tend to stay the same, while making minor changes nothing really questions the current cultures. (Gagliardi, 1986)

The second type of change, incremental change is the only type of change that reaches the deep level of values and assumptions. If the new strategy implies differences, the organizational culture stretches to include new values alongside with the old ones. It means, that when a new strategy is different but not contrary to the old one, culture expands by the assumption and values within the new strategy. (Gagliardi, 1986)

When the last type of change occurs, revolutionary change, a new strategy that mismatches at least some key assumption and values is imposed in the organization. It destroys old symbols and creates new ones. This typically occurs when a new CEO is recruited from an external company or when a company is merged, acquired or downsized. Two different outcomes may eventuate when strategies are in conflict with the organizations existing assumptions and values. Either the organization's culture is replaced or destroyed, revolutionary change, or the strategy is resisted and never implemented, in other words no change occurs. When a revolutionary change occurs, the old firm dies and a new firm, sometimes with little in common with the old firm, is born. (Gagliardi, 1986)

Even if Senior and Fleming (2006) mean that wide-range changes normally are a response to an external trigger, Schein (1992) shows as in chapter 4.2.1 *How Cultures Develop and the Impact of the Leader*, that a new leader can bring new values and assumptions to the organization and by that change the organization's culture. On the other hand, a new CEO is an internal trigger according to Goodstein and Burke (1991) and shall therefore lead to small-scale changes, according to the theory of Senior and Fleming (2006). Gagliardi (1986) on the other hand, means that a new CEO often lead to a revolutionary change. It seems likely that a new CEO who wants to create a new culture should be a revolutionary change for a company and Senior and Fleming's theory therefore seems to be a simplification of the reality. It therefore seems likely that wide-range changes can be a response to internal as well as external triggers.

Organizational culture will be a very important concept in organizational psychology. Without a good understanding of an organizations culture, it is impossible to really understand change or resistance to change. Many change programs within organizations have probably failed because they ignored the forces related to the culture in the organization where they were implemented. (Schein, 1992)

How Employees Influence Change

The participation or influence of those who are involved or are influenced by the change is argued to be a condition for successful change work. The work with changing is also often seen as a learning process, where the employees learning is an important part of the changing process. It is proven that participation in problem solving, formulating goals and decision making increase the feeling of involvement and motivates the employees. An active involvement can even have positive effects on results in terms of performance and work satisfaction. (Aronsson et al, 1995) Four different sorts of participation can be identified: participating in setting goals, making decisions, solving problems and making changes in the organization. The fact that participation often results in positive effects depends on three different basic human work needs: increased

autonomy, increased meaningfulness and decreased isolation. Some researchers question whether participation and influence are only positive for the employees and mean that employees can be given too much influence. (Sashkin, 1987 in Nonås, 2005) Both too much as well as not enough influence and expectations about responsibility for the own work can lead to stress and physical and mental illness. Another aspect is that influence and participation take a lot of time and in some cases enough time does not exist for this process. (Thylefors, 2004)

Norrgren et al. (1996) in Nonås (2005, pp. 28) state that “...effective change is achieved when the majority of employees form an understanding for themselves of why change is necessary and have great influence on how the change is carried out...”.

4.3.3 Implementation of Change

The temporal dynamics of change and the way change is implemented within the organization can be divided into four dualities: negative versus positive, continuous versus episodic, proactive versus reactive and open versus closed. Dualities are polar opposites that often work against one other. Negative dimension occurs when it is negative aspects that lead to a change, like various problems, whereas positive dimension focuses on the positive reasons for organizational change, such as developing a positive future vision. Continuous versus episodic process represent two different temporal patterns of change initiatives. The episodic approach argues that a change is experienced and implemented as an occasional interruption from the normal state, while continuous approach assumes that change is an ongoing modification of work and groups pattern. The third pair is proactive versus reactive change. Proactive indicates that it is changes that are implemented before a problem occurs while a reactive change is a response to a problem. Finally, open versus closed focus on how widely the change is spread in the organization. Is there any part of the change or reason for the change that is secret or is everything conveyed to everybody? (Seo, Putnam & Bartunk, 2004)

What is the right strategy to manage implementations of change? There are four different ways of managing dualities: selection, separation, integration and transcendence. Selection includes denial where the opposite part is ignored. This is the most typical way of managing dualities. Separation implies that both sides receive credit, but they are separated by different levels of analyzing or temporal processes. For example, an organization can use one model at the individual level and another model at the organizational level. Integration combines the dualities by neutralization; which means a compromise or splitting the difference. The fourth approach, transcendence refers to managing dualities by transforming them into a new perspective so that the original tension among them no longer exists. For example, the tension between cooperation and competition in a conflict situation, become reframed when parties transcend their differences and uncover a new definition of the dispute. (Seo, Putnam & Bartunk, 2004)

Most studied theories argue for taking one side of the pole when deciding if they should have a negative or a positive focus, a selection. Most of the change processes that they have studied were motivated with a negative focus. Selecting is also the common strategy when handling the approach of episodic or continuous change process, where most processes were episodic. When dealing with proactive versus reactive approach, most studied theories draw attention to the need for both, a sort of integration. Finally the open versus closed duality, where all studied theorists prefer a selection of the open approach. (Seo, Putnam & Bartunek, 2004)

4.3.4 The Change Agent

The change agent is often a person whose mission is to build the motivation to make the change and help the organization to identify changes in functions that must be done. The change agent also helps the organization to carry out necessary changes for the future. The agent's task starts with a diagnostic phase where the agent tries to evolve a model with existing theory that is adapted to the particular organization. In short, the change agent's role is to act as transducer between scientific knowledge regarding organizational functioning and change processes and the particular situation during this phase. The developed model must be reasonably complete, predictive and adequate to provide the organization with useful information. (Bowers & Franklin, 1972)

The model must be presented to the members of the organization in an excellent way, because the issue of acceptance is critical. Even if it is a really good model, it has no value without a good understanding of the members of the organization. To realize this, the change agent must be a good communicator and has enough knowledge about the groups' tasks to relate the model with these tasks, that is to say an understanding of the organizations reality. In later stages, the change agent often helps the organizations members with skill acquisition and perfection. The agent must not only know which skills are necessary, but also be competent in guiding the acquisition. The agent needs skills for handling everything between problem solving, giving and receiving feedback, listening, general leadership, resolving conflict etc. In the end of the change process, the goal is that the organizational members start to rely more and more on themselves and the need for the change agent decreases. (Bowers & Franklin, 1972)

4.3.5 Change can Fail

Beer, Eisenstat and Spector (1988) studied over a period of three years six large companies that had made a huge investment in change programs to help them become more competitive. These companies have all ended up in uncompetitive positions.

When analyzing these six organizations, the researchers found policies and practices that led to:

- Inflexible and unadaptive rules
 - Managers and workers out of touch with customer needs
 - Managers who were not committed, not cooperative and often not competent to produce change
 - Poor interaction among functional groups
 - Top management refusing to believe that lower revenues and market share were more than a temporary perturbation
 - Lack of strategic thinking
 - Lower level employees not fully informed
 - Low levels of trust
- (Beer, Eisenstat & Spector, 1988)

Even though there was a huge need for change in these organizations most of these changing programs failed or had limited success. Even in the program that was judged the most successful, there was little sign of change. Most of the programs began with a big fanfare, but faded away. One reason for the failure of these programs was that they were constructed with no consideration

to what was really going on in the organization. Most of the programs were designed for quick success and quick fix and the focus was to change what the root causes produced, not the root causes themselves. Another reason to the rate of failure was that the companies used programs that others companies used, with no adaptation to their own company. (Beer, Eisenstat & Spector, 1988)

4.3.6 Learning Organization

Introductions of improvement programs are a common phenomenon and are emerging everywhere. The organization's purpose is of course to better themselves, but unfortunately, there are many programs that have failed and one reason for this high rate of failure is that the companies did not put enough attention on the fact that improvement requires a commitment to learning. It is obvious that learning comes before improvement. Regardless if the company wants to solve a problem or introduce a product or re-engineer a process, all these changes demand the company to see the world in a new light. If the company does not learn before changing, the change remains cosmetic and possible improvements are either fortuitous or short-lived. (Garvin, 1993)

There are many different theories about organizational learning. Some researchers believe that it is necessary with behavioral change to learn while others claim that thinking in new terms is enough. Some believe that learning takes place during the information process while others say that it necessary with shared insights and organizational routines. Furthermore, some assert that organizational learning is common, while others do not believe this to be the case. (Garvin, 1993)

Garvin (1993, pp. 80) gives the following definition of organizational learning:

“A learning organization is an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insight.”

It is a truth that new ideas are essential if learning is to take place. The ideas can come from the outside or through flashes of creative insight, but regardless of the source of the idea, it is a trigger for organizational improvement. New ideas cannot by themselves create a learning organization. If the organization does not change the way it works only a potential for improvement will exist. (Garvin, 1993)

What identifies a learning organization? Learning organizations are skilled at five main activities: systematic problem solving, experimentation with new approaches, learning from their own experience and past history, learning from the experiences and best practices of others, and transferring knowledge quickly and efficiently throughout the organization. The learning organization is illustrated in Figure 20. There are a lot of companies that practice these activities to some extent, but there are only a few that are consistently successful. Most companies rely on luck, circumstance and isolated examples instead of creating systems and processes that support these activities and integrate them into the companies' daily operations, thereby resulting in a better management of their learning. (Garvin, 1993)

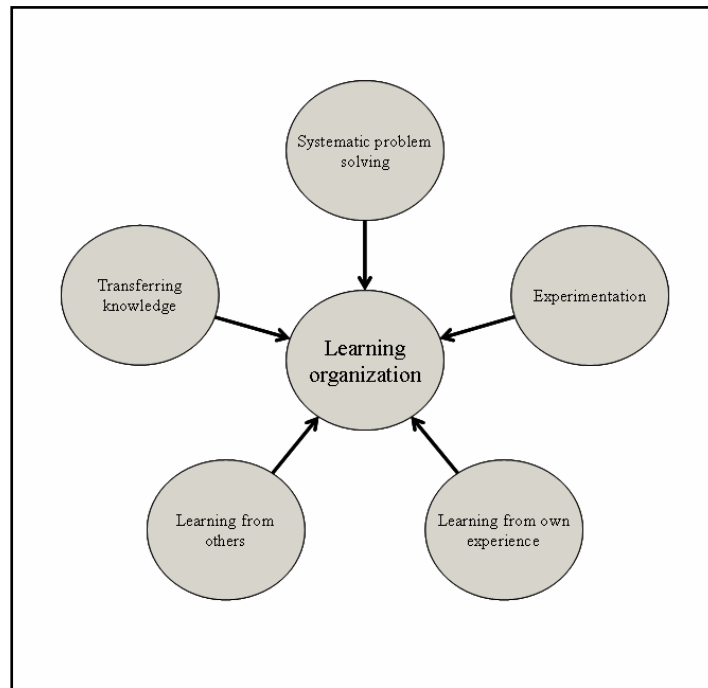


Figure 20 - Learning organization

The five different activities will be presented in more detail below.

Systematic problem solving: This first activity is related to philosophy and methods of the quality movement. It argues for using scientific method rather than guesswork for diagnosing problems, where Demings model, “Plan Do Check Act” cycle is an example. It is also important to use data rather than assumptions as background for decision making, so called fact based management. It is also common to organize data and draw inferences by using simple statistical tools, like histograms, Pareto charts and “cause and effect” diagrams. It is important that organizations are more disciplined in their thinking and more attentive to details. They must frequently ask themselves; “How do we know that’s true?” If they really want to learn, they cannot be satisfied with things that are close enough. They must constantly be taking one step further, to assess underlying causes and not remain satisfied with the first explanation. (Garvin, 1993)

Experimentation: This kind of activity involves systematic searching for and testing of new knowledge. It has a lot in common with systematic problem solving, but the difference is that experimentation is motivated by opportunity and expanding horizons, not by current difficulties. Experimentation can take two different main forms: ongoing programs and “one of a kind” demonstration projects. Ongoing programs involve series of small experiments and are common on the shop floor. Successful ongoing programs have normally some factors in common. They normally work hard to get a steady flow of new ideas, from inside or outside of the organization. It also supports some degree of risk taking, while the employees must feel that the benefits of experimentation exceed the costs. For the manager it can be quite tricky, while they must maintain the accountability and the control over the experiments, without stifling creativity by penalizing employees for failures. Finally, ongoing programs really need managers and employees that are skilled to perform and evaluate experiments. These skills must usually be

learned and they cover a wide scope from statistical methods, like design of experiments to creative techniques, like role playing. The other form of experimentation, demonstration projects, is usually larger and more complex. They often involve system wide changes, introduced at a single site and the goal is often to develop new organizational capabilities. These kinds of projects often represent a sharp break from the past and are usually designed from scratch. Even demonstration projects share a number of characteristics, for example they are often the first project to embody principles and approaches that the organization later wants to introduce in large scale. They will form guidelines and decision rules for later projects and include many tests, to see if the rules have changed. They are often developed by a multi-functional team that reports directly to senior management and they do not normally impact the rest of the organization. (Garvin, 1993)

Learning from past experience: Companies must investigate their success and failures systematically. A famous philosopher, named George Santayana, once said, “Those who cannot remember the past are condemned to repeat it.” Even though a study of more than 150 new products has shown that knowledge achieved from failures is often involved in gaining subsequent successes, there are many managers that are hostile to the past and do not reflect on it. Garvin gives an example of when learning from past experience has resulted in improvements for the company. Boeing had serious problems with their planes 737 and 747 and to ensure that the problems were not repeated, they put together a group that compared the development process for 737 and 747 with those of 707 and 727, two of the company’s most profitable planes. This group worked for three years and produced hundreds of recommendations that worked as lessons learned for the development team of 757 and 767. These planes ended up to be the most successful, error free launches in Boeing’s history. An example of a leader who has understood the importance of learning from past experience is IBM’s founder, Thomas Watson, who called a young manager who has lost 10 million USD in a risky venture into his office. The young manager began to say, “I guess you want my resignation. “ Watson replied, “You can’t be serious. We just spent 10 million dollars educating you.” (Garvin, 1993)

Learning from others: All learning and knowledge does not come from reflection and self-analysis. Sometimes it can be really powerful when looking at the outside to gain a new perspective. Even companies that produce completely different products can be important sources of ideas that start a process of creative thinking. Benchmarking is a source of ongoing investigation and learning experience, which can ensure that best industry practices are uncovered, analyzed, adapted and implemented. The best thing to study is practice, the way that work gets done, rather than results. Benchmarking is only one way of getting outside perspective. Another source can be conversation with the customers, as they can provide up to date product information and immediate feedback about services and other important areas. It does not matter what the source of outside ideas is, learning can only be possible in an open environment. Managers cannot allow themselves to be defensive. Instead they must be open to criticism and bad news. Learning organizations are characterized by open and attentive listening. (Garvin, 1993)

Transferring knowledge: If the learning should be widely spread in the organization, the knowledge must be transported quickly and efficiently throughout the organization. To spread the information, a variety of mechanisms should be involved, like written, oral and visual reports,

site visits and tours, personnel rotation programs, education and training programs and standardization programs. Personnel rotation programs are seen as one of the most powerful methods of transferring knowledge, as actively experiencing something is more valuable than having it described. Also education and training programs are powerful tools for transferring knowledge, but for maximum effect they must be linked to the implementation. It is too common, that trainers think that new knowledge will be applied without concrete help and without taking concrete steps to ensure that trainees actually follow through. (Garvin, 1993)

It is important to recognize the differences between individual and organizational learning. Individual learning is primarily a cognitive process that takes places “inside people’s heads” which leads to individual insights and changes of habits, competences and action. Organizational learning is a complex, interpersonal process that occurs via structural mechanisms and leads to changes in norms, doctrines, production process and cultures. (Nonås, 2005) An organizations change competence as is its ability to manage theory and method in proportion to the organization’s actual level of development and change competences develop stepwise. When an organization’s choice of change strategy agrees with its own development level, there is good potential to achieve set goals in a change process and the organization has change competence. Change competence is a relative concept; it is only in relation to the situation and condition of the specific organization it is possible to speak about change competence. (Håkansson, 1995)

There are also relationships between organizational and individual learning and change. If the organization will change, the individual organization members must change. The individuals are influenced by signals received directly from their work setting and indirectly from organizational vision and these signals produce new behavior. (French, Bell, Zawacki, 2005)

Becoming a Learning Organization

Even though a learning organization is not built over night, all companies that want to become a learning organization can begin with a couple of steps. The first step is to ensure that the environment is conducive to learning. The organization must have time for reflection and analysis as learning is difficult in a stressed or rushed environment. The members must have time for brainstorming, problem solving, evaluating experiments and other core learning activities. The next step is to open up boundaries and stimulate the exchange of ideas, with conferences and project teams with members from different parts of the organization. When these steps are established, the manager can create learning forums, which are programs or events that are designed with a learning goal in mind. Together these efforts can improve learning and also shed some light on the issue of learning in the organization. (Garvin, 1993)

4.3.7 Measure Learning and Changes

Garvin (1993, pp. 87) asserted that managers have for a long time known, that “if you can’t measure it, you can’t manage it.” Organizational learning can be explained and identified with three different overlapping steps. The first step is cognitive when members of the organization expand their knowledge, are exposed to new ideas and begin to think differently. The following step is behavioral where employees start to internalize new insights and change their behavior. The last step is performance improvements, where changes in behavior leading to measurable improvements in results such as superior quality, increased market share or other tangible gains.

A complete learning process must involve all three steps. To assess if an organizational learning has occurred within a change project surveys, questionnaires and interviews can be useful.

A questionnaire is a research instrument that gathers information from respondents with help of a series of questions. They can be useful for both quantitative as well as qualitative research. Advantages of questionnaires are that they normally are cheap and do not demand as much effort from the questioner as verbal or telephone surveys.⁶ Compared with interviews, it is more difficult to motivate the responder to put time into answering the questionnaire and it therefore demands a missive in order to explain why the responder shall answer the questionnaire. During an interview, it is possible for the questioner to motivate the respondent. (Patel & Davidsson, 2003) Interviews are described in chapter 3.5 *Interview Methodology*. At the cognitive level the questions should focus on attitudes and depth of understanding. Has the organization really understood the meaning of the changes or are some things still unclear? At a company named PPG Industries, a team of human resource experts periodically audits every manufacturing plan, including extensive interviews with shop floor employees, to ensure that the concepts are well understood. Surveys like this are the first step in identifying changed attitudes and new ways of thinking. Supplemented with direct observation, behavioral changes can be assessed. Finally, a successful learning organization also increases their performance and this can be measured by halftime curves or other methods that measure performance. (Garvin, 1993)

4.3.8 Leadership during Change

To realize effective and successful change, organizations need both management and leadership. Management is a set of processes that keep a complicated system of people and technology running smoothly. The most important aspects of management include planning, budgeting, organizing, staffing, controlling and problem solving. Leadership on the other hand, is a set of processes that creates organizations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision and inspires them to make it happen despite the obstacles. To perform change it is important with competent management and without this, the transformation process can get out of control. But for most organizations, the bigger challenge is to lead change. It is only leadership that can motivate the actions needed to alter behavior in a significant way and anchor the change in the culture of an organization. In modern, complex organizations it is not enough with only one leader; many people need to assist the leadership task. The risk with too much focus on management rather than leadership leads to an inward focus and bureaucracy takes over. In companies with success that creates some degree of market dominance that then leads to company growth, the physical expansion of the organization leads to a much greater need for management. This focus, together with arrogant managers who over evaluate their current performance and competitive position; can result in a “slow” organization that has great difficulty in making any transformation or change. This above described pattern is especially evident in large, established firms where getting a transformation process started proves often more difficult. It is also a risk that, in these kinds of companies, the change programs are over managed and under led. (Kotter, 1996)

⁶ <http://en.wikipedia.org/wiki/Questionnaire>

The far most important ethical issue that the organization and its leader should deal with before implementing any change strategy is that of defining the goals, behavioral outcomes or expected change objectives. A vague, unspecified goal can ruin an organizations change effort. Another important question is whether the top management should take the decision or should it be made with input from the rest of the organization. The advantage of receiving employees input is that this often results in increased support for the decision made. However it is hard to spread information in large organizations and top management has often better knowledge and is better equipped to take this kind of decision. Nonås (2005) Miles (2000) claims that all organization members should have complete information regarding outcomes of the change project. This idea sounds appropriate, but according to Nielsen, Nykodym and Brown (1991) it becomes very difficult to realize a change like this in an organization of some size. It can be possible to have one information meeting, but it is much harder to keep everyone up to date throughout the whole change process. Success will require many group meetings, newsletters etc. In a large organization, it is likely that this kind of process will break down making it impossible to realize the change. The spreading of too much information within the organization can be a problem in a change process as the information may generate resistance that there is often not enough resources to deal with. It is better to introduce the change gradually within the organization and in smaller groups, thereby allowing for clear and correct explanations and avoiding misunderstandings. (Nielsen, Nykodym & Brown, 1991)

When a change is needed, the leader must often take the role as a change agent. He or she must guide the organization through changes, implement changes and support organizational members in adapting to the changes. Today, when change is always present, leadership can be defined as the process of managing change. It is the leaders' responsibility to ensure that the organization and its members are flexible enough to manage an adaptation of behaviors and skills to fit environment changes. If the individual will manage to contribute to their changing organization, the leader must emphasize, encourage and provide continuous education and learning. (Howell & Costley, 2006)

4.3.9 Change Strategies

There are a couple of strategies that have been developed after studying Swedish companies. Gustavsen et al. (1996) presented the following five change strategies: expert driven strategy, concept driven strategy, technology driven strategy, design driven strategy and communication driven strategy.

In a concept driven change process, communication is of central importance for how change processes are run. It is often the used strategy when concerning extensive organizational change or parallel and simultaneous changes or all main functions in an organization. Expert driven change process, are driven and initiated by experts in a particular area. Both expert and concept driven strategy are built on analytical knowledge with focus on participation, knowledge base and goals. Technology driven strategy is formed from earlier experiences when new technologies were introduced, while new technology often demands an organizational development. Design driven strategy is a development of the technology driven strategy, when the organization has experience from a number of introductions of new technologies. Finally, communication driven strategy is based on the communication between management and employees and this communication is seen as an important part of the change process. This strategy needs

participation on the part of the employees throughout the change process. Concept and communication driven strategies both use the communication between management and employees as the driving force for the development, but the difference between them is that the concept driven strategy has a stronger structure for how the change will be implemented. (Gustavsen et al., 1996)

A second research in Sweden, identified four different change strategies. Expert project, which represented the traditional change strategy where the change process is started in order to meet a development need and the initiative is taken by top management. The second strategy, problem focused change strategy is also initiated by top management but the focus is to solve problems that have emerged. In these cases an expert group is often formed to manage the change. The third strategy, process oriented change strategy can be initiated by both the management and the employees and the change involves participation regarding problem solving on all levels of the organization. Broad strategy is the fourth strategy and can also be initiated by all levels of the organization. Here too all members of the organization participate, but employees on different levels in the organization have different responsibilities for carrying out change work in their department. (Håkansson, 1995) There are great similarities between episodic, planned change, expert projects and expert driven change strategy. In the same way, there are parallels between concept driven change strategy, process oriented and broad strategies for organizational change. (Nonås, 2005)

A third research handling change strategies in Swedish organizations identified two different strategies, programmatic change strategy and learning strategy for change. A company working according to the programmatic change strategy tries to identify a desired future condition, a goal for the change process and the steps that are needed to reach this desired end status. The management often copy proven strategies and methods to carry out the change, and adaptations to the specific organization are only done when it is absolutely necessary. These companies have a lot of confidence in existing, proven methods and believe that used correctly, the methods will lead to the desired effects. The change is seen as in equilibrium with the organization's natural balance. Expert knowledge and formal power among those who are making decisions are expected to reduce uncertainty in the organization. The project group for the change normally only involves a small number of people and is expected to delimit the risks that the change process may develop in an unexpected direction. (Norrgrén et al., 1996 in Nonås, 2005)

Organizations using learning strategy see change as a pattern of constant modifications. While they do not believe it is possible to create complete control over the change process and the organizations development, they do not see the value of deciding exact final results in advance. They do not neglect the planning process, but they see the need for balancing improvisation with a clear plan. Management and employees try together to decide the future goal and the task then for the management is to create conditions where the employees can participate in the process. The learning strategy places focus on getting groups with different wills and knowledge together. These mixed groups will lead to a broad acceptance and understanding of the change. (Norrgrén et al., 1996 in Nonås, 2005)

A study about effective change strategies showed that more than half of the 60 studied organizations in Sweden used both programmatic and learning strategies at the same time in their

change process. This research also showed that the learning strategy lead to higher effectiveness compared with that of programmatic strategy. The effectiveness was measured by two indices. The first measured how the change had influenced productivity, like quality level, delivery assurance, lead time and cost level. The second index measured if the change had led to better working climate, greater involvement in work and increased work content. Effective change is achieved when the employees understand *why* a change is necessary and have a great influence on *how* the change is carried out. Using only programmatic strategy did not bare any relationship with effective change work. (Norrgrén et al., 1996 in Nonås, 2005) To choose a change strategy is a part of a company's change competence and it is therefore important to be aware and understand how the company manages changes. (Nonås, 2005)

4.3.10 Response and Adaptation of Change

When a change event occurs, the adaptation can be either directed or undirected. Undirected adaptation works like species evolution, it is a cycle of variations before a new stable phase can be introduced. Directed adaptation is more structured and often follows a plan with a lot of information and active choices. The response to a change event can come both before and after the change event. It is quite rare with prevention of the event and the organizer often places more attention on toning down its consequences. There does not have to be a strong proportionality between the magnitude of change events and the response to them. It can also be good to know that responses to change events often have unexpected consequences, both desirable and undesirable. (McGrath & Tschan, 2004)

An organization consists of a number of people. Early in life, people are taught how to act in ways to be in control, especially when they are dealing with issues that can be embarrassing or threatening. People transform these lessons into theories of action and the program exists in two different ways. The first way is the set of values and beliefs that tell people how to manage their lives, called their espoused theories of action. The second way is the actual rules they use to manage their beliefs, called their theories-in-use, which is possible to change. Most people, irrespective of childhood and adolescence, sex or education level use the same theories-in-use, called Model I. Model I theory-in-use motivate people to be in unilateral control, to win and not to upset people. It recommends actions that are primarily selling and persuading and strategies that save their own and others faces. When people with Model I theory-in-use thinking deal with issues that are upsetting, embarrassing or threatening, the result is often defensiveness which lead to misunderstanding, distortions and self-sealing processes. Because most people think and act these ways, most organizations also have defensive routines. Organizational defensive routines are actions or policies that prevent individuals within an organization from experiencing embarrassment or threat and these routines are anti-learning, overprotective and self-sealing. These defensive routines make it highly likely for both individuals and groups to not detect or correct embarrassing and threatening errors. Instead, the fundamental rules when these kinds of errors occur, is to ignore the errors and act as if they were not being made. To successfully introduce a change or a new strategy in a defense organization, some advice must be followed. It is important to clearly define new roles and responsibilities, suitable for the new strategy. These new roles must be carried out by the right people with adequate financial support and effective information systems. These people also need to feel supported by the management team yet feel they have the right to take risks. (Argyris, 1990)

The first step to improve the organizations ability to learn, especially concerning problems that are embarrassing or threatening is to identify how the organization presently deals with such problems. The next step is to help each individual in the organization to diagnose the extent to which each person creates and maintains the current way of dealing with problems. The third step is to reeducate the members in the organization to another theory-in-use than the current one. It is important that the individuals feel that the new theory-in-use is positive and see the advantage of it. The fourth step is to repeat the learning experience to solve new problems as they arise. It is also important not to ignore the organizational defense. The only thing that can be worse than having organizational defenses is denying that these exist. (Argyris, 1990)

4.3.11 The Organization's Reactions to Change

The hazard of organizational failure increases with organizational change and such a change increases the likelihood of an additional change of the same type. Both these effects decline over time. (Amburgey, Kelly & Barnett, 1993)

Amburgey, Kelly and Barnett (1993) research study is based on a model that was presented by Hannan and Freeman in 1984, which includes both internal and external constraints on organizational change. Organizations exist as long as they are reliable and act rationally. When organizational goals are strong and institutionalized and the activities are routines, the reliability and accountability are high within the organization. However institutionalization and routinization also generate strong pressure against organizational change. This means, that the characteristics of organizations stability also generates resistance to changes. Changes disturb internal routines as well as connection with external stakeholders and both internal and external stakeholders prefer reliable and predictable performance. This means, that organizational change is hazardous and normally disturbs the equilibrium of the organization. Organizational change increases the failure rate of organizations, independent of the effects of the changed characteristics. The reason for this statement is as stated above, that a change disturbs the routines in the company. (Amburgey, Kelly & Barnett, 1993)

Another statement is that the disruptive effect of organizational change increases with the age of the organization. The reason is that internal roles and formal structures are more established in older organizations. The old organization also has more standardized routines and a change in this environment leads to more disruption in both the internal and the external environment. (Amburgey, Kelly & Barnett, 1993)

A third statement from Amburgey, Kelly and Barnett (1993), is that the disruptive effect decreases with elapsed time since the occurrence of the change. Immediately after an organizational change, even an old organization returns to the same conditions that make young organizations more likely to fail, the liability of newness⁷ (Carroll & Delacroix, 1982). A while after a change, the organization starts to build up new routines and processes and the negative effect from the change starts to fade out (Amburgey, Kelly & Barnett, 1993).

⁷ The liability of newness phenomenon describes the different risks of dying of an organization during its life course. It states that at the point of founding of an organization the risk of dying is highest and decreases with growing age of the organization. (<http://www.sfb504.uni-mannheim.de/glossary/>)

All these three statements show that effects of changes depend on time. Even a change that is perfectly adapted to an organization has a start period that leads to disruption, and the good effect can only be fully shown after this period. This time period can also lead to problems when changes occur too often, as this recovery process may never take place. Change processes can be almost like a routine, but to achieve this, the process must gain experience by modifying operating routines. The more an organization changes its operating routines, the more likely it is to develop routines that need further changes of the same character. (Amburgey, Kelly & Barnett, 1993)

The fourth statement is that the probability of an organizational change increases with the number of former changes of the same type. They have shown that each occurrence of a change increases the likelihood of other changes, and they mean that the fact that the organization has previously implemented changes and survived increases the openness to new changes. (Amburgey, Kelly & Barnett, 1993)

The fifth statement is that the longer the time that has elapsed since a change of a special type occurred, the less probability it is for this given type of organizational change to occur again. The reason for this is that when searching for a solution, it is likely to start with the most recently used routines. The more time that has past since the last implementation of a special type of change, the less likely it is that this type of change will be used again. (Amburgey, Kelly & Barnett, 1993)

An early occurrence of a special type of change increases the probability that the following changes will be of the same type. The reason for this is that organizations become committed to routines and they are more committed to actions taken in an early stage. (Amburgey, Kelly & Barnett, 1993)

The last statement is that older organizations not only are more disrupted by a change, they are also less likely to change at all, that the probability of organizational change decreases with the age of the organization (Amburgey, Kelly & Barnett, 1993).

Their research results showed that the risk for failure is strongly age-dependent and age acts as a strong moderator between organizational change and failure. Even though a change can lead to a bigger “jump” for an old organization, the risk of failure is much higher in a young organization as the older organization is more robust prior to the change. This ended in a conclusion that old organizations are more likely to survive fundamental changes compared with young organizations. (Amburgey, Kelly & Barnett, 1993)

4.3.12 Models of Change Process

A classic model for implementing changes was developed by Lewin (1951). The model includes three different elements, unfreezing, changing and refreezing.

Unfreezing involves creating a motivation to change. Organizational members must perceive that things are not right with their group or organization, perhaps due to some crisis or external threat. This phase shall show that there is a difference between the organizations desired state and the current state and shall also create a desire for change. This establishes a sense of urgency in the

organization. The changing phase involves creating new ways of thinking, perceiving or behaving. This can be done by training sessions or changes in structures and procedures. This phase shall also involve developing an action plan and implementing new actions. The last phase, refreezing, includes some kind of data confirming that the changes are appropriate which remove the anxiety or sense of urgency that motivated the change efforts. The organization shall stabilize in a new state of equilibrium. (Lewin, 1951)

Kotter (1996) describes in his book an eight-stage process of creating changes in an organization. Kotter has received widespread acknowledgment for this model by many company leaders who have found the model easy and useful. Even if it can be easy to identify a problem, it is not always easy to correct and implement needed change without a well-considered method. (Kotter, 1996)

The eight steps in Kotter's model are:

- Establishing a sense of urgency
- Creating the guiding coalition
- Developing a vision and strategy
- Communicating the change vision
- Empowering broad-based action
- Generating short term wins
- Consolidating gains and producing more change
- Anchoring new approaches in the culture

(Kotter, 1996)

The first four steps will break-up the status quo, steps five to seven will introduce new practices and step eight secures the changes in the organization culture and helps make them stick (Kotter, 1996). Kotter does not mention Lewin in his book, but the grouping of the eight steps into these three different groups proves Kotter has been influenced by Lewin when developing his model. According to Kotter (1996), it is important to go through all steps, neglecting any of the steps will result in the change not being long-term or successful.

Almost everybody thinks it is hard to implement changes in big organizations. The solution is to claim and establish a high sense of urgency for the change. The organization and its leaders have to identify and discuss crises, potential crises and opportunities. To effect major changes in companies with 100 employees at least twenty-four people must be working hard and applying a great deal of energy and time within the change process to produce a significant change. In a company with 100,000 employees, as many as 15,000 people working this way may be required. To gain this cooperation, it is necessary to establish a sense of urgency. With low urgency, it is difficult to get a group together with enough power and credibility to carry out the change. To get this strong sense of urgency usually demands bold or risky actions, which calls for a strong leader. Crises that are visible can be enormously helpful in catching people's attention. It is important even during good times to catch people's attention and prevent employees becoming complacent by talking about potential problems, setting very ambitious goals etc. Complacency can be a huge problem for a company. When this kind of feeling is prevalent in an organization, it is difficult to get rid of and it prevents the company's possibility to develop and change. The

key players for changes in departments are the middle or lower-level managers who are in charge of the department. They will need to reduce complacency and increase urgency. It is also their responsibility to create change coalition, develop a guiding vision and sell the vision to the employees. To realize this challenge they need to have adequate autonomy. (Kotter, 1996)

Step two is to create a guiding coalition. Major changes are difficult to carry out and it is therefore necessary to have a powerful force. Even an admired CEO is not able to develop the right vision, communicate it to large numbers of peoples, lead and manage dozens of change projects, eliminate all the key obstacles, generate short term wins and anchor new approaches deep in the organization's culture. Instead, it is necessary with a strong guiding coalition with the right composition, level of trust and shared objective. This is an essential part of producing a successful change process. Teams that will lead and direct changes must consist of persons with the right characteristics and qualities. There are four key characteristics that are necessary to create good guiding coalition, namely position power, expertise, credibility and leadership. The most important is leadership. (Kotter, 1996)

It is also important to avoid engaging certain sorts of people when putting together a guiding coalition. These are persons with a huge ego who leave no space for anybody else and persons who create mistrust and kill teamwork. Even if a person is extremely intelligent and motivated but has these special characteristics, it is important to keep him or her out of the team. When creating the change coalition team, it is important to keep in mind that this group must be able to do the hard work in creating the necessary vision, communicating the vision widely, empowering a broad base of people to take action, managing dozens of different change projects etc. (Kotter, 1996)

Step number three is to develop a vision and strategy for the change. There are three different ways of approaching management. The first method is to use an authoritarian role and in a tough manner tell people what they should do. If anybody questions the directives; the solution is to scream the same thing out again only louder. Micromanagement is the second method where the management tries to specify everything the employees should do in detail. Both these methods will have difficulty breaking through the barriers to make lasting changes. Instead it is better to create a vision that all employees can share. The ability to create visions is a central component of all great leadership. A vision shall give a picture of the future and also explain why this future is better than the current situation. It shall motivate people to take action for this change and the results can be that thousands and thousands of people will work for the same goal. (Kotter, 1996)

An effective vision has the following characteristics:

- Imaginable: Conveys a picture of what the future will look like
- Desirable: Shall be in the interests of employees, customers and others with interest in the company
- Feasible: Contains realistic, reachable goals
- Focused: Shall be clear enough to provide guidance in decision-points
- Flexible: Must allow individual initiative and alternative methods
- Communicable: Must be easy to communicate within a few minutes, simplicity is essential

Apart from the vision, it is also important with a strategy explaining how the vision can be accomplished and is feasible. An effective vision and the strategy that backs it up must focus on the reality of the company to produce change. (Kotter, 1996)

The fourth step is to communicate the change vision within the company. The real power of a good vision can only be used when most of the people within the company have a common understanding of its goal and direction. The feeling of a common goal and a desirable future can motivate actions that create transformation. To successfully communicate the vision it is important to keep the message simple. Speeches that are formal containing many complicated words tend to create confusion, suspicion and meaninglessness. Instead, it is useful to use metaphors, analogies or examples using simple language. It is advantageous to use many different forums, like newspapers, memos, meeting, posters etc. and repeat the vision many times. Repetitiveness will help the vision be remembered. Another important issue is ensuring that the management works according to the vision. If something is said but another thing is done, then the company will have a lot of problems carrying out their change. The management must instead be in the forefront and communicate the new direction through their own behavior. (Kotter, 1996)

The fifth step is to empower employees for the change. It is always important to help more people within the organization become more powerful, but it is even more so during changes. Examples that can empower employees are: removal of structural barriers such as an organization structure that is not working, provision of appropriate and necessary training, alignment of systems e.g. HR systems to the new vision and confrontation of supervisors who undercut needed and decided change, no one can disempower a person more than his or her own manager. (Kotter, 1996)

Step number six is to bring about short term win. An unexpected short term win can knock-out most skeptics and also provides the guiding coalition with correct feed-back about the validity of their vision, helping them to then fine-tune the vision and strategy. As a short term win often can be visible for the whole organization, it can work as a good example for proving how the change actually provided something worthwhile. The pressure for short term win can also be helpful in keeping up the urgency rate. (Kotter, 1996)

The seventh step is to keep spirits up, consolidate gains that have been made, not losing sight of the vision but rather producing more change. Big celebrations of short term wins can provide a feeling that the difficult work of change is over. One change shall also motivate more changes and it is possible to run many change programs at the same time. For example, it is possible to run twenty change projects simultaneously if responsibility and detailed leadership is delegated as far down as possible in the organization. Endless meetings and planning would be necessary if all projects were to be run by the top management. Instead, top management should concentrate on overall leadership tasks and spread these within the organization, helping everyone to understand the “bigger picture”, that is to say the overall vision and strategy. Much time is needed when making many changes to a big organization as step number seven can become a decade-long process with dozens of change projects. (Kotter, 1996)

Step number eight finishes the process with anchoring the new approach in the culture. Culture is the norms of behavior and shared values amongst a group of people. Norms of behavior are ways of acting within a group that persist, with new group members being taught how to act by old members. Shared values tend to shape group behavior, while it is an important concern that goals are shared by most of the members in the group. The shared values often remain the same over time even if group membership changes. Generally, shared values are difficult to change because they are deeply ingrained in the culture. In big companies, some parts of the corporate culture affect everyone while other parts are specific for departments. Corporate culture is important as it can influence human behavior, it can however be difficult to change and because it is nearly invisible it is hard to address directly. It is therefore difficult to anchor new sets of practice in a culture. The more the new approach differs from the core of the culture, the harder it is to anchor. It is also important to change the culture in the end rather than in the beginning as much of this change depends on the results and requires a lot of talk and practice. (Kotter, 1996)

A summary of chapter 4.3 can be seen in Figure 21, Figure 22 and Figure 23.

- Organizational change is when the company has a new or another position in how the organization functions and how its members and leaders act. Organizational change can also be seen as a type of organizational development. Many theorists claim that it is impossible to completely control an organizational change.
- During this thesis, only planned and episodic changes have been studied. Planned change is implemented by actors and always tries to improve the situation. Planned change can be controlled. Episodic change occurs when the organization moves from its equilibrium and the change is infrequent, discontinuous and intentional.
- Organizational changes can be triggered by both internal factors, e.g. a new CEO and external factors, e.g. new technology. Small changes normally originate from internal factors while big changes normally originate from external factors. Also temporal shift like systems breakdown and unexpected absence can be a trigger for change, as such occurrences force the organization to think differently.
- Someone in the organization needs to have the power to influence to change. Different sorts of power are: physical, resource, position, expert, personal and negative.
- Organizational culture is stable and a force of resistance to change. The culture wants to stay the same until leaders act to change them. It is important to understand the organizational culture in order to understand and manage the resistance to change.

Figure 21 - Summary of chapter 4.3 part 1

- The employees participation or influence during the change is argued to be a condition for successful change work. Too much as well as not enough influence and responsibility can however lead to stress and physical and mental illness.
- The way a change is implemented within an organization can be divided into four dualities: Negative vs. Positive, Continuous vs. Episodic, Proactive vs. Reactive and Open vs. Closed. There are also four different ways to handle these four dualities: selection, separation, integration and transcendence. Integration is the recommended way to handle the duality Proactive vs. Reactive, but for the other dualities, selection is the most common way.
- The change agent's tasks are to motivate the organization for the change and identify changes that must be done. It is also the change agent who shall create an understanding for the change within the organization and must therefore be a good communicator. He or she shall also needs skills for handling such as problem solving, leadership, giving and receiving feedback, resolving conflicts etc.
- Change programs can fail or have limited success. Many changes start with a big fanfare, but then fade away. Reasons for failure can be a weak understanding of what is really going on in the organization and a focus on solving the consequences rather than the problem itself.
- In order to change, it is important that the organization is good at learning. If the organization does not learn before change, the change is only temporary and cosmetic. Learning organizations are skilled within five main activities; systematic problem solving, experimentation, learning from own experience, learning from others and transferring knowledge. To become a learning organization, the organization must has time for the above named main activities.
- It is important to measure the organizational learning and progress during the change project. If the result from a change is not measured, the change cannot be managed. Interviews, questionnaire and surveys can be used.
- To realize a successful change, both management and leadership are needed. Leadership includes aspects such as creating a vision, communication, inspiring the organization etc. Management includes planning, budgeting, organizing etc. It is necessary with several persons in order to lead a change. The leader often take the role as the change agent.
- It is extremely important with a specified and clear goal for the change project. Some theorists mean that it is best if the top management decides the goal, but others mean that it is better if the whole organization develop the goal together.

Figure 22 - Summary of chapter 4.3 part 2

- There exist many different change strategies that are adapted to Swedish organizations. Successful changes were achieved when the employees understand *why* the change was necessary and were able to influence *how* the change was carried out.
- Response to change can be both directed, which mean that it is structured and follows a plan, and undirected, which mean that it is a cycle of variations before a stable phase can be introduced.
- The resistance towards change is closely related to individuals' defense towards issues that can be embarrassing or threatening. Most people manage their beliefs according to the Model I theory-in-use. This theory is defensive towards threatening errors and wants to ignore these errors. In order to improve the organization's adaptation of change, the employees must work with and change their way of handling threatening issues.
- A change disturbs the equilibrium of the organization and this disruptive effect increase with the age of the organization. An old organization is more disturbed compared with that of a young organization.
- The good effects of a change can be fully shown first after that the start period that lead to disruption is over.
- An organization is more adaptive to a change if it has already carried out changes that are similar to the new change. An organization will also be likely to use the same method as was used when last change was carried out.
- It is more difficult to change within an old organization as it is more committed to routines compared with a young organization. However an old organization has lower risk for failure when implementing change compared with a young organization. The reason is that old organizations are more robust prior to the change.
- A classic model for implementing changes was developed by Lewin (1951) and includes three different elements; unfreezing, changing and refreezing.
- Kotter (1996) presented an eight-stage process in order to implement and carry out an organizational change. The eight steps are:
 - Establishing a sense of urgency
 - Creating the guiding coalition
 - Developing a vision and strategy
 - Communicating the change vision
 - Empowering broad-based action
 - Generating short-term wins
 - Consolidating gains and producing more change
 - Anchoring new approaches in the culture

Figure 23 - Summary of chapter 4.3 part 3

5 Empirical Findings

This chapter is a summary of the interviews performed at Saab Aerosystems. It describes the different employees' apprehension of the company and its culture. It will also explain how Saab Aerosystems is running change projects today and which weaknesses and strengthens the company possess in this area, according to their employees. Also in this chapter, each sub chapter ends with a summary, which will enable the reader to get a quick overview of Saab Aerosystems current situation.

5.1 Saab Aerosystems and its Culture

The culture within Saab Aerosystems is strongly related to their main product, military aircrafts. The employees are extremely proud of this product, believing they have one of the best military aircrafts in the world. They are aware of the fact that they are not the company selling most aircrafts in the world, but agree that it is not only due to the technology whether or not the company sells many aircrafts but also due to political aspects. It is normally more useful for a nation to have a deep cooperation with the United States of America compared to with the Swedish government. Due to this strong sense of commitment to the product, technical skill is the most admired competence and persons having this competence are highly valued and strongly trusted in all areas, even areas not related to technical performance. As the company has many engineers and technical competence is highly admired, the people who are not engineers may have difficulty being accepted and listen to. Even persons working with non-technical matters, are preferred and sometimes expected to have technical competences and preferably be an engineer. This strong focus on technical competence leads to other matters, e. g. commercial and economical matters not receiving the same attention. The interviewed employees mean that the common apprehension within the company is that if the product has technical standard, it does not matter if it is too expensive or if the delivery does not hold the expected time frame. This weak understanding of commercial matters has been allowed to develop during the long time that Saab Aerosystems only had one client, FMV, sharing the economical risks with them. If the project needed more money, the client made the necessary funding. Saab Aerosystem's profits were related to their costs, which meant that the higher costs, the higher profits. This rule was applicable up to a ceiling price and when exceeding the ceiling price the client and Saab Aerosystems shared the costs. One employee claimed that this has motivated Saab Aerosystems to try to complete their projects just prior to the costs reaching ceiling price. Nowadays, when Saab Aerosystems has developed other products than military aircrafts and needs more and more to be a competitive company, a change in focus needs to occur and more attention must be placed on commercial matters with products that are good enough for the client, as the client will most likely not want to pay extra money for special functions that they neither ask for nor need.

Traditionally, the different departments within Saab Aerosystems have been run independently of one another. This individualistic thinking has caused the departments often only see to their own interests rather than working for the best of the entire company. The interviewed persons mean that this weakness has now been addressed and that the company is currently working to achieve a higher solidarity between the departments. Gunder is one example where different departments work across the borders and collaborations of this sort must be driven frequently in order to increase the exchange of experience and knowledge between the different departments.

Almost all interviewed employees assert that there exist different subcultures alongside of the company culture. Most of the employees mean that it is unavoidable for a company the size of Saab Aerosystems to have subcultures. They also mean that the differences between different cultures do not pose a problem. Others mean that these differences increase the feeling of “we and them” and in some cases increase the difficulties of working together between the different departments.

For Saab Aerosystems as a company, it is difficult to appoint any specific person as responsible for forming the company culture. On the other hand, a couple of employees mean that the aircraft crash with Jas 39 Gripen at the Stockholm water festival in August 1993 has influenced the company greatly. This accident was a trauma for the organization and increased humbleness within the organization. It has also led to that journalists in general are seen as enemies and extremely little information is spread to journalists from the employees. The accident has then strengthened the company’s solidarity and employees now pay less attention to what is written in the press today compared to before the crash. According to some interviewed employees, Saab Aerosystems together with the other Saab departments in Tannerfors, Linköping sometimes think that the world outside the gates is not of interest for the company. They mean that many employees acting according to the outside world will adapt to Saab at Tannerfors and not vice versa. This attitude can be a problem, and stems from the deep trust in technological competence within the company.

5.1.1 Formal and Informal Organization

The formal organization is a balanced matrix organization between the line organization and the project organization. According to the interviewed employees the purpose of this type of organization is that the line organization shall manage and ensure continuity, personnel competence and look at the products entire lifecycle. The project organization shall manage the project, contracts and that products of correct quality are delivered in time. The reasons for having a matrix organization are to increase flexibility and develop an organization that can focus on short as well as long term projects and goals. Many of the interviewed employees mean that the organization has been quite bureaucratic, and still has some influences from this, e.g. it is hierarchical where decisions have to be taken at a certain level in order to be heard.

Almost all interviewed employees are in agreement that informal organizations exist side by side with the official organization. One explanation to this phenomenon is that many employees have been working at Saab throughout their whole working lifetime, meaning more than 30 years at Saab in different positions. This leads to them having contacts within many different departments in the company. Some interviewed employees mean that this network is only used in order to procure and spread information, but many more mean that decisions are taken within these informal organizations, often before or after official meetings. The result of this is that persons who are not included within these informal organizations have difficulty knowing which decision have been taken, by whom and when. In some instances therefore a decision is suddenly taken and most employees start to work according to this, but there are no documents or reports that support this decision. This results in that some employees are working according to official documentation and will first after some time find out that a decision has been taken.

The advantage of such an informal network is that it speeds up the information currents within the company. Some employees mean that these informal networks are necessary if it is to be possible to produce and develop complex products such as military aircrafts within a limited budget. When working at a company with extremely complex products, contacts in many different fields are important and these informal organizations are necessary in order for individuals to maintain contact with the many different experts. Another positive aspect is when all informal organizations work towards the same goal, the environment can be extremely dynamic and creative, which is positive in a company that develops complex products where creativity is one of the most important success factors. A majority of the interviewed employees mean that these informal organizations work for the company's best, but many also assert that individuals within these informal organizations use the network in their own interests, to acquire more power or a better position. Finally, a problem of the informal organization is that it is not always the most important task that is prioritized, as the informal organization often listens to the persons who scream the loudest or who have a certain reputation and acknowledgement within the organization.

Within Saab Aerosystems there exist many informal leaders besides that of the formal leaders. These leaders often have much knowledge and are admired by fellow employees and have true leadership qualities. During the interviews, the employees pointed out the importance of getting these informal leaders involved in the change process. Due to the impact these informal leaders have on other employees, changes they oppose themselves to are often extremely hard to carry out successfully. Another reason for involving the informal leaders in the change process is that they often have deep product and organization knowledge and are also often very intelligent, which means that their knowledge and opinions are frequently important and interesting, according to the interviewed employees.

When developing a change project, no active regard is taken for existing culture according to the interviewed employees. There exists no system in how and when to take regard of the culture. One way of implementing existing culture is to use the informal leaders in the change project, as they often have good knowledge about how their part of the organization works.

5.1.2 How the Military Industry has Influenced the Culture

While Saab Aerosystems is an established, military industry, the employees mean that the company has a military culture. They mean that a military culture is rigid, hierarchical and quite macho, a culture that is similar to the culture within the Swedish defensive force a couple of decades ago. Saab Aerosystems is quite an old company; celebrating its 70th anniversary 2007. The influence of the company's age is also stated when many interviewed employees claimed that the old-fashion factory mentality is still present.

Almost all employees mention the "hero-culture" as an important part of the company's culture. The "hero-culture" celebrates and rewards those persons who often at the last minute are involved in completing complex projects or fixing urgent, big problems. Some of the interviewed persons said that this is not completely bad as these persons often fix a difficult problem and ensure projects are finished on time. Instead the problem is that persons working consistently, avoiding problems and time difficulties, are not celebrated or rewarded as "they are only doing their job". In other words, this culture results in that only persons who are involved in projects

with problems are rewarded. The persons involved in projects that are successful from beginning to end are sometimes not noticed at all.

Another general feeling within the company is that the employees have great confidence and trust in their ability to do things, which results in a “doing-culture”. The employees are not afraid of receiving new challenges as they trust themselves and their colleagues and are convinced that they are able to handle these challenges. In Figure 24, a summary of chapter 5.1 can be seen.

- The employees at Saab Aerosystems are extremely proud of the product that they produce.
- Technical skills are admired and the company has many engineers. Even when working with non-technical matters, it is likely that it is an engineer with technical competence will solve the issue.
- Technical matters are in focus, which mean that other matters, e.g. economical and commercial do not receive the same attention. A common apprehension within the company is that it does not matter if the delivery does not hold the timeframe or is too expensive, as long as the technical standard of the product is high.
- The weak understanding for commercial matters was developed when Saab Aerosystems had only one client, FMV, that shared the economical risks with them.
- The different departments within Saab Aerosystems are run independently and are quite individualistic. Solidarity between different departments is low.
- Informal organizations exist side by side with the official organization. Many of the interviewed employees mean that decisions are taken within these informal organizations. The good aspects of the informal organization is that it speeds up the information currents.
- Many informal leaders exist beside the formal leaders at Saab Aerosystems. The informal leaders are very knowledgeable and are often admired by other employees. If an informal leader is against a change, it will be hard to carry out the change and receive acceptance for it.
- The informal leader can also consider and take into regards the existing culture within the company because they know exactly how their organizations work. Currently, no regard is taken for it.
- Saab Aerosystems has a military culture, which means it is rigid, hierarchical and macho. Also the “hero-culture” is an important part of the company culture, which celebrates and rewards persons who fix urgent problems. Persons who work according to expectations without time delays or other problems often receive no rewards, recognition or attention.

Figure 24 - Summary of chapter 5.1

5.2 Leadership

Satisfaction with leadership during the change projects differs greatly. Some mean that it is usually clear who the leader is and that the vision is clear, while others mean that it is normally very diffuse, both concerning leader and goal for the change project. A majority of the interviewed employees found that the qualities of the leadership differ a lot from project to project. In some change projects the leaders are very clear and professional whilst in others the leaders are the complete opposite. With Gunder, employees hope to see a clearer and more uniform style of leadership emerging and tendencies for some leaders to only see and optimize part of the change project instead of seeing the project in its entirety decreasing or even disappearing. The interviewed employees also mean that it is extremely important that the line manager supports the change project and allocates time and energy for his or her personnel to work with the change project. If the line manager is against the change and does not support the project manager, it is extremely hard to achieve a successful change project. Another important success factor is if someone in upper management is involved and burning for the change issue. A person in top management can be a helpful support for the project manager in order to keep interest for the change alive and motivate leaders in many different departments. Some employees mentioned the importance of a line manager who asks for the sought out change and its results. If a change project has changed the way of doing something, it is extremely important that the line manager requests the new model and demands his or her employees to work in line with it. If the line manager does not ask for the “new thing”, the change is easily forgotten and the employees start to revert to old methods again. This phenomenon can explain why expressions like: “We have already tried that, it does not work!” exist within Saab Aerosystems. When attitudes such as this exist amongst employees it is extremely difficult to carry out successful change projects.

Almost all employees agreed that it is a team rather than an individual that leads change projects at Saab Aerosystems. On the other hand it is always a project manager that leads the team and is responsible for the team’s results. Satisfaction rates of these teams vary greatly. Some mean that they are working well and that they follow Saab Aerosystems project model, PSM, while others mean that these teams are not working according to any specific models but should be working according to PSM. None of the interviewed employees have mentioned that they are working according to a specific change strategy. Some expressed that they have enough resources while others mean that the projects have often needed more people and certainly more time during implementation phases. One classic phenomenon is that within the management group ongoing discussions take place about a potential change project during a period of a couple of months. During this time the change receives acceptance within management as all members have had time to think through the project. Once the decision is taken, other employees have only a couple of days or perhaps weeks to go through the same process. When the procedure for acceptance is this short for co-workers, it becomes more difficult for them to accept the change.

In general, the interviewed employees claim that too many staff with leading positions are working with short term problems and do not have the ability to work with strategic questions. One reason for this is that this staff is often good at operational work but does not necessarily have any interest or competence in working with strategic matters. Another reason is that recognized and rewarded actions normally occur when somebody solves a complex and urgent

problem. This also motivates the leaders to get involved in short term problems rather than focusing on long term issues.

5.2.1 Careers at Saab Aerosystems

The military culture makes it hard for women to make a career at Saab Aerosystems. According to some employees there are very few female leaders and women that can serve as role models for other women. It is not only harder for women to achieve higher positions and more responsibility, some employees mean that almost all leaders have the same age (mid-age and over), background (grad school degree), education (engineers) and sex (men) as well as having an operational focus. Many employees are looking and asking for more diversity when promoting new leaders. One employee means that the company is talking a lot about doing things in order to change this situation, but in actual fact it is more discussions than actions taking place. The outcome of this is that many female employees leave the company after a couple of years feeling that they do not have the same opportunities as their male colleagues. The women that actually have a leadership position either take on a masculine role or have difficulties receiving acceptance as leaders. Some employees also mean that the organization expects greater things of a female leader compared to that of a masculine leader. It is generally more accepted that a masculine leader makes mistakes.

When recruiting new staff, leaders often look into the candidates' education and background. Values separated from technical values, e.g. social competences and personally engagements are becoming more interesting where earlier only technical competence was of interest. However technical competence is still the most important success factor for somebody interested in employment at Saab Aerosystems. When promoting employees, almost all interviewed persons claimed that the most important factor is being able to do a good job and that leadership competence or other such skills that can influence working as a manager are not that important. The result is that it is often the best engineer in a group that receives a promotion and not the person with the best leadership qualities.

5.2.2 Discussions and Decision in Forming Goals

The lack of time allocated to discussions is one problem according to some of the interviewed employees. They mean that there is only time for taking decisions and no time for discussing the appropriate and necessary issues prior to decision making. One employee means that all official meetings are followed according to a checklist and there is extremely limited time for any spontaneous discussions. This is effective and ensures all details are controlled but does not create any visions or new goals. Goals are normally clear for those in project management, but lower down in the hierarchy colleagues seem not to know what the goal is. The explanation given for this is that it is the line managers' responsibilities to convey the goal from the project manager to other colleagues and only some line managers do so. To ensure that information is conveyed to all concerned co-workers, the project management must produce material that the line manager can use when presenting change to their staff. It is extremely difficult to present a change that one does not fully understand and without supporting material it is common that presentations are not made at all. The interviewed employees mean that goals regarding technical or other concrete matters were often clearer compared to goals for changes handling other values than technical, such as employee satisfaction etc. With Gunder, both the setting of goals and

conveyance of these are in focus. If the project manager cannot present a clear goal and show how the project will change the organization's economy, the project will not receive financing.

Most interviewed employees mean that the company must work with its ability to anchor the goals within the organization and think that this can be done by more and better communication. Today a pre-decided goal is presented by the management and thereafter other staff must accept it. This means that all staff members are not involved in the goal setting process but rather first when the goals are decided upon and the implementation phase will start. This fact is something that the employees find really bad. They mean that it is harder to get acceptance for the change project and its goal, when most co-workers have the goals served to them and are not involved in the developing phase. When a decision is taken, information about the change is spread throughout the entire organization, but as stated above, the information is spread at too late a stage.

The interviewed employees also point out the importance of only conveying information about goals that staff can influence. There is no point in engaging all levels of staff if the goal is handling a problem at a higher level. Many employees will only feel a sense of hopelessness at not being able to influence the result. It is only meaningful to convey information about goals and change projects if they affect the staff. In communicating a goal or other message, it is common to use the Intranet, meetings and posted documents. BCAM has also had workshops where information was presented and participants were allowed and encouraged to discuss BCAM in small groups upon which they then described and explained their group's feelings and expectations towards the BCAM project.

5.2.3 Measuring Results from Change Projects

When discussing the follow up of goals and measuring of results, many interviewed employees mean that Saab Aerosystems is not strong in this area. Many have had high hopes for Gunder, and explained that the project manager must calculate and rely on the economical aspect of each change project, called a business case, and only projects with an economically positive value will be carried out. Many of them mean that when everything is put into economical terms, it is easier to measure and follow up. Most of the interviewed employees are positive towards the goal in Gunder that states all projects shall be put into economic figures. Although some employees are a little skeptical and mean that there is a risk that the economic issues will receive too much importance and that values that cannot be measured by economical results will not receive any attention. Apart from the important issue of income versus outcome, it is also necessary to investigate how staff members and the customer have experienced the change. Here time and quality are important aspects that the organization should pay attention to. Another positive aspect of Gunder is that somebody must take over when the project is finished and ensure that the change has been implemented. Prior to Gunder no given person was responsible for this and this often resulted in staff reverting to the old way of doing things upon project completion. With Gunder, someone will be responsible even after the project is finished in order to achieve better results in Saab Aerosystem's change projects.

Each completed change project should today be followed by a documentation of lessons learned performed during the project. Many of the interviewed persons claim that these documents are often too extensive, resulting in many new project members not thoroughly reading necessary

documentation. The outcome of this behavior is that the new members make the same or similar mistakes to members of earlier projects. The interviewed employees suggest that lessons learned be done in a less extensive way making it easier for new members of a project to adopt the results. They mean that when a new project starts, the members are so motivated that they do not feel they have the time to go through old and extensive documents; they want to start the new project immediately. Another issue that the employees are not satisfied with is the competence in carrying out measurements and providing feedback during the change process. Today it is very unusual to point out short term wins and spread this information within the organization in order to create motivation for the change. A summary of chapter 5.2 can be seen in Figure 25.

- The satisfaction rate with leadership of change projects differ greatly. Many employees hope Gunder will bring about a more uniform style of leadership.
- It is extremely important that the line manager supports the change project and allows his or her personnel to work with the change. A person from the upper management can be helpful by providing support in order to keep the interest for the change alive.
- Change projects within Saab Aerosystems are lead by teams and a team is lead by a project manager.
- The employees within Saab Aerosystems do not receive much time in order to accept and think through a change. The management who take the decision have much more time to think through the process.
- Many of the persons with leading positions are working with short term problems instead of strategic issues. The reason for this is that it is often persons who have performed well operationally and solve urgent problems who receive leading positions.
- Almost all leaders within Saab Aerosystems are engineers, men and have an operational focus. It is often the best engineer in a group who receives a promotion, leadership qualities are not in focus.
- Goals are normally clear for those in the project management, but lower down in the hierarchy the goal is often not known. The reason for this is that information about the change and its goal is not conveyed to all employees.
- Saab Aerosystems must work with its ability to anchor goals within its organization. It can be done by more and better communication and by involving the employees during the goal setting phase.
- Saab Aerosystems is not good at following up goals and measuring results from change projects. Gunder will improve this, as it will be necessary to calculate the economical aspect of each change project. Today, all change projects should be followed by a documentation of lessons learned, but these documents are often too extensive.

Figure 25 - Summary of chapter 5.2

5.3 The Change Process

Normally the initiatives for change come from the management, so called “top down” decisions. The interviewed employees mean that the management is very good at listening to their customer and adapts operations according to their wishes, especially in regards to technical matters. The interviewed employees even mean that sometimes this desire to satisfy the customers’ wishes can go too far. On the other hand, according to the interviewed employees, the management is not at all that good at listening to their staff and creating changes according to their wishes. With Gunder, this will hopefully be better, as the project management of Gunder is taking care of all improvement suggestions that arrive to them within two weeks and providing the person who has given the suggestion feed back in regards to what will happen to his or her suggestion. The improvement suggestions can handle issues within all areas and can be given by employees at all hierarchical levels.

5.3.1 Participation during Change Projects

Most staff members do not participate much during the discussion phase of change projects. The interviewed employees mean that there are tendencies showing that the management is almost afraid of this. The management knows that there are a lot of intelligent, well-educated persons that can and will question their way of work and their ideas. The result is that much of the resources in the form of knowledge and experience are not fully utilized. When persons with much knowledge do not get their voices heard, they can feel powerlessness. The distance between different levels within the company gets larger and communication does not work as well as it could. The management does not always have the whole picture of the company and its operations and by not involving people who actually work with daily operations, mismatches between change projects and daily operations can occur. On the other hand, some of the personnel interviewed meant that not everybody can be involved in everything, if it shall be possible to make a decision. When there are too many people who want to communicate their point of view, it takes a lot of time and is costly. Instead, it is important to involve the persons who are influenced by the change and who have the confidence and trust of other staff, the informal leaders. By involving these persons, the rest of the organization will feel that even their thoughts and ideas have been attended to, while the informal leaders are allowed to represent the rest of the organization.

There are also interviewed employees who mean that the amount of people involved in the developing phase of the change project does not matter, the important aspect is rather whether the idea and the presentation of the change project is good or not. If only one person is involved, but his or her ideas are good and are presented in a clear and positive manner to other colleagues then the acceptance can be good anyway. If the anchoring of the change is well done, the implementation phase normally also goes well. The interviewed employees mean that generally the implementation phase includes the right number of persons, as e.g. a new operation system must be learnt by those who shall use it and they then naturally get involved in the implementation phase. Normally, a change occurs while the company has met with some problem and the change is a way of solving this problem.

The interviewed employees mean that it is not only the management’s responsibility to involve staff in the change project. Staff members must show that they are interested and want to participate in matters besides their normal, daily work. Very few persons stand up and say that

they want to participate with strategic issues. One of the interviewed employees means that he needs and would like more time to work with strategic issues, but with the company extremely focused on operative matters, it is hard to get this time. He said that he could only work with strategic issues when he had completed his operative work load, and that there is therefore no continuity in his strategic work. He also means that it would help if he had received some guidance in how he should work with strategic issues from the management.

5.3.2 Attitudes towards Changes

The interviewed employees mean that most staff members often have a quite skeptical and even negative attitude towards change. While the decision often is taken at a higher level, co-workers often question the change and its meaning. The interviewed employees mean that this attitude is normal and that it is important to be prepared to answer questions when introducing a change, because it is obvious that questions will come. When the change threatens a person's position, the change is always classified as negative, as this person wants to protect his or her identity and importance. The interviewed employees mean that it is almost impossible to find a change which everybody likes, but one way of achieving widespread acceptance is by way of communicating and discussing. When a change come from the top and is just "put on" the employees without any anchoring and with no adaptation to the operation within the company, skepticism is high and there are many examples of projects that have started this way and not been completed. The interviewed employees mean that establishing a sense of panic as a technique in order to awaken interest for the change is not a good method. They mean that most fellow workers at Saab Aerosystems are highly educated and will question the change even in a panic situation. That is to say they will not accept and adapt to a change project without knowing exactly why the change is to be implemented. It may be possible to use this kind of method once, but if somebody attempts to use it a second time everybody will know that there really is no panic situation and may not pay any attention to the change.

The interviewed employees mean that some colleagues feel that all changes are disturbing and tiresome but the explanation to this attitude is normally that the person does not have enough time to solve his or her normal work issues and putting change work on top of this workload is always interpreted as negative. The employees feel that sometimes they do not have enough time to get committed to the change. To change this attitude some mean that the project manager must create a need for the change where the atmosphere encourages the employees to change and see the potential in the change. The advantage of the change and how it affects staff in a positive way must be clearly stated.

Even though there still prevails a feeling of skepticism towards changes, many of the interviewed employees mean that it is much easier to introduce a change today compared to a couple of years ago. Staff members expect something to happen all the time and no longer want the company to stay the same year after year. This expectation has led to colleagues handling changes better and panic does not occur every time discussions about changes take place. Some interviewed employees did however think that the organization does not have enough patience to carry out a change completely. When a change project has just been finished, the organization has already left that change and is instead looking at something new. This lack of patience results in that many change projects that have started with much ambition, finished before they were completely implemented and the desired results did not occur. The interviewed employees have

pointed out the importance of completing what has been started, they mean that when many projects do not finish in a good way or do not create added value, the organization grows tired of the changes and the changes do not result in any progress. They also claim that it is important to not tire the organization with “big, fantastic changes” too often. Instead the organization must increase its capability to work with small changes, perhaps only affecting one department, and implement larger projects affecting the entire organization only when it is really important.

The interviewed employees also pointed out that changes always will be something that human beings dislike. When working with changes and change projects the manager must have the courage to stand up for his or her change project when it is criticized. On the other hand, the project manager must also be able to listen to colleagues and explain the reasons behind the change if acceptance for the change is to be reached. The interviewed employees mean that the project manager must handle the balance between working to receive commitment for the change while at the same time accepting that a change cannot be accepted or liked by everyone in a large organization.

5.3.3 Who can Receive Recognize for Ones Change Suggestions

According to the interviewed employees, it is not easy for everybody's suggestions for change to be heard. One needs to be a person with excellent technical skills and have a high level position in order to be an employee who is listened to by everybody. A person with a high level position has greater respect if he or she has been working operationally earlier in their career. On the other hand, a person that enters the company at a high level position with experience from another industry has greater difficulties getting acceptance and attention compared to persons whose entire career has been with Saab or who has had previous experience from other aircrafts industries. The reputation within the company is important and a person with little experience has far more difficulties being listened to concerning a suggestion about change. It is also of great help if the person knows how and by whom decisions are made and in what manner decision making is carried out. It is also important to know who to talk with to acquire commitment and acceptance for a change. According to the interviewed persons, it is mainly persons holding high level positions that act and describe according to the situation described above. Other staff members are generally considered more open minded and can more easily accept a suggestion for change that has come from a person with a low level position. Another characteristic that helps a person gain hearing for a change is his or her charismatic power. Colleagues, who talk a lot, are confident, have a lot of personal charm and a capacity to fill people with enthusiasm, are much more likely to receive attention for suggestions compared to that of a person who is quite shy or quiet.

Only two of the fifteen interviewed employees did not agree with the above described situation. Instead, they meant that everybody can receive commitment for a change suggestion as long as the idea is well thought out. The interviewed employees found that the proposal box has not yet any pervasive force. However they hope that with the new Gunder rules, the capability to take care of good suggestions at Saab Aerosystems will improve. The interviewed employees mean that it is harder to get commitment to changes that cross borders between departments. It is normally harder to find someone who wants to take the responsibility for these kinds of project compared with a small change project that only includes one department. The interviewed

persons mean that the reason for this is the organization's focus on details and lack of understanding for the entirety.

5.3.4 How Saab Aerosystems Handles Problems

The interviewed employees mean that Saab Aerosystems is good at taking care of problems. Normally the organization does not try to hide problems or pretend that they do not exist. If a problem is not taken care of this is usually due to lack of time. When many problems emerge simultaneously and there are not enough resources or personnel to take care of all the problems, it is normally the person who screams the loudest that receives help first and not always the person who needs help the most. This is a problem for Saab Aerosystems as employees are running from one problem to the next instead of having time to work proactively. The interviewed employees mean that they needed more time in order to work proactively in order to predict and prevent problems from occurring. The organization does not actively try to avoid problems, but rather attempts to take away the consequences of the problem. The reason for this behavior is once again lack of time and also that it is normally easier to polish the surface of a problem rather than get to the root of it. One of the interviewed employees said: "We pay attention to problems, but we are not good at doing real changes in order to get rid of the problem".

The large number of meetings is one explanation for the lack of time allocated to problem solving. It is too easy to call for a meeting that often does not result in anything of great worth. Meetings also have a tendency of being too long taking up a lot of time for many employees. The interviewed employees expressed feelings like; "Today I will do some real work, I have no meetings." A summary of chapter 5.3 can be seen in Figure 26.

- Initiatives for change come from the management and so called “top down” decision. The management is not good at listening to their staff and creating changes according to their wishes.
- The employees do not participate much in the change project before the implementation phase. The result is that much knowledge and experience is not fully utilized.
- By involving the informal leaders, the rest of the employees will feel that even their thoughts and opinions have been attended to.
- A change normally occurs when Saab Aerosystems has a problem and the change is a way of solving this problem.
- The attitude towards changes are often skeptical and even negative. It is extremely important to be able to explain why a change shall be carried out, the employees must understand the meaning with the change.
- Lack of time is one explanation for the negative attitude towards changes. The employees do not feel that they have enough time to get committed to the change. The many meetings are one reason for the lack of time.
- The employees mean that the organization does not have enough patience to completely carry out a change completely with the result that the desired results did not occur.
- Persons whose suggestions for change are always listened to have excellent technical skills and a high-level position with much experience within the aircraft industry.
- Saab Aerosystems is good at taking care of problems and trying to solve them. If a problem is not taken care of it is due to lack of time. The employees mean that the organization rather takes away the consequences of the problem instead of the problem itself.

Figure 26 - Summary of chapter 5.3

5.4 Learning within Saab Aerosystems

The interviewed employees feel that the company encourages the employees to learn, but principally with focus on technical matters such as new technology. When regarding other areas like economic or organizational matters the organization does not provide the same level of support and encouragement. The interviewed employees mean that they do not have enough time to get commitment to learning; they just try to resolve every day problems. While the company has an operational focus and a high expectation of productivity, many employees feel that they do not have time to learn new things or take part in courses or other learning forums. They can also feel somewhat afraid of learning new things, as some of the interviewed persons expressed that errors and mistakes are not acceptable, not even in an initial phase. The interviewed employees claim that if a fault occurs someone must take responsibility for it and therein also the shame that

is attached to this. This can scare employees and prevent them from testing new tasks where they do not have complete control. This fear of doing new things has also led to the current situation where everybody screams for the experienced experts when problems arise; instead of allowing a person with less experience the chance to solve the actual matter and learn from that experience. This phenomenon has led to a situation where everybody wants to engage a few experts in their projects and much of the organization's knowledge is concentrated in these persons. These experts must not be mistaken for informal leaders, as informal leaders have leadership qualities and experts do not necessarily have these qualities. When asked about learning related to change, a couple of the interviewed employees did not really understand the connection between learning and organizational change. They mean that an organization can be good in carrying out changes even though it is not good at learning.

When talking more specifically about the characteristics regarding organizational learning that were presented in the theoretical frame of references, the interviewed employees claimed that they are fairly good at systematical problem solving. As long as there are many engineers within the company, the willingness to solve problems is high. There still exist some potential for improvement as the systematic part is not completely established; however revisions regarding systematical learning give high points to the company. The interviewed employees mean that theoretically, Saab Aerosystems is really good at systematic problem solving and there are all kinds of necessary tools and models, e.g. Demings model. The problem is that these tools are not fully utilized and that many within the organization do not use them at all.

The engineering atmosphere within the company conveys that the willingness to experiment is high and that employees like to try and develop new solutions. This willingness to find new solutions can in some cases be extreme where nobody wants to use the discovered solutions. Here Saab Aerosystems could put others' experience better to use, and there should be an improved and structured system e.g. when training a new project manager. The same mistake can re-occur many times due to the fact that people do not read and use lessons learned enough. Lessons learned are documented, but these documents are then archived and after that nobody looks at them again.

The interest for benchmarking has increased, but management still does not place enough attention on learning from others as an effective learning instrument. Some of the interviewed persons mean that staff members show a lot of interest in visiting other companies and learning from them, but that management does not really support and encourage their employees to do so. Instead, they try to figure out their own solutions and methods when an issue occurs.

As stated earlier, learning from own experience is not good and lessons learned are not used to the extent they could be. One area that the company does not command is personal rotation. The interviewed employees mean that many within the management do not encourage their employees to try other tasks because they wish to keep the best employees at their department. Sometimes employees are given a couple of new tasks and a better salary in order to make them stay at the same department. This is also a signal that some leaders and departments have difficulty seeing to the best of the whole company and see rather to the best of their departments. Increased personnel rotation can also take away the feeling of "we and them" and replace it with a "we" feeling for the entire company.

5.4.1 Experience from Historical Change Projects

When looking at historical change projects, the interviewed employees mean that they have not been that successful. The projects themselves are normally professional driven, but what's normally missing is the ability to implement and anchor the change in the organization. Most of the changes are not long lived and they are not seen as a natural part of everyday work. One example is "Målstyrningen", a project that aimed at increasing the company's ability to control and measure their operations. Many interviewed employees said that this project is a good idea and that it could help the company in many ways, e.g. in order to measure the results of change projects as well as to show how change projects develop over time. "Målstyrningen" is a project with a good reputation. It had a successful start with much support from a person in upper management. However when this person retired the spirit of the project died and the project has not been following through and is no longer frequently used. Many employees also mean that the company sometimes proceeds forward at too rapid a rate with the desire to change everything at one and the same time. They assert that some of the unsuccessful projects would perhaps have received better results if they had been introduced step by step by a more patient management. Big change projects almost never give the original desired results which leads to a general feeling of mistrust and disappointment for such projects within the organization. Another historical problem has been that many people have viewed change projects as some kind of new toy from the management given to their employees. A famous expression describes just this feeling that the employees possess when a new change project has arrived; "We do a BOHICA, Bend Over, Here It Comes Again". This expression shows that change projects are not anchored properly within the organization. When the management does not follow up their decision regarding a change project, it conveys that nothing really changes. The interviewed employees say that there have been too many projects that have not given desired results, leading to disappointment for the employees. Another characteristic is that the same type of change project re-occurs with regular intervals, which is quickly discovered by the staff. They then feel that they are doing the same type of changes many times, but are still working according to the same manner.

5.4.2 Measurements and Important Factors

Almost all interviewed employees have suggestions about what they think is important to measure during and after a change project. In general they refer to that time, economy and quality are important aspects that should be controlled during and after a change project. The economic measures they find important are costs and receipts. Many also think that the use of business cases can be useful as it forces the project manager to think through the project and show if the project is profitable or not. Business cases are almost the same thing as a budget, with the difference being that a budget provides the result when the project is going according to plan. A business case can be made for the worst as well as the best scenario, and the project manager must prove that he or she can handle the possible scenarios. Apart from economic measures, everybody agreed that other measures are also important. Measures that were mentioned are how employees and clients react to the change and investigating how much the change has influenced the employees and how much the effectiveness has increased. They also mean that lessons learned could be used in a far more effective way. If the lessons learned were summarized in short documents instead of long reports, the usefulness of the lessons learned would be much greater.

When discussing important factors that can influence the success of a change project, almost all interviewed employees mean that it is extremely important to involve informal leaders and pay much attention to communication, as stated before. Other important aspects are that the top management need to show interest throughout the project even upon completion in order to anchor the change within the organization. In Figure 27 a summary of chapter 5.4 can be seen.

- Saab Aerosystems encourages learning within technical matters, but regarding other areas the organization does not provide the same level of support.
- Fear of learning new things can occur, as errors or mistakes are not accepted. This fear of making mistakes has led to a situation where everybody wants to engage the company's experts when a problem arises.
- The company is good at systematical learning and experimentation, but must improve its ability to learn from others, learning from own experience as well as transferring knowledge.
- Many of the historical change projects have not been successful. A common problem has been anchoring the change within the organization. Another problem is that large change projects almost never gave desired results, leading to disappointment from the employees.
- Evaluation of change projects is important and tools that can be used are business cases, costs vs. receipts and to investigating how clients and employees react to the change. Lessons learned can also be utilized better by ensuring less extensive documents.
- Important factors in order to carry out a successful change project are to involve informal leaders within the change project, pay much attention to communication and to involve someone from top management within the change project.

Figure 27 - Summary of chapter 5.4

6 Analysis and Discussion

In this chapter, the theoretical studies are linked together with the empirical findings in order to analyze Saab Aerosystems current methods of carrying out changes and running change projects. The chapter also includes discussion parts, where the author presents her view, based on the analysis. Here she makes suggestions for what Saab Aerosystems should change in order to be a company that controls the change process in a good way. Each sub chapter finishes with a summary.

6.1 Organization

When developing a balanced matrix organization, Saab Aerosystems purpose was to create an organization that could both have continuity to work with long term matters while at the same time be sufficiently flexible in order to handle urgent projects and problems. In fact, the matrix organization is a development of an earlier bureaucratic organization. (Interviewed employees) Senior and Fleming (2006) show that normally the horizontal axis in a matrix organization is designed for different products or regions. This is not the case at Saab Aerosystems, instead the horizontal axis consists of the product organization which shows that the description given by Senior and Fleming (2006) regarding matrix organizations is not complete. Greiner (1972) in Senior and Fleming (2005) means that it is important with good teamwork and good leaders in order to be successful with a matrix organization. The teamwork within Saab Aerosystems does not seem to be completely successful, while many interviewed employees mean that the cooperation between line managers and project managers is not always problem free. One reason for this lack of teamwork can be that it is always the persons with expert knowledge in demand which results in both the line manager and the project manager wanting to tie the experts to their operations, causing a conflict between the two types of managers.

Besides the formal organization, an informal organization exists with many subcultures. Senior and Fleming (2006) state that, informal organizations sometimes work for their own best but not always in line with the organization's best. The interviewed employees also said that this is the situation at Saab Aerosystems even though they also added that the informal organization is not working against the formal organization in order to destroy the company. Instead, they mean that sometimes persons within the informal organization want more power or influence and can use the informal network in order to get this. Another problem with the informal organizations is that many decisions are taken within these organizations, which makes it more difficult for the official leaders to control the organization. Another problem with these informal organizations is that even if two different groups work in the best interest of the organization; their work can be contradictory due to a lack of official documents. In other words one part of the company does not know what the other part is doing and vice versa. (Interviewed employees)

Apart from the formal leaders there also exist informal leaders at Saab Aerosystems. These leaders hold often a great deal of knowledge about the organization and its operations and they are also often admired by other members within the organization. This results in them having a lot of influence within the company. These persons can be an important help for the project manager in order to get a change project anchored within the company. If these informal leaders think that the change is a good idea, it will be much easier to also convince the rest of the organization of the possibilities with the change project. (Interviewed employees) Schein (1992)

and Kotter (1996) point out that leadership during changes is extremely important and that it is not enough with only one leader when carrying out a big, organizational change. By involving the informal leaders in the change project, the project manager has partly a person who he or she can share the leadership role with and partly better possibilities of anchoring the change within the organization. By giving the informal leaders the mandate to spread the information within their departments, it will also be possible to spread information throughout the organization without involving all staff in all meetings. The informal leaders can also handle the possible resistance that can occur in the organization when information is spread according to Nielsen, Nykodym and Brown (1991). If resistance occurs, the informal leader can listen to and discuss the issue and hopefully convince other staff about the change project's potential. All the above described consequences shown when involving the informal leaders within the change project are advantages for the change project. On the other hand, the project manager will decrease his or her own power and influence over the change project. At the same time, the informal leaders will increase their power and receive more possibilities to influence the organization and it is therefore important to ensure that the informal leaders do not have other interests in this new position than that of working for Saab Aerosystem's best.

6.1.1 The Environment has influenced the Organization

An explanation for the changes in the company's organization is that the environment surrounding Saab Aerosystems has also changed. The fact that Saab Aerosystems earlier only had one client for their products created a situation with a stable cooperation between the industry Saab Aerosystems on the one hand and the Swedish state with FMV on the other hand. (Interviewed employees) This situation was ideal when having a mechanistic and bureaucratic organization (Burns & Stalker, 1994). During the latest year this environment has changed with Saab Aerosystems now developing surveillance products for new clients where the Swedish state and FMV are not involved. Similar products are also produced by many other companies, forcing Saab Aerosystems to be more competitive. (Empirical findings) This change of environment has also forced the company to change its organization; today the company has a more organic structure (Burns & Stalker, 1994). The new matrix structure is one way of achieving an organic organization that will fit the company's entrepreneurial manner better and may increase the ability to produce innovations (Utterback, 1994). With Saab's CEO, Åke Svensson, asserting that Saab and the whole industry will change focus and concentrate more on protection of streams instead of protection of borders, the change of organization type may prove useful and help Saab Aerosystems in their willingness to change focus and develop new products. The above described development of Saab Aerosystems organization shows that Burns and Stalker (1961) were correct when they claimed that the environment actually influences how the organization is structured. Even if Saab Aerosystems has developed and became more organic with a new matrix organization and new products, it is still not a completely organic organization. Saab Aerosystems is still quite hierarchical and the environment considered stable, which are both characteristics and conditions for a mechanistic organization.

6.1.2 Characteristics of Saab Aerosystems

Saab Aerosystems corresponds to Tichy and Sandströms (1974) description of Swedish organizations. Even though their article is quite old, many of the characteristics of Swedish organizations that they have identified are currently present at Saab Aerosystems. Almost all employees hold a high level of education and are in general interested in getting involvement in

change processes. As a country, Sweden has a strong commitment to democratic values and is quite wealthy. All these factors induce that employees within Saab Aerosystems need involvement in decision making about changes that will affect their jobs. (Tichy & Sandströms, 1974) Also Aronsson et al. (1995) as well as Sashkin (1987) in Nonås (2005) mean that participation and an ability to influence are important conditions in order to carry out successful changes. Towards all these theorists' recommendations, the interviewed employees mean that decision making takes place at a high level and that a change is first presented when a decision has already been taken, in other words, most staff within Saab Aerosystems have very little involvement during the decision making phase. This can lead to frustration and can also be an explanation for the skepticism that the employees normally show towards changes. If the company change their way of decision making and involve their employees more in this phase, the result can lead to both a better success rate with future change projects and that employees feel a higher sense of work satisfaction and are more motivated and committed to change.

The interviewed employees mean that it is not possible to involve all staff in all changes as it demands much time and is too costly. Also Tichy and Sanströms (1974), Aronsson et al. (1995), Sashkin (1987) in Nonås (2005) and Thylefors (2004) show both good and bad consequences of involving many employees in the decision phase. Saab Aerosystems had 1664 employees the 30th of November 2006 and it is of course impossible to involve all of these in all change projects. Instead, one solution can be that each department chooses one member of staff who is allowed to represent the whole department in the developing phase of changes: in goal setting, decision making and the problem solving phases. The interviewed employees mean that if the change is anchored, the implementation of the change often goes well. Thylefors (2004) also discusses problems that can occur when employees are too involved in the company's change process. Within Saab Aerosystems there are no tendencies showing that staff are too involved. According to the interviewed employees, the risk that employees will feel stressed because of too much involvement and responsibility does not seem to be realistic. A summary of chapter 6.1 can be seen in Figure 28.

- Saab Aerosystems has a matrix organization which demands good teamwork in order to be successful. The teamwork does not seem to be completely successful as line managers and project managers want to tie the experts to their operations.
- Leadership during changes is extremely important and therefore Saab Aerosystems should engage its informal leaders within the change projects. It will increase the possibility of anchoring the change and will also improve the spreading of information within the organization.
- Saab Aerosystems has been forced to become an organic organization because of the new situation where they have more than one client and must learn to be a competitive company.
- A characteristic of Saab Aerosystems is its well-educated employees who in general are interested in getting involved in the change process. Currently, the employees are not involved which can be an explanation for the skepticism towards changes.
- All employees at Saab Aerosystems can not be involved within all change projects. Instead, one co-worker from each department can be chosen to represent the department and its interest within the change project.

Figure 28 - Summary of chapter 6.1

6.2 The Culture at Saab Aerosystems

Schein (1992) was correct when he stated that there are weaknesses in existing methods of studying organizational culture. Even Douglas theory, that Hendry (1999) means had good acceptance, was not possible to use within this thesis. The three different types of culture that are described in Douglas theory will be hard to identify within companies in Sweden, as they do not have much in common with tribes from Africa, which were the reference groups during Douglas study. Another criticism towards Douglas model is that it only shows two dimensions, which seems to be quite limited when describing a company's culture.

On the other hand, Hatch (1993), Hendry (1999) and Schein (1992) state that organizational culture can influence organizational change and therefore it is obviously important to identify as much as possible of the organizational culture within Saab Aerosystems. Instead of using Douglas model, Martin and Meyerson's method has been used. During the interviews, many questions have been asked in order to identify Saab Aerosystems organizational culture. Many observations have been made and informal chats had during the author's time within the company. All these different approaches have together identified Saab Aerosystems organizational culture. When the interviews were prepared, Schein's questions, shown in chapter 4.2.3 *How to Identify an Organizational Culture*, were studied in order to cover all areas related to the organizational culture. The interviews and this investigation have not been intensive or extensive enough to identify the underlying assumptions of the organizational culture within Saab Aerosystems. Instead, it is the observed artifacts and values that have been identified. (Martin & Meyerson, 1988 and Schein, 1992) This results in a somewhat incomplete description of the organizational culture, as an investigation with a complete focus on organizational culture is

required to obtain such an analysis. Many of the questions during the interviews performed within this investigation handle organizational culture; however the main subject was organizational change.

6.2.1 The Admired Technical Competence

The interviews within Saab Aerosystems show that the company and most of its employees value technical competence and mean that to produce a product with excellent technique is the only thing that matters. Many of the people who have been interviewed mean that this focus must change and that commercial matters must also be valued. As stated by Schein (1992), the leader has a huge impact on the organization's development, both via primary embedding mechanisms and secondary articulation and reinforcement mechanisms. Benis and Shepart (1956), show that the leader within an organization can influence the culture as well as the organization's members. In spite of Benis and Shepart's article being quite old, the author of this thesis believes that their views are still interesting and valuable and has therefore taken their views into consideration. As long as it is the best engineers being promoted to managers and as long as technical skills are the most admired competence, the company will retain a culture that is strongly related to their products and the technology behind these. The "hero-culture" is famous within the company and even though the interviewed employees mean that this culture is something that the company wishes to be rid of, they claim, at the same time, that it is still co-workers who fix important and urgent problems that leaders recognize most and reward. If the "hero-culture" shall disappear, the leaders must pay attention to and reward employees who are performing well and on time throughout a project.

6.2.2 Characteristics of the Culture

While many of the interviewed employees mean that the culture is not perfect today, they express that they still accept the main part of the culture. They show creative individualism which means that they have learnt all central assumptions and norms of the culture but can also reject and criticize some aspects (Van Maanen & Schein, 1979 in Schein, 1992). While the company wants to change focus and become more commercial, they must develop their culture and not only focus on technical competence. This does not mean that they shall forget about the technical side of business by solely concentrating and improving the ability to do business but rather carry out both these aspects side by side. Saab Aerosystems produces extremely complex products and the technical competence within the company is truly important, but the company must understand that to win business in a competitive industry they must offer more than just a product with good technology.

When the interviewed employees assert that departments often work for their own best instead of looking to the best of the whole company, Saab Aerosystems shows an aspect of individualism (Schein, 1992). It also seems to be common with individuals working for their own personal best, acting in ways that optimize their outcome for e.g. a change, according to the interviewed employees. This is a problem that must be solved, as it can lead to a situation where resources and time are put on actions that are not for the company's best and therefore can be a threat to the company and its operations. The employees are proud of their company and mean that they are making really good products with the best technology. This confidence is also shown when they assert that they are quite dominant within the aircraft industry when looking at technology and performance. However they do also see the need for a new business and niche, after having

identified an increasing demand for surveillance equipment. This above described situation shows that Saab Aerosystems perceive themselves as dominant but is at the same time searching for a new niche (Schein, 1992).

Time has never been an important aspect of Saab Aerosystem's world. The company has always tried to deliver on time, but within the company employees do not see the need for keeping time schedules, instead they place more focused on the product's quality. An aircraft's life cycle is approximately twenty to thirty years which can explain this low interest in time. According to Schein (1992), this shows that the company are living in a concept of the past and do not understand that time is an important factor for their customers. In order to be a more competitive company in industries with many operators and if successful changes are to be carried out, the interest in time and timing must increase.

6.2.3 Subcultures

Within Saab Aerosystems, there exist many subcultures along side of the more homogeneous company culture. This is seen as normal by most of the interviewed employees and this indicates that the company accepts some diversity. Even though the company shows this side of diverse thinking, it possesses more characteristics of a homogenous organization due to the fact that the largest part of the group consists of engineers with high technological competence. (Schein, 1992) It is also persons with this competence who receive managerial promotions and in their turn recruit persons with the same competence, further creating a homogenous group. As some of the interviewed employees said, a typical manager at Saab Aerosystems is a middle-aged man with an engineering exam. Saab Aerosystems needs to be more open minded in order to be a competitive company. The company needs to see and understand that other competences besides engineering are needed in order to form the new company they wish to become. A summary of chapter 6.2 can be seen in Figure 29.

- The culture at Saab Aerosystems is strongly related to their products and the technology behind these and will stay related as long as leaders only reward and promote persons who have competence within the technical area.
- If the "hero-culture" is to disappear, the leaders must recognize and reward employees who are performing well and on time throughout projects.
- The characteristics of the culture within Saab Aerosystems are the focus on technical competence, the individualistic side where each department works for its own best, the confidence concerning their products and technical performance and the low interest in time and timing.

Figure 29 - Summary of chapter 6.2

6.3 Organizational Changes

According to the interviewed employees, the organization is very attentive to demands from the clients and can easily make changes accordingly. They have identified tendencies of the industry changing and have started to develop new products as well as trying to change the company and

its culture in order to fit this new industry. These two examples show that they are willing to change as a response to external triggers (Senior & Fleming, 2006). On the other hand, internal suggestions for change have to come from persons with a position of power, expert power or managerial power. Even personal power like charisma can improve a person's ability to have his or her suggestions for change heard, but it is the two first kinds of power that are the most important and useful. Employees who have made a career at companies in other industries can have great difficulty in getting acceptance and this is a big problem for Saab Aerosystems. (Empirical findings and Senior & Fleming, 2006) The company needs to be more open for influences from other industries and try to learn from others. They also need to be more open-minded and listen to employees without position or expert power. Hopefully the new way of handling suggestions for change within Gunder will help the company become more aware and take better care of the knowledge and competence within the company. One of the good aspects of Saab Aerosystems is that it has many well-educated employees with high creativity who are problem-solving minded (Interviewed employees). Many resources are wasted by not taking care of improvement suggestions from these persons.

6.3.1 The Time Issue

The need for more time to perform well is clearly stated by the interviewed employees. They mean that employees do not ignore problems but when too many problems occur simultaneously, the employees must prioritize which problem he or she shall try to solve and which they shall leave without any action. This lack of time leads to frustration and the ignoring of small problems which can lead to large, future problems according to Staudenmayer et al. (2002). Some of the interviewed employees mean that one explanation for this lack of time is the many meetings. Meetings and communication are important, however if the persons at the meeting feel that their presence at the meeting is not needed and the meetings have nothing to do with their tasks, then they should not be there. When calling for meetings, it is important to think through the list of participants and only invite people who are involved or have specific interest in the project. It is also important that the employees who receive the invitation feel that it is acceptable to decline an invitation if they do not feel that the meeting will be of value to them or if their presence is not required for some other reason.

Even though it is understandable that lack of time can cause frustration for the employees, Staudenmayer et al. (2002) also claim that lack of time and temporal shift can work as a trigger for change forcing employees to think in different terms. Sometimes it can be healthy with an increase in pressure, but as it seems that the employees at Saab Aerosystems always have such time issues it is presumed that reactions to temporal shift and time issues would not be positive. Instead, it seems that they feel a kind of hopelessness and mean that even if they are working hard, they are always behind time schedule.

6.3.2 The Negative Attitude towards Changes

According to the interviewed employees, the organization is resistant to changes, which is normal according to Hatch (1993). The culture stability does not like change and will remain the same until the management does something radical in order to change the culture (Hatch, 1993 and Schein, 1992). The fact that many of the interviewed employees mean that the culture has its origin in the old, military industry and that this heritage is still strongly present, indicates that there have not been many revolutionary changes during Saab Aerosystem's history. According to

Gagliardi (1986), revolutionary changes often occur when a new influence is brought into the company from the outside, by way of a new CEO or other persons with high positions. As persons coming from external companies and industries have difficulty receiving acceptance within the company it would be very difficult to change the culture in a revolutionary way by recruiting a new CEO from outside of Saab. Instead, the company has made apparent and incremental changes which have developed their culture gradually and this seems to also be their future tactic. None of the interviewed employees have claimed that the culture is really bad and must change. Instead they have mentioned a couple of things that they mean can be good to change in the future, but they have not asked for anything revolutionary that shall turn the company upside down. With Neuron, Saab Aerosystems will be in a completely new situation and needs to cooperate with companies from many different nations at the same time and within the same project. This will of course change the company, but the employees mean that these changes will be inside the framework that surrounds the culture and a complete change in culture will not be necessary.

According to the interviewed employees, changes are in general a response to existing problems, which indicates that Saab Aerosystems works reactively. The employees freely admit that the company is working reactively and state that they do not have enough time to work proactively with analysis of possible problems or weaknesses within the company. This concentration on existing problems also indicates that changes are often implemented with quite a negative focus: “We need to make this change in order to solve this problem”. The change is often kept secret until a decision is taken, in other words the change has a closed focus, but as soon as the decision is taken the information about the change is spread throughout the organization indicating a transition to an open focus phase. (Seo, Putnam & Bartunek, 2004) Saab Aerosystems could focus and work more on their capability to show that changes can be something positive. A change is normally a response to a problem and is therefore often presented that way. Instead, the company should work more proactively and try to figure out changes that can help them to be a better company in some way. A change does not always have to be a response to a problem. By working more proactively and by arguing for the change with positive words, the attitude towards change can become more positive and full of expectation. This would help Saab Aerosystems move away from the skeptical and even negative attitudes that is today apparent. It is far more inspiring to change in order to increase satisfied clients within the industry, compared with making changes because of common delays in delivery.

6.3.3 The Project Manager

Within Saab Aerosystems, the term change agent is not used. Instead, it is the project manager for the change project who has the change agent's tasks. The project manager is appointed when a decision for a change project is taken and at this stage the problem behind the change is already identified as well as the solution, the change project itself. The task for the project manager is to run the project and implement decided changes. (Interviewed employees) A change agent on the other hand has a much wider role with tasks including identification and diagnostic of future changes (Bowers & Franklin, 1972). At Saab Aerosystems, nobody has the role of change agent, which also can explain the company's difficulties in working proactively. Bowers and Franklin (1972) mean that the change agent must be an excellent communicator in order to anchor the change and ensure acceptance. Nonås (2005) claims that communication is a main factor in order to carry out successful organizational changes. The change agent also needs certain skills

including leadership skills and a good understanding of the employees' daily operations (Bowers & Franklin, 1972). When people are promoted to higher positions within Saab Aerosystems, almost all focus is placed on technical skills and how the person is handling his or her daily operations. This means that attention to leadership or communication qualities is very low and this can result in persons lacking these qualities receiving project manager positions. (Empirical findings) This can also explain why it is difficult to really anchor a change within Saab Aerosystems. Without a distinct leader that can clearly explain the change, it is difficult for staff to understand and accept the change. This does not mean that all project managers at Saab Aerosystems lack leadership qualities. Some of the persons with excellent technological skills of course also have leadership qualities. The problem is instead the promotion process, which places too little attention on leadership qualities.

6.3.4 Experiences from Earlier Change Projects

During the interviews, the employees claimed that earlier change projects in general have had problems in giving stated results. Often the change project faded out and the way of doing the work went back to being carried out in the same way as prior to the change. Schein (1992) means that the ignoring of the organizational culture can be a trigger for the failure of a change project and Beer, Eisenstat and Spector (1988) identified a couple of habits and bad points that were present within companies that have had problems getting their change programs working. Many of these identified variables are also present at Saab Aerosystems. One identified factor is that the managers and workers are out of touch with the customer needs (Beer, Eisenstat & Spector, 1988). The interviewed employees mean that normally the contact with the customer is good, especially regarding technical matters, but sometimes the employees do not understand that other matters besides the product's technical functionality are important. For example, many employees have difficulties understanding that costs and time aspects can be as important as the technical functionality for many new clients, especially clients within the new industry where Saab Aerosystems wants to do business. (Interviewed employees) If Saab Aerosystems is to be a competitive company in the future and will manage to carry out successful changes, employees must understand that matters other than strictly technical matters are also important.

One other weakness within Saab Aerosystems is the lack of strategic thinking. Upper management develops visions and strategies for the company as a whole, but many of the interviewed employees mean that they themselves and the management are working with too much focus on operational matters, instead of looking forward and working towards the future. Many of the interviewed employees mean that they do not have enough time to work proactively. This can be another explanation for the lack of results in earlier change projects (Beer, Eisenstat & Spector, 1988). If employees only have time to solve daily problems, the interest in change projects that are not urgent is low. When the problem reaches an urgent situation, the problem is solved by a "quick fix" in order to attack the next problem. This focus on operational issues is also closely related to the identified culture, where "heroes" who fix urgent problems are rewarded and employees working according to the project plan and do not run into any problems are not recognized or rewarded. This is also related to what many of the employees mean is a company focus on solving symptoms rather than the root of the problem. It is important that someone undertakes the task of analyzing the organization and investigating what the best solution for this situation is.

A third negative aspect that is a reality at Saab Aerosystems is that employees at a lower level are not fully informed during the change process (Beer, Eisenstat & Spector, 1988). Many of the interviewed employees mean that co-workers at Saab Aerosystems are informed first when a decision for a change has been taken. As they are not involved during the developing phase and the information is often given by persons who do not have adequate communication skills, the understanding of the change is low and a resistance is built up against the change. To change this pattern, co-workers should be provided with some information even during the developing phase prior to decision making. The person who presents the change must be a good communicator and be well prepared in order to answer questions. This person must also be able to explain the change and the reason behind the change with a language that everybody in the organization can understand.

A fourth identified reason for problems with change projects is that the company has poor interaction between functional groups (Beer, Eisenstat & Spector, 1988). At Saab Aerosystems, the collaborations between departments is low. There is also a lack of understanding between different functionalities, e.g. the developing engineer has difficulty understanding the marketer and vice versa. More employees crossing over department borders are needed and Saab Aerosystems must improve within this area in order to facilitate large changes affecting the entire company. (Empirical findings) Teams that are responsible for the change projects must involve people from all departments that will be influenced by the change. These teams shall be involved during both the developing phase as well as the implementation phase. Hopefully such teams with members from many departments will create a better “we” feeling between departments instead of the “we and them” feeling that some interviewed employees mean exist between different departments today. A summary of chapter 6.3 can be seen in Figure 30.

- Saab Aerosystems is willing to change as a response to external triggers, but has more difficulties changing as a response to internal triggers. The internal trigger must come from a person with position and/or expert power.
- The employees need more time in order to handle even small problems. By decreasing the number of meetings and accepting declines to meeting invitations, more time will be left for daily operations and strategic issues.
- The culture at Saab Aerosystems has not been changed by many revolutionary changes, as the heritage from the old, military industry is still present.
- Saab Aerosystems works reactively as a change is almost always a response to a problem. The company needs to improve its capability of working proactively and show that a change can be something positive, not only a response to a problem. By working more proactively, the attitude towards changes can become more positive.
- Nobody at Saab Aerosystems has the role as a change agent, which can explain the company's difficulties in working proactively.
- The lack of communication in change projects can be explained by the promotion process, where persons with technical skills but without leadership skills or communication skills can be promoted to positions as managers.
- Saab Aerosystems has a couple of habits which characterize organizations that have problems getting their change project working. For example employees are out of touch with customers needs, a lack of strategic thinking exists, employees at a low hierarchical level are not fully informed during the change process and the cooperation between different departments is low.

Figure 30 - Summary of chapter 6.3

6.4 Learning at Saab Aerosystems

It is important to be good at learning in order to improve or change. When changes are carried out, the organization must work on performing tasks in a new way and it is then obvious that to be able to learn quickly, the employees must have good training in learning. (Garvin, 1993) The interviewed employees mean that the company strongly supports staffs who want to develop their technical skills and many courses exist within this area. Other subjects such as economy do not receive the same focus or support and this proves how strongly Saab Aerosystems focuses on technical aspects. (Interviewed employees) If Saab Aerosystems is to be a learning organization, the managers need to provide their employees with more time for learning. Many of the interviewed employees mean that this lack of time is a problem when learning new competencies and Garvin (1993) states that time is necessary if the organization and its member are to learn and develop.

6.4.1 Expert Knowledge

Some of the interviewed employees claimed that demands for experts were high in all projects. The knowledge is therefore concentrated to a few persons that everybody wants to engage in their projects. The fear of doing something wrong and being punished for this is one explanation that the interviewed employees gave as to why this concentration of knowledge exists. Making mistakes is not acceptable and it is therefore more secure to involve people who have a lot of experience and knowledge instead of letting someone without this experience attempt to solve the problem. Despite only three of fifteen of the interviewed employees describing this situation it is still quite dangerous and alarming that some employees feel this way. When employees start to be afraid of learning new things, the possibility of carrying out successful changes becomes very small as well as the company's possibility of developing and in the long turn surviving (Garvin, 1993). In order to get rid of this behavior and these feelings, upper management should encourage learning and clearly convey this message to managers at all levels. It must also be acceptable to make small mistakes during the learning phase and the employees shall not be punished because of these. This attitude is also proof of a lack of strategic thinking within the company as it shows that managers only think about solving the problems of today, instead of acting as visionaries and understanding that these kinds of problems will need to be solved in the future even after experts have retired. The expert must also show that they are willing to teach and share their knowledge with others. As the culture currently motivates the organization to reward and admire employees with technical expertise, it is possible that the current experts may want to keep their position within the company and not share their competence with someone else in the organization. In such cases, the management shall encourage the experts to teach others in the organization, leading to a situation where persons who share their competences with others are more valued than persons who keep their expert knowledge for themselves.

6.4.2 Systematical Problem Solving

According to the interviewed employees, systematical problem solving is on the right track and all necessary models and tools exist. The knowledge within this area seems to be quite good, and in order to become even better here, the organization needs increased time and interest from employees in using existing tools and models. (Garvin, 1993) The organization must increase their willingness to be best and always try to improve their performance. The responsibility for this development lies on the whole organization, where everybody needs to improve their own as well as their department's performance.

6.4.3 Experimentation

The experimentation willingness is high within the company; some interviewed employees mean that it is sometimes too high with employees always wanting to develop their own solutions to problems that have already been solved before. This willingness to experiment can also be related to the culture, where technical competence is admired and rewarded. Finding new solutions to problems can be a way of defending or upholding a position. This willingness to experiment is however really positive and indicates the high level of creativeness within the company (Garvin, 1993). At the same time, some interviewed employees mean that employees who try to do new things and fail, can be punished, which normally stifles creativity and this willingness to experiment. Experimentation willingness is high when employees are working within their field of expertise, and here they do dare to try new approaches. On the other hand, the willingness to change areas of expertise and work within a completely new area is low. The different attitudes

towards experimentation and the fact that only a few feel fear of failure can also depend on which department the different interviewed employees work at.

6.4.4 Learning from Experiences

Learning from past experiences can be improved and many of the interviewed employees mean that the same mistakes can be avoided if lessons learned functioned better. With the documented lessons learned not being used, it is likely that staff believe that something is wrong with the way the lessons learned is documented. One reason mentioned for this is that the documents are too extensive. (Empirical findings and Garvin, 1993) Extensive and detailed documents can be good but they are useless if they are not being read. Instead, it could be favorable for the documentation of lessons learned to be written in a more general manner. It could be sufficient with only a few pages scoping small descriptions of good and bad experiences. If the next project manager requires more information, it is better that he or she gets in touch with the old project manager and discusses the issue. Another solution is that the overall, general document is complemented by an annex of more extensive documents providing further information. By doing this people who only are interested in the overall lessons learned can read the general document whereas people who wish for a deeper perspective can complement their studies by reading the complementary documentation.

6.4.5 Learning from Others

The interviewed employees mean that interest shown from staff to visit other companies and learn from them is not supported by the management. This attitude seems to be closely related to the culture and the difficulties personnel coming from external companies encounter with acceptance issues at Saab Aerosystems. The management seems to believe that their industry is completely different from other industries and that Saab Aerosystems cannot learn from representatives from other industries. (Interviewed employees and Garvin, 1993) Even though Saab Aerosystems' products are unique for Sweden, Saab Aerosystems can of course learn from other industries within other areas. As stated many times above, Saab Aerosystems focuses much attention on their technical competences but in order to become a truly competitive company they need to develop other areas as well. This learning can be increased and aided by studying other companies (Garvin, 1993).

6.4.6 Transferring Knowledge

Transferring knowledge is important if knowledge is to be spread throughout the organization, and here too is an area that can be improved within Saab Aerosystems (Garvin, 1993). The company tries to use many different ways of spreading information, e.g. Intranet, documents, meetings and work-shops. This is good when a message normally needs to be conveyed many times in different shapes and forms and in order to be fully understood. Many of the interviewed employees mean that it is quite easy to get support when they need to take a course in order to develop their individual competence, especially if it is within a technical subject. General group training programs do not seem to occur frequently as none of the interviewed employees have mentioned them. More general learning programs for larger groups can strengthen the company's spirit and could prove useful. The most effective way of transferring knowledge is by staff rotation, but within Saab Aerosystems this does not work well. (Empirical findings and Garvin, 1993) Saab Aerosystems must work with and improve their ability and willingness to allow and encourage staff rotation within the company, if they wish to improve in the area of transferring

knowledge. The line managers must learn to see to the best of the whole company instead of how it is today, when they optimize their own departments' performance. A summary of chapter 6.4 can be seen in Figure 31.

- The management must encourage learning of new things and small mistakes must be accepted.
- The organization must increase their willingness to be the best in order to be a competitive company and the responsibility for this development lies on the whole organization.
- Learning from own experience can be improved if the documents of lessons learned are written in a more general manner. The overall document can be complemented by an annex with more detailed documents.
- The management of Saab Aerosystems should support benchmarking at other companies in order to learn from others.
- The management should also support personal rotation to improve the transfer of knowledge. The line managers must learn to see to the best of the whole company, instead of optimizing their own departments' performance.

Figure 31 - Summary of chapter 6.4

6.5 Leadership

Leadership during changes is the issue that has generated the most widely spread answers during the interviews. Some mean that everything is functional and clear, while other means that it is not working at all and that indistinctness best describes the leadership of changes. Schein (1992) and Kotter (1996) agree that leadership during changes is extremely important. As stated before, it is important with a leader that can communicate the change in a positive and effective manner with knowledge of the operational area. Within Saab Aerosystems it is extremely difficult for a person without operational competence to run a change project, as the focus is on operational matters and technical as well as the admired operational skills. According to the interviewed employees there have sometimes been conflicts of interest between the line manager and the project manager in regards to personnel resources within their projects or operations. (Interviewed employees) The rules and specifications regarding leaders of organizational changes and their mandate must be made clearer within the whole company. It shall not only be clear who the leader is, even the whole project team shall be official and have the mandate to act as leaders. Today, it is obvious that the leadership differs greatly depending on which person holds the position of project manager. Personal qualities will always have an effect on how a leader is interpreted, however if the company has clear instructions on how a project manager and his or her team shall act and which mandate he or she has, it is much easier for the project manager as well as for the line manager and employees to know the rules and prioritize the different work situations.

An important factor in order to produce successful changes according to the interviewed employees is that someone in upper management has an interest and involvement in the change

project. However many of the employees mean that the company needs more people working with strategic issues and that upper management should not be involved in all matters of operation. While Schein (1992) and Kotter (1996) point out that leadership is extremely important during changes, one solution could be to select a person in upper management to be a contact person for the project manager. These two persons shall maintain contact throughout the project and have shared responsibility for its outcome. The project manager shall despite this contact be responsible for running the daily operations. This will hopefully increase the success of the change project without forcing too much involvement from management in the daily operations of the project. A summary of chapter 6.5 can be seen in Figure 32.

- The mandate for project managers must be clearer in order to improve the cooperation between themselves and the line managers.
- By involving a person from the top management who shares the responsibility for the outcome of the change project with the project manager, the interest for the change project can hopefully remain throughout the whole change process. This will increase the degree of successful change projects.

Figure 32 - Summary of chapter 6.5

6.6 Matching Strategy for Saab Aerosystems

Saab Aerosystems does not have any outspoken strategy for how they shall carry out changes. (Empirical findings) The company's current way of implementing changes has most in common with expert driven strategy, problem focused change strategy and programmatic change strategy. Within problem focused change strategy the change is initiated at a high management level and the change is developed in order to solve an existing problem (Interviewed employees and Håkansson, 1995). One way of having a suggestion for change heard within Saab Aerosystems is by using expert knowledge, which has much in common with the expert driven strategy (Empirical findings and Gustavsen et al., 1996). Saab Aerosystem's way of working with changes today also has a lot in common with programmatic change strategy, e.g. the change is seen as something that disturbs daily operations and a strong trust to people with expert knowledge and formal power exists. Within programmatic change strategy, it is common to study other companies and adapt their methods and models to the own company; however Saab Aerosystems does not correspond to this description as they do not visit other companies and learn from them. Instead, they like to find their own solutions to issues without involvement from external companies. (Empirical findings and Norrgren et al., 1996 in Nonås, 2005) The first step in order to develop a change strategy can be to instigate increased benchmarking in order to learn from others. Norrgren et al. (1996) in Nonås (2005) mean that learning strategy is more effective than programmatic change strategy and that many companies use both types of strategies. In a longer perspective it can therefore be useful for Saab Aerosystems to also develop a learning strategy by involving changes as a natural part of daily operations and by increasing cooperation between management and employees to together decide upon future goals. Saab Aerosystems must also put together groups of people with strongly different wills and knowledge, which will lead to a broader acceptance and understanding of changes. The advantage with a chosen strategy is that it can be easier for the members of the organization to understand in which direction they are working, when they can read about and study the company's change strategy. The choices of

suitable strategies are taken to match analysis made earlier in this chapter. In the beginning it can be easy to use an existing strategy, but after a while it is important to develop the strategy in order to match the company's culture. A summary of chapter 6.6 can be seen in Figure 33.

- Today, Saab Aerosystems does not have any outspoken strategy for how they shall carry out changes, but its way of handling changes has most in common with expert driven strategy problem-focused change strategy and programmatic change strategy.
- The advantage with a chosen strategy is that it can be easier for the employees to understand in which direction they are working when they can study the company's strategy.

Figure 33 - Summary of chapter 6.6

6.7 Reactions to Change Projects

Organizations' initial skeptical reaction towards changes is a natural behavior and comes from the Model I theory-in-use thinking, where issues that are upsetting, embarrassing or threatening result in defensive behavior. This is the most common behavior when issues of these characteristics arise. Members of Saab Aerosystems act like people who have grown up with a Model I theory-in-use thinking and are often defensive in order to protect their position and work tasks. (Argyris, 1990) Saab Aerosystem's employees are not only defensive; sometimes they even show a negative attitude towards changes despite the fact that interviewed employees mean that it is much easier to make changes today compared to a couple of years ago as the employees are today more positive towards changes and expect them to occur and therefore they do not panic each time a change project is to be carried out. This is very positive and by further increasing the learning within the organization, attitudes towards changes will normally also become more positive according to Argyris (1990). It is also important that the organization admits that they have problems with acquiring acceptance for changes. Some of the interviewed employees said that there is a problem with this negative attitude, while others mean that it is completely normal with a defensive attitude and that it is impossible to change this. Even though a defensive attitude is normal, it is possible to change this by helping individuals diagnose their current way of handling threatening issues and helping them develop a more positive theory-in-use (Argyris, 1990). By using a positive approach in change work, the employees will see the possibilities with the change and the change will then be related to something positive. As long as Saab Aerosystems uses a negative approach where most changes are a way of solving existing problems, the company's employees will associate changes with something negative and the defensive and negative attitude towards changes will remain.

Another explanation for Saab Aerosystems negative attitude towards changes is the age of the organization. It celebrates its 70th anniversary this year, which means that the formal structure and internal roles are much more stable compared to that of a young multi-media company that has only existed for a couple of years. The older the company, the more established its routines are and the more a change will disturb these routines. While Saab Aerosystems' environment has changed a lot and will continue to do so, the company must understand that their old ways of working do not match their environment and that the demands from new clients are different from those from the old clients. (Interviewed employees and Amburgey, Kelly & Barnett, 1993) The interviewed employees were all well-acquainted with this new future and mean that it is

necessary for Saab Aerosystems to change if it will continue to survive and thrive. This attitude shows that the company is on the right track and that it accepts that it has to change in order to maintain current client as well as find new customers. This is a positive sign as it is often hard for old organizations to accept the need to change. Even though it is hard for an old organization like Saab Aerosystems to start to change, it is more likely that it will survive a change compared with a younger organization; the real danger occurs if they do not see or accept the need to change (Amburgey, Kelly & Barnett, 1993). As Saab Aerosystems see and admit that they need to change, the possibilities for a good and successful change is high. The interviewed employees said that change projects shall be run according to the company's overall project model, PSM, which means that most of the changes shall be carried out in a systematic manner. This is important in order to increase the positive attitude towards changes, as Amburgey, Kelly and Barnett (1993) show that a successful change increases the willingness to make further changes in the same area and manner. Saab Aerosystems should therefore continue to use the PSM model when implementing changes and should develop a clear routine for how changes are to be performed. This will provide the employees with a sense of security when carrying out future changes, which also will improve the possibility of developing a positive attitude towards change. The positive effects of using the same model will only occur if the company manages to carry out successful changes when using PSM. If the PSM model is related with failed change projects, the positive effect and the feeling of security by using PSM will not occur. A summary of chapter 0 can be seen in Figure 34.

- A skeptical attitude towards changes is natural, but in Saab Aerosystems the attitude can even be negative. The attitude towards changes can become more positive by increasing the learning within the organization and helping the employees develop a more positive theory-in-use than the Model I theory-in-use. This can be done by using a positive approach in work with change projects.
- By using a systematic manner when carrying out change projects, the employees confidence and feeling of security related to changes will increase, which will lead to a more positive attitude towards changes.

Figure 34 - Summary of chapter 6.7

6.8 *Gunder can improve the Change Process*

During the interviews, many employees showed that they have a lot of expectations for Gunder and mean that Gunder has the potential to greatly improve the way changes are handled. It is not only employees involved within the Gunder project that have expectations; many of the other interviewed employees have these same expectations. The interviewed employees mean that Gunder will result in increased solidarity and collaboration between the different departments. It will also result in a clearer and more uniform style of leadership during changes. Gunder places important attention to the goal setting process and expresses the importance of conveying goals within the organization. It will hopefully also ensure that change projects are completely thought out prior to a decision being taken for go-ahead. The project must show economical possibilities and Gunder also insists that someone is responsible for the change after project completion in order to completely anchor the change. Finally, Gunder shall also ensure that the process of

taking care of suggestions from employees works better and that all suggestions are investigated. (Empirical findings)

Many of these possible improvement areas are areas where Saab Aerosystems has problems today. Gunder seems therefore to be a project that has been properly considered and adapted to the company's current situation. It is however important that the management for Gunder are able to keep the spirit up within the project. The project shall run for three years, handling many non-technical issues, which normally do not receive much attention within Saab Aerosystems. It is therefore important that management show results from Gunder during the time the change project is running and clearly show which improvements the changes have resulted in. This can lead to increased employee motivation within the organization (Kotter, 1996). A summary of chapter 0 can be seen in Figure 35.

- Many employees at Saab Aerosystems have a lot of expectations regarding Gunder and hope that the project will improve the company's ability to carry out changes.
- The project will be run for three years and results from the project must be shown during this time in order to keep the interest alive during the entire change project.

Figure 35 - Summary of chapter 6.8

6.9 Measuring the Progress of Change Projects

Many of the interviewed employees mean that Saab Aerosystems is not good at measuring progress during change projects. Kotter (1996) points out the importance of allowing for short term wins in order to keep up the project spirit. Garvin (1993) means that measuring and identifying changed attitudes and new ways of thinking is necessary in order to manage the change project. The measuring instruments that are discussed in this exam thesis are all general and are possible to use in almost all change projects. The measure variables shown in the theoretical frame of references interviews, questionnaires and surveys can be useful tools in measuring non-technical values such as the clients' or the employees' feelings about the change. These tools can be adapted after each change. A questionnaire is an inexpensive tool that does not require much time for clients or employees to answer if kept brief. The interviews also came up with a couple of suggestions on how to measure changes, and related to economics many interviewed employees suggested business cases. Such a business case can show many different outcomes depending on what is happening within the company. It can give a worst and a best case scenario where the company must have solutions for all cases between these two extremes. As stated earlier in this chapter, the lessons learned must be used in a better way. At the moment, much knowledge and experience is not being put to proper use because of this poor use of lessons learned. It is important to observe, that these suggestions of measure variables are general variables. They shall be complemented by measure variables adapted to the specific change. These general measure variables shall however provide a general statement regarding how the change is currently progressing and what the preliminary results of the change are. These variables are easy to use and calculate and can be used by persons without prior experience within this area. A summary of chapter 6.9 can be seen in Figure 36.

- When results during and after a change project shall be measured, general tools like budget, business case and questionnaires can give a general statement of the change project, but they shall be complemented with variables that are adapted to the specific change.

Figure 36 - Summary of chapter 6.9

7 Results and Conclusion

This exam thesis ends with a presentation of the final solution, which is shown by way of a checklist. The checklist is based on chapter 6, Analysis and Discussion, and will give a suggestion for how Saab Aerosystems can introduce and manage organizational changes. Finally suggestions are made regarding future studies within this issue. In the first sub chapter, 7.1 The checklist, each stage of the checklist finishes with a couple of questions that can be useful for the project team to ask themselves during each actual stage. The following sub chapters, 7.2 Final Conclusions and 7.3 Further Research, ends with summaries.

7.1 The Checklist

The checklist is produced using Kotters eight-stage process and develops and adapts this process in order to match Saab Aerosystems organization, culture and identified important variables that have been discussed in chapter 6 *Analysis and Discussion*. The checklist will also include some measuring instruments that will help the organization manage the change project and decide if the change project is progressing in the right direction or not.

7.1.1 Creating an Interest for the Change

The first issue is to create an interest for the change and a willingness to be a part of the change. This shall be done by presenting an overall picture of the reason for change, why the change must be done and what the purpose of the change is. The project manager must already be appointed. The project manager shall be in possession of skills related to the change as well as leadership and communication skills. In order to create an interest for the change, the project manager can use the fact that the organization has a great interest in technical matters and relate the change to some technical aspects. By relating the change project to technical matters the employees will also see that all parts and aspects of the organization's operations are linked together and the outcome will hopefully lead to and create a better understanding and interest in the company's non-technical chain of operations. No solution or complete change project shall be present during this stage, but the employees within the organization shall be encouraged to send their suggestions for solutions to the project manager in charge of the project. It is important for employees at Saab Aerosystems to feel that they are involved in the change process, as they are normally more positive towards the change if they have this possibility. During this stage, people can also present their interest in being a part of the project team. This first stage will allow co-workers the same opportunity as the management to think through the issue of the change and accept the need for a change. This stage will also make co-workers aware of the company situation and its future issues and improvement potentials. It is positive and important that co-workers are involved and think about these aspects, as it helps them understand why changes need to be made, even when the business is going well. It also creates a commitment and an engagement to the company and gives the employees needed time in order to get used to the fact that the organization must change. This first stage shall also be used in order to create a focus on strategic thinking. The management shall use this stage to encourage the employees to think over the specific change project and other strategic issues. The employees need more time to work with strategic issues and they can be motivated to take this time during this first stage. Questions that can be asked during the first stage are shown in Figure 37.

- Have all employees been informed about the change project?
- Has a presentation of the change project created an interest for the change?
- Have the employees had enough time to think through the change project?

Figure 37 - Questions related to stage 1

7.1.2 Putting Together a Project Team

During the second stage, it is the project manager's responsibility to create a group that can develop and implement the change. When electing members to this team, there are a couple of identified factors that must be respected. First, all involved departments must be represented in the group. The reason for this is that they can create an understanding for the change within their departments and can also present their department's special needs and wishes. If any of these requests cannot be met with then the representative can go back to his or her department and provide an explanation. This communication is normally more accepted than if somebody from the management or another department conveys these kinds of messages. Secondly, many of the informal leaders need to be engaged in the project team. These persons have a natural leadership position within the group and normally know how to communicate with the group in order to convey a message. Most employees respect them and they often have a good knowledge of their department's operations. Thirdly, it is important to try and engage as many of those who have shown an interest for the change during the first stage in the project team. People who want to be a part of the change and think that the change is a good idea are enormous resources in all change projects. Of course if the interest in being involved is enormous, all employees who have shown this interest cannot be engaged in the project team. It is then important to convey a reasonable explanation why they cannot be involved and which process of selection has been adapted. Another aspect to consider before electing people to the team, are that they must be able to collaborate and work together as a team. They must also be able to communicate and have an ability to engage people, as they will be responsible for anchoring the change in their departments. The project manager shall also have a person in the management group who is involved and responsible together with the project manager for the result of the change. At Saab Aerosystems, experiences from earlier change project have shown that an engaged representative from the top management can help in keeping interest for the change alive throughout the entire change process, thereby increasing the possibility for successful change projects. Questions that can be asked during the second stage are shown in Figure 38.

- Is someone from the top management involved in the change project?
- Do all involved departments have a representative within the project team?
- Have as many informal leaders as possible been involved in the change project?
- Have persons who showed interest during the first stage been involved in the project team?
If no, have they received an explanation for why they are not involved?
- Does the project team consist of members that can work together and cooperate?

Figure 38 - Questions related to stage 2

7.1.3 Formulating a Vision, Strategy and Goals for the Change

During the third stage the project team shall work together and develop a clear vision, strategy and goals for the change. During this stage, communication with the rest of the organization is limited, but it is important that representatives from the different departments keep their ears open and detect if rumors or negative gossip surround the change. If this is the case then it is important to hold an information session where all employees receive information with current project status and are informed that further information will be presented as soon as it is ready. The reason behind keeping the information limited during this phase is that the project team needs to decide what the vision, strategy and goals are before these are stated, there is otherwise a risk that spreading information can sound different depending on which person is presenting the information. It is instead better, if possible, to wait with spreading of information until all project team members have accepted the future of the project. The reason for providing information when gossip and rumors start to occur is that if these rumors and gossip are anchored within the organization, a negative attitude and feeling towards the change can arise making future work more difficult. Saab Aerosystems should try to improve the attitude towards changes and make it more positive. Negative gossip will not facilitate this work.

The vision, strategy and goals must be that clear and easy to understand that everybody in the organization shall be able to understand them. The vision shall have all the characteristics of an effective vision, namely imaginable, desirable, feasible, focused, flexible and communicable. The strategy shall support the vision and make it possible to reach. The goal shall also be in line with the vision and shall be concrete and measurable. As the organization has a big interest in technology, it is favorable if the vision, strategy and goals have some parts that are related to the technology. It can be easier to awaken interest for the change if the project can show, where possible, how the change can influence the technology in a good way even if the changes main task is to alter something other than technology related issues.

During the third stage, the first measure variables in form of business cases shall be calculated. These variables will help the project team verify their ideas, see if they are feasible and see what the outcome will be in different scenarios. In Figure 39, questions that can be asked during the third stage are shown.

- Are there rumors or negative gossip surrounding the change project? If yes, why have these rumors occurred and how has the project team handled them?
- Has any information been communicated to the organization and has the spreading of information been the same throughout the whole organization?
- Have a vision, strategy and goals been formulated and do they fulfill all characteristics of good visions, strategies and goals?
- Are the vision, strategy and goals related to any technological aspect?
- Has a business case been made for the change project?

Figure 39 - Questions related to stage 3

7.1.4 Communicating the Change Project

The fourth stage is one of the most important in order to succeed with the change, but it is also in this area, communication, that Saab Aerosystems has had earlier difficulties. If the work in stage three is performed correctly, the fourth stage proves much easier. The communication shall be presented in many different forums and with different techniques, e.g. formal information sessions presented by the project manager, documents posted on the Intranet and informal information meetings where department representatives inform his or her colleagues of the change. All information meetings shall be communicative in both directions; the informed employees must have an opportunity to voice their opinions and point out good and bad aspects with the change project. It is important that all employees receive the same information and it is therefore better if members of the project team convey the information. This will differ from the current situation where it is the role of the line manager to spread the information. During these information sessions, the vision, strategy and goals shall be presented. The vision, strategy and goals shall be easy to understand and the information meetings shall all be carried out in this same way. It is important that the project members keep in mind that other staff members who have not worked much with the change must receive the information at a level where everybody can understand the message. The person who presents the change must clearly state that they are open minded and that they wish to have improvement suggestions from their audience. For employees at Saab Aerosystems it is important to feel that they have an ability to influence their future. The interviews show that they do not like when decisions come from the upper management and they are simply forced to accept the decisions made. Therefore, it is important that these co-workers have the possibility to present their views throughout the change project. The project team can never satisfy all demands but if they can provide a sound explanation as to why some suggestions have had a greater influence than others, then employees can normally accept this. The most important issue here is that all staff members have the ability to give their point of view and feel that members from the project team listen to and consider their suggestions.

The first measure variables, the outcome from the business cases based on different scenarios, shall also be presented as they concretely show how much the change will influence the organization and in which possible ways. At the end of this stage, it can also be favorable to send out a brief questionnaire to employees. This must be kept to a minimum of only a few questions if it is to be answered by as many as possible and no more than a couple of minutes should be required to answer. The questionnaire shall ask staff to give their description of the vision and the goals of the change. This will tell the project team if they have been successful in their way of informing staff of the change or if further work here is required. Questions that can be asked during the fourth stage are shown in Figure 40.

- Have many different forums and techniques been used in order to spread the information within the organization?
- Have all meetings been communicative in both directions? Have the employees received an opportunity to convey their opinions about the change project?
- Has the same information been spread in all departments?
- Has the information spread at meetings been easy to understand, even for persons who are not involved within the change project?
- Have all questions been answered in a way that was accepted by the employees?
- Have the outcomes from the business cases been shown to the employees?
- Has a small questionnaire handling the employees' apprehensions of the change projects vision, strategy and goal been distributed to employees within the company?

Figure 40 - Questions related to stage 4

7.1.5 Equipping the Organization with Tools and Knowledge

If the members of the organization shall cooperate in order to carry out the change, they must feel that they have the needed knowledge and tools to be able to carry out the change as well as manage the new future which will come after the change. The line manager must encourage his or her personnel during this phase and provide support for the time and attention they put to the change. To achieve a state where the line manager supports the change, the project manager and his team must regularly inform the line manager always ensuring that he or she has the latest news about the change project. Without this kind of open work ethics the project will meet with many obstacles.

In order to obtain the right tools and knowledge, concerned employees must receive training when necessary, e.g. when a new computer system shall be introduced, employees must be educated in how the new system works. This period of training will hopefully increase employee confidence and motivation towards the change. If co-workers feel that they have the necessary instruments to handle the change, they will be more likely to view the change in a positive light. In Figure 41, questions that can be asked during the fifth stage are shown.

- Have the employees received necessary education and tools in order to handle the change project and the situation that proceeds the change project?
- Have the line managers been supportive during the change project?
- Have the line managers been fully informed about what is going on within the change project?

Figure 41 - Questions related to stage 5

7.1.6 Implementing the Change and Reporting Initial Results

When the organization has been informed and has the necessary tools and knowledge, the change team can commence the implementation phase of the change project. No real objection will exist at this stage if the prior five stages have been performed carefully. During this and all other

stages it is important to update all documents when something happens that affects the change project. It is important that the informal organizations do not make any decisions and all departments work according to the same line and decisions. During the implementation phase, it is important that the project manager and the project team pay attention to and reward the departments that work according to set time schedules and manage to keep a good rhythm throughout the project. Departments that lapse in time schedule throughout the change project but manage to finish just in time shall have credit for their ability to complete, but shall not be celebrated as heroes. As Saab Aerosystems wants to take away the “hero-culture”, it is important that this willingness is clear even during change projects. Rewarding projects that keep their time schedules and work reliably and well will show employees that time and timing are important aspects and that all staff must pay attention to them in order to perform well.

After the change has been implemented, the project team must keep themselves informed of initial change results. The departments’ representatives can investigate how the change has influenced their departments and try to find some good examples. These do not have to consist of extreme improvements; it is sufficient that the change accomplished what it set out to and even examples of small improvements can motivate the organization to continue work with the change project. It is therefore important that the good examples and improvements are spread throughout the entire organization.

During this phase it can also be favorable with brief interviews where the representatives for the department discuss the change project with the co-workers within his or her department. These interviews shall try to catch the employee’s apprehensions of what has been good or bad with the change project and how the change has influenced the organization. This will give the project team an indication of if the change project actually changed what it set out to. By involving the representatives for the departments, the employees will hopefully convey their sincere opinions about the change, as the representatives shall be persons who have the other employees’ trust. In Figure 42, questions that can be asked during the sixth stage are shown.

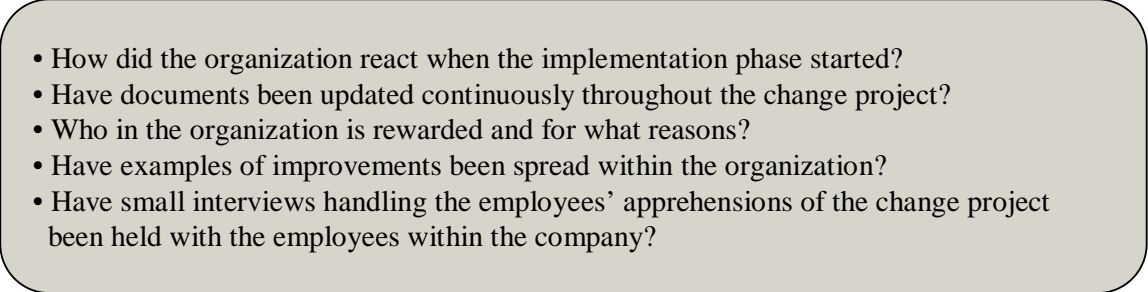
- 
- How did the organization react when the implementation phase started?
 - Have documents been updated continuously throughout the change project?
 - Who in the organization is rewarded and for what reasons?
 - Have examples of improvements been spread within the organization?
 - Have small interviews handling the employees’ apprehensions of the change project been held with the employees within the company?

Figure 42 - Questions related to stage 6

7.1.7 Maintaining the Spirit within the Change Project

The implementation phase continues during the seventh stage. It is important in this stage to keep the spirit of the change project up, and in Saab Aerosystems this can be achieved by involving the person responsible for the change project within the management group. He or she can provide both necessary inspirations to the project team as well as show interest for the results of the change and encourage employees within the organization to keep working with the change after the first initial implementation phase has been completed. This person shall also encourage the

line managers to work with the new methods that the change has resulted in and in this way influence other staff to do the same. A manager's actions, rather than words, influence employees to a greater extent. Most of the responsibility of maintaining project spirit lies with the project manager and the team members, but help from the upper management will facilitate this work. Besides keeping the project spirit up, the project team will continue work with the implementation of the change and perhaps carry out some modifications to the change project if the interviews during the sixth stage indicate that this was necessary. If a change project proceeds according to schedule, this stage will be very easy. However if there are a great deal of problems, this stage will require a lot of work. Questions that can be asked during the seventh stage are shown in Figure 43.

- Is the representative from the top management involved and interested in the change project and does he or she motivate the rest of the organization to carry on with the change project?
- What have the project manager, the members of the project team and the line managers done in order to keep up the motivation for the change project within the organization?

Figure 43 - Questions related to stage 7

7.1.8 Finish the Change Project

This last stage shall ensure that the change is grounded within the company and its culture and that the collaborators will work according to the change even after the change project has been completed. It can take a long time before the change is completely anchored and everybody is working according to its new methods. It is therefore important that the project is living until the change is grounded as there is otherwise a big possibility that the change will fade away and the organization will go back to their old way of working. During the end of this last stage, it is maybe enough if the project manager runs the project together with the responsible person from the top management as all or most of the operational work will have been completed. During this phase the results from the change shall also be both measured and presented regarding economical as well as change specific aspects. A new questionnaire shall be distributed to the employees where they can describe how the change has influenced their way of work and which positive versus negative consequences it has brought with it. Other interested parties, like clients or suppliers, who have been influenced by the change should receive similar questionnaires where they can explain how they have experienced influences of the change in their cooperation with Saab Aerosystems. At the very end, it is extremely important that the project manager documents lessons learned from the change. This document shall be quite short and easy to read, as it must be easy for everybody involved in future change projects to read. It shall only provide an overview of the project and things that have been successful or unsuccessful. This document shall also be complemented by a more extensive document where the project manager describes the whole project in detail and also explains the lessons learned and the happenings behind them more fully. This document can be read by those who are really interested and want to know more upon having read the shorter version of lessons learned. Questions that can be asked during the eighth stage are shown in Figure 44.

- Have the project manager and the representative from the project management anchored the change within the organization?
- Does the organization work according to the change's new methods and/or models?
- Have the final investigations concerning economical outcome, change specific aspects and employees' and clients' apprehension of the change been carried out and have the results from these investigations been presented?
- Have lessons learned been documented?

Figure 44 - Questions related to stage 8

7.2 Final Conclusions

Saab Aerosystems needs to improve a couple of aspects regarding its ability to manage changes. The management needs to be more communicative and spread the information about the change to all employees at an earlier stage and in a better manner in order to facilitate an understanding of and acceptance for the change within the organization. The company also has to clearly document how a project manager for a change project shall act and handle and which mandate he or she will have. This will hopefully lead to a better collaboration between project managers and line managers, as this concretizing of leadership will clarify the mandate for different resources when a competition between the two kinds of managers occurs. The collaboration between different departments can be improved by putting together project teams with members from all involved departments, which can lead to a better “we” feeling for the company as a whole. In order to feel secure with the new situation that a change leads to, it is also important that the organization's members have necessary tools and knowledge. If employees do not have the equipment that is needed when the change project starts, the organization must provide assistance by ensuring they receive the correct tools as quickly as possible. Finally, it is important that Saab Aerosystems manages to measure the progress of the change throughout the change project and learn to spread this information within the organization.

With the project Gunder, Saab Aerosystems has started to revise its procedures on how change projects are managed. Many of the interviewed employees mean that Gunder can help Saab Aerosystems become better at handling changes and change projects. Gunder also shows that Saab Aerosystems has understood that it needs to develop as a company if it will be a competitive company within many different surveillance areas. In Figure 45, a summary of chapter 7.2 is shown.

- Saab Aerosystems must improve several aspects regarding its ability to manage change, e.g. communication, leadership, collaboration, learning and measure progress from changes.
- Gunder can help Saab Aerosystems become better at handling changes and change projects.

Figure 45 - Summary of chapter 7.2

7.3 Further Research

This exam thesis can with advantage be followed by a verification of the above presented model for a change process. This verification can end with an evolution of the model and can bring knowledge which can lead to modifications of the model. It can also be of interest to do research within smaller, well-defined subject areas. These more specific investigations can result in measure variables that are more adapted to a specific type of change, which can help the organization when evaluating a specific change.

This exam thesis has only investigated how big organizational changes shall be managed. It can therefore be of interest to complement this exam thesis with an investigation into how departments within Saab Aerosystems run their small, daily change projects, improvement programs and how they work in order to ameliorate all their activities. If the company is to improve constantly and be a future world-class company, they must be able to manage big as well as small scale changes and must constantly try to find new improvement possibilities. A summary of chapter 7.3 can be seen in Figure 46.

- A verification of presented model can be useful.
- An investigation of how departments within Saab Aerosystems run small, daily change projects and improvement programs can be a good complement to this exam thesis.

Figure 46 - Summary of chapter 7.3

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Interviews with 15 employees at Saab Aerosystems during June 2007

Appendix 1 – Interview Questions

Organisation och kultur

- Hur skulle du beskriva Saab Aerosystems organisationsform? (Byråkratisk, matris etc.) Är organisationsstrukturen väl anpassad efter verksamheten?
- Hur är den omgivning Saab Aerosystems befinner sig i? Omvälvande/oberäknelig eller stabil? Beskriv med egna ord.
- Är er organisation väl anpassad för snabba förändringar, har den hög flexibilitet? Behöver flexibiliteten förbättras? Om ja, har du några förslag hur? Om nej, varför inte?
- Finns det mycket/många informella organisationer på Saab? Verkar de för företagets bästa eller vilka intressen har de?
- Vem är din närmsta chef och hur många är han chef över?
- Hur skulle du beskriva företagskulturen på Saab Aerosystems?
- Vilka värderingar och normer anser du utformar företagets kultur?
- Hur anser du att kulturen har formats i Saab Aerosystems? Någon speciell händelse eller person som ligger bakom?
- Hur väl identifierar du din chef/ledare med företagets kultur? Verkar den personen som förebild enligt dig?
 - Vad värdesätter, kontrollerar och belönar chefen?
 - Vad anser du värdesätts vid rekrytering, befordran, pensionering och bannlysning? Följer det företagets vision/kultur?
- Trivs du på företaget och i arbetsgruppen? Anser du att det är viktigt med trivsel av detta slag?
- Är organisationen demokratisk? Vilken möjlighet har du till påverkan och involvering när det handlar om beslut som påverkar dig?

Ledarskap

- Har ni ett tydligt ledarskap under förändringsprocessen, någon som visar vägen?
- Brukar det vara endast en person som fungerar som ledare eller ett helt team? Tycker du att det varit ett bra antal personer som skött ledarfrågan? (för många/få)
- Brukar förändringar föregås av ett tydligt mål? Bestämmer ledningen beslut eller är det ett organisationsbeslut? Hur påverkar det valet förändringen? (Positiva och negativa aspekter)

Förändringsarbete – generellt

- Vad känner du när förändringar för organisationen kommer på tal? (Rädsla, förväntan, nyfikenhet...) Hur upplever du att organisationen reagerar på en förändring?
- Vilken sorts makt har oftast personer som får gehör för förslag på förändringar?
 - resurs, position, expertis, personligt (karismatisk), negativt (förstör för andra)
- Brukar problem tas upp till ytan, eller tycker du att det förekommer att problem ”sopas under mattan”?
- Anser du att företaget har en miljö som stödjer och uppmuntrar till lärande?
- Vilka faktorer påverkar mest vid förändringsarbete? (BCAM/Gunder/Neuron)
- Hur har du/ni arbetat för att implementera BCAM/Gunder så smidigt och enkelt som möjligt?

- Vad upplever du brukar generera förändringar?
 - Externa faktorer såsom nya konkurrenter, uppköp av kunder etc.
 - Interna faktorer, såsom nya chefer, nya organisationsstrukturer (småskaliga förändringar, generellt sätt)
- Vem eller vilka i din organisation har möjlighet att få gehör för ett förslag på förändring och/eller kan genomföra en förändring?
- Brukar en förändring föregås av ett lärande moment på Saab Aerosystems? Anser du att det har någon verkan/behövs?
- Är miljön öppen för nytänkande, nya, galna idéer?
- Förbättrar ni kontinuerligt er prestation?
- Finns det tid och förutsättningar för att tänka, analysera och reflektera? Brainstorming, problemlösning.

Förändringsarbete – specifikt för aktuell förändring

- När förändringsförslag och förändringsprogram tas fram, brukar de då ta hänsyn till rådande kultur? Tror du att detta förhållningssätt i någon mening har påverkat resultatet och genomförandet av förändringen?
- I vilken grad är medarbetarna delaktiga i utvecklingen av nya förändringsprogram?
- Historiskt sätt, vilken framgång har tidigare organisationsförändringar haft? På vilket sätt har de varit lyckade/misslyckade? Vad definierar en lyckad förändring för dig?
- Brukar förändringar av samma sort återkomma eller brukar det röra sig om nya förändringar?
- Brukar Saab Aerosystems bli starkt påverkad av en förändring, eller flyter arbetet på som vanligt?
- Hur brukar förändringsarbete kommuniceras ut till dig? Tycker du att kommunikationen sköts på ett bra sätt?
- I vilken ande har förändringen implementerats i organisationen?
 - Negativ vs. Positiv – på vilket sätt ”marknadsförs” förändringen? Existerande problem eller möjligheter?
 - Reaktivt vs. Proaktivt – är det alltid ett svar på ett redan uppstått problem, eller genomförs förändringar i förebyggande syfte?
- Använder ni er av förändringsagenter på Saab Aerosystems? Om ja, på vilket sätt agerar de?
- Hur reagerar organisationen på händelser som är pinsamma eller hotfulla?
- Tror du att Saab Aerosystems ålder påverkar utgången för förändringar? Positivt eller negativt?
- Hur lång tid brukar det ta innan en förändring integrerats i organisationen och blivit allmänt accepterad?
- Vilken uppföljning har ni efter förändringsprogram? Gör ni någon form av mätning av förändringens påverkan?
- Brukar någon form av strategi ligga bakom införandet av förändringen?
- Vilka tror du är de kritiska faktorerna för att lyckas respektive misslyckas med en förändring?
- Hur brukar förändringar tas emot på Saab Aerosystems? Direkt acceptans, motstånd etc

Utvärdering av förändring

- Hur brukar ni utvärdera förändringar under dess gång? Vilka mått används? Hur utvärderas förändringen efter att förändringen avslutats?
 - Budget, intervjuer, enkäter etc...

Förändringsmodell

- Har förändringsledaren förmedlat någon form av panik/känsla av behov/det alvarliga i situationen när förändring har implementeras? Är det bra? Om nej, tror du att det skulle underlätta förändringsarbetet?
 - Hur förmedlas annars behovet av förändring till stora delar av organisationen?
 - Finns det för stor självbelåtenhet inom Saab Aerosystems? Tekniskt kunnande är högt, men är egenkärleken för stor?
- Hur har ledningsteamet satts ihop? Får de tillräckligt med resurser och har de alla de egenskaper du tycker krävs för att genomföra ett bra förändringsarbete?
- Har förändringsvisionen kommunicerats ut i företaget på ett bra sätt?
 - Görs målen förståliga? Är det lätt att förstå eller är det mycket fackspråk och formella möten?
 - Vilka sorters olika kommunikationssätt har användas för att förmedla förändringen? (intranät, möten, utskick, workgroups,)
 - Upprepas budskapet många gånger, eller har gruppen informerats endast en gång?
- Vad har gjorts för att uppmuntra och stödja medarbetare under förändringsprocessen?
 - Vad tycker du skulle kunna göras för att ytterligare motivera medarbetarna?
- Har någon snabb förbättring som förändringen medfört förmedlas ut i organisationen? Är det lätt för medarbetarna att snabbt se nyttan av förändringen, eller tar det lång tid innan det blir uppenbart?
 - Förmedlas de snabba förbättringarna ut i organisationen?
 - Finns det ett krav från organisationen att visa snabba förbättringar? Tycker du att det skulle vara önskvärt med ett sådant krav? Fördelar/nackdelar
- Vad görs för att hålla ”ångan” uppe under hela förändringsprocessen? Brukar engagemanget och intresset minska med tiden? Ses förändringen som mindre viktig i ett senare skede jämfört med i inledningsfasen?
 - Håller ledningen intresset uppe för förändringen under hela fasen, eller är den mest fokuserad på start-end faserna?
 - Brukar delvinster firas mycket och tycker du att dessa firande gör att ”luften går ur” organisationen rörande förändringen?

Huvudfrågor

Vilken kultur råder på Saab Aerosystems och hur verkar den?
Förstår jag processen runt förändringar?
Förstår jag hur förändringsprocesser brukar utvärderas?