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# **Strategic Theory**

SAS' Takeoff for a Sustained Competitive Advantage



Authors: Thomas Grønne Mathias Skar-Gislinge Supervisor: Jacob Holm Total pages: 120 Characters: 236.486

## Abstract

The main purpose of this thesis is to give the reader a better understanding of how strategic theories can be integrated to help create a sustained competitive advantage, through an examination of SAS. This is done through a thorough analysis of three different strategic perspectives, the critiques and discussions presented by other scholars on the theories and finally by summarizing and comparing the presented findings and discussion.

A presentation of the Scandinavian and European airline markets, SAS and their history shows that the airline market have been through much turmoil over the last 20 years, where SAS has been challenged by deregulation, increased competition and a financial crisis, which are some of the factors that have caused a paradigm shift in the industry. The PEST and Five Forces analyzes are used to uncover the underlying factors and in the macro environment and airline industry, such as the consequence of the deregulation, the high bargaining power of consumers and the highly competitive nature of the industry. This furthermore forms a foundation for further analysis through the three different strategic viewpoints.

Through the years numerous strategic theories and thoughts have been proposed, who each offer their view on the subject of business strategy. This thesis draws on the resource based view, the activity based view and positioning strategies. They each contribute a unique viewpoint on SAS and uncover different aspects of the company and their strategic options.

The resourced based VRIO analysis shows that SAS cannot rely on their internal resources for creating a sustained competitive advantage at the moment, as only two resources are found as possible sources for that. Dierickx and Cool offers a suggestion to how the imitability of resources can be lowered. Besides their suggestion a key finding is that the VRIO framework does not offer a solution to how resources can be made into sources for sustained competitive advantage. On the contrary Porter's generic strategies offer a direction for SAS to move from being stuck in the middle to a position that can create a competitive advantage. Following Porter's notion SAS should seek a differentiation strategy, this does however dismiss what the analysis finds to be SAS' most important opportunity. That opportunity is to use the acquisition of Cimber to seek a cost leadership strategy in a part of SAS Group while the other part seeks a differentiation strategy. It is only when Bowman's critique of Porter's theory is acknowledged that this becomes a viable option and SAS are able to respond to the threats in the market. Through the value chain analysis it is made clear that SAS operations are a vital part of their value chain, and can through the creation of uniqueness in some areas help build a sustainable competitive advantage for SAS. It is also found that the value chain analysis is very comprehensive to apply to a real world setting, and as Porter acknowledges it is found external researchers cannot examine all underlying activities in depth.

Based on this analytical framework the thesis proposes that each analysis contains a vital dimension for understanding the strategic options and capabilities of SAS. It is thus made clear that using the three different perspectives in conjunction adds greater complexity when building a sustained competitive advantage at SAS than they could have done on their own.

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# Part 1: Introduction

In the following sections, the scene will be set for the thesis, including a motivation of the chosen subjects, a problem statement including secondary questions, definitions and delimitations as well as a graphic presentation of the thesis.

## **1.1 Motivation**

Over the past 25 years European airline industry has experienced an enormous transition of the market. In the mid 1990's the European aviation monopoly was liberalized and all peers could operate flights in and out of the before restricted regions. This drastically affected Scandinavian Airline Systems (SAS) profitability due to increased competition.

After the liberalization of the European market in 1995, the so-called low cost carriers (LCC) such as EasyJet, RyanAir and Norwegian entered, and quickly gained a significant foothold. Common for the LLCs was a more flexible and less cost intensive structure, compared to the more traditional country based airlines such as SAS, Lufthansa, Air France, and British Airways.

The market change has forced the traditional airline carriers to rethink their business model and become more cost effective in order to compete with the new market actors. For SAS, this has meant making a huge effort in order to reduce cost and since 2002 a total of six different cost saving strategies have been implemented.

As a result of the increased competition on the European market, the "general traveler" changed and leisure travel has become much more common. Travelers have changed their preferences from loyalty towards a brand or carrier, to price. This change of customer preference is seen as a paradigm shift (Kromann-Mikkelsen, 2015) and opens up for rethinking the strategic theories within the airline industry and similar markets.

As a response to this paradigm shift, SAS acquired Cimber A/S In December 2014. Cimber A/S was a LCC on the edge of dissolving due to a loss of market share and a previous bankruptcy. SAS acquired their licenses to operate and pay conventions, and now plan to move a part of their regional flights and personnel into this company.

In light of this paradigm shift combined with the heightened competition, it is found interesting to analyze how strategic theory can contribute towards creating sustained competitive advantage in the future for SAS. Our knowledge of Michael Porter and his well renowned theories, which has been fostered through the years at Copenhagen Business School, is a natural basis for this. We have become aware that Porter's theories has been challenged and questioned, which has laid the foundation for our motivation towards using his theories in conjunction with and opposition to other strategic theories in this thesis.

## **1.2 Problem statement**

The aim of this thesis is to provide a better understanding of how selected strategic theories can contribute to creating a sustainable competitive advantage for SAS. As stated in 1.1 most of the old established airlines, and SAS in particular, have been challenged by an unregulated market and the recognized paradigm shift over the last 20 years, with increasing competition from LCC's and a shift in the needs of the passengers. The thesis seeks to provide an understanding with a basis in relevant theories, thus the main question will be:

- How can traditional strategic theory support a sustained competitive advantage for Scandinavian Airlines (SAS) in a rapidly evolving airline industry?

In order to answer the above-mentioned question, the following secondary questions are answered:

- What is SAS' current strategy?
- What is SAS' and their competitors position in the market?

- How does the market and macro environment influence SAS and their strategy?
- How does the paradigm shift affect the airline industry and SAS in particular?
- How can SAS strengthen the position they have and protect themselves from potential threats in the market?
- What theories are most suitable for SAS to apply to their current situation?
- How can strategic theories be used in conjunction to reveal areas that one theory can not uncover?
- What strategic theories are applicable to gain a sustained competitive advantage within the airline industry?

## **1.3 Definitions**

## LCC

LCC is an abbreviation for low cost carrier. Low cost carriers are airlines that operate aircrafts with mainly one passenger class, a minimum of optional equipment and often without luxuries such as seats that recline to reduce weight and fuel consumption. The most well known LCC's in Europe include EasyJet, Ryanair and Norwegian.

## **Traditional carrier**

A traditional carrier also known as legacy carrier requires that certain criterion are met, these include; different booking classes, a frequent flyer program, membership of an airline alliance like Star Alliance and have own airport lounges. One can thus say that a traditional carrier is the opposite of an LCC and are often old well known carriers like SAS, Lufthansa and British Airways.

#### Low cost countries

Low cost or low cost European countries are in this thesis defined as countries that offer the possibility of cheaper general agreements than the Scandinavian countries as well as Germany, France and The Netherlands, where some of SAS' main competitors are based. This is exemplified in Figure 9, where it can be seen that the airlines in Europe with lowest cost per employee are based in Jersey, Portugal and Ireland.

#### **Regional market**

In this thesis the regional market refers to the Scandinavian market in which SAS primarily operates, hence Denmark, Norway and Sweden.

#### Traveler

In this thesis a traveler is defined as a person who travels by plane and does not refer to travelers who travels using other means of transportation.

#### **Paradigm Shift**

When we talk about paradigm shift within the airline industry it is not the industry itself that changes. It is the behavior of the users of the industry that changes in general, specifically the change in use of air transportation from a luxury available to the few to a commodity for the masses. Thomas Kuhn's theory on paradigm shift will be elaborated in section 2.4.

## Wet Lease

A wet lease is a leasing contract including both aircrafts and personnel from third party contractors that includes maintenance and other processes that goes into keeping the planes in the sky. When operating under a wet lease the aircraft's use the lessee's flight number. It is usually used for short term leasing contracts.

#### Codeshare

Codeshare refers to the practice, where one airline operates a route but other airlines can market the flight under their own name. The flight is thus operated by one airline but tickets can be bought through both the operator and other airlines.

#### Reliability

In this thesis reliability is perceived at the ability of an interview or research to produce consistent result, when being done under different circumstances or by different people.

#### Validity

By validity is understood that the research is in full coherence with what wants to be researched.

## **1.4 Delimitations**

Due to time and page number limitations in the process of making this thesis, the following delimitations have been made. The delimitations have been made to enable a thorough analysis based on these, rather than a broadly focused thesis that is not able to analyze and discuss the theories and results thoroughly.

#### Aircraft industry

When discussing the aircraft industry only manufacturers of aircrafts to traditional carriers or LCC's will be discussed. The market for private jets, hobby planes and the market for military airplanes will thus not be taken into consideration.

#### **Geographical markets**

As SAS operates from Scandinavia/Europe, we have chosen to limit our market to competitors operating from Europe as well. As the airline industry differs from market to market it is reasonable to compare only actors with similar market situations. This does not mean that actors operating from outside Europe and to Europe not should be seen as competitors.

#### **SAS Business units**

SAS runs a variety of different businesses under the SAS AB mother company such as ground handling, hotels and goods freight. This thesis will mainly focus on their main business, which is passenger transportation by air.

#### Market Definition Theory

The theory-based part of the market definition is delimited to an analysis of the macro environment using a PEST analysis and a market analysis using Porters five forces. Many other theories could have been chosen, but this thesis only focuses on the two as they provide a full picture of the macro and market situation and form a basis for the continued analysis.

## Analytical framework

The analytical framework of this thesis is delimited to a VRIO analysis, Porter's generic strategies and a value chain analysis. The different aspects of the analytical tools will be thoroughly examined and discussed in part 5. The theoretical framework contains discussions of how and why the three theories are applied in this thesis. Furthermore a thorough discussion of the views and critique proposed by other scholars can be found there as well. This will thus not be discussed and presented in a separate section of the thesis but be found in each part of the analytical framework.

## Research

The research conducted in this thesis is limited to a semi-structured interview with Head of Media Relations at SAS, Trine Kromann-Mikkelsen. It has been found that the airline industry and its customers have been thoroughly analyzed by official institutions and other researchers. These analysis have been used as complementary 3<sup>rd</sup> party data sources, it has thus been assessed that replicating these studies and analyzes would not add extra value proportional to the use of the limited time at hand.

## **1.5 Project outline**

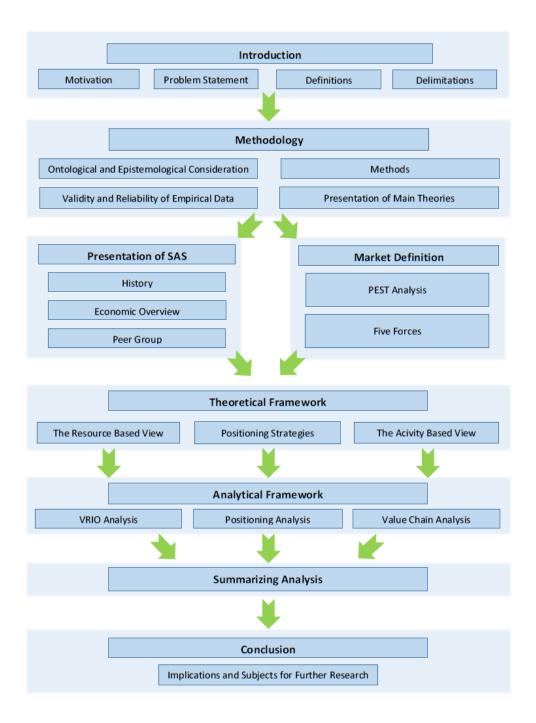


Figure 1, Project Outline, Own adaptation

# Part 2: Methodology

Part 2 contains our ontological and epistemological considerations as well as a presentation of the research methods used in the thesis and considerations of validity and reliability of the conducted research. Finally a presentation of the theories used is given to present an overview of what theories that are used in the thesis.

## 2.1 Ontological and Epistemological consideration

*Our ontological and epistemological considerations will be discussed in the following section.* 

Our\_methodological positioning is based on the critical realisms approach, as we share the view that there is an objective reality, which exists outside of the human experience, and that the only way to enter this reality is through our own experience of it (Jespersen, 2004). Critical Realism epistemology is our way to approach the reality with the intention of exploring more than just the tip of the iceberg, since the theory is that you can go in depth with the structures and explore the different levels of differentiation beneath the reality that you see at first.

This positioning obviously affects our choice of methods and analytical approach, and throughout the research the approach is evolving. In the beginning, an inductive approach is applied. Due to our limited knowledge within the field, we started with an explorative approach with a minimum of prejudice. This was done through the qualitative interview. After obtaining knowledge, we narrowed our research down to more specific topics and collected 3rd party data to heighten the understanding of the most relevant elements. Hereby we moved to the more deductive approach to make them more generalizable (Bryman, 2012: 24-27).

## 2.2 Methods

In this section we explain the thoughts behind the data production and the 3<sup>rd</sup> party data, that has been collected as well as reviewing the quality of the data.

## **Theoretical considerations**

The interview with Trine Kromann-Mikkelsen was a semi-structured explorative interview and was conducted with an interview guide containing the structure and topics of the interview. In

order to encourage an open dialogue with room for a spontaneous conversation the interview was conducted using only open-ended questions. Open-ended questions gave Trine Kromann-Mikkelsen the opportunity to answer in a varied way and to influence the interview, thus providing an expert's insight on the topic. Such an in-depth interview gives the opportunity of generating new knowledge in the research area (Bryman, 2012: 477 ff).

According to Kvale (2009: 44-50) an interview like this has three main purposes. The interview can generate new knowledge and provide valuable information that cannot be generated in another way through an open dialogue. Second, it provides a basis for the analytical work by supporting, complementing or falsifying the proposed assumption. Third, the interviewee holds a unique position and has significant and unique knowledge in an area, in this case SAS and the airline industry.

The interviewee has a special knowledge, close involvement and a personal experience of SAS and the industry. Due to these factors her perception and opinion of the case can have a significant impact on the analysis using a qualitative method.

The purpose of the interview with Trine Kromann-Mikkelsen was to obtain knowledge of the empirical field, and to understand how that knowledge could be used in the analysis. The focus was not to get a deeper understanding of her feelings and why she responded like she did in the interview, however it was found that transcribing the interview would enhance the understanding and bring nuances to the analysis that was not caught during the interview.

Trine Kromann-Mikkelsen was briefed on the open-ended questions and topics a week ahead of the interview, to leave time for preparation on her part. This was done to make sure she felt comfortable and prepared, it was also done to minimize time waste during the interview, as she already knew the topics and what information was sought. At the start of the interview she was told that the interview could be anonymous or confidential if she preferred that (Kvale, 2009: 89). The interviewers had different roles during the interview; one was leading and controlling the conversation, while the other asked follow-up questions and made sure that all topics were covered. When an interviewee is outnumbered like Trine Kromann-Mikkelsen was, they might feel the interview is like an interrogation or examination (Kvale, 2009: 50). With that in mind it might have been better to have a one on one session, but she seemed relaxed during the interview and answered all the questions with great enthusiasm, so it did not appear to be an issue.

Besides the semi-structured interview with Trine Kromann-Mikkelsen a number of 3<sup>rd</sup> party data sources has been used in this thesis. The airline industry is considered to be a relatively complex industry with many national, international players and both national and international regulations. Due to time and economic constraints it has not been possible to conduct interview or collect 1<sup>st</sup> party data from SAS' international competitors or partners like Norwegian and Lufthansa. This sets limitations on the collectible data on other industry participants, but as described in section 1.4 the airline industry has been subject to comprehensive analysis from both independent and official sources. Hence the researchers have gathered additional information in the following forms (Yin, 2013):

## Documentation:

- Reports SAS strategy formulation, IATA price reports, European commission reports, Center For Aviation reports and others
- Newspaper articles Articles from both mainstream media (e.g. Børsen and The Economist) and industry specific media (e.g. Aviation Media)

## Archival records:

- Annual Reports From SAS, Lufthansa, Norwegian and others
- Other records Passenger records, Slot price records and others
- Survey data Surveys/Analysis conducted by organizations and other researchers in the field

The additional information gathered from these 3<sup>rd</sup> party sources has been assessed to make sure they are valid and unbiased. A special concern could be data collected from industry media like Aviation Media or from industry analysts in The Economist or Financial times, as they might be biased towards presenting a favorable or unfavorable view of a company or industry. Furthermore official reports from either industry organizations or political players, has been carefully evaluated as they may be biased as well.

## 2.3 Validity and reliability of empirical data

In the following section the validity and reliability of the empirical data used in this thesis will be discussed, this both accounts for an interview and data collected from external sources.

#### Validity of semi-structured interview

A main issue when considering the validity of a semi-structured interview is that the researcher can be biased towards presenting a certain opinion or angle on what is being researched (Johnson, 1997). The authors of this thesis have no stake or prior work experience in SAS or any other participant in the airline industry, therefore it is not considered to be an issue in the semi-structured interview. To ensure that the researcher acts unbiased, he can refrain from reacting to the answers given by the interviewee and act with a certain distance to the subject. In the semi-structured interview, the interaction with the interviewee through follow-up questions was assessed to more than outweigh the negative consequences it could on the validity. The follow-up questions have thus enabled the researchers to gain more information and get a better understanding of the subject.

After completion of the research, the interviewee has verified that the researchers have acted unbiased and not skewed the results in an undesired direction. The interviewee has been given the transcribed interview to ensure that her opinions and statements have not been altered (Cutcliffe & McKenna, 2001). Furthermore direct quotes from the interview have been used in the thesis to make sure that the interviewee's opinions and not the authors are reflected in the thesis. The authors are aware that Trine Kromann-Mikkelsen is a key employee at SAS and can be biased in her opinions and statements. Most statements have been cross-checked, but Trine Kromann-Mikkelsen is considered a valid source by the authors.

## **Reliability of semi-structured interview**

An important factor to ensure reliability in the thesis is that the tools used to record, transcribe and review the data have functioned properly, therefore two tools have been used, both a computer based program and a voice recorder. According to Perakyla (1997) it is important for the researchers to note any non-verbal communication and use it in the thesis to ensure reliability and that no communication is lost. The tools used to record and review the interview have allowed the researchers to note and consider non-verbal communication during the interview through first hand observations.

Furthermore the researchers have made sure to not just use a couple of the interviewee's opinions, but have sought to show an overall picture of the interview, the interviewee's knowledge and both verbal and non-verbal communication.

## Validity of 3rd party data

Only data sources that are official records, reports or articles from highly regarded media, which has been cross-checked with references from other sources, have been used. As noted reports and articles can be biased, why it was found necessary to crosscheck them to secure validity.

## **Reliability of 3rd party data**

According to Stiles (1993) a key objective to secure reliability is to make sure that the research is credible and that the results and analysis is free of external influences, and that they are consistent. It is thus important that the 3<sup>rd</sup> party data is used and processed in a way, that secures that the results would be consistent if done at another time and/or by other researchers, the researchers must thus secure a inter-rater reliability (Weber, 1990)

This has been secured as the authors of this thesis have acted without prejudice and unbiased when choosing 3<sup>rd</sup> party data sources. The same applies for the use of the 3<sup>rd</sup> party data, where the researchers have assured that the main points from the selected articles and reports have been made clear and not just selected parts. This has been done to make sure that no opinions or biases from the researchers are reflected in the thesis.

## 2.4 Presentation of main theories

This paragraph will provide the reader with an overview and brief explanation of the models and theories applied in this thesis.

## **Five Forces**

Michael E. Porter has identified five underlying forces, which can help identify the attractiveness of a market; Rivalry among existing competitors, Barriers of entry for new competitors, Threats of substitute products, Bargaining power of suppliers and Bargaining power of buyers (Kotler, Keller, Brady, Goodman, & Hansen). The five forces will in this thesis be referred to as respectively; Competitors, Potential entrants, Substitutes, Suppliers and Buyers.

The five forces are used to analyze the industry SAS finds itself in and the market the acquisition of Cimber potentially opens for them. The analysis can help determine the attractiveness of the different markets and give an indication of what position is the most beneficial to SAS.

## PEST

A PEST analysis can be used to assess a company's macro environment, thus it can provide a company with a strategic analysis to the external factors that can influence it. After conducting a PEST analysis, a company will be better suited to handle and withstand the threats and risks, which are present in the market. With this in mind the PEST analysis will be used to prepare SAS for the threats in the macro environment.

As the PEST analysis is used to assess the macro environment it is found necessary to conduct it in connection to the five forces analysis to extend the knowledge of SAS' external environment.

## **Resource Based View**

In opposition to other strategic theories, the resource based view acknowledges that a company's resources and capabilities are the main foundation for a sustained competitive advantage. Barney's (1991) VRIO framework will be used to operationalize the resource based view in this thesis and to analyze if it is sufficient for SAS to build a sustained competitive advantage or can act as complementary theory to other strategic theories.

#### **Activity Based View**

The activity based view can be used as a framework to split up a firm's value chain into individual activities within five main activities. It provides a possibility to analyze the effect of each separate activity and determine its value on the product or service. When knowing the value chains separate elements, it is possible to discover potential sources of competitive advantage. When performing the value chain analysis on SAS, it will contribute to prioritize the sources of sustainable competitive advantage and thereby the future for SAS.

## **Positioning Strategies**

Michael E. Porter (1980) has developed generic strategies that are common and can be equally pursued by the participants in a given market, hence also the airline industry. In this adaptation of positioning strategies a company's ability to successfully pursue and implement a generic strategy will determine its ability to build a sustained competitive advantage. Generic strategies can help determine if SAS' current position in the market is the best possible to build a competitive advantage and how this view supplements other theories within the strategic field.

## **Paradigm shift**

A paradigm shift is based on Thomas Kuhn's theory of a group's understanding of a scientific matter that changes due to new discoveries within science. The theory has since been applied on a more general basis to describe a profound change in a fundamental model or perception of an event (Kuhn, 1962).

# **Part 3: Presentation of SAS**

In this section SAS will be presented from their founding to their present state. We will look at the vision and mission statement and walk-through the six cost reduction plans that have been implemented since 2002.

To get a better understanding of the company and to be able to analyze the shifting environment within the industry the following will be presented: SAS' markets, its management and operational structures as well as an economic overview of the company. In addition to SAS, their peer group will be described as well to enhance the understanding of the market and their competitors.

## 3.1 History

In 1946 SAS was founded as a merger between three Scandinavian airlines, Det Danske luftfartsselskab A/S, Det Norske Luftfartsselskab A/S and Svensk Interkontinental lufttrafik AB. Shortly thereafter SAS opened its first international route to New York and SAS quickly rose to a well renowned airline, both within and outside Scandinavia. In 1954 SAS opened a "short cut" route "over the pole" to Los Angeles and again in 1957 an "around the world route over the pole" to Tokyo was announced. SAS main goal was to be the best, fastest and preferred airline, and these goals were recognized in 1983, when SAS received the "Airline of the Year" award. Through the 80- and 90'ies SAS expanded and founded Spanair, acquired Air Botnia, Estonian Air, Wideør and Braatens. At this time SAS was according to themselves a market leader in Scandinavia, Europe and globally (SAS, 2015).

After the liberation of the European airspace in the 1990's SAS did not manage to grasp the development and lost their competitive advantage to both new and existing airlines. Finally the financial crisis hit Europe in late 2007 putting the already declining SAS in dire straits.

## **3.2 Economic overview**

Below a brief overview of SAS and its economical situation is given. This will be used to back up the strategic analysis later in the thesis.

SAS has since the financial crises hit had problems with the profitability of the main business model; transporting passengers from A to B. In table 2 below the key figures from 2007 to 2014 are listed. A full report of SAS financial data and the numbers behind Figure 2 can be found in Appendix 2. It shows that SAS have had negative results since 2007, except for 2013 where SAS managed to get a small positive result. This was mainly a result of selling profitable business parts. Overall SAS has over the last three years taken measures to streamline its aircraft fleet so that only next generation aircrafts will soon be operating. Furthermore, only one type of medium haul aircraft is operating from each base. This lowers the ground cost to crew skills and spare parts.

Key figures (m. SEK)	Revenue	EBIT	Net Profit	Equity	Balance
2014	38.006	153	-736	4.907	29.325
2013	42.182	1.381	178	11.103	35.628
2012	31.840	-225	-871	5.850	32.519
2011	41.412	646	-1.687	12.433	39.185
2010	40.723	-1.942	-2.218	14.438	41.825
2009	44.918	-3.156	2.947	11.389	0
2008	53.195	-765	-6.321	8.682	0
2007	52.251	1.255	637	17.130	0

Table 2, SAS key financial performance, own adaptation

## 3.3 Geographical breakdown

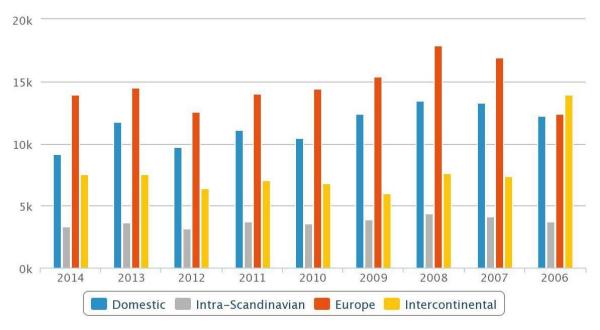


Figure 3, Geographic traffic revenue, (SAS group, 2015 and Appendix 3)

Above the geographic breakdown of total traffic revenue in million SEK into the market areas; Domestic, Intra-Scandinavian, Europe and Intercontinental, is shown (the specific numbers can be found in appendix 3). It clearly shows that all markets are lacking behind the high 2007/2008 except intercontinental flights, where different intercontinental routes were closed (SAS Group, 2008).

SAS has managed to make their international routes a steady source of earnings with full flights on all take offs. To ensure this positive trend continues SAS has in 2015 renewed their complete long haul fleet. To meet the anticipated need of more direct intercontinental flights in the future, SAS has ordered four Airbus A330E medium/long haul aircraft to be delivered in 2015 and eight Airbus A350-900 long haul aircraft. The last order with an option for six extra airplanes to be delivered by 2018. (SAS Group, 2015)

Both types of aircraft are some of the most fuel-efficient produced, helping SAS lowering operating expenses (SAS Annual report, 2014).

It is clear to see that the increased competition on the Scandinavian market covering domestic and intra-Scandinavian traffic has had its clear effect on the revenue stream. To limit this negative development SAS has been looking closely on the route network; closing the non-profitable routes and stated they will close the ones without potential turnaround. SAS has also begun using aircrafts from the Scandinavian route net on summer routes in Europe, as this is off-season for many Intra-Scandinavian and Domestic flights that are primarily used for business travel. This has in itself not increased the revenue but heightened the earnings per passenger (Centre For Aviation, 2015).

On the European market, SAS has not been able to regain its 2007 high, although they have managed to keep it relatively steady the last five years, with exception of 2012. Here, SAS has also closed non-profitable routes and operates more codeshare routes on profitable, but highly competitive routes. This is done with their strategic alliance partners e.g. Lufthansa, Swiss and Austrian airlines. SAS better use of aircraft capacity has enabled them to operate more summer/holiday routes that are only operated on peak seasons (SAS Group, 2015)

## 3.4 Strategy

SAS describes their vision as the following:

"Our vision is to make life easier for Scandinavia's frequent travelers. With SAS you become part of a community experiencing easy, joyful and reliable services, delivered the Scandinavian way" (SAS Group, 2015)

With SAS vision statement, they focus on the regional frequent travelers and in what level the travellers become part of a community. The contents of the vision statement has not changed much within the last 75 years, and in recent time the goal has simply been to be the best, fastest, and most reliable airline company in the world. Though the focus prior to 1995 was on business travelers SAS gradually shifted this aim to cover both leisure and business travelers, although still focusing on the frequent flyers (SAS Group, 2015).

#### Implemented turnaround strategies

Since the liberalization of the European airline regulations in 1995 SAS has been in tough competition with its peer group and it became clear that SAS had to adapt to the evolving market with low cost carriers and foreign companies operating point to point, winning market shares from SAS on their own turf.

In 2002 the CEO Jørgen Lindegaard presented the first of six cost reduction and efficiency increasing plans. However, since SAS presented its financial statement with negative numbers in 2008, they have not been able to return a positive result on solely its earnings from passenger transportation.

The strategy "Turnaround 2005" was implemented in 2002 and was launched to reduce cost within the SAS group with 14 billion SEK by 2005. This plan was met in November 2005 (RB Børsen, 2005) but it was quickly realized that the effect of the saving plan was just a small taste of what was needed to bring SAS back on route. Within the next two years, SAS managed to save additional two billions on cost reduction within the same strategic plan.

The new CEO Matt Johansson in 2007 presented a cost reduction plan called "Strategy 2011" that was supposed to save the company 2.8 billion SEK.

When the financial crisis hit in late 2007 the travel figures dove to a record low and the company had to look carefully at the business model. The ability to adapt the business to the rapidly changing market was lacking for SAS and they lost ground to different LCC's that focused solely on cost (Centre For Aviation, 2010). The business travellers were for the large part grounded by their companies or forced to use more economically means of transportation or conducting meetings.

This led to the new savings plan "Core 2008" that was implemented before "Strategy 2011" had met its goals. This was the most drastic plan presented and included the laying off of 4500 employees, savings of four billion SEK and a decline in salary of 20 percent for all pilots and cabin personnel (SAS Group, 2015). The board and administration also experienced a salary decline of 15-20 percent including the CEO Rickard Gustafson.

On top of this came a big reorganization of the administration that got centralized in Sweden. Denmark and Norway only kept the jobs necessary for the daily operation in those countries.

The "4 excellence" strategy was launched in 2011 to ensure a focus on four identified core areas: Commercial Excellence, Sales Excellence, Operational Excellence and People Excellence. The overall goal with the strategy was to get the customer back in focus while increasing efficiency. On paper the plan should lead to savings of five billion before the end of 2015 (SAS Group, 2011). In addition to the already applied strategy Rickard Gustafsson presented "4 Excellence Next Generation" plan in November 2012 which focused on ensuring the future of SAS by lowering the fixed costs for personnel. In late 2012 he managed, with some political backing (telegram information.dk, 2012), to implement the salary decrease, originally proposed in "Core 2008". By selling rentable parts of SAS group like Widerøe and SAS Ground Handling he also managed to get the first annual report with positive numbers within 7 years.

The positive results surprised senior analyst Jacob Pedersen at Sydbank who commented the annual report with: "The strategy 4XNG actually works" (Lønstrup, 2013). His surprise on the effects is well put when you look at the amount of saving strategies implemented without positive results.

#### SAS strategy review in 2014

SAS has in their annual report 2014 listed three main focuses in their strategy that creates value:

## Establish an efficient production platform

SAS has managed to change the collective agreements and pension terms, reduced number of employees at Blue1, established a new supply chain unit for optimization of external costs, expanded their wet lease production and simplified processes through the Lean principle.

This has so far resulted in a 3,9 percent unit cost drop, 3,6 percent increase in aircraft utilization and a punctuality raise of 1,8 percentage points (SAS Group, 2015). All factors contribute to increase SAS' ability to compete with its peer group and ensure the company its future.

## Win the battle for Scandinavia's frequent travelers

SAS has in 2013/14 rejuvenated their SAS EuroBonus offerings, renewed SAS lounges, introduced Fast track in more airports, automated boarding and baggage drop and ensured knowledge for travelers about service levels on SAS GO and SAS plus. To further increase their offering to the Scandinavian frequent traveler, SAS has launched more than 50 new routes in 2013/14.

Following these measures, SAS has experienced a passenger increase of 6,3 percent, load factor increased by 1,3 percent point and SAS EuroBonus has acquired 500.000 new members. This is an indication that SAS is underlining their wanted position as the frequent travelers preferred airline company for both leisure and business travel. The customer satisfaction rose from 2013 to 2014 with one percent point (SAS Group, 2015).

## Invest in our future

SAS has started to invest in their fleet to cope with future demands of both short and long haul travelers. This has been done by streamlining and modernizing the aircraft fleet and increasing the fuel efficiency. As a result of this, SAS has upgraded the cabin interior of both medium and long haul aircrafts, and increased fuel efficiency by phasing out the older Boeing 373 Classic. SAS has also invested in improved leadership in the organization and has introduced a new leadership and employee model, as described in the following: *"This new model strive to bring the best and outmost out of all employees and management in a way that corresponds with the SAS strategy and thereby creates value to the firm."* (SAS, 2015)

All of these strategies and goals of course lead to an overall strategy, as for most publicly traded companies – To generate value for its shareholders.

## 3.5 SAS' markets

With an average annual growth on 5,8 percent in the period 1980 to 2015 it is no wonder that the airline industry is an attractive market (SAS Group, 2015). The LCC companies has been able to capture most of the traffic increase and gained significantly on the existing network companies. In

Europe the airline market is described as "extremely competitive" (SAS Group, 2015) and with "high overcapacity" (Centre For Aviation, 2014). A returning trend for the network companies to cope the market development has been to increase efficiency and flexibility, and by differentiating their products from LCC's. The differentiation on short haul flights has not been particularly successful and now many LCC companies and network companies provide the same products on the same routes but to different costs. This clearly shows the new paradigm, where cost trumps service and brand for the common.

This shift in priorities and increased competition has forced many network companies to outsource short haul routes to a subsidiary LCC or production companies. For example in Germany where German wings operate a large portion of Lufthansa's regional flights and some medium and long-haul flights (Germanwings, 2015), similar transition has been seen at Air France/KLM (AirFrance, 2015)

SAS operates from Denmark, Norway and Sweden. From here they operate a wide variety of routes where Scandinavia and northern Europe is the main focus. Besides Scandinavia, SAS operates to almost all major cities in Europe and five routes to North America and three to Asia, a total of 277 routes (Kromann-Mikkelsen, 2015) (SAS Group, 2015).

Where Scandinavian and European routes in the recent years have been SAS' main focus the US routes have now started to generate a measurable profit. This is also a general trend in the market where the amount of direct long distance routes from Copenhagen Airport has doubled to 35 routes since 2009 (Seerup, 2015). SAS is not the only operator on the long haul market and CEO Rickard Gustafson expects the trend of increased competition seen on the European market, to spread to the shorter long haul routes. This is a possibility for many LCC's who can use their existing airplanes on these routes, instead of investing in new and expensive long haul airplanes. (Kjær, 2015).

## 3.6 Management, ownership and operational structure

SAS was founded as a fully state-owned company by the three Scandinavian countries, but has since 2001 been an overall share primarily on the Swedish stock exchange as SAS AB. Each country

still owns a minimum of 10 percent and together they own 50 percent and thereby have the main vote.

As mentioned SAS has went through a turbulent time and as part of a bigger restructuring and share increase, SAS AB has been the parent company based in Sweden since 2001. The legal structure as of August 2015 is shown below:

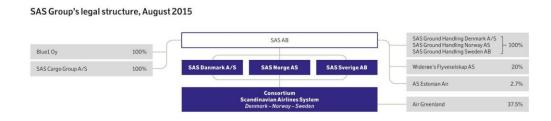


Figure 4, Ownership structure, (SAS Group, 2015)

## 3.7 Peer group

SAS peer group consists of both Scandinavian, European and international competitors including charter airlines, low cost carriers and traditional carriers.

Within the traditional carriers, SAS mainly competes with companies that operates from Europe on its European and overseas destinations such as Lufthansa, Iberia, Swiss, Air France/KLM, British Airways, Virgin and Finnair. Direct flights operated from overseas also present competition on long-haul flights, but as the geographic setup from Scandinavia for many customers, requires an extra flight (e.g. to Copenhagen) before flying overseas; it makes sense for the customer to buy a ticket including the connecting flight instead of two separate tickets. This eases the transfer and often lowers the total travel time.

Within the LCC group SAS' main competitor is without a doubt Norwegian (Centre For Aviation, 2012). This is due to the geographical location of the airlines and Norwegian's relative high standards for a LCC operator. Other competitors on the European low cost carrier market are Easyjet, RyanAir, Vueling.

## **3.8 Strategic Partnerships**

SAS is part of the Star Alliance partnership, founded in 1997 by SAS, Thai airways, Air Canada, Lufthansa and United Airline. Through codeshare, this partnership has made it possible to expand the respective airlines reach to almost all major cities in the world. Star Alliance now contains 28 airline companies and is the biggest alliance in the industry. Although the alliance allows the members to reach destinations far beyond the reach of the individual members, it posts some "natural boundaries" of whom can operate where. For example, Thai airways and SAS have in many years competed on the same route from Copenhagen to Bangkok where they shared the flight dates between them. But when Thai airways increased their activity SAS was forced to close down the route and codeshare on Thai airways flights instead. In that way alliance members can both be partners and competitors both directly and indirectly.

# Part 4: Market Definition

In the following section, consideration about the airline market in general will be discussed and most importantly it will be stated how the market is viewed and defined in this work.

The airline market is a quite large market ranging from small business jet operators, over regional and local airlines to multinational alliances with operations in nearly every country of the world. As this is the case, it is necessary to define how the market is viewed in this work and what parts of this vast market it will focus on.

First of all the general buyer group is viewed as either business-to-business or private consumers. Where the business-to-business segment is viewed as companies who purchase tickets or make general agreements with airlines, the private consumers are for example vacationers, commuters or people who occasionally buys a ticket for business purposes. This paper does not consider the business-to-business market, but focuses solely on the private market. This is done to set a clear definition and avoid confusion when comparing ticket prices and the like, as business agreements are not published. Furthermore not all of the airlines that are considered as SAS' competitors offer such agreements, which could cause issues when making comparisons and analysis between the different airlines in the industry.

SAS distinguishes between frequent flyers that take more than five round-trips a year and leisure flyers that flies less than that (Kromann-Mikkelsen, 2015). It is important to note that this work does not delimitate from one of these groups, but considers them both equally as part of the market. Other airlines might use other definitions of the market or simply see their customers as a homogenous group, so this is not assumed to apply to the market in general.

It is found necessary to look at both low cost carriers and larger traditional airlines, as it is assumed that the costumers sees the market as a whole and they do not consider only LCC's or traditional carriers when choosing airlines. Furthermore it is found that SAS is in competition with both types of carriers. This work does however not consider small independent operators, business jet companies and the like, but focuses on airlines of a size where SAS cannot ignore their presence in the market.

SAS has a focus on the Scandinavian market, where they are the largest operator at the moment (SAS Group, 2015). Hence this paper will focus on the Scandinavian market and routes from Scandinavia to Europe and the rest of the world.

## 4.1 Paradigm shift in the industry

Theorist Thomas Kuhn presented a theory of paradigm shifts in his book "The structure of scientific revolution" (Kuhn, 1962). He presented an idea about a company, group, society's view on a certain way of understanding or doing. Within the airline industry there has been a certain trend of what is valued by the traveler, here the focus has been on differentiation. The decision of which airline to use, often ended with a decision based on differentiation from one company to another: Both offer a flight from A to B at roughly the same price, what differ are "The Extras"; Network, Service, Food, Lounges, punctuality, ease etc. This started changing at the liberalization of the airspace in the 1990's and accelerated in Europe after the financial crises in 2007.

The increased competition and the amount of LCCs accelerated the price drop on airfares, which have resulted in a more price focused way of flying. Now travellers use search engines to locate the cheapest airfares and decides primarily on behalf price and mainly business travelers and frequent travelers relates to a certain airline (Kromann-Mikkelsen, 2015). This shift in behavior indicate a change in the industry paradigm from product to price differentiation within the common leisure traveler.

## 4.2 PEST Analysis

In this section the following four factors will be discussed; political, economic, social and technologic. They are external factors that impact the environment where SAS and the rest of the airline industry find themselves.

#### **Political factors**

Over the years the airline industry has gone from being a heavily regulated market to a rather open market. In 1978 the US government took the first step towards a deregulated market with the Airline Deregulation Act. The act stated that all decisions regarding routes and pricing should be handled by the airlines and not by the government (U.S. Governments PO, 1978). The experiences from the deregulated American market were used when the European market was deregulated. The European market was however not fully deregulated until 1997, where airlines were allowed to operate in any European country (The Economist, 1997).

After and during the deregulation many European airlines were privatized, while SAS remains under part ownership of the Norwegian, Swedish and Danish government who holds the majority of the shares. This can have both pros and cons and over the years SAS has been through financial turmoil numerous times, one example was when Core SAS was introduced. When Core SAS was introduced it was necessary to raise additional capital and the three governments contributed with 3 billion SEK (SAS Group, 2010). With over 12.000 employees, some might argue that the governments are more interested in keeping SAS alive to protect jobs than to increase profitability, giving SAS access to resources that other non-state backed companies might not have.

SAS and other traditional airlines are under immense pressure from LCC's, who can shop around between the European countries and base their personnel and planes where the legislation is most favorable. SAS is lobbying for a change in the legislation, as it views the practices of LCC's as unfair competition (Kromann-Mikkelsen, 2015). If SAS and other traditional carriers are successful this will hurt the LCC's and most likely make the traditional carriers more competitive.

## **Economic factors**

When evaluating the economic situation it is important to consider the home market, Scandinavia, and the global economy. All Scandinavian countries are in the top 30 in the world when looking at GDP per capita, which indicates a great economic performance and standard of living (CIA, 2015). The growth rate of the GDP is considered to be moderate in the three economies, with a growth between 1,8% and 2,6% annually until 2020. The expected annual GDP growth in the entire

European union is around 1.8%, thus a rapid economic expansion in the market is not expected (Trading Economies, 2015). SAS expects an annual growth in the airline traffic around 3,3% over the next 20 years, it is thus almost twice as high as the growth in the economy in general (SAS Group, 2015).

Besides looking at the general growth in the economy it is also important to look at the price development of crude oil and jet fuel, as this accounts for over one third of the operating expenses for an airline (SAS Group, 2015). The price development of jet fuel is generally dependent on the development in crude oil prices. The jet fuel price is at the moment on the lowest level since the financial crisis of 2008. However the jet fuel price has increased a bit since the beginning of 2015 (IATA, 2015). At the moment the price is around 70 USD per barrel, while it peaked just before the financial crisis in 2008 at 180 USD per barrel. Another factor that influences the cost of jet fuel for SAS is the exchange rate between USD and SEK, the rise of the dollar over the last year has increased the cost for European airlines (IATA, 2015).

#### **Social factors**

There are many social factors that can influence the airline industry. One of the most influential in recent years has been consumers' access to the product. With the rise of the internet and online flight search engines, the access has been made significantly easier. Customers can simply find their tickets online and purchase them without being in contact with anybody from the airline. This can be an advantage to the airlines as they can save a lot of money on sales staff and easily display their products. At the same time the rise of search engines have been a challenge to airlines like SAS as it favors the cheapest product and display that on top of the search result. SAS includes baggage, credit card and other fees in their base price, while these are extras when booking a flight with a LLC, this results in SAS being shown after the LCC's on the search engines (Kromann-Mikkelsen, 2015).

Furthermore search engines have put a focus on price, which might have increased price consciousness among the travelers. An increase in the price consciousness among travelers, who

favors the companies that offer the cheapest products. Hence, the increase in price consciousness is a challenge for airlines like SAS, which has to be dealt with.

The shift that is happening in society in the Nordics with a growing elderly population can influence the airline industry as well (Danmarks statistik, 2010). It can be hard to predict how this will influence the industry, but one might argue that with more people retired we will see a rise in the leisure segment. Furthermore it is not uncommon for Scandinavian pensioners to have a holiday home in warmer climate.

## **Technological factors**

The technological development plays a huge role to airlines as they are always pushed to adopt new technology and seek advancements to strengthen their business. One of the advancements that have been described earlier are the online search engines. As mentioned SAS and other airlines have to deal with this new reality and perhaps even make adjustments to their products and price structure to be on the top of the search engines (Kromann-Mikkelsen, 2015).

Making the flight experience as convenient as possible for the passengers is important to SAS and assumingly to other airlines as well. They have for example developed a smartphone app, where you can do everything from buying tickets, keep track of EuroBonus points and download your boarding pass (Kromann-Mikkelsen, 2015). This is an example of how a technological factor can be used as an advantage, it is however one that is easy to copy for competitors. Other examples of airlines using technological factors to their advantage are Norwegian, who installed WiFi in their planes (Norwegian, 2015). These are great examples, that it is an industry where you can use technology to offer something different, but also needs to keep track of what your competitors are doing to stay on top.

The aircrafts are also under continuous technological development, both in terms of fuel efficiency, cabin space optimization and various other areas. The development takes place at the supplier side, but airlines have to stay on top of it and continuously analyze their fleet. New and more cost

efficient airplanes are being developed. If the airline does not take this into their fleet management, they risk that others gain an advantage over them.

## 4.3 Porter's five forces

The airline market situation will be discussed and analyzed in the following section, using the Five Forces framework proposed by Michael Porter.

## **Threat of New Entrants**

The purchases that airlines have done of new airplanes have both historically and recently often been in large bulks. This has been done to obtain discounts on the purchases. A most recent example of the use of this strategy is Norwegian, who in 2012 announced that they had put in an order for 222 new airplanes from Boeing and Airbus (Norwegian, 2012). Arabian airlines have adopted this strategy as well, when the two major airlines in the United Arab Emirates, Etihad and Emirates purchased 200 new airplanes in 2013, for a combined value of 547 billion DKK (Ritzau, 2013). When placing orders of such substantial sizes, airlines are usually granted quite large discounts (AFP, 2013).

Being able to demand better terms from suppliers, due to the sheer size of the orders, is an advantage and in this case a high entry barrier for new players trying to enter the market. As mentioned above, the orders placed by both Norwegian and the Arabian airlines are very large and require a substantial investment by the buyer. This is a clear indication that it is an industry with high capital requirements, which will act as a barrier to new entrants. One thing that can help lower this entry barrier is the fact, that airplanes have high resale value. A high resale value is an important factor for investors or banks lending money to new entrants. This makes them more willing to finance investments by new entrants in the market (Porter, 2008).

Besides the airplane purchases, another significant expense to airlines are runway slots. Runway slots are permissions to use a runway and the corresponding airport infrastructure on specified dates and times (Whitlam, 2012). Runway slots are most expensive at the most busy airports in Europe like Charles de Gaulle and Heathrow. Before the financial crisis one airline paid up to 1,15

billion DKK for four daily pairs of slots. The average price of a daily slot is now around 66 million DKK, an early morning slot costs around 138 million DKK, the price then falls around 30% by midday and 50% in the evening (Thompson, 2012). Runway slots however differ quite a lot in both trade value and how easy they are to obtain, depending on which airport they are located in. As it is stated by the city of London (Greater London Authority, 2013), Heathrow was operating at 99% capacity, while Luton and Stansted airports had respectively 51% and 47% of their runway slots available. This is of course an opportunity for new entrants in the market, as it is actually possible to get available runway slots in the vicinity of a large city. In the example of London, it is however only possible if the entrants are willing to operate from other airports than the largest airport close to the city center.

It can be quite difficult to determine how existing players will retaliate, when new players enter, since the number of entrants has been low in the past years. If new entrants enters the market, airlines can however retaliate in different ways. It is important for airlines to have their airplanes as full as possible, due to high fixed costs, which might motivate them to lower prices accordingly if new players are a threat on existing routes (Kromann-Mikkelsen, 2015). Another strategy, which is common in the airline industry, is acquisitions of the new players or competing airline. This strategy has for example been used by SAS, who acquired Braathens (SAS, 2007), a competitor on the Norwegian market.

As discussed in this section, the entry barriers are quite high in some aspects of the market, especially regarding capital requirements, which are very high. Due to high capital requirements only a few new airlines have entered the market in the past years. The entrants have mostly been existing airlines expanding into new territories, like Lufthansa who now operates Germanwings (Germanwings, 2015) or Virgin who entered the American market with Virgin America (Virgin America, 2015). It is thus found that entrepreneurs or other wishing to enter the market will have to cope with high entry barriers, which can be lowered if they are supported by an existing airline. Furthermore it is found that existing companies moving into new geographical areas are not

subject to the same barriers as new players, as they have already met the capital requirements for operating an airline.

## **The Power of Suppliers**

The three most dominant suppliers in the airline industry are found to be aircraft manufacturers, airports and the labor unions that organize the employees.

The aircraft industry is a very concentrated industry compared to the airline industry, thus a lot of different airlines have to rely on only a few large aircraft manufacturers. Boeing and Airbus have long been battling for the crown as the largest manufacturer of commercial airplanes (Hollinger, 2015), while Bombardier plays a role in the market as well (Kromann-Mikkelsen, 2015). A concentrated supplier group is a strong indication of powerful suppliers, thus they will hold a high bargaining power over the airlines. The battle that is going on between Boeing and Airbus can indicate that the bargaining power is lower than expected, as it might cause them to offer discounts to win market share (Porter, 2008).

As Trine Kromann-Mikkelsen (2015) states all personnel, including pilots, mechanics and cabin crew has to be trained for a specific aircraft type, which gives a lot of extra costs if an airline switches airplane type or supplier. The advantages of sticking to one airplane type is underlined by Virgin America *"There are tremendous benefits to keeping to a single fleet type, from hiring and training team mates to operations, maintenance, spare parts and managing the guest experience"* (Aviation Media, 2012). The switching costs are thus assessed to be quite high in the industry.

With all of the above-mentioned factors taken into account, the aircraft manufacturers are found to be a moderately powerful supplier group. There are however some factors which lowers their power, such as the fact that they rely heavily on the airlines for revenue and the war that is going on between the largest manufacturers.

Airports naturally play a very central role for the airline industry, as there are no substitutes for the service they deliver to the airlines. According to Porter (2008) this is a clear indication of a

powerful supplier group as there is no alternative for the airlines than to use the airports. Airports do however rely just as much on the airline industry for their revenue, without any airlines to operate the airports they have no revenue. When a supplier group relies as heavily on the industry for its revenue, it severely lowers their bargaining power (Porter, 2008). Taken these two factors into account, it is found that there is a mutual relationship between the industries and they both rely heavily on each other and have an interest in keeping a healthy relationship between them.

One of the largest powers employees and especially the pilots and cabin crew have over the airlines is that there are no substitutes for the service they provide (Porter, 2008). Without a team of well-trained and experienced pilots it is impossible to get planes on their wings and offer a product to the airline customers.

A recent labor dispute at SAS shows that airline can withstand the bargaining power of the employees. When SAS recently bought Cimber, they planned to move employees to Cimber that had cheaper collective agreements, which resulted in a five day long strike from the cabin crew. The direct result for SAS was 334 cancelled flights and a loss of around 53 million DKK (Kolby, 2015). But most importantly, SAS managed to get the cabin crew back to work and they will be transferred to Cimber, but can keep their SAS collective agreement for two years as stated by Danish law (Ritzau, 2015). This is just one case of SAS getting their way in the end, when the employees have been pushed as far as possible. Other examples include the labor dispute following the 4 excellence next generation strategic plan. SAS was allegedly close to bankruptcy, which was used as leverage towards the cabin crew to get them to accept lower salaries and a poorer collective agreement in general (Carlsen, 2012).

It is thus found that employees have moderate bargaining power over the airlines. As stated above employees with the right competence are crucial to airlines, but employees rely heavily on the airlines as well, and are willing to accept worse terms to keep their jobs when given ultimatums from the airlines.

#### **The Power of Buyers**

The purchase of plane tickets is most often a large purchase for private customers as it often represents a significant part of their vacation or travel budget. As this is the case, they are likely to bargain or shop around looking for the lowest prices. This is a clear indication that leisure travelers are fairly price sensitive (Porter, 2008). The possibility to shop around for better prices has been heightened significantly with the rise of price comparing search engines such as momondo.com (Kromann-Mikkelsen, 2015). The search engines could raise their price sensitivity as it is more convenient and does not require as much of an effort for customers as it did before to find the best prices.

If a consumer is highly price sensitive it is assessed that their purpose of travel is to get from a to b as cheaply as possible. When customers adopt this mindset they might not see or add any value to the extra services offered by some airlines and will perceive the different offerings in the market as fairly standardized and undifferentiated. Customers, who perceive the products on the market as standardized, tend to have higher negotiating leverage as they believe they can just go elsewhere and find an equivalent product (Porter, 2008). Search engines are powerful tools to do so, as buyers within seconds can see who delivers the cheapest option of these comparable products. When using search engines customers are in fact leveraging their bargaining power as they force airlines to offer discounts and low prices if they are to choose that exact airline. Another factor that is worth taking into account is if a route is operated by one or more airlines. If one airline is the only operator of a route, they can work under monopoly like conditions significantly reducing the buyer's bargaining power.

#### **The Threat of Substitutes**

The most direct form of substitutes for the airline industry are other means of transportation, this mainly includes car and train travel.

High-speed train travel is particularly interesting, as it can offer transportation that is as fast as air travel on some routes. According to the European Union, high-speed trains are the fastest mean of transportation on journeys between 400 and 800 km. The high-speed train network is still under

development in Europe and the planning phase has just begun in Scandinavia (European Commision, 2010). As the network is not fully developed yet, especially not in Scandinavia it is not seen as threat at the moment to the market where SAS operates. It can however be a threat in future and is something that existing players in the market has to be aware of.

For the threat of a substitute to be high it has to offer an attractive price-performance trade-off compared to existing products (Porter, 2008). At the moment that is not the case on one of the most popular high-speed train routes in Europe, the London-Paris route. The cost is approximately the same as plane travel, while the travel time is a bit longer everything considered (Eurostar, 2015) (Momondo.com, 2015). Furthermore low switching costs have to be present between the substitute and the industry's product for it to be a high threat (Porter, 2008). This is considered to be the case between high-speed trains and plane travel.

Another direct substitute is car travel, which offers the ability to travel from doorstep to doorstep, while plane travel often involves other transportation forms to get to and from the airport. This flexibility is considered to be the main advantage that car travel holds over plane travel. On longer routes in Scandinavia such as Bergen-Copenhagen, car travel takes up to 5 times as long while the cost is approximately the same (Google Maps, 2015). The picture can of course look more favorable for the car on shorter routes, while plane travel is assessed to be more favorable on longer routes. Car travel is thus not considered a high threat substitute.

Communication can also be considered a substitute to plane travel and especially video conferencing can be a threat. It can be a convenient and price-effective alternative to business travel, as meetings can be held at a fraction of the cost of travelling to meet each other. This work does however not consider the business-to-business airplane market, so it is not considered a viable substitute in this context.

## **Rivalry Among Existing Competitors**

The intensity of the rivalry in the airline industry and if price competition is likely to occur depends on different parameters. SAS notes a lot of different players in the Scandinavian market, with themselves being the largest and Norwegian the second largest airline. SAS and Norwegian have a market share around 55% combined, while various different airlines make up the remaining 45% (SAS Group, 2015). Contrary to the Scandinavian marked, the European market does not have one or two large players, but a lot of different players (HHL, 2010). With this in mind the rivalry is found to be much more intense in the European market than in Scandinavia. If Norwegians market share grows in Scandinavia the rivalry can intensify in that market. The European airline market is predicted to have an annual growth around 3%, while the global market will grow a little more than 6% (SAS Group, 2015). The growth is thus not found in SAS main market, with more than one operator to share the growth it is found to be factor that intensifies the rivalry (Porter, 2008).

If products or services are perceived to be nearly identical and there are few switching costs for buyers, price competition is likely to occur, Porter (2008) exemplifies this by using the airline industry. The products offered by the airline industry can be perceived as identical if viewed as getting from a to b, this is supported by the growth of LCC's in recent years. Furthermore there are few or in most cases no switching costs for customers. It is important for airlines to operate at full capacity, as marginal costs of filling an empty seat are low and the cost of flying with one is quite high. Flying with an empty seat costs SAS 0,76 DKK per kilometer traveled in lost revenue (SAS Group, 2015). To finally support the likelihood of price competition is the fact that the product offered is perishable (Porter, 2008). If a plane operates with unused capacity it cannot be recovered and have thus perished.

# **Part 5: Theoretical Framework**

In part 5 the theoretical foundation for the analyzes carried out in part 6 will be presented and the theories discussed, with a basis in the critique and influence from different scholars.

## 5.1 The Resource Based View

The following sections will provide an overview of the Resource Based View, as well as highlighting the strengths and complications of the theory. Furthermore it will discuss how it can be utilized in the analysis of this paper.

The resource based view focuses on the company's resources as the main building block for obtaining and sustaining a competitive advantage. The resources that can help building and sustaining a competitive advantage are viewed as tangible and intangible assets controlled by a firm (Barney, 1991) (Daft, 1983) (Wernerfelt, 1984). The company's ability to utilize their firm specific resources is the foundation of its competitive advantage, as they provide the opportunity of implementing and maintaining strategies that can help create value and improve internal efficiency (Barney & Clark, 2007) (Barney, 1991).

## Development of the resource based view

Edith Penrose and her book *"The Theory of the Growth of the Firm"* is by many Resource Based View scholars recognized as one of the main building blocks of the view (Rugman & Verbeke, 2002) (Wernerfelt, 1984) (Barney & Clark, Resource-Based Theory, 2007). Before the introduction of Penrose's book, a firm's growth had been viewed based upon microeconomic assumptions (Penrose, 1959). A firm and its growth were thus seen as an economic function, that supposed their production level and profit maximization was based on supply and demand conditions in the marked.

Penrose's theory was in opposition to this view by the notion that it was not adequate to view a firm as a simple function of the market. (Barney & Clark, 2007). According to Barney & Clark (2007) some other influences on the Resource Based View are Ricardo's land rent analysis and antitrust implication studies.

Ricardo's analysis from 1817 focuses on farmland and stated that the supply of fertile land is fixed and cannot be increased due to higher demand (Barney & Clark, 2007). Thus the factor is inelastic, Ricardo (1817) did not address how some farms ended up with this inelastic factor and some did not. This has later been an important question in the Resource Based View.

Ricardo (1817) in contrary to traditional economic theory suggested that the profit earned by farmers with fertile land, would not lead to others entering the market. The reasoning behind this was that the land was an inelastic good, which could not be imitated by others (Barney & Clark, 2007). Traditional economic theory suggests that only few goods are inelastic (Barney & Clark, 2007), in contrast Ricardo (1817) and the Resource Based View acknowledges that many different goods can be inelastic and cannot be imitated by others (Wernerfelt, 1984). To further build on Ricardo's analysis the resource based theory tries to explain how some could end up with more fertile land and what price was paid for it. If the price paid for the land reflected the economic return, then the farm did not actually outperform other farms, as the cost of obtaining the attribute reflects its value (Barney & Clark, 2007). Barney argues that if the market is imperfect, the cost of the attribute will be higher than the return and the attribute should thus not be obtained (Barney, 1986). The relationship between the market and the resource based view will be further discussed later in this paper.

Penrose (1959) suggested that firms should be viewed as a construction of productive resources and an administrative framework that coordinates productive activities for groups of individuals. When adopting this view, firms can no longer just be looking at the market for profit maximization and growth. Instead firms have to rely on their ability to utilize their productive resources by coordination through their administrative frameworks (Barney & Clark, 2007). Penrose (1959) was among the first to note that the resources or attributes controlled by a firm could vary significantly. It was thus recognized that firms within the same industry are heterogeneous and they do not possess the same base for creating competitive advantage (Barney & Clark, 2007). Traditional economic theorists suggested that only a few resources could be inelastic, Penrose (1959) on the other hand suggested that many different resources could be inelastic and provide a competitive advantage for a firm (Barney & Clark, 2007). This was extended, as resources could be broken down to even smaller parts. As a result of this, it was noted that a firm could be heterogeneous due to attributes that are not obvious at first, such as ambitiousness or judgment skills by management (Penrose, 1959).

The Structure-Conduct-Performance paradigm suggests that the industry and its competition structure sets the scene for the activities a firm can be involved in and its performance (Bain, 1956). It was developed with a basis in antitrust and the economy's influence on it, especially how less than perfect competition influences social welfare and antitrust law. When Demsetz questioned this theory its influence on the Resource Based View was sparked, this will be further discussed in the next section.

#### Further development and discussion of the Resource Based View

Another influence were Distinctive competencies studies, which concentrated on the competencies, which enable a firm to pursue a strategy more efficiently than other firms (Barney & Clark, 2007). It identified general managers as the distinctive competence of a firm, and other distinctive competences or attributes were not recognized as important for a firm's performance.

Barney (2007) questions the premise of the distinctive competencies studies; that general management and their decisions are the best and main reason for a firm's performance. The main critique of the view is that it is not easy to define what a good general manger is. A good general manager in one setting is not necessarily a good one in another setting. This is further backed by Yukl who states that, what makes a good general manager is as unclear as what makes a good leader (Yukl, 1989). Barney & Clark (2007) argues that when just looking at general managers, many other explanations for good or bad performance is ignored. A general manager is just a piece of the puzzle, who prior to the Resource Based View have been credited with too much influence on performance, this is highlighted here on general managers: *"They receive too much credit when things go well and too much blame when things go poorly"* (Barney & Clark, 2007). It is also suggested that the basic function of general managers, which is administration and decision-

making, does not provide a distinctive competence in itself (Selznick, 1957). Selznik (1957) argues that general managers should focus on fostering distinctive values and nurture them within the organization. This further backs up Barney & Clark's (2007) notion, that general management in itself is not the sole explanation of a firm's good or bad performance.

Demsetz (1971) was among the first to question the Structure-Conduct-Performance paradigm (Barney & Clark, 2007). Demsetz proposed that the industry and its structure was not the only reason for a company's performance. With regards to antitrust he argued that a company was not engaging in anticompetitive activities just because they exhibit superior performance. He further argues that firms can gain competitive advantages by being better to address customer needs (Demsetz, 1973), which according to Barney & Clark (2007) is an inspiration for the Resource Based View. Porter (1980) has based his studies on the Structure-Conduct-Performance paradigm. Demsetz (1973) proposed his thoughts as an alternative to this paradigm. It can thereby be argued that Demsetz (1973) helped establish the Resource Based View as an alternative to the framework Porter later proposed.

Wernerfelt's paper from 1984 *A Resource-based view of the Firm* is regarded as the first publication that describes and defines the Resource Based View as a concept. Wernerfelt's theory is not derived from the inspirations mentioned above, but restated with concepts from another perspective (Barney & Clark, 2007). Wernerfelt positions his theory as an alignment to Penrose's thoughts, rather than a development of them. His analysis was carried out with a basis in Porter's five forces framework. The five forces framework is intended for use on products or firms in general (Wernerfelt, 1984) (Porter, 1980). Wernerfelt thus used the same notions as Porter (1980), but applied a resource based view instead of a product view. In this paper the resource based view is used in conjunction with Porter's (1980) theories, this is thus an assessment that is supported by Wernerfelt (1984). Where the five forces framework in the *Market Definition* section of this paper is used to analyze rivalry, buyers and suppliers, Wernerfelt (1984) uses the framework to analyze the resources. Wernerfelt opened the thought of coherence between a firm's products and its resources. He argued that there is comparability between firms' competition on

market positions and resources (Wernerfelt, 1984). With the paper Wernerfelt (1984) put an emphasis on unique resources as a driver for creating competitive advantages and increasing performance of firms'. This view can be found and is acknowledged in later literature within the Resource Based View (Barney, 1986) (Barney, 1991) (Teece, Pisano, & Shuen, 1997) (Barney & Clark, 2007)

The same year as Wernerfelt published his paper, Rumelt published an article relating to the Resource Based View. While Wernerfelt (1984) focused on the performance of a firm deriving from the resources it controls, Rumelt focused on the importance of resource heterogeneity for economic performance (Rumelt, 1984). Rumelt (1984) thus helped connect the thoughts of the Resource Based View with economic performance, this stresses that the difference in firms economic performance is based on the heterogeneity of their resources (Barney, 1991) (Barney & Clark, 2007). This view can be traced back to the economic theory of Ricardo (1817) that was described earlier in this paper. Rumelt (1984) further introduces the term isolating mechanisms, which can best be described as a resources barrier to imitation (Mahoney & Pandian, 1992). The isolating mechanisms are the reason a firm can keep a resource to them themselves and thereby maintain their competitive advantage (Rumelt, 1984).

## **Resource Based View and the market**

Barney (1986) introduced the term "Strategic factor markets" and, as noted earlier in this paper, thus acknowledges that the market and its structure have an influence on the Resource Based View. This provides this paper with another argument for using the definition and analysis of the market from part 4 in conjunction with the Resource Based View. Barney (1986) builds on Wernerfelt (1986), by noting that the performance of a firm is dependent on its attributes and resources, the influence of these attributes is however determined on the basis of the market situation the firm finds itself in. Barney & Clark (2007) argues that this was a crucial step towards developing what is now known as Resource Based Theory.

A strategic factor market is defined as a market where firms develop and acquire the resources that are needed for implementing a strategy (Barney, 1986). Barney (1986) notes that given that

perfect competition exists on the market where the resources are acquired, and then this acquisition will anticipate how the resource will impact a firm's performance once they have been implemented in the strategy. Barney thus notes that a factor market can in fact be subject to perfect competition. With this notion Barney and his contribution to the Resource Based Theory states that the theory of imperfect product markets are inadequate for explaining persistent differences in the performance of firms in a market. Barney (1986) thereby rejects Porter's (1980) theory about markets attractiveness. Porter's (1980) argument that a persisting great performance of a firm is explained by their ability to participate in attractive product markets is not sufficient for Barney (1986). In contradiction to this, Barney (1986) argues that the resource based cost of implementing a strategy is central to creation of persistent superior performance. Barney & Clark (2007) further notes the following "... Barney's argument suggests that if strategic factor markets are always perfectly competitive, it is not possible for firms to earn economic rents." (Barney & Clark, 2007, p. 17).

Barney (1986) does acknowledge that strategic factor markets are not always perfectly competitive. He suggests two ways they can be imperfect, firms in the market can be lucky and they can have knowledge about the resources they acquire that other firms do not have.

Dierickx & Cool (1989) extends Barney's (1986) thoughts by arguing that it is the lack of capacity rather than the state of the competition in the strategic factor markets that makes it possible to create competitive advantages. Like Barney (1986), Dierickx & Cool in their article argues that the resources a firm already have are better at creating positive economic results than the resources it can acquire in the market. It is further suggested what can enhance the economic value of existing resources. Dierickx & Cool (1989) build their suggestions on a basis of the isolating mechanism, which as earlier mentioned, were proposed by Rumelt (1984). The following are suggested as abilities that make resources less likely to be subject to competition in the strategic factor market: *"Subject to time compression diseconomies", "Causally ambiguous", "interconnected asset stocks", "Asset mass efficiencies"* and *"Asset erosion"* (Dierickx & Cool, 1989). Barney build on these thoughts

in his papers on the VRIN and VRIO frameworks (Barney, 1991) (Barney, 1995), which will be further explained in the next section.

## **Barney's VRIO framework**

Barney (1991) proposed an analytical framework to establish what attributes that are most useful for creating a sustained competitive advantage. The framework is build with the assumption that the resources a firm hold may be heterogeneous and immobile. It is however acknowledged that not all resources have the potential of creating a competitive advantage. The following four attributes was at first proposed to be empirical indicators of how heterogeneous and immobile a firm's resources are (Barney, 1991, pp. 105-106):

"(a) Must be valuable ... it exploits opportunities and/or neutralizes threats in a firm's environment"

"(b) Must be rare among a firm's current and potential competition"

"(c) Must be imperfectly imitable"

"(d) There cannot be strategically equivalent substitutes ... that are valuable but neither rare or imperfectly imitable"

With these attributes in place it is possible to determine how useful the attributes are for creating a sustained competitive advantage (Barney, 1991). Barney later simplified his framework and replaced attribute (d) and the framework was then broken into the following four questions (Barney, 1995):

- 1. Value
- 2. Rareness
- 3. Imitability
- 4. Organization

It is important to note these questions seek to answer the same as in the first framework. The four questions will be further elaborated below. Figure 5 explains the relationship between heterogeneity, immobility, the four key questions and sustained competitive advantage.

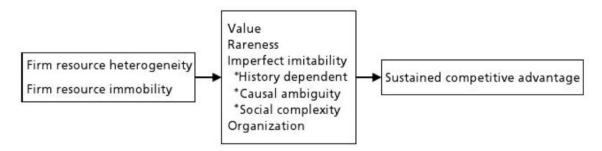


Figure 5, Vrio relationship, (Barney & Clark, 2007, p. 69)

## **Question of Value**

Barney (1995) suggests that the first thing a firm must do to evaluate if its resources help build and sustain a competitive advantage, is answer if they fulfill indicator (a) from his first framework, thus they have to ask the following question: *"Do a firm's resources and capabilities add value by enabling it to exploit opportunities and/or neutralize threats?"* (Barney, 1995, p. 50).

It is however not certain that the resources and capabilities that have added value in this sense in the past will continue to add value in the future. Change in customer preferences, industry structure, or technology are all examples of what can alter a resource's value. One of the senses in which a general manager can add value is to constantly make sure that the resources and capabilities of the firm adds value even though the environment has changed (Barney, 1995). Selznick (1957) backed this notion when he, as mentioned earlier, stated that general managers should foster and nurture the distinctive resources in the firm to be counted as a valuable resource. It is not common that a change in the environment leaves a firm without any or just a few valuable resources. Barney (1995) states that environmental changes however often reduce the value of a resource when used in one way and might even heighten the value if used differently. When this happens, the following question should be answered: *"How can we use our traditional strengths in new ways to exploit opportunities and/or neutralize threats?"* (Barney, 1995).

### **Question of rareness**

A resource might be considered as being valuable, when answering the question above, but being valuable in itself is not enough for creating a competitive advantage. If other firms in the market hold a resource, then the resource is most likely not a competitive advantage to any of them, it will merely be seen as a common resource (Barney, 1995). Valuable but non-rare resource can however not be neglected, as they might ensure survival when competitive parity exists in an industry (Barney, 1991). According to Porter (1980) a firm does not gain competitive advantages under competitive parity, but increase the likeliness of economic survival.

Barney puts the following forward as a key question, when assessing if a resource can help establish a competitive advantage: *"How many competing firms already possess these valuable resources and capabilities?"* (Barney, 1995, p. 52). If this question can be answered desirably and the resources are thus both valuable and rare, they enable the firm to gain at least a temporary competitive advantage (Barney, 1995).

#### **Question of imitability**

When a firm gains both valuable and rare resource it can be a way to describe that they get firstmover advantages. For it to develop into a sustained competitive advantage it has to be resources than cannot be directly obtained by competing firms through duplication or substitution (Barney & Clark, 2007). Other firms will thus have to experience a cost disadvantage if they are to obtain the same or a similar resource. Resources can be imperfectly imitable due the following three factors, unique historical conditions, causal ambiguity and social complexity (Barney, 1991).

Where Porter (1980) dismisses the unique historical conditions of a firm as a source of competitive advantage, the resource based theory acknowledges this. It is argued that firms are historical entities and that their ability to obtain and sustain resource are dependent on their place in time. Once the time passes where a certain resource could have been obtained passes, firms that did not do so, cannot obtain them any longer and it is thus considered imperfectly imitable (Barney, 1991). If a competing firm should however imitate the resource at a later time, it will be at a significant

cost advantage and the firm that obtained it originally will still hold a sustained competitive advantage (Barney, 1995).

A resource is subject to causal ambiguity when the link between the competitive advantages a firm has and the resource is poorly understood. It will thus be difficult for competing firms to imitate a resource or the strategy of the firm if the competitors do not what to imitate. It is however important to note that the firm that possesses the resource must have the same level of causal ambiguity as its competitors for the resource to be a source of sustained competitive advantage. If the firm that controls the resource has full understanding of it, competitors might seek to reduce the knowledge gap by for example hiring the employees who holds the knowledge (Barney, 1991).

Some physical resources can be easy to imitate but socially constructed resources and capabilities are very difficult to imitate (Barney, 1995). Barney (1995) lists the following examples of socially complex resources: *"Reputation, trust, friendship, teamwork and culture"* (Barney, 1995, p. 55). With most of these examples it is quite easy to see how they can give a competitive advantage, it is thus noticeably that the socially complex resources are often not subject to causal ambiguity. Due to the nature of resource with high social complexity, this is as described still very hard to imitate.

## **Question of Organization**

To get full advantage of the competitive advantage created through valuable, rare and inimitable resources, the firm has to be organized to exploit these. Barney (1995) refers to a firm's formal reporting structure, explicit management control systems and compensation policy as organizational components that can support the resources of the firm. The components are referred to as complementary resources because they cannot generate a competitive advantage without other resources. While it cannot create competitive advantages in itself the organization can enable a firm to reach its full competitive advantage by gaining full advantage of the resources and capabilities it possesses (Barney, 1995).

### Usage of RBV and the VRIO Framework

The VRIO framework is viewed as a tool that in an applicable way summarizes the main thoughts of the Resource Based Theory. This corresponds with the purpose of this paper that seeks to explain the strategy of SAS on a theoretical basis. It is argued that by identifying the resources that can create a competitive advantage and using the VRIO framework, the value of the strategic discussion will be heightened. Furthermore it is seen as valuable in identifying what the paradigm shift in the industry has caused to SAS and their internal resources and capabilities. As mentioned the resource based view and the VRIO framework is positioned in opposition to many of Porter's thoughts. By including the internal resources and capabilities it adds another dimension to the analysis than Porter's positioning strategies. It is thus used to explain some of the factors, that are not included in Porter's theory and to assess if Porter's theory is sufficient in analyzing and building strategies or if the internal resources and capabilities of the resource based view are necessary as well.

Barney (1995) positions his framework as an analysis of a firm's internal factors. It is acknowledged that it is necessary to conduct an analysis of a firm's external factors as well, to get the full picture of its competitive advantages. An external analysis can however not stand-alone and must be accompanied with an internal analysis (Barney, 1995). This stresses that the empirical analysis conducted in this paper using the VRIO framework, should be viewed in conjunction with and not in contradiction to the market definition found earlier in this paper. It is thus also necessary to analyze the market when conducting an analysis with a Resource Based Theory like the VRIO framework.

The framework does not explain how to identify and define the resources and capabilities of a firm (Barney, 1991) (Barney, 1995). In order to operationalize the framework, this dimension is added to the VRIO analysis that will be conducted in this paper.

## 5.2 The Activity-Based view

In this section we will go through the Activity-Based view and look at the forces and downsides of the theory. We will also discuss how the framework can be used in the analysis.

The activity-based view of the firm is a comprehensive strategic framework, which analyzes firmlevel competitive advantage using activities as the unit of analysis (Porter, 1985). Porter, argues that breaking the value chain into activities such as receiving, manufacturing, storing, transporting, hiring, training, purchasing and marketing provides the possibility to identify potential competitive advantage (Porter, 1980) (Porter, 1985).

## **Prior to porter**

In the early 1950's Wood & Dantzig(1951) were the first to focus on the company as a set of activities, they saw the market as fully competitive and self-regulating.

Other theorists as Dorfman et al. (1958) also shared the same perspective as seeing the firm as a set of processes or activities. *"We conceive of a firm making choices among a number of processes"* (Koopmanns, 1951, page 6).

This understanding and possible optimization of the firm, is the baseline of the Activity analysis, which shares similarities with Porter's (1985) activity based view and possibly also served as inspiration (Foss & Sheehan, 2009).

When looking at the value chain within a company both share several features:

- Separation of primary and support activities: Primary activities contribute directly to the output and support activities contribute either directly to a primary activity or supports throughout the value chain. One requirements is that it is a *"required support activity which is used by the final demand activity"* (Wood and Dantzig, 1951 p16)
- Another similarity is the possibility to improve. Porter (1985) suggests two ways to optimize cost: Either by looking at the value chain and implementing new technologies, production techniques etc. Or by looking at the drivers and manipulate those to improve coordination of the activities.

When porter presented his activity based view he of course had an idea to improve the already existing framework proposed by Wood and Dantzig. One of the main differences is the theoretical view on the market. Where Dorfman et *al.*(1958) and other theorists of their time "saw" the market as self-regulating from supply and demand, Porter made it clear that he saw the market as oligopolistic competition. Porter also made sure that the focus was on firm level and that way looked to improve the firm's competitive advantage in all areas (Porter, 1980)(Porter, 1985).

## The role of the firm's strategy

Porter (1985) acknowledges the importance of a business strategy that is visible in all activities in the company, but it has been discussed whether the strategy should control the activity or vice versa. In 1991 Porter stated that strategy is the creation of a unique and valuable position, involving a different set of activities. He also states that it is about creating a fit among a company's activities, because if there is no fit among activities there is no distinctive strategy and little sustainability (Montgomery & Porter, 1991).

## **The Value Chain**

Porter (1985) states that competitive advantage cannot be understood by looking at a firm as a whole. By this is meant that to analyze the reason for competitive advantage or support one, one needs to look at each activity that supports a company's services or goods "transformation" through the business.

Figure 1: Porter's Generic Value Chain

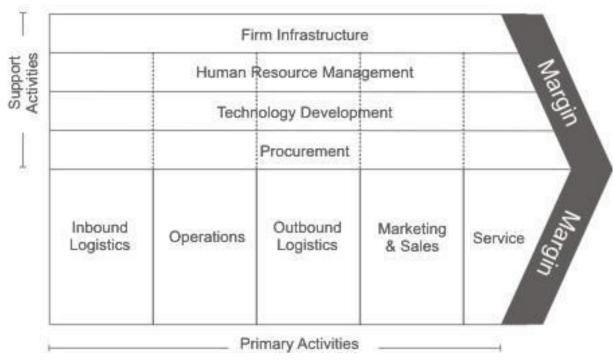


Figure 6, Generic Value Chain, (Porter, 1985 p. 37)

## The framework itself

As shown in the model above Porter has created a value chain within an activity based view. He primarily differentiates between two types of activities: Primary and support activities. Primary activities are goods or service direct way through the business, this is then separates into five Generic groups, Inbound logistics, Operations, Outbound logistics, Marketing and Sales and last Services. These are again divided into several underlying activities depending on the industry. Inbound Logistics is related to all necessary handling regarding receiving, storing, warehousing, inventory control, vehicle scheduling and returns to suppliers (Porter, 1985).

Operation activities associated with transforming the product into the final product form, such as machining, packaging assembly, equipment maintenance, testing, printing and facility operations. (porter, 1985) Outbound logistics consists of activities regarding collecting, storing, and physical distribution to buyers. This can be transporting finished goods to warehouses, material handling, delivery vehicle operation, order processing and scheduling (porter, 1985).

Marketing and sales activities are associated with providing means by which buyers can purchase the product and inducing them to do so. This is done by advertising, promotion, sales force, quoting, channel selection, channel relations and pricing (Porter, 1985).

Service is the last primary activity in a company's value chain. It is activities associated with providing service to enhance or maintain the value of the product, such as installation, repair, training, parts supply and product adjustment. (Porter, 1985)

All value chains activities depend on the type of business and industry the business operates in (porter, 1985).

On the upper level of the framework are the support activities. These activities are spread out over all or some activities depending on the firm structure, and they support the possibility of competing with the industry. They are split into four generic categories and an again, depending on the industry been separated into different categories (Porter, 1985). The four generic groups, Procurement, Technology development, Human resource management and Firm infrastructure all contribute to the company and its value chain, and are in different degrees necessary to obtain competitive advantage (Porter, 1985).

Procurement refers to the function of purchasing inputs used in the firm's value chain. It is important to separate this from the actual purchasing of the inputs. As there is a purchasing function of inputs in each main activity it is important to be able to measure on the level of all primary activities. The impost can be raw materials, supplies, office equipment, and buildings. Purchasing inputs can also be active in the support activities such as resources for technology development. Procurement is normally spread throughout the value chains primarily activities (Porter, 1985).

Technology development is highly important as all primary activities makes use of technology whether it is technology for production, purchasing, optimization or simple know-how it plays a vital role throughout all activities. It might not be explicitly recognized, as technology development often is seen in relation to development and engineering but can also be media research and servicing procedures. (Porter, 1985)

Technology development is more than ever, important and since the introduction of information technology (IT) it has been necessary to implement IT systems in almost all aspects of the firm to sustain competitiveness (University of Michigan, 2014).

Human resource management consists of activities involved in the recruiting, hiring, training, development and compensation of all types of personnel. This supports both Primary and support activities and the entire value chain.

Last is the firm's infrastructure, which covers all from general management, planning, finance, accounting to legal, governmental affairs, and quality management. This support occurs to the whole value chain and firm, rather than an individual activity. Again these are split up between relevant operational parts of the firm such as production unit on one hand and mother corporation on the other. Infrastructure can also be a powerful source of competitive advantage in regards to development rights and negotiation skills. The top management can in some business be important contacts for buyers as well and therefore also contribute to competitive advantage.

All activities combined form the value chain and are therefore part of differentiating the value chain from other companies. This difference is a vital role for competitive advantage.

#### **Discussion of the Value Chain**

In an article from 2009 Norman Sheehan and Nicolai Foss, discussed the development of the activity-based view. In their article they note that activity-based view is often taught in classroom settings, but is not widely used in real world settings due to difficulties in applying it (Foss & Sheehan, 2009). Porter himself also acknowledges this problem: *"In retrospect, I probably should* 

have written more about how to apply it, because it seemed to take a long time for practitioners to learn to actually use the tool." (Foss & Sheehan, 2009, p. 254). The activity-based view is thus not viewed as a tool that is straightforward to use and can be applicable to all settings and by all strategist in the business world.

Nilofer Merchant, in Harvard Business Review, puts forth another criticism of the Value chain. Her main criticism is that its focus is on big companies, and that being big is no longer enough to win in today's business setting,. Focus should rather be one how to create a fast, fluent and flexible company (Merchant, 2012). This criticism is much related to one proposed by Mintzberg et al. (1998) on one of Porter's other strategic theories, the generic strategies. It is stated that the value chain is well suited for a mass-market approach where focus is on efficiency and low-costs, but not for differentiated products where customers wants to have an influence on it and customize it to some extend (Merchant, 2012).

The criticism from Merchant (2012) is build around the rise of crowdsourcing and interactions between companies and their customers, both online and offline. Daniel Evans and Aaron Smith propose another discussion of the value chain based on the Internet. They argue that the value chain does not sufficiently consider the Internet and its vast possibilities (Evans & Smith, 2004). Many different scholars have argued that the value added by the Internet calls for a modification of Porter's value chain (Bickerton, Bickerton, & Simpson-Holley, 1998) (Johnston & Mak, 2000). As noted by Evans & Smith, Porter does however state that technology is embodied in all value activities in the firm, Evans & Smith then argues that this is not enough due to the vast application options of the Internet and its possible effects on all parts of the value chain.

## Usage of the activity based framework

The Value chain framework enables the user to view the company's business actions in strategically relevant activities and thereby understand the behavior of cost and the existing and potential sources of differentiation. By applying the activity based view on SAS it is possible to analyze the specific activities that contribute to or create competitive advantage from both cost performance and differentiation. It gives a systematic tool for examining the sources of competitive

advantage (Porter, 1985). The framework only provides a tool to identify activities that contribute to competitive advantage. It does not take the company's market position or the resources available, into account. To be able to offer the full understanding of SAS' potential competitive advantage it is therefore necessary first to obtain significant information about the company's resources available and its position in the market. As Sheehan and Foss (2007) describes, it is not before integrating the activity-based view with the resource-based view that they provide the most comprehensive explanation of firm value. As described in section 5.1 Barney acknowledge the need for an external analysis of the firm's position in the market.

Combining the theories of resource based view and activity based view it grants us the possibility to analyze the full understanding of SAS firm value and Competitive advantage. Furthermore the findings from positioning analysis will be used to support the activities potential competitive advantages.

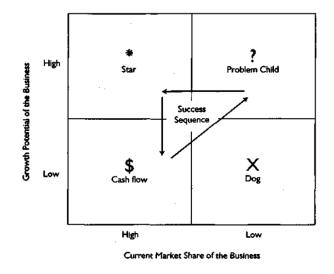
## **5.3 Positioning Strategies**

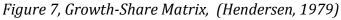
This section will give an overview of positioning strategies, as well as providing a discussion of the strategies in terms of strengths, implications and how they are applied in this work.

The positioning school of strategies focuses on a company's strategic position in the market as the main driver for a sustained competitive advantage. The strategies described in the positioning school are generic and specifically common, and can thus be pursued of all players in the market (Porter M., Competitive Strategy, 1980) (Mintzberg, Ahlstrand, & Lampel, 1998). A company's ability to pursue and implement a strategic approach is seen as the main indicator for its ability to outperform its competitors and build a defensible strategic position in the long run (Porter M., Competitive Strategy, 1980).

#### **Development of Positioning Strategies**

Before Porter introduced his concept of generic positioning strategies and started the popularity of positioning strategies in a broader sense, management consultants introduced similar concepts. Boston Consulting group launched their *Growth-Share matrix*, it had its basis in empirical cases but was seen as a tool to find the one best way (Mintzberg, Ahlstrand, & Lampel, 1998).





As it will later be shown, Porter supports this objective in his work on generic strategic (Porter M. , Competitive Strategy, 1980). Henderson (1979) of Boston Consulting Group argued that to be a successful company it needs to have a portfolio of products that fit into the four generic strategies he proposed. As it can be seen in Figure 6, a company's products or offerings can be in four different market positions, based on its market growth potential and current market share (Hendersen, 1979). It is thus a tool that combines elements from the company's external environment and internal capabilities to create four generic strategies. In a fairly simple way the company should be able to put in the conditions and select the strategy or sequence of strategies, which provided the best opportunities for capitalizing on its possibilities (Mintzberg, Ahlstrand, & Lampel, 1998). The framework proposed by Henderson (1979), has been much criticized afterwards for its oversimplification of strategy and its implementation (Seeger, 1984). It is further noted by Seeger (1984) that the Growth-Share Matrix provided powerful images, which are easy to interpret and understand, the market is however found to be much more complex than this. A competitor to BCG,

McKinsey & Company, has suggested a similar framework known as the GE-McKinsey matrix. It was developed as a tool to determine where to invest for a company based on the strength of the business unit and the attractiveness of the market (McKinsey & Company, 2008). Similarly to the Growth-Share Matrix it has been criticized for oversimplifying strategy and not accounting for synergies between different products or business units.

Other influences on positioning strategies that derives from management consulting is the Experience curve that was developed by Boston Consulting Group and PIMS developed by Schoeffler for General Electric (Mintzberg, Ahlstrand, & Lampel, 1998). The Experience Curve suggests that when the production of an item doubles the production costs decreases by a percentage, generally between 10 to 30% (Yelle, 1979). When adopting this notion, the objective of a firm quickly becomes volume in production, as higher volumes would generate a cost advantage and a quick way to obtain cost leadership. Companies were therefore likely to cut prices in order to gain market shares before other companies in the market (Mintzberg, Ahlstrand, & Lampel, 1998). PIMS was developed as a database that aggregated a number of strategy variables and then estimated ROI and market share. It enabled participating companies to compare their strategic positions with their competitors. The ability of PIMS to find causation between input variables and actual performance have been questions, as Mintzberg states "Does high market share bring profit or does high profit bring market share? ... Or more likely, does something else bring both?" (Mintzberg, Ahlstrand, & Lampel, 1998).

## **Porter's Generic Strategies**

Michael Porter (1980) has identified three generic strategies that by coping with the five forces that was discussed in section 4.3 of this paper can provide a competitive advantage. The generic strategies enable a firm to outperform its competitors and create a defendable position in the market (Porter M., Competitive Strategy, 1980).

#### STRATEGIC ADVANTAGE

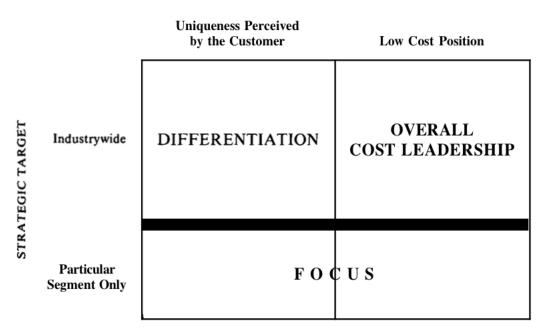


Figure 8, Generic Strategies, (Porter, 1980)

It is important to note that the successful implementation of a generic strategy does not equal high returns and profitability. The economic outcome of a successful implementation is dependent on the industry structure, in some industries it might secure high returns and it others it will only be enough to get by (Porter, 1980).

## **Overall Cost Leadership**

When adopting the overall cost leadership strategy a company seeks to have low costs compared to their competitors in all aspects of their business. Porter outlines the strategy's requirements in the following sentence *"Cost leadership requires aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service, sales force, advertising and so on."* (Porter M., Competitive Strategy, 1980). When adopting this position a company can earn high returns even though there are strong competitive forces in the market. In a market the buyers can drive down prices if they have a powerful position, according to Porter (1980) however only to the level of the next most cost efficient competitor. The next most efficient competitors will

suffer first if the industry is put under pressure. The overall cost leadership strategy also protects against powerful buyers, provides high entry barriers through scale economies and cost advantages, and puts the company in a favorable position to deal with substitutes in the market (Porter M., Competitive Strategy, 1980).

It will be an advantage for a company to hold a relatively large market share or other clear advantages over its competitors, if it will successfully pursue an overall cost leadership strategy. It can thus not be developed and successfully implemented overnight or without full focus and dedication (Porter M., Competitive Strategy, 1980). If a company successfully implements the strategy it has the potential to revolutionize and upset the existing industry. This risk of this is significant if the other participants are not prepared and do not respond to such a strategy immediately (Porter M., Competitive Strategy, 1980).

#### Differentiation

When pursuing a differentiation strategy a company differentiates its offerings so that it will be perceived as unique in the industry. Porter outlines various different sources to differentiation *"design or brand image, technology, features, customer service, dealer network or other dimensions."* (Porter M., Competitive Strategy, 1980). If successfully adopted by a company it will, like overall cost leadership, create a defendable position against the five forces and thereby give the possibility of above-average returns. It provides protection against competitors through brand loyalty, thereby creating lower price sensitivity among the customers. Due to the brand loyalty the customers does not have viable substitutes in the market, which severely lowers their bargaining power.

As opposed to overall cost leadership, differentiation does not require a high market share, on the contrary it might require a rather low market share, as the perception of exclusivity is a requirement for obtaining differentiation. It is important to note that even though the differentiated product is perceived as superior and exclusive, not all customers will pay a premium for it (Porter M., Competitive Strategy, 1980). Thus, the company cuts of part of the market to

maintain a differentiation strategy. Despite the differentiated position, a company cannot ignore costs, it will just not be the primary strategic target (Porter M., Competitive Strategy, 1980).

## Focus

If a company adopts the focus strategy it lays it strategic focus on a single buyer group, segments of the product or geographic market. The targeted market might be based upon what is least vulnerable to competitors or where competitors are not present or particularly vulnerable (Porter M., Competitive Strategy, 1980). Some scholars divide the focus strategy into two strategies, cost focus and differentiation focus (Hill & Jones, Strategic management theory: an integrated approach, 2004). When adopting this strategy a company focuses and builds it strategy around servicing one particular part of the industry very well. It should thereby be able to service it more efficiently or effectively than others who have a broader focus (Porter M., Competitive Strategy, 1980).

When applied successfully a company will achieve either differentiation by meeting the needs of the target group, lower costs by only serving the particular group or both. When achieving this the defendable positions that have been discussed in the sections on differentiation and cost leadership, will apply to the focused company. A focused strategy will apply natural limitations to the overall market share a company or product line can gain, due to its narrow focus (Porter M., Competitive Strategy, 1980).

## Stuck in the middle

To be "stuck in the middle" is a fourth and very undesirable strategic position a company can find themselves in, according to Porter (1980). A company runs the risk of being stuck in the middle if they do not successfully develop their strategy in one of the strategic directions mentioned in the previous sections or pursues both simultaneously (Porter M., Competitive Strategy, 1980). In this undesirable position a company is not able to compete with competitors who have obtained cost leadership, who have achieved differentiation in the industry, or who have a cost or differentiation focus on a narrow part of the market. A company in this position will most likely experience low profitability and probably also have blurred corporate structures and motivational systems. It will take time and effort for a company to move out of this position, dependent on the abilities of the

company and industry structure any of the three generic strategies might be most suitable for getting the company back on track.

#### **Discussion of Generic Strategies**

Albeit Porter's Generic strategies have long played a vital part in the world of strategic literature, it has received a lot of criticism since it was introduced in 1980. One of the most recent critics have been Bowman (2008), who states that strategy have been boiled down to a simple choice between a few prescribed choices. This is considered to be incomplete in terms of understanding the strategic capabilities and options of a company (Bowman, 2008). The simplicity of the generic strategies hides three main issues *"1) confuses 'where to compete' with 'how to compete'; 2) confuses competitive strategy with corporate strategy; and 3) excludes other feasible strategy options."* (Bowman, 2008, p. 2).

Porter (1980) argues that companies can gain an advantage by competing in industries that are attractive. Bowman (2008) does however not recognize this, as it simply not possible for a company to radically change it's offering and thereby switch to a more attractive industry. Furthermore Porter's (1980) description of industries is dismissed as being too simple and broad. This is exemplified by the auto industry, where Hyundai does not necessarily compete with Ferrari just because they are in the same industry. Hyundai and Ferrari are not servicing the same segments, thereby they are not in competition with each other and their performance or position cannot be compared (Bowman, 2008). It can thus be argued, that for generic strategies to be applicable they must have a very narrow focus and only be used when comparing to companies who caters to the same part of the market. Porter (1980) is arguing that the generic strategy should be implemented across markets. Bowman (2008) however states that firms operating in many markets are corporations. When considering the structure of a corporation that might operate across many different geographical markets or business units, it is argued that the same generic strategic position must be pursued at a much more granular level.

According to Bowman (2008) cost leadership and differentiation can be explained using the following equation: "Profits = Quantity x (Price – Cost)" (Bowman, 2008, p. 3). One of Porter's central theses is according to Bowman (2008) that everything else being equal, differentiation would then result in a higher price, and cost leadership in lower costs. As mentioned earlier Porter (1980) states that to be successful with a cost leadership strategy it needs to have a relatively high market share. In Bowman's equation, the quantity would then have to go up for a cost leadership strategy to be successful. The increase in sales (quantity) cannot just come by reducing costs, but has to come from offering equivalent products at a lower price. This is the case as there needs to be an extra value for customers to chose a company's product, in this case a lower price (Bowman, 2008). Thus a change in generic strategy would trigger a change in all parts of the equation and not just price or cost, this is according to Bowman (2008) in opposition to Porters central thesis. Furthermore Bowman (2008) argues that a firm can indeed pursue both a differentiation and a cost leadership strategy in some areas. This can be done through centralizing production at a scale, and then compete with premium priced competitors on a variety of different markets. This can be linked to his earlier argument about applying generic strategies at much smaller market segments, than stated by Porter (Bowman, 2008). Bowman (2008) exemplifies this by the Volkswagen group, where different brands share production facilities and platforms, but competes in different market segments. It can thus be argued that Audi as an example would enjoy economies of scale at a corporate level, but can apply a differentiation strategy when going to market.

Hill (1988) points out two primary flaws in Porter's generic strategies, first he argues that differentiation can be a step on the road for a company on the way to overall cost leadership. It is thereby argued that cost leadership and differentiation are not incompatible, which is in contrast to Porter's (1980) theory. As mentioned in the section above, Bowman later supported this notion. Secondly it is found that many industries do in fact require that a company pursue both cost leadership and differentiation if it is to gain a sustained competitive advantage (Hill, 1988). Porter (2008) states that a company, who is doing this, will end up being "stuck in the middle" and they will thus experience low profitability.

Hill (1988) argues that investments aimed at differentiation have two effects, firstly it creates brand loyalty, which also Porter (1980) notes, and secondly it broadens the appeal of a product in the market and thereby increases the volume sold. The effect in the short run will be increased unit costs. But as the volume increases the long run effect will be reduced unit costs. The extent to which the cost will decline in the long run and enable a firm to establish overall cost leadership is determined by the effect the increased volume will have on unit costs (Hill, 1988). Hill (1988) recognizes that his theory will not always be true and that it depends on how much differentiation investments increases demand and to what extent the increased demand lowers unit costs. The impact differentiation has on demand is determined by "the ability of the firm to differentiate its product, the competitive nature of the product market environment, and the commitment of consumers to the products of rival firms" (Hill, 1988, p. 404). Three sources of lower unit costs are recognized "economies due to learning effects, economies of scale, and economies of scope" (Hill, 1988, p. 406). Note that economies of learning effects are referring to the experience curve discussed in the section on the development of positioning strategies (Hill, 1988). Cost reductions linked to increased volumes, has to outweigh the differentiation investments made. Only when this is fulfilled differentiation is found to be a source of overall cost leadership (Hill, 1988). It is thus found than when this is not the case, the first flaw Hill (1988) found in Porter's theory does not hold.

According to Porter (1980) a company can gain an overall cost leadership position in an industry. This assumption is based on a continuously declining experience curve, Hill (1988) argues that this effect will eventually die out. Hence, there will be no potential for an overall cost leadership position in many industries but for a group of companies to hold a low-cost position. When a company holds this position it can gain a sustained competitive advantage through differentiation (Hill, 1988). This relates back to the second flaw Hill found in Porter's theory, which is mentioned above. Hill (1988) uses the auto industry as an exemplification to this, where many companies hold a low-cost position but uses differentiation to gain a competitive advantage. It is however implied that a company must hold a non-unique low-cost position for Hill's second flaw to be valid.

Treacy and Wiersema (1993) have with their Value Disciplines proposed a theory that is somewhat similar to what Porter (1980) proposed, but with some important differences. Three market segments are identified and then three corresponding generic value disciplines are proposed to cater the market segments. When seeking the value discipline "operational excellence" the company's objective is to lead the industry in price and convenience (Treacy & Wiersema, 1993). This is quite similar to Porter's cost leadership strategy, Treacy and Wiersema (1993) however notes that the strategy is targeted at a specific segment of the market. That segment is customers who value a standard product at a rather low price. The last two value disciplines "customer intimacy" and "product leader" can both be viewed as forms of differentiation. When pursuing a customer intimacy strategy a company tailors and shapes its product to fit the demands of the customer, while companies pursuing a product leader strategy seeks to produce state of the art products and services (Treacy & Wiersema, 1993). These value disciplines respectively cater to the market segments who demands bespoke products and who are willing to pay a high price for innovative and top of the line products.

Whereas Porter (1980) argued that a company must only follow one generic strategy, Treacy and Wiersema (1993) argues that a company must at least meet industry standards in them all and excel in one. Companies that seek an operational excellence or cost leadership strategy must thus also differentiate its products and vice versa. Furthermore it is argued that the "big winners" in an industry will be the companies who master more than one value discipline (Treacy & Wiersema, 1993), companies are thus encouraged to seek more than one generic discipline to become a "big winner". Bowman (2008) offers a critique to Treacy and Wiersema's theory, as he states that not all markets necessarily has three segments and it is not certain that it would be the segments described by Treacy and Wiersema. Furthermore it is argued that the theory is based on the hope that other competitors will not adopt the same value discipline and if they do they will not be as successful in implementing it (Bowman, 2008). This leads to the point that focus should perhaps be on the quality of strategy implementation and not so much on choice of generic strategy (Bowman, 2008).

Mintzberg, Ahlstrand & Lampel (1998) have thoroughly discussed positioning strategies and proposed four main critiques or concerns of it; focus, context, process and strategies themselves. It is proposed that the focus of Porter and positioning strategies is too narrow and is too oriented towards economic results and quantifiable data. It does thus take social or political factors into account, which results in a focus on what is measurable, both in strategy formulation and selection of strategies (Mintzberg, Ahlstrand, & Lampel, 1998). It is thus a concern that to much focus might be laid on cost leadership rather than differentiation, as it is easier to measure and quantifiable.

With their second critique, context, Mintzberg et al. again argues that positioning strategies are too narrow. They argue that Porter and other positioning theorists are biased towards big business, this might be linked to their first concern since the quantifiable data is available in well-established industries as opposed to fragmented or new industries (Mintzberg, Ahlstrand, & Lampel, 1998). They further argue that the focus on big established industries decreases the applicability of the theory in unstable fragmented industries.

The concern of process is related to the focus of "massaging the numbers" in positioning strategies. It is argued that this significantly hinders learning, creativity and in some cases also personal commitment. This is the case as it might emphasize a strategy dictated by numbers rather than the nuances of business and everyday experience of the people working in the organization (Mintzberg, Ahlstrand, & Lampel, 1998).

The final concern proposed by Mintzberg et al. (1993) is that the strategies themselves are too narrow. This notion is supported by Bowman (2008) who as mentioned earlier criticizes Porter for excluding other feasible strategy options and Treacy and Wiersema for focusing solely on three segments and value disciplines. Mintzberg et al. (1993) argues that strategy formulation is reduced to following a formula as it is selected from a restricted list of conditions. Managers will thus be tempted to become *"codifiers of the past rather than inventors of the future"* (Mintzberg, Ahlstrand, & Lampel, 1998, s. 117).

Rumelt published an article called "How Much Does Industry Matter?" where he examined if industries had the influence on performance that was proposed by Porter and other positioning theorists. He examined the following: *"total variance in rate of return among FTC Line of Business reporting units into industry factors (whatever their nature), time factors, factors associated with the corporate parent, and business-specific factors."* (Rumelt, How much does industry Matter?, 1991, s. 167). Following the notions of positioning theorists, the industry factors will be the strongest explanatory factor on performance.

	Sample A			Sample B		
Component	Est.	Std. Error	Percent	Est.	Std. Error	Percent
Industry-Year	21.92	2.04	7.84	22.09	2.31	5.38
Industry	23.26	4.72	8.32	16.55	4.26	4.03
Corporation	2.25	3.84	0.80	6.74	3.31	1.64
Business-unit	129.63	6.91	46.37	181.50	7.04	44.17
Error	102.51	2.18	36.87	184.06	3.04	44.79
Total	279.56		100.00	410.95		100.00

Table 1, Variance components estimates, (Rumelt, 1991, p. 178)

As seen in the table above, business-unit is the most explanatory factor on both sample A and B, the variance is six times larger than Industry in sample A and eleven times larger in sample B. He thus found the exact opposite of what is proposed by positioning theorists. The findings are aligned with the thoughts of the Resource Based View, described in section 5.1, this is also noted by Porter & McGahan in their answer to Rumelt (1991) called "How Much Does Industry Matter, Really?" (Porter & McGahan, 1997). In their article they found the following percentage of variance between different factors and company performance.

	Percentage of total variance
Year $(\sigma_{\gamma}^2)$	2.39
Industry $(\sigma_{\alpha}^2)$	18.68
Corporate parent $(\sigma_{\beta}^2)$	4.33
Segment specific $(\sigma_{\Phi}^2)$	31.71
Corpparindustry covariance $(2C_{\alpha\beta})$	-5.51
Model	51.60
Error	48.40
Total $(\sigma_r^2)$	100.00

Table 2, Percentage of Variance, (Porter & McGahan, 1997, p. 23)

They found that 18,68% of variance is associated with industry effects, this is substantially higher than in the samples conducted by Rumelt (1991). It is acknowledged that other factors have an influence on performance and profitability, but industry is still seen as a highly important factor (Porter & McGahan, 1997).

As mentioned Rumelt's arguments have their foundation in the Resource Based View. Rumelt (1991) is not the only Resource Based scholar to contradict Porter's thoughts. As mentioned in section 5.1 Barney (1986) stated that theory of imperfect product markets are inadequate for explaining sustained competitive advantages of some firms in a market. Other factors mentioned in the section on the Resource Based View that positions it in opposition to Porter and the Positioning strategies include the following: Porter does not recognize historical conditions, Barney (1991) acknowledges that they are important factors in the Resource Based View as the resource are dependent of the firm's place in time. Furthermore Porter's work is based on the Structure-Conduct-Performance paradigm, whereas Demsetz (1973) in one of the founding articles for the Resource Based View positioned this as an alternative to the paradigm.

## Usage of generic strategies

Porter's generic strategies are viewed as one of the major works within the field of positioning strategies, which summarizes many of the earlier positioning thoughts. Porter (1980) argues that

by successfully pursuing and implementing a generic strategy a company can outperform its competitors and create a sustained competitive advantage over them. As earlier described, Barney (1995) claims that the VRIO framework can help do something similar. By using these theories in conjunction, the strategic considerations in this thesis will include the views of opposing strategic fields. It is thus argued that recommendations and considerations will be of higher value than if just one strategic approach had been used. Whereas the resource based view focuses on the internal resources and capabilities of a firm, Porter's generic strategies adds the dimension of a company's position in the market.

In the resource based view Barney (1995) argues that an external analysis cannot stand alone but must be accompanied with an internal analysis. It is argued that an internal analysis in comparison cannot stand-alone either, it is thus also necessary to include an analysis that includes the market and position view as well.

After its rise, Porter's (1980) generic strategies have been much discussed and criticized for the reasons mentioned in the previous section. In the analysis based on the generic strategies found in section 6.2 these opposing views and discussions will be tested and compared to Porter's original thoughts. All of Porter's views are thus not acknowledged as necessarily being sufficient in determining how to create a sustained competitive advantage, but will be tested and compared to the critique and discussions proposed by other theorists.

# 6. Analytical Framework

The analytical framework contains the application of the theories and the theoretical development and discussions found in part 4.

## 6.1 VRIO Analysis

In the following section SAS' strategic resources and competencies will be identified, when identified the resources and competencies will be tested using Barney's VRIO framework to see what are strategically important and what can help create a sustained competitive advantage. Once the analysis is done the results will be discussed using other influences on the resource based view and the discussion in section 5.1.

## Identification of SAS' resources and competencies

Before it is possible to analyze what resources and competencies can provide SAS with a sustained competitive advantage it is necessary to identify the resources and competencies it possesses. As noted in the theoretical framework, the VRIO framework does not state how to identify what resources and capabilities are important for a firm to analyze using the VRIO framework.

Barney however notes that a firm's resources include all physical, human, organizational and financial assets controlled and used by a firm (Barney, 1995). As an example Barney (1995) states that among other things human resources include experience, knowledge, judgment, risk taking propensity and wisdom of employees. Due to limitations mentioned in section 1.4 all factors noted and suggested by Barney (1995) will not be analyzed using the VRIO framework in this thesis. Such an analysis would be very comprehensive and include resource and capabilities, which the authors do not find to be of utmost importance to a company in the airline industry. However it is a concern to the authors that by limiting the analysis to Barney's (1995) suggested factors, important airline industry specific resources and capabilities might not be thoroughly covered. By not covering industry or company specific resources and capabilities it is assessed that the VRIO analysis will not provide the full picture of what contributes to a sustained competitive advantage. This could result providing wrong recommendations to SAS and not fully covering the strengths and weaknesses of the VRIO analysis.

With this being said, this analysis will be structured around the four main resource and capability groups that Barney suggests; physical, human, organizational and financial assets. What these groups cover are however fully customized to SAS and the airline industry. In each group a brief argumentation for the chosen resources and capabilities will be found. In this analysis the four groups contain the following resources and capabilities:

- Physical resources
  - o Runway slots
  - o Geographical locations
  - o Digital platforms
  - o Fleet
- Human resources and capabilities
  - o Management
  - o Staff (pilots and cabin crew)
- Organizational resources and capabilities
  - o Collective agreements/compensation
  - o History
  - o Partnerships
- Financial resources
  - o Public funding
  - o General financial state

### **Physical resources**

In this analysis SAS' physical resources includes; runway slots, geographical locations, digital platforms and their fleet of aircrafts.

#### Runway slots

Runway slots are basically permissions to use a runway and airport facilities, they are thoroughly described in section 4.3 of this thesis. As noted earlier they can be very expensive to obtain for other airlines when they are in possession of an airline. With average prices around 66 million DKK, they can be of high value to the airlines who holds them in possession and are thus seen as a physical resource worth examining.

SAS operates at and serves some of the major airports in Europe and the world, both at favorable times with expensive runway slots (cf. 4.3) in the morning and less expensive during the day and night. The examples of airports with very expensive runway slots Charle De Gaulle in Paris and Heathrow in London are both served by SAS, during busy hours (Scandinavian Airlines, 2015). Other traditional airlines like Lufthansa serve many of the same airports as SAS and hold runway slots during busy hours as well (Lufthansa, 2015). This is in contrast to many low cost carriers like Easyjet and Ryanair who holds runway slots at much cheaper airports (cf. 4.3) like Luton and Stansted (Ryanair, 2015) (Easyjet, 2015).

Runway slots at main airports in Europe have added value to SAS in the past, as they have been one of the only operators from the Scandinavian countries to these main airports. They do of course still hold value to SAS as they are coveted and expensive to obtain, but the paradigm shift in the industry might have reduced the value, as passengers might be more and more willing to fly to e.g. Stansted instead of Heathrow if the price is low enough. The runway slots SAS holds can however still be valuable in the sense that they can neutralize threats as they can help keep new players out of the major airports. Hence they act as entry barriers within the five forces framework (cf. 4.3. As mentioned other airlines hold similar runway slots as SAS, which lowers the rareness of the resource. The most popular airports in Europe operate at near 100% capacity (cf. 4.3), it can thus be very costly or only come at a cost advantage if other airlines where to imitate the runway slots SAS holds.

### **Geographical locations**

The geographical locations of an airline, which in this interpretation includes main hubs, airports served and location of production facilities are vital to the airline and its strategy. It is found to be a factor where an airline can distinguish itself from other airlines, chose what markets it will serve and what national rules and regulations it will follow.

SAS operates three hubs, Copenhagen, Stockholm and Oslo, Copenhagen being the main intercontinental hub while Stockholm serves some intercontinental routes as well (Scandinavian Airlines, 2015). This gives SAS a very strong base in Scandinavia as their hubs are placed in the three Scandinavian capitals. A strong Scandinavian presence does enable SAS to exploit the opportunities on this market, as they already have the infrastructure in place in all major airports and are well established. According to Trine Kromann-Mikkelsen (2015) most LCC's have their main hubs in and are based in low cost countries. This gives them a cost advantage that SAS cannot obtain when operating from rather expensive Scandinavian countries. Even though LCC's have valuable geographical locations in their own sense, the Scandinavian bases are still considered valuable to SAS.

In terms of the rareness of the resource it is necessary to see how many other companies already possesses this resource. Even though Norwegian is a major player in the Scandinavian market, they still do not have the infrastructure in place and thus not have the same number of major hubs or airports served as SAS (SAS Group, 2015). The resource is thus considered to be rare, but as SAS naturally does not have a monopoly at the Scandinavian airports it is imitable to some extent. Barney (1986) however notes that it is still inimitable if the other company experiences a cost advantage by obtaining the resource. Due to limitations mentioned in section 1.4 it has not been possible to analyze how much it would cost to build the infrastructure and hubs today compared to what SAS has done over the years. However, it is assessed by the authors that new players would be at a cost disadvantage if they were to imitate it today. They are however not imperfectly imitable as they do not fulfill the historical, causal ambiguity or social complexity conditions proposed by

Barney (cf. 6.3). In terms of organization the authors assess that SAS is organized in a way so they can exploit this competitive advantage.

### **Digital Platforms**

As identified by Trine Kromann-Mikkelsen in the section on technological factors, the technological development and digital era has changed the game for the airline industry. Airlines are under pressure and in fierce competition with competitors to stay on top of the development and offer great solutions. Due to this it is assessed to be a resource worth analyzing through the VRIO framework.

The main digital platform SAS operates on is their website, while they are currently developing smartphone solutions to everything from buying tickets, checking in and storing boarding passes (Kromann-Mikkelsen, 2015). According to Trine Kromann-Mikkelsen (2015) SAS has almost totally eliminated the need of travel and booking agents and are relying almost fully on their website for booking and purchases. As IT accounts for almost all of the sales and revenue it enables SAS to exploit the opportunities found online and thereby adding value to SAS. It is however considered that all competitors have similar or more advanced options than SAS when it comes to digital platforms and sales. It can thus not be considered to be a rare resource and in Barney's notion it is a common resource and not a source of competitive advantage. Barney (1991) does however note that even though it does not give SAS a competitive advantage the valuable resource cannot necessarily be neglected. The authors assess that the digital platforms help ensure profitability for SAS and is highly important even though it is not a competitive advantage.

### Fleet

The purchase of aircrafts represents a are very large expenditure for an airline, as noted in section 4.3 airlines can spend billions of DKK when placing an order for new aircrafts. Even though there are only two major suppliers in the aircraft industry (cf. 4.3), airlines can distinguish themselves from one another through their fleet and choice of aircraft supplier.

SAS have a very diverse fleet consisting of planes from Boeing, Airbus and Bombardier (SAS, 2015). SAS is however aiming to get rid of the Bombardier planes to simplify their fleet and focus on just a few plane types in order to reduce costs (Kromann-Mikkelsen, 2015). On top of the existing fleet SAS have placed orders for 42 new Airbus planes, to help the process of simplifying the fleet (SAS, 2015). SAS serve many different types of routes, from regional routes in Denmark to intercontinental flights from Copenhagen and Stockholm to the US, Asia and the Middle East (SAS, 2015). This makes it necessary to have both smaller and larger aircrafts, hence SAS cannot focus on just one plane type like some LCC's have done. With the new orders in place the fleet enables SAS to exploit the opportunities on both the regional and intercontinental routes. However, this does not mean that the resource is rare, as many other airlines have similar fleets. Even though no other airline matches exactly the number and plane models that SAS have, other airlines have fleets build on the same principles and airplane types. Even though this results in the fleet not being a competitive advantage in the eyes of Barney (1995), it cannot be neglected by SAS. As with the digital platform, an up-to-date fleet is an absolute necessity to secure the survival of SAS.

### Human resources and capabilities

In this VRIO analysis the human resources and capabilities examined are the company's management and its staff, where staff in this includes pilots and cabin crew.

### Management

Different scholars, as noted in the theoretical framework, have discussed the role of managers, and influencers on the resource based view. This gives an interesting theoretical perspective on the role of the SAS management. The management and ownership structure differs significantly from airline to airline e.g. between SAS and Norwegian (cf. 3.7), which makes it an area of interest to the authors of this thesis.

SAS does not have the colorful management teams that some competitors have, exemplified by Ryanair's Michael O'Leary or Norwegian's Bjørn Kjos (Berlingske, 2015) (The Guardian, 2015). CEO Rickard Gustafson and Chairman of the board Fritz Schur manage SAS. None of them has extensive experience in the airline industry prior to joining SAS, but have a general business background leading other successful companies (SAS Group, 2015).

The competencies of a management can be hard to analyze from people outside the organization, due to time constraints the authors of this thesis have not conducted a thorough managerial analysis of SAS. Many experts have however expressed themselves negatively about the management through the crisis SAS have found themselves in (Ritzau Finans, 2014) (Björnelid, 2012). Even though both the current and former management have been criticized, they enabled SAS to formulate and execute strategic plans. Whether or not the execution has been successful every time can be discussed as six different strategic and cost reduction plans have been introduced since 2002 (cf. 3.4) Section 3.4 reveals that the management have been successful in increasing the number of passengers and the load factor over the recent year, thus there are some positive managerial results to find. It is thus found that the management is a somewhat valuable resource to SAS.

In the authors' opinion a management like SAS' consisting of various experienced business people is quite common in the airline industry and the business world in general. Whereas the likes of Ryanair and Norwegian have top managements that are assessed to be quite unique and rare this is not the case with SAS. Management is thus valuable and important to SAS and their survival, but without rarity it cannot be seen as a source of sustained competitive advantage (Barney, Looking inside for Competitive Advantage, 1995).

### Staff

Even though SAS has staff in many different areas from ground handling to marketing, this analysis is based on the pilots and cabin crew. They face the customers/passengers every day and as noted earlier in this thesis, have been subject to much discussion. Furthermore there can be vast differences in the type of staff different airlines hire in terms of seniority, nationality and contractual conditions.

The staff of many low cost carriers is based in and from low cost European countries such as Ireland and Spain. This is not the case in SAS, where the majority is Scandinavian and everybody is based in one of the hubs in the Scandinavian capitals (Kromann-Mikkelsen, 2015). As the pilots and cabin crew are Scandinavian, passengers will mainly encounter staff that speaks their native language. Many passengers will supposedly find this as a positive factor, but the high seniority Scandinavian staff has one major disadvantage stated by Trine Kromann-Mikkelsen in the following: "Going forward we have some very expensive pilot that have reached a high pay level and still wishes to be employed at SAS." (See appendix 1, page 11). The high seniority staff hampers SAS opportunities of lowering costs as much as some of their competitors. That being said SAS is far from having the highest wages in the airline industry, as an example the Norwegian cabin crew is better paid than SAS' cabin crew (Ritzau Finans, 2014). SAS can of course not do without its pilots and cabin crew, but in the sense of the question of value (Barney, Looking inside for Competitive Advantage, 1995), it is not considered that they enables SAS to exploit opportunities that could not be exploited with a different staff. It can be argued that Scandinavian-speaking staff is an area where SAS can distinguish itself from its competitors, but it is not assessed that this is enough to exploit any opportunities that could not be exploited without them.

### **Organizational resources and capabilities**

As noted by Barney (1995) organizational resources and capabilities can include many different factors, in this analysis it includes; collective agreements and compensation structure, history and partnerships.

#### **Collective agreements and compensation**

As noted earlier in this thesis, collective agreements have been a long time concern for SAS and the airline industry in general. SAS and other airlines have been involved in many disputes over this issue and as stated by Trine Kromann-Mikkelsen (2015), some competitors might hold an advantage over others due to collective agreements and compensation plans. Trine Kromann-Mikkelsen exemplifies this in the following. *"As an example you pay 10 percent taxes in Ireland. All of Ryanair's employees (flying to and from Denmark, Ed.) are employed under Irish law and pay their taxes in Ireland but live and work in Denmark."* (See appendix 1, page 9.)

Furthermore collective agreements have been one the reasons raised for the recent acquisition of Cimber.

As noted in the section above on the staff, while not being the most expensive in the industry they are still quite expensive compared to some of SAS' competitors. SAS has been through several cost cutting maneuverers, to lower the wages of their staff and renegotiate their collective agreements. This is seen as a clear indication that the wages are too high in the eyes of SAS and that the collective agreements already in place are not satisfying for SAS. The recent acquisition of Cimber has however opened some opportunities for SAS, as they now have access to much cheaper collective agreements and can lower the wages for some of the staff (cf. der hvor det star). The old collective agreements are not seen as valuable to SAS as they do not enable them to exploit opportunities or neutralize threats. The Cimber collective agreement can on the other hand be seen as valuable to SAS as they are now able to lower the wages for some of their staff, and try to exploit the opportunities that provides. The low wages are however not only found at Cimber/SAS but many places in the airline industry. Many airlines in the industry, especially low cost carriers based in low cost countries, have been able to reduce costs through low wages and exploit the opportunities that provides as well. The collective agreements are thus seen as valuable but not rare and cannot be considered as a source of sustained competitive advantage.

#### **History**

Some airlines and SAS in particular have a long and glory-full history full of up's and down's and different strategic directions. Whereas others especially many low cost carriers are relatively new companies without the same background and history. This makes company history an area of interest to the authors of this thesis.

SAS can trace its routes back to the early 20<sup>th</sup> century and was founded in a merger in 1946 (cf. 3.1) SAS has been the flag carrier for the Scandinavian countries ever since and is still the major airline in the region, even with Norwegian's recent rapid growth. Being the largest and the national airline of the Scandinavian countries have had its upsides historically, this was especially true before the market liberalized. The authors however argue that it has not been valuable to SAS, as

they have not been able to adjust to the paradigm shift that has happened in the industry. Other competitors with a history almost as long as SAS like Lufthansa have responded by establishing an LCC in Germanwings and transferring local and low cost routes to that company (Germanwings, 2015). SAS has failed to respond to the low cost carriers in the same way until now. Even with the many strategic shifts SAS has more or less continued down the path dictated by their history, making it more of an obstacle than a valuable object when it comes to exploring new opportunities.

#### Partnerships

Partnerships or alliance are as earlier described quite common in the airline industry. The alliances are formed when airlines work together to create global route nets, where passengers can change between different airlines depending on where they are going and still enjoy the benefits they get when travelling with their local airline. There are however many different alliances globally and some, especially low cost carriers, do not participate in any global alliances.

SAS is part of Star Alliance, which is made up by 28 airlines from all over the world, with some of the most prominent members besides SAS being; United Airlines, Lufthansa and Thai airways (Star Alliance, 2015). The alliance broadens SAS' route map significantly and enables them to offer their passengers smooth transfers and easy booking to 1,333 different destinations around the world (Star Alliance, 2015). This is considered to be highly valuable to SAS as it enables them to offer services that they otherwise could not have done. The alliance membership helps SAS exploit the opportunities that are found in the customer base who wants vast route networks and travel time options, and who are frequent travelers that wants to collect bonus points across different airlines. It is thus found very important to SAS to keep being a part of the alliance and extending the partnerships with other airlines even if it is not found to be rare. The membership of Star Alliance is not found to be rare, as mentioned many other airlines are part of Star Alliance as well and other alliances, with the two other major being OneWorld and SkyTeam exists as well (SkyTeam, 2015) (OneWorld, 2015).

#### **Financial resources**

Financial resources cover the public funding or ownership that SAS enjoys together with their general financial state.

### Public funding

As mentioned in section 3.6, SAS is partly owned by the Swedish, Danish and Norwegian states. SAS is however not the only airline in the world who are or have formerly been nationally owned and controlled, some airlines on the other hand are and have always been independently owned. This difference in ownership structure and availability to public funding provides an interesting difference between the participants in the industry that is worth examining.

As SAS is partly owned by the Scandinavian governments, it can be speculated if the owners have an interest in keeping routes alive that are not profitable to SAS. The governments might have an interest in strengthening the national infrastructure with less regard to the financial performance of SAS. The governments might have an interest in keeping the local workforce employed at SAS, which hinders them in exploiting the opportunities found in cheap labor from low cost countries.

The governments have earlier backed SAS financially through bank guarantees, which have been deemed legal by the European Union. This can however only be done once and SAS cannot receive any further guarantees from the governments without it being illegal according to the EU (Krog, 2012). The share issues SAS has done with the backing of the governments have raised legal questions in the EU as well (Krog, 2013). Even though the governments have an interest in keeping SAS alive and interesting to potential buyers, the public funding and ownership is not considered to be a valuable resource to SAS (Lassen, 2012). This is mainly due to the reasoning in the previous section and the fact that they cannot receive any further funding without violating EU law.

## **General financial state**

The general financial state includes an assessment of equity, debt and other financial factors. This is important to examine as it provides an overview of the available financial resources SAS have and if they can help them build a sustained competitive advantage.

As mentioned above the three Scandinavian governments have a keen interest in keeping SAS alive but might also encourage SAS to make some unsound financial choices. This is however considered far from the only reason behind the poor economic performance described in section 3.2. As described SAS has only managed to generate positive results once since 2007, and that was due to divestments of profitable business units. Furthermore the equity has fallen from 17 to 4.9 mia. SEK from 2007 to 2013. As described in section 4.3 the airline industry is highly capital intensive, which makes the rather poor financial state of SAS even more unfavorable. A high equity and strong results is seen as highly valuable to an airline, but as mentioned this is not the case with SAS and the authors does thus not consider their general financial state to be valuable and a source of competitive advantage.

#### **Other RBV influences**

In the following section other views on the development and application of the resource based view, from theoretical framework will be discussed in connection to the results of the VRIO analysis.

One of the influences Penrose had on the development of the resource based view was as mentioned in section 5.1 that resources could be broken down to very small parts and the sources for sustained competitive advantage could be found there. The VRIO analysis primarily focuses on the main resources of SAS like; management in general, partnerships and geographical locations. By adopting the view of Penrose (1959) the analysis should be more comprehensive and detailed than what was suggested by Barney and carried out in this thesis. This might have altered some results, as the management for example does not seem to provide a sustained competitive advantage at first. If a more thorough management analysis had been proposed by Barney and conducted other results might have surfaced, as the source for sustained competitive advantage could have been uncovered as a special skill such as extraordinary judgment skills by the management. Such small details are not covered using the VRIO analysis in this thesis.

Wernerfelt (1984) proposes another interesting take on the resource based view, which is positioned in alignment to Penrose's thoughts as described in section 5.1. Using Wernerfelt's

thoughts the analysis carried out in this thesis would have centered on the same resources and capabilities. These resources would however have been analyzed based on the bargaining power of suppliers and buyers, threat of substitutes, entry barriers and the rivalry over attractive resources in the industry, instead of value, rarity, imitability and organization. This of course would have given a different analysis structure and considerations, but the authors of this thesis find it questionable if the results would have been any different. Wernerfelt is acknowledged as an inspiration for Barney (cf. 5.1), it must thus be assumed that Barney had taken this into consideration when developing his VRIO framework. Furthermore are some of the factors viewed to be somewhat aligned, as an example the question of rarity in Barney's VRIO framework resembles Wernefelt's availability of substitute resources. That being said an analysis using Wernefelt's would provide some interesting thoughts, and create a synergy between the five forces analysis carried out in section 4.3 and the resource based analysis.

As noted in the theoretical framework Dierickx and Cool (1989) build on Rumelt's (1984) suggestion of isolating mechanisms and relates this to strategic factor markets. More precisely they specify isolating mechanisms that can be used on such markets to realize the value of the resources. This could have acted as an addition to the analysis where it would be analyzed what SAS could do to realize and heighten the value of their resources or assets, which is the term used by Dierickx and Cool. Using the isolating mechanisms it might have been proposed how to reduce the imitability of resources such as runway slots or geographical locations, which are found to be subjects of possible imitability in the analysis. In such an analysis the five isolating mechanisms to sustain a privileged resource position; *"Subject to time compression diseconomies" "Causally ambiguous" "interconnected asset stocks" "Asset mass efficiencies" "Asset erosion"* (Dierickx & Cool, 1989), would be applied to the resources in question. As noted such an analysis could provide SAS with answers to how they could maximize the value of the resources. This is thus found to be an aspect that is missing in VRIO framework.

#### **Interim Conclusion**

The analysis of SAS from the resource based perspective has been conducted using Barney's VRIO framework, using the four main groups of resources and capabilities recognized by him; Physical

resources, human resources and capabilities, organizational resources and capabilities and financial resources. Resources and capabilities that do not fulfill one criterion have not been assessed by the next criteria in the VRIO, if a resource is not found to be rare it has thus not been assessed by the imitability and organizational criteria. An overview of the findings in the VRIO analysis can be found in the following table:

Resource	Value	Rareness	Imitability	Organization
Physical resources				
Runway Slots		/	/	-
Geographical Locations				
Digital Platforms			-	-
Fleet			-	-
Human resources and Capabilities				
Management			-	-
Staff		-	-	-
Org. Resources and Capabilities				
Collective agreements			-	-
History			-	-
Partnerships			-	-
Financial resources				
Public Funding		-	-	-
General Financial State		-	-	-

Table 3, VRIO analysis overview, (Own adaptation)

As seen in the overview above only SAS geographical locations are viewed as a source of sustained competitive advantage, while the runway slots are rare and non imitable to some extend. In the eyes of Barney, there are thus not many existing resources at SAS they can rely to build a sustained competitive advantage in the future. While this is the case, the analysis reveals that even though

many resources are not sources of sustained competitive advantage at the moment they can still not be neglected by SAS. It is found that SAS needs to support the resources that meets Barney's criteria and unveils many different areas that are subject for improvement.

Used in a real world setting the VRIO analysis thus provides an analysis of the resources that gives a sustained competitive advantage at the moment and which does not provide that advantage. It has however not been made clear, what SAS should do to gain the sustained competitive advantages they do not have at the moment. Hence, we can see where SAS needs to improve and what resources to tweak, but how and in what direction they should be changed are not made clear through the VRIO analysis.

Dierickx and Cool's development of isolating mechanisms is found to be a possible theoretical solution to this missing link in the VRIO framework. By using the isolating mechanisms it can be suggested what SAS could do to reduce the imitability of resources that are subject to that. If used correctly the isolating mechanisms could thus increase the number of resources for SAS that are sources of sustained competitive advantage. The isolating mechanisms does however not answer the question of how the rareness of a resource can be heightened, which is a necessary step to take before reducing the imitability.

## 6.2 Positioning analysis

This section will identify and perform a positioning analysis based on Michael Porter's generic strategy framework.

To be able to perform a generic strategy analysis on SAS it is necessary to identify all influencing factors both for the environment and industry. Afterwards a theoretical discussion will be carried out based on the theory discussion in 5.3. This way, the analysis will strive to reflect a precise picture of SAS' generic strategy based on Porter and his fellow theorists within positioning strategies.

### **Identifying Generic strategies**

As described in the theoretical framework Porter's generic strategies focus on positioning the company and its strategy in one of the following market position; Differentiation, overall Cost leadership or Focus. Focus is by some scholars divided into two categories: Differentiation focus and Cost focus. To identify SAS generic strategy within the industry it is important to obtain extensive knowledge of the market, the industry they operate in and to gain knowledge about the company's strategic history.

As mentioned Porter (1985) describes generic strategies as *"enable a firm to outperform its competitors and create a defendable position in the market."* Thus he also describes that a company can get "stuck in the middle" if they do not successfully develop their strategy in one of the strategic directions or pursue both simultaneously. For a company like SAS a generic strategy is not something that is implemented from one day to another. It is developed over time and grinded by both the market situation, the industry, internal in the firm and by its shareholders (Porter, 1985). Porter also states that the pursued generic strategy must be implemented across markets or otherwise risk to get "stuck in the middle" which is an unfavorable market position for a company (Porter, 1985).

The internal resources SAS possess have already been assessed through the VRIO framework this section will in contrast focus on the environment and the position in the market. It will tough look at the internal activities that SAS holds to position itself on the market.

#### SAS' history

SAS was founded as a result of a merger between the national airlines in the three Scandinavian countries; Denmark, Norway and Sweden. At that time the Scandinavian market was monopolistic, SAS was thus the only operator in the market. By operating in a monopolistic market SAS was ensured the required earnings to expand both to the European and intercontinental markets (cf. 3.1) They wanted to have the newest aircraft fleet, the best service and the biggest route network (SAS, 2015), this was the vision for the company, which did not have a focus on price. It has been clear that SAS saw themselves as a company that offered something different than its competitors.

It is assessed that SAS has an opportunity in regards to its history and historical position as the leading company for business and frequent travelers. It is though important that there is the required request for the differentiated product they are able to offer. If we look at the results of the strategy in 2014 SAS has managed to get 500.000 new members in their EuroBonus program, which is a good indication that there is an increase in customers that value the offerings 3.4. It should though be seen in perspective with all other companies offering some kind of membership. It cannot be said with full certainty how many EuroBonus members that have a similar membership at other airlines as well. SAS history as the Scandinavians preferred airline also impose an opportunity and combined with the geographical location of the market, it is of high importance that SAS adapts to the increasing demand for more direct trans-atlantic and Asian flights (cf. 3.5). The opening of several long haul direct routes from both Sweden, Norway and Denmark shows that SAS is embracing the consumer needs. It is however important to bear in mind that Porter (1985) states that not all customers are willing to pay the extra cost for the differentiation, as some are solely focused on the fare price.

#### **Cost pressure**

SAS has several opportunities to advance or sustain their market position inside their organization, the main area is found to be lowering overall operating cost. Due to the diverse market SAS operates in, it can be hard to compare the competitors and compare SAS to the overall European average but a way to do so is by looking at the profit margin overall. The difficulty in the comparison is due to the highly competitive market where many companies operates non-profitable routes within their network to be able to offer the full flight to their customers or simply is a non-profitable airline company. The overall profit margin on the European market is also generally lower than e.g. Northern America due to the high number of operators present. The European market also has the lowest average EBIT per seat, which underlines the pressure on the European market (Centre For Aviation, 2015).

SAS has since 2002, implemented cost reduction plans on a total of 29,4 billion SEK and have thereby seeked to reduce almost all cost factors controlled by the company. This has increased the

operating income and SAS expects positive figures on their annual report for 2015 according to the latest interim report (SAS Group, 2015). Through the heavy reduction in cost SAS has managed to create a platform that potentially can compete with other traditional carriers such as Lufthansa and Air France/KLM. There is still a long way to go with cost reductions for SAS to be able to compete with companies like Norwegian and Easyjet on operating costs. This gap between SAS and its low cost carrier competitors creates a severe threat on the competitive advantage due to the difference in profit margin. Especially Norwegian has managed to build an extensive route network within Scandinavian and many direct intercontinental routes, which starts to look more and more like the main products SAS offer (SAS, 2015) (Norwegian, 2015).

According to SAS they will continue to strive towards lowering their costs but will never be able to match the costs of an LCC due to the high operating cost on a huge network company (Kromann-Mikkelsen, 2015). Porter (1980) states that reducing costs does not necessarily hurt a differentiation strategy as long as the focus is kept in place, but SAS might already have crossed the line between cost reduction and cost focus. With a constant focus on cost reduction plans, the main focus is considered to have been creating a more lean and cost efficient organization and company. As noted this has resulted in lower cost but might have influenced the customers perception of the quality of the SAS product negatively.

#### **Environmental pressure in the industry**

As the focus on carbon emission and global warming continues, it has also had its effect on the flight industry. It has now become clearer to the passengers and governments how much Co2 the airline industry emits (ATAG, 2015). This has led to an opportunity in the market on how to lower the carbon footprint and is for SAS used as a CSR instrument and is integrated in their strategy.

In 2015 SAS flew a test regional flight with a fuel mixture of 55 percent biofuel from deep fry oil mixed with conventional jet fuel. This helped lowering the carbon footprint considerably (SAS Group, 2015). As much biofuel is residue from other production facilities it is also cheaper than conventional jet fuel and a mixture of up to 50 percent is already allowed in North America (Aviation Benefits, 2015).

There are though more effective and self-controlled ways for SAS to lower their carbon footprint. SAS has renewed their fleet so they now only consist of so-called next generation aircrafts, which has lowered the carbon emission and the fuel cost (SAS Group, 2015) SAS has also developed fuel saving systems and technology on their existing aircrafts such as winglets and more efficient engines. By adapting to this industry change, it has thus been possible for SAS to improve their profitability and competitive position, though there has been substantial direct cost connected to the adaption.

The integration of CSR in SAS strategy will possibly also contribute to the consumer perception and can in Scandinavia be an important factor when choosing between products, especially for business customers that focus on CSR themselves. When SAS is able to offer a more "green" product than the competitors it considered to heighten the differentiation of the product. This is though only applicable if there is a request for a "green" product, which generally is considered to be the case in Scandinavia and Europe (Blue & Green Tomorrow, 2012). SAS has already stated that they want to be the world's most environmentally conscious airline (SAS Group, 2011). Competitors that has not yet embraced the increased concern for the carbon emission can potentially encounter a great threat, if there is to be set more strict rules for carbon emission like the ones seen in the shipping and automobile industry (Miljøstyrelsen, 2015).

#### The financial crisis

The effect of the financial crises hit SAS on both its core customer groups and changed the market completely (cf. 4.1). The business traveler segment that for SAS on the Scandinavian market, was the main customer group before the financial crises suddenly almost disappeared. This eventually led to the end of Business Class on Scandinavian and European flights as the frequent business travelers simply found other means of transportation or ways of conducting meetings (cf. 4.3)

For SAS who has differentiated their product to suit primarily the Business traveler and the Frequent Traveler in Scandinavia, the financial crisis has been a huge threat for the company (3.2). The need for the more expensive product that included fast track, business lounges, full service

onboard etc. shrunk to almost nothing (Kromann-Mikkelsen, 2015). Similar trends were seen in the once rising frequent traveler market within leisure travel as it also experienced a tremendous drop in 2009 (cf. 3.2). This has as mentioned led to many cost reduction strategies and route closures, as SAS has tried to reduce the immediate deficit and increase their flexibility and efficiency within their cost structure. The differentiation SAS once possessed and that ensured the company's profitability was no longer requested by the customers and SAS then started cutting on the differentiating services such as free food and beverage on board, newspapers, flexibility within tickets and the general service level compared to earlier was lowered (Kromann-Mikkelsen, 2015). This was all done to cope with the reduced number of customers willing to pay the extra price. By reducing the differentiation of the product on the short run, SAS has now on its Scandinavian and European routes a setup that looks more and more like Norwegian, EasyJet and other low cost carriers. They only have two booking classes, Go and Plus, where Go only includes baggage and the fare itself. Food and drinks are purchased on board and flexibility is nonexistent. Plus includes a more spacious seat, food and drinks, business check in, fast track, and full flexibility (SAS Group, 2015). The offer is quite similar to Norwegian and many of the routes is flown by both (Norwegian, 2015) (SAS, 2015).

The cost reduction needed, as a result of the financial crises, has affected the service and offerings available considerably and therefore lowered the differentiation between SAS and its LCC competitors. This puts SAS in a difficult position as Porter (1980) mentions that it is necessary to successfully implement and sustain a generic strategy in order to reach a sustainable competitive advantage. If this is not fulfilled there is a high risk of getting "stuck in the middle" SAS seems to be in a position where the lack of clear differentiation strategy due to market changes has landed in a limbo position (Porter M., Competitive Strategy, 1980). Porter (1980) describes this as an undesirable position where the company is not able to compete with competitors who have obtained cost leadership, achieved differentiation or who have a cost or differentiation focus in a narrow part of the market.

#### The paradigm shift

Since the financial crisis hit the market have started to experience a change in the overall behavior of both business, frequent and leisure travelers. This change of behavior is seen in all segments but now primarily in the leisure segment. As the private economy lunged the first thing that was cut off was leisure activities. This meant that vacations were kept to a minimum and as cheaply as possible (Bondesen, 2009). This ensured the growth of travel search engines and accelerated the focus on getting from A to B as cheap as possible (Bondesen, 2009). Search engines do not offer a look on what is included in the price but focuses primarily on price. When the customers starts their travel search at a search engine SAS and other network companies are often displayed at the bottom due to the LCC's lower starting price and is therefore left out as an alternative (Kromann-Mikkelsen, 2015). This of course only occurs if LCC's are operating on the same routes but as the market in Europe is characterized by overcapacity this is often the case.

The paradigm shift is in itself a threat to SAS but it is also the repercussions in the travel industry that can threaten SAS' position in the market. It is therefore now more than ever, important for SAS to underline what strategic approach they are striving for and to clearly show the frequent travelers what additional service they get when purchasing a ticket with SAS.

### Technology

Technological development and specially IT solutions regarding customer self-service has proved to be an important factor for SAS (Kromann-Mikkelsen, 2015). The Scandinavian customers have a high level of willingness to serve them self at; searching tickets, booking, check in, baggage handling, security and boarding and self-serving systems it is therefore highly important to meet the customer needs. SAS has now almost automated all procedures except the security check (Kromann-Mikkelsen, 2015). It is also possible for the customers to check in online using the SAS app or website. This lowers the time wasted at the airport. For the average tourist, airports and tax-free shops might be a part of vacation but for the key segments that SAS pursues time wasted is equivalent to money wasted. SAS has as mentioned offered fast track, lounges and priority boarding for its frequent traveler through the EuroBonus program and business travelers via ticket type, which eliminates the waste time as much as possible. The possibilities these factors give is of high value to the main segments according to SAS and are therefore seen as an important part of the differentiation strategy.

Though there has been high costs connected to implementing these systems it has also shown highly effective and the costs for ground personnel has been lowered (Kromann-Mikkelsen, 2015). This opportunity that SAS already has achieved has released another positive effect. As costs was reduced due to cost savings plans the customer satisfaction took a hit due to long lines and ineffective operation structures at check in terminals (SAS Group, 2011). Now, even though the amount of personnel is lower than before customers are still greeted by SAS employees in front of self-serving machines that can assist if needed (Kromann-Mikkelsen, 2015). The technology has thus helped SAS restructure its resources and thereby support the activities that can help deliver differentiation and competitive advantage.

The information technology has come to stay and self-serving systems are being implemented throughout the operators in Europe, both LCC and network companies. The competitive advantage that SAS therefore possess is at high risk of being lost, though it is seen as important that key customer segments value the full service throughout the travel from booking start to baggage claim.

### Outsourcing, divestment and the acquisition of Cimber

When cutting cost in an organization like SAS, outsourcing of secondary business activities is often used and SAS is no exception. SAS AB consists of different business areas and SAS has had many subsidiaries both partly and completely such as Spanair, Snowflake and Widerøe but they have also managed full ground handling, aircraft service, training and education, hotels etc. (cf. 3.1). Many of these business activities are a necessity for both network and LCC companies to operate but do not have to be "in house" operations. It can therefore be profitable for SAS to focus its resources on the key activities directly related to aviation.

SAS has been in dialogue with several ground handling agents in regards to a divestments of their company SAS Ground Handling but has not yet been able to realize the sale. Outsourcing of SAS

aircraft services has been on the table as well but has not been found profitable in regards to the level service provided (Kromann-Mikkelsen, 2015). If these divestments and outsourcings are realized on a later stage the capital earnings can be used to invest in the main business unit. SAS has managed to divest most of the company Widerøe, which has been a profitable part of SAS Group (Nyheder check-in.dk, 2013). This has been done to increase capital in SAS AB and to reinvest in renewing SAS fleet.

Another way of releasing capital for the main business line has been done by selling 19 reserve engines and signed a lease-back agreement. This has freed assets for approximately 750 million SEK (Berlingske Nyhedsbureau, 2013). Same procedure has been done with one aircraft type, the Boeing 737-600 and releasing assets for half a billion SEK (Baumgarten, 2013). Both procedures is part of the plan 4 Exellence Next generation to release assets for three billion SEK all to ensure the future financial position of SAS (cf. 3.4)

In December 2014 SAS acquired the low cost carrier Cimber for 20 million DKK (cf. 4.3). The acquisition gives SAS the possibility to move their 12 Bombardier CRJ 900 aircrafts and its activities to the new company. As Cimber AS is operating on a LCC platform it is more cost focused and effective in regards to regional jet aviation (Cimber, 2015).

It is only the company and its activities that have been acquired by SAS. All existing aircraft leases Cimber had, have been terminated prior to the sale. A positive effect for SAS is also the flexibility that comes with an LCC that operates with cheaper and more agile general agreements (World Airline News, 2014). CEO Rickard Gustafson states as the acquisition was formally approved in February 2015 *"With formal approval now in place, we look forward to making rapid progress in establishing the company as an efficient airline specializing in regional air traffic. We will build a simple, focused and flexible organization that is able to deliver SAS' well-known product to our customers with punctuality, service and many departures," (Direct news centreforaviation.com, 2015) He here states that he wants to ensure the high standard that customers know and value SAS for also in the new company in SAS Group. This limits the threat of SAS becoming a low cost carrier and if successful they have managed to take a non-profitable part of the business and turned*  into an efficient, flexible and focused part of the business with cheaper collective agreements. An opportunity that seems necessary to grab on the European market for the moment. As earlier mentioned many major European Traditional carriers now have a LCC within their company or network. Lufthansa has Germanwings that operates all regional flights in Germany not connecting to one of the three hub airports, Air France/KLM has Transavia, British Airways and Iberia has merged and started Iberia Express to fight back against Ryanair and Easyjet as the two biggest operators from Europe to Spain (Centre For Aviation, 2011).

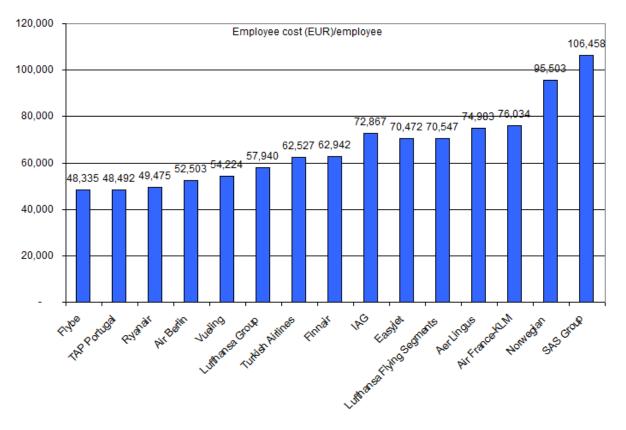
The mixture of a network company's brand, customer base, operation facilities and network combined with the flexibility, cost focused and efficiency can ensure that SAS can compete on the competitive regional, Scandinavian and European market.

#### **Overall market changes**

The market that SAS operates in continue to change rapidly and challenge the players of the market.

As SAS is a Swedish based company it operates with SEK as their company currency. This means that the fluctuation between the SEK and other currencies such as the euro or dollar can act as a threat to SAS. The rapidly changing oil prices affect the airline industry as they purchase fuel to fixed prices for a longer period of time. SAS has in that concern paid a higher price than market price in 2015, this is though similar for many other companies (IATA, 2015).

Labor costs are an important factor when competing in an international market. Even though some employees, such as the cabin crew is cheaper for SAS than some of its competitors (cf. 6.1), SAS is the company in Europe that have the highest employee cost per employee in general. They are therefore weighted by this "extra cost" in comparison to lower waged countries. On a report carried out by Center For Aviation in 2013 all major European airlines, both network and LCC's were listed by employee cost per employee. The full report is found in Appendix. 4.



*Figure 9, Employee cost(EUR)/Employee, (Centre For Aviation, 2013 and Appendix 4)* 

In Figure 9 it is clear that the two Scandinavian companies are operating with much higher employee costs than the competitors. SAS has managed to lower the employee costs since both by renegotiating the collective agreements and the pension agreements but also restructuring the working force more effective in regards to the need of overtime payment (cf. 3.4).

The Intercontinental market between Europe and North America possess a potential for passenger growth as two American companies, United and Delta has closed their Scandinavian routes. This has opened up for new routes and Norwegian and SAS have already started capturing these. The general Scandinavian interest in North America combined with the lower fare prices is expected to increase the demand for these profitable routes even more (SAS Group, 2015).

## **Opportunities and threats**

To sum up the market position SAS is situated in, a brief overview of the main opportunities and threats will be listed below:

## **Opportunities**

- SAS' weakened brand can be relaunched and thereby underline the essence of SAS now and forward This is already been carried out by the "we are travelers" campaign.
- The geographical location supports a potential growth platform for both point to point within Scandinavia and direct medium and long-haul flights. This combined with the economic growth and willingness to travel both for business and pleasure can help SAS' position themselves as the No 1. preferred company again.
- The brand SAS EuroBonus is also of high value as it relates primarily to its frequent travelers by expanding the use and offerings EuroBonus contains.
- Leaner SAS Group through further cost reduction plans such as the once already in motion. As CEO Rickard Gustafson has said that they will continue to strive towards a more profitable operating platform even after the goals for 4Excellence Next Generation is met.
- SAS Usage of CSR, biofuel and fuel efficient aircraft types states a good example, saves operating costs and position SAS well to cope with potential stricter carbon emission rules. It can also work as a motivational factor for other companies that are environmental friendly to buy "greener" airfares.
- Differentiation on the things that matter. Accommodating the frequent travelers needs such as simplicity, ease when traveling, self-service.
- Technology development in all areas of SAS operation can contribute to a more effective operating platform like Self-Service system.
- Outsourcing and divestments is both ways to release assets needed in main operation and potentially lower costs.
- Cimber as a LCC within SAS Group is the most important opportunity SAS possess at the moment as it allows them to compete on more economically equal terms with Norwegian and other LCC's on the Scandinavian market.

### **Threats**

- Increased competition on the European market and an overall significant overcapacity.
- The economy in Europe are on the rise but have not yet given the same travel figures as before the crises and as many LCC has built up market share SAS has lost theirs and are having trouble competing on price.
- Collective agreements has long been a threat to SAS as no other airline have the same employee cost per employee. Some of this has already been dealt with but compared to LCC's it is still a significant risk.
- The overall market economy with changing oil prices and low value of the Swedish currency is also a threat that needs to be taken into account.
- Paradigm shift towards a more cost focused demand can undermine SAS differentiation strategy on the long run and needs to be taken into consideration.
- Ticket price structure that includes Extras that is not part of the competitor's fares can contribute to market loss of search engine users.

# SAS' position in the market

By using the data from above conducted analysis we can graphically place SAS and some of their competitors in the positioning model found below in figure 10.

As mentioned SAS find themselves stuck in the middle from a generic strategy view. They are not as cost focused as Norwegian and other low cost carriers found in the airline industry, but the perceived quality is not found to match other competitors such as Lufthansa and British Airways.

SAS strives to deliver the high service in regards to ease, punctuality and reliability, which is their characterization of a differentiation strategy. It is therefore found important for SAS to position themselves high on the quality axis, to realize their full differentiation strategy. To be able to respond to the threats imposed by Norwegian in the Scandinavian market it is found necessary for SAS to close some of the gap to Norwegian on the price axis. The threat imposed by Norwegian and necessity to respond to it, is found to be heightened by the paradigm shift that has happened in the

industry. The opportunity the acquisition of Cimber provide, enables SAS to position a portion of SAS in close proximity to Norwegian and other low cost carriers, while still pursuing a differentiation strategy with their primary business unit. The semi-transparent SAS logo in Figure 10 plots where SAS ideally would be situated when the primary business unit has successfully implemented their differentiation strategy. The semi-transparent "regional SAS" logo plots the ideal position for a potential other business unit, that when following a cost leadership strategy will be able to tackle Norwegian and other low cost carriers in the Scandinavian and European markets.

When looking outside Scandinavia, Lufthansa and British Airways are among many others found to be both high in quality but also a comparable price tto SAS. In the other corner of Figure 10 Ryanair and Easyjet are found, who are following a cost leadership strategy very closely. It can thereby be seen that SAS competitors are situated in two different clusters, with two different focuses while is found being stuck in the middle not pursuing either of the directions followed by their more successful competitors.

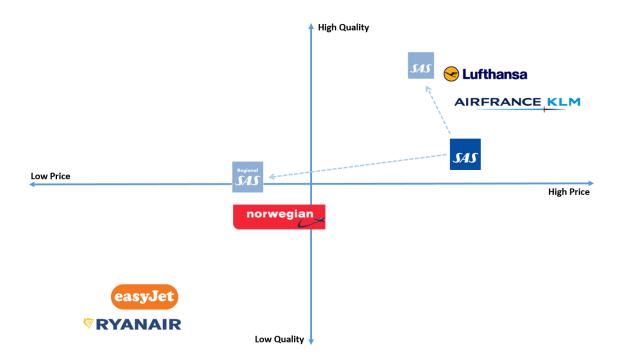


Figure 10, Positioning map, (own adaptation)

#### **Influence of other theorists**

While conducted the analysis based on Porter's (1980) positioning analysis and thereby generic strategies it is important to note that even though the theory is heavily used all over the world, there are several critics towards the theory. This discussion of Generic strategy is thoroughly described in the theoretical framework. The individual critiques will be further discussed in the section below.

One of the main critiques is Bowman (2008) who states that there by using Porter's theory are few prescribed choices to decide from. This does not sufficiently support understanding of the strategic capabilities. Porter's theory states that SAS only have one possibility and is to increase the differentiation thereby gain a competitive advantage, on the contrary Bowman states that it leaves out other feasible strategy option. In this case it fits the bill as SAS can differentiate their focus on some markets to cost oriented, though with the same level of service and thereby gain a competitive advantage of by the critique proposed Mintzberg et al., who argues that the strategic options proposed by Porter are too narrow and focused on predefined choices. The narrowness thus leaves out other feasible options such as the opportunity provided by the acquisition of Cimber.

Porter (1980) states that you should only compete in industries that are attractive, Bowman here contravenes, as it is simply not possible for SAS just to shift into another industry. The industry's attractiveness changes with the market and this point can therefore only be applicable for new entries. Bowman also hits down on the definition of industry given by Porter as to broad. In the analysis there has only been a focus on the airline industry within Europe. Private jet's etc. has not been taken into account. When looking at markets Porter (1980) states that the strategy applied should be on all markets. Trough Bowman it will then be that SAS that works across both different market segments and geographical markets should be considered as a corporation. To get the most effective result of a strategy it should be applied on a more granular level. This is related to the opportunity SAS gets from the acquisition of Cimber and the possible entry to the low cost carrier market.

Hill (1988) points out that the two strategies differentiation and cost leadership are not incompatible and can be used to reach one another. By differentiation SAS has managed to create a brand and brand loyalty and thereby pursue to increase the overall sale. Hill points out that if succeeded, unit cost can be reduced and potentially lead to cost leadership. Though this does not seem to apply for the European airline industry as the network companies all have lost market share to the LCC's that focus on cost leadership. Though it might be possible that the reverse is plausible. Norwegian has focused on cost leadership and are closing in on SAS but their base products are not that differentiated anymore. The level of differentiation that Norwegian needs to create on point to point routes is limited and with a more effective cost structure it might be a possibility. In that case SAS would have lost some of its brands competitive advantage.

Porter's theory of getting stuck in the middle is applicable for SAS as they have been in a limbo with missing differentiation and declining market share. Hill describes the impact differentiation has on demand, is determined by the ability of the firm to differentiate its products, the competitive nature of the product market environment, and the commitment of customers to the products of rival firms.

SAS are striving to meet the criterion and adapt their product to the market environment and as LCC customers do not have a high degree of loyalty it is possible for SAS to win market share back.

Companies like Norwegian that pursue an overall cost leadership strategy is by Porter thought to decrease the unit cost by 10-30 percent each time production doubles. This is by Hill thought to be incorrect and as we look at the airline industry it is also a general picture that the price for a passenger transported from A to B is dependent on many external factors that does not change the price significantly. The most changeable factor is the occupancy of seats and usage of aircrafts. If these factors were met it would mean a significant lowering of unit cost and it can of course be done each time the market share increases. Thus it will be hard to keep as a lucrative market where the perfect conditions is valid there will always come new entries and obtain market share.

When looking at Treacy and Wiersema and the value disciplines, customer intimacy fits quite well on SAS as they try to accommodate its frequent travelers customer needs. The need of meeting industry standards in all three markets before a success can be gained in one also seem to be applicable. If SAS are able to master more than one strategy they are potentially "big winners". Bowman states a point in regards to the value disciplines, that the focus should be more on the quality of implementing the strategy successfully instead of the strategy itself. This is not necessarily correct as a bad strategy that is not equipped to handle a competitive market like the airline industry will most likely backfire in market loss even though implemented correct and vice versa. This can be seen in the many strategies that have been implemented by SAS where not one single of them have been capable and drastic enough to create the needed turnaround.

### **Interim Conclusion**

In the previous section an analysis of SAS generic position has been conducted by looking at the opportunities and threats the following factors have given SAS; SAS history, cost pressure, environmental pressure in the industry, the financial crisis, the paradigm shift, technology, outsourcing, divestment and the acquisition of Cimber and the overall market changes.

When analyzing these factors using Porter's generic strategy framework, it is clear that SAS needs to define their strategy. When doing this, they have to carefully assess how and where they can bring value to their customers. In their vision statement SAS states the following:

"Our vision is to make life easier for Scandinavia's frequent travelers. With SAS you become part of a community experiencing easy, joyful and reliable services, delivered the Scandinavian way." (SAS Group, 2015).

As stated, their main vision is to make life easier for the frequent travelers, hence their primary customers. In the eyes of the authors this can with a basis in the analysis only be obtained by pursuing a differentiation strategy, where SAS seeks to differentiate themselves from their competitors by delivering a high degree of customer service, ease of traveling, sticking to and focus on developing the EuroBonus offering.

At the moment SAS are however not successfully pursuing the differentiation strategy proposed by the generic strategy analysis, but find themselves being stuck in the middle. SAS high focus on lowering operating costs has diluted their differentiation strategy, by reducing the factors valued by the customers and changing the focus of the management. As noted Porter (1980) finds this as a very undesirable position that will ultimately lead to low profitability and no competitive advantage. When adopting this view, Porter's theory is in accordance to reality as SAS has delivered poor financial results since 2007. Even though being stuck in the middle might not explain the low profitability fully, the authors see it as an influencing factor when adopting the generic strategy view.

On the other hand pursuing a cost leadership strategy is not found to be a viable option for SAS. According to Porter (1980) it is not enough to be the second most efficient player in a market, but one has to be the overall cost leader. This is not found to be possible for SAS as their current company structure does not support such a position. As noted SAS is based in a high cost region and have the highest employee costs in the industry, this would have to be completely changed if they were to pursue a cost leadership strategy. Furthermore it is found that SAS could alienate the frequent flyer segment that SAS finds to be their main customers if completely changing their strategy, they would thus have to build their customer base more or less from scratch.

The most important opportunity found in the analysis, is the potential creation of a LCC based on the acquisition of Cimber, within SAS Group. When adopting Porter's (1980) generic strategy view, this is not found to be a viable strategy for SAS. According to Porter (1980) a company has to align their strategy throughout their different business units. As noted Bowman (2008) contradicts this view, if adopting Bowman's view on positioning strategies SAS would then have the possibility of pursuing this opportunity. Applied to a real world setting, Porter thereby dismisses a potential opportunity for SAS. This has successfully been adopted by some of their competitors, such as Lufthansa who both operates a differentiated company in Lufthansa and a LCC in Germanwings on the same market. Lufthansa have thus pursued two different generic strategies, differentiation and cost leadership, with success.

If Bowman's view is adopted in contradiction to Porter's argument against pursuing more than one generic strategy, SAS will be able to respond to some of the threats listed in the analysis. As noted many LCC's have increased their market share since the financial crisis hit, by only pursuing a differentiation strategy SAS will not be able to get their part of this increasing market share. Furthermore it is found that SAS cannot fully respond to the threat of the paradigm shift, if they do not acknowledge the increasing focus on low prices in their strategy. By focusing their main brand on their existing frequent flyer base and using the acquisition of Cimber to adopt a cost leadership strategy in another business units, that could be used to respond to some of the threats found in the analysis. The authors are based on this of the belief that Porter's generic strategies on their own are not enough for explaining and providing SAS with the optimal strategic advice going forward. It is thus recognized by the authors that the inclusion of Bowman's thoughts is a necessity for the possible to suggest, what on the basis of the analysis is considered to be the best option, that is to use acquisition of Cimber in the way described above.

Even though SAS successfully implements both a cost leadership and differentiation strategy, it will not necessarily lead to superior economic performance, due to the environmental threats they cannot control mentioned in the analysis. As Porter notes, these threats can result in a company just getting by and not deliver high economic returns. This will be the case as well, if just a differentiation strategy is successfully implemented, Porter states this with a harsh environment this will not equal high economic returns.

## 6.3 Value Chain analysis

In this section an activity based value chain analysis will be carried out. The theory described in section 5.2 will be used as framework for the analysis. Afterwards a discussion will be carried out based on the theoretical discussion on the theory.

### SAS' Value Chain

SAS Group consists of many business units with specific operations. This value chain analysis will only focus on SAS AB and its relevant activities.

As described in the theoretical framework a company's value chain consists of five primary activities and four support activities. Support activities are placed horizontally as support activities and often overlaps some or all primary activities.

## **Primary activities**

Primary activities are described in detail in section 5.2 and consist of Inbound logistics, Operations, Outbound Logistics and Marketing and service.

## SAS inbound logistics

- Route selection
- Flight planning
- Crew training
- Crew scheduling
- Facility planning
- Fuel
- Pricing systems
- Passenger systems such as self-serving
- Aircraft acquisition

By ensuring a high standard training facility, crew scheduling, flight planning by sophisticated IT systems it contributes to running an operation that can keep the high punctuality standards, which SAS has set for them self and the industry (SAS Group, 2015). Punctuality is one of the key value factors and activities supporting this is of high essence for SAS as it is a key factor towards fulfilling their vision. Another key element is the acquisition of aircrafts as they are elementary for their main operation and therefore a vital part of the business model. SAS has not historically adapted their fleet to their core business, but has with its lean structure of aircraft types now managed to

set a direction for future aircraft acquiring (Kromann-Mikkelsen, 2015). This is reflected in the latest aircraft order, which consisted of Airbus A321 NEO and Boeing 373-800 NG. Both types are in the fleet already and operates with high efficiency (SAS Group, 2015). This also ensures that aircraft service operations as effective as possible, as they don't need new spare parts and additional training of the staff.

Route selection is of the essence as well as the demand and profitability on different routes vary. As SAS has restructured the route net and focused on profitability combined with demand, many routes are operated with changing capacity and frequency. Peak season overcapacity is used on summer routes and thereby maximizes the passenger yield (SAS Group, 2015).

## **SAS Operations**

- Counter operation both ticket and bag drop.
- Self check-in counter
- Gate operation
- Aircraft operation
- Ticket offices
- Baggage handling
- On board service
- Service level differentiation
- Alliance partner services

SAS operations are the main activities and what passenger pay to get. In this areas SAS have several competitive advantages, as they offer their customers a variety of self-service systems; from booking site, online check, in, self-service machines at airport, bag drop and self-scan boarding (SAS Group, 2015). The business and frequent travelers are offered additional service such as priority booking, baggage and check in, fast track security, lounges throughout the world and priority boarding and seats. This is a key factor for differentiation and the activities are therefore essential to sustaining a competitive advantage (SAS Group, 2015). Operations include the SAS

brand and its contributions to customer satisfaction by ensuring delivery of the product that the SAS brand supports. (Porter, 1985)

## **Outbound logistics**

- Baggage handling
- Network connection service
- Customer service

Activities within Outbound logistics primarily consists of the services provided by SAS for their customers. This is according to SAS done with high Scandinavian standard throughout their and Star Alliance partners destinations (SAS Group, 2015). By continuingly improving and sustaining the high level of customer service it is in theory possible to build a sustainable competitive advantage. SAS customer service satisfaction took a dive in 2013 but has as described in section 3.4 improved again in 2014. As differentiation from competitors is essential for SAS it is important to keep customer satisfaction high as SAS relays on the returning customers as frequent flyers (Porter, 1985).

# Marketing and Sales

- Advertising
- EuroBonus program
- Group sales
- Promotion
- Travel Agency service

Marketing can be a powerful tool to gain competitive advantage, which is often utilized fully through their marketing. SAS advertise on brand level, but also drive an effective ticket campaign called "1.000.000 cheap tickets". This ticket sale is a returning event four times a year and helps SAS utilize the lower prices to get customers to book more in advance of their flight than usual (Kromann-Mikkelsen, 2015). It has several effects as it gives SAS an overview of the demand on both price and destinations and it sells base line tickets to fill the planes to maximum capacity.

On brand level SAS in 2008 launched the slogan "Så godt som hjemme" which translates "As good as Home". The slogan underlined the" Scandinavian way" and played on the passengers feelings to feel like home, when flying with SAS. The "feeling of home" was highly valued by customers (SAS Group, 2010) and is still being used all over the world. The now active brand campaign "We are travelers" strives to get the frequent travelers to relate to several "normal situations" while traveling and thereby link the frequent travelers with SAS. This is creating a relation between the customer and the brand as well and thereby hopefully strengthening their loyalty. The customers' loyalty to a specific brand can create a competitive advantage (Porter, 1985) and by continuingly improve and sustain loyalty it is possible to build a sustainable competitive advantage.

SAS EuroBonus is important for the offerings provided for the customers. By creating a variety of advantages and services for the frequent flyer program users it build the number of returning customers. One of the main factors is the bonus point system where customers can collect points when flying with SAS but also when using a Star Alliance company or other partners such as hotels, Car rentals, magazine subscription etc. EuroBonus has launched a MasterCard and travel cash system as well, which enables the members to use their EuroBonus as a credit card when travelling. By adding these functions to the card customers get a travel insurance with high coverage levels tailored travelers (SAS EuroBonus, 2015).

The membership level changes with the usage frequency, the more a customer flies the more points they earn per flight. It changes the level of benefits when traveling such as priority boarding, Checkin and lounge access as well. The customers who wishes to receive higher benefits can work as a sales factor and thereby drive a competitive advantage. Customers though have to value the benefits provided and also get a result sooner or later. SAS has as described in section 3.5 renewed their point system to be more aligned with alliance partners in regards to points but also in the offerings provided.

### Service

• Lost and found

- Baggage claim service
- Customer service afterhand
- Afterhand sales
- Critique, complaints, follow up

To maintain a high service level and ensure a high level of returning customers, which are not yet loyal to the brand it is important to follow the customers all the way through their journey. SAS Customer service in regards to baggage service is relatively high and they strive to serve the customers as quick and stress free as possible. The priority system for frequent travelers again contributes to keeping the customer and gain loyalty. SAS uses its valued partners within Star Alliance, at destinations where they are not represented themselves. Complaints are handled by a specific team which ensures consistency and effectivity and that accommodates the customers' needs (SAS Group, 2015).

SAS also uses the information provided by EuroBonus to suggest relevant information and offers to the members. This can increase sales and help build the position of the SAS Brand. If customer satisfaction is high and the customers' ability to relate to the product and company, the ground has been set for customer loyalty and thereby competitive advantage. (EuroBonus, 2015)

## Support activities

Support activities are activities that supports the overall business and the primary activities. Their impact are generally not directly measurable but are essential for a successful value chain and thereby business. Support activities are described in detail in section 5.2 and consist of Firm infrastructure, Human resource management, Technology development, and procurement.

## SAS infrastructure

- Company structure, Planning, Financial policy, Accounting, Community affairs, Legal, Regulatory compliance
- Quality management

Where most of these support activities services the complete value chain some activities are present in all primary activities on a more granular level. E.g. Quality management is important as SAS uses quality as a differentiation factor in regards to, Customer service, ease of traveling and Punctuality. It is therefore necessary for SAS to know in what primary activities quality lives up to the requirements or more important where they don't (Kromann-Mikkelsen, 2015).

SAS company structure has as described gone through a major transition with many cost reduction plans where the latest, 4 Excellence Next generation, has changed the company structure significantly and thereby created a more flexible and financially viable platform. The renewed operation platform is a step along the way towards turning SAS into a profitable business. The cost reduction plan has also focused on releasing liquidity through outsourcing and divestment to ensure more financial independence in regards to future investments.

Strict rules for regulatory compliance are imposed on the airline industry. This is both in terms of legal matters for SAS and ensuring a high level of safety for travelers. It is therefore of essence for SAS to live up to the requirements and ensuring a high level of safety.

#### Human Resource management

- Inbound logistics
  - o Training programs for Flight, Route and Yield analysts.
- Operations
  - o Pilot and crew training
  - Ground personnel training such as check-in, gate, ticket and baggage handling personnel.
- Outbound logistics
  - Customer service training, baggage system training, General training in understanding of partner companies and their customer service.
- Marketing and Sales
  - Training and development of the understanding of the "Scandinavian way" in marketing matter.

- Service
  - Afterhand customer service training with complaints and follow up as key activities.
- In all Primary activities Human resource management also handles hiring.

In general Human resource management is the controlling unit of all training aspects throughout all primary activities and is highly important for SAS. By offering a differentiated service that requires personnel in all activities it is important that the training is adequate and there is a general understanding on delivering a high quality standardized product differentiated from competitors. The Scandinavian way is here an overall mantra for all personnel that should be followed throughout the business. (SAS Group, 2015)

## Technology development

• Computer systems used for reservation, flight scheduling, pricing and in-flight Entertainment.

These systems extremely important in today's airline industry. SAS uses computer systems in all aspects to optimize their routes, capacity and most important pricing. The pricing is controlled by several parameters and can by IT systems be optimized towards the most profitable price segmentation. For SAS, it supports the three primary activities; Inbound logistics, Operations and Outbound logistics.

• Product development and market research

These support activities are primarily applied in Marketing and Sales activities and assists the offerings presented the customers. Market research for SAS is essential for delivering the products and services their customers demand. The knowledge about the wish and willingness for Self-service is a result of market research activities.

Services.

• Baggage tracking systems, complaint follow up and customer information data management platform.

As described under primary activities, services after the journey are powerful activities that can deliver competitive advantage. SAS' technology systems that supports primary activities within

servicing customers contribute to securing a high level of service and enable the possibility of returning customers. (Kromann-Mikkelsen, 2015)

#### Procurement

• Purchasing of various goods throughout the activities.

Procurements is at SAS placed at a central department where all required goods are purchased and the department is split into different business areas. Aircraft purchasing, acquisitions and technology development is decided on management level (SAS Group, 2011) where goods for the general operation such as fuel, spare parts etc. is run by the purchasing department. (Kromann-Mikkelsen, 2015)

#### **Interim conclusion**

In the previous section the analysis based on the activity based view has been carried out. The findings strive to bring a granulated picture of the activities that at SAS contributes to an increased competitive advantage and are supported by the findings in the positioning analysis.

Porter describes the activity value chain as *"System of interdependent activities"* where the linkages are relationships between the way one value activity is performed and the cost of performance of another (Porter, 1985). This underlines the need for consistency throughout the value chain e.g. through a high level of customer service or self-serving systems. If there is a successful linkage between value activities it can lead to competitive advantage (Porter, 1985)

The activity based value chain analysis shows that SAS has several value activities that support competitive advantage where most of them are combined throughout the value chain. SAS customer service activities are linked together throughout the value chain and the connection between marketing activities and the frequent flyer program EuroBonus enables SAS to increase the value of one activity into another.

SAS operations are the main element of the business and value activities such as providing selfservice systems, delivering a high punctuality and offer specific activities for business and frequent travelers helps differentiate and create an uniqueness in some areas and thereby create sustainable competitive advantage.

As described in the theoretical framework different theorists suggest that the value chain should be altered to acknowledge the effect of the Internet in all value adding activities. The authors though acknowledge Porter's recognition of technology development as a support activity that is set to include the Internet's effect in this analysis, and do not find an extension is necessary based on the analysis carried out. This is due to the presence of the Internet in all technological developments in today's business environment.

As Porter acknowledges the Value Chain can be quite comprehensive and difficult to apply to a real world setting. Due to this fact only the activities that are already found on the basis of the resources available at SAS and supported by the findings in the positioning analysis has been thoroughly examined using the value chain analysis. In the eyes of Porter the value chain analysis seeks to examine all underlying contributing activities, due to the limitations of this thesis noted in section 1.4 only the overall value-adding activities have been examined.

#### **6.4 Summarizing analysis**

In the following section the three parts of the analytical framework are connected to analyze what aspects the different analyzes contributes with, to create a sustained competitive advantage. It is furthermore analyzed how they complement each other and how their strengths and weaknesses acts together.

The analytical framework of this thesis has presented three different views on the strategic development of SAS. Each of them contains a vital dimension of the internal and external conditions that affects SAS' strategic choices, the usage and their ability to create sustainable competitive advantage. The resource based analysis has enabled SAS to identify the strategic importance of their internal resources and capabilities. The activity based framework has helped further analyze the internal capabilities SAS possesses. This has been done on a more granular level, and identified specific value activities that contribute to competitive advantage. The

externally focused positioning analysis has identified SAS current position in the market and provided an overview of what strategic opportunities are available to SAS in order to create a sustained competitive advantage. The results of each analysis have in the analytical framework been critically examined with a basis in discussions and thoughts proposed by opposing theorists. This has provided a more thorough analysis of SAS' strategic position and options, and enables the authors to view the theories and analyzes both in conjunction with and in opposition to each other. Each analysis has thus provided their detailed image of SAS and their strategic options, from their specific theoretical point of view.

To open the discussion of how the analyzes can be used in conjunction with each other we will first use selected factors from the positioning analysis, to get an understanding of how and if the other parts of the analytical framework considers these.

The history of SAS is by the positioning analysis recognized as a possible opportunity and a factor that supports the possibility of differentiation and a possible successful implementation of that strategy. Through the analysis it is made clear that the history can be used to heighten the understanding of SAS as Scandinavia's no. 1 airline and an airline who are the best at catering to the needs of frequent flyers. This is somewhat recognized by the value chain analysis that accepts SAS history as supporting basis for activities, such as marketing and bonus programs to heighten customer loyalty and the sense that SAS offers something different than its competitors. The VRIO analysis considers the history of SAS as well but from a slightly different perspective. As mentioned in section 6.1 the history of SAS is deemed not valuable with a basis in Barney's VRIO framework, which thereby notes that the resource does not enable SAS to brush aside threats or seek new opportunities. This is with the argument that the history have acted more of an obstacle than advantage when it has come to grab new opportunities, such as reaching the customer base who now primarily uses LCC's.

With a basis in this we can see that even though the same factor/activity/resource is considered in all three analyzes their thoughts and conclusions are vastly different. The VRIO analysis considers the negative influences SAS history have had on its ability to respond to opportunities, while the generic strategy analysis sees is as an opportunity for seeking the strategy that deems most viable for SAS in the future. Had only the VRIO analysis been carried out, we would not have noted that the history could be used positively for SAS going forward and as a part of future strategy formulation. The authors however acknowledges the need for the angle the VRIO analysis has on the history, without that the negative impact it has had so far had not been realized. We could thus risk making the same mistakes again and following SAS historical roots blindly in future strategy formulation, as we had not been aware of the opportunities that had not been sought in the past partly because of their history. It is thus clear to the authors that the full picture of the impact the history of SAS has and has had, would not have been uncovered if only one of the analyzes had been conducted, stressing the importance of combining the three.

The cost pressure in the industry is widely discussed in the positioning analysis. Overcapacity in the market and the continued operation from some airlines of non-profitable routes are seen as highly influencing factors on the pressure the industry is under, especially on the European market where SAS operates. SAS are thus deemed to be under pressure to cut costs and adapt to the market, which can threaten their brand position but also provide opportunities. The resource based analysis does from its internal viewpoint not take this into consideration. The same accounts to some extend for the activity based analysis, as it is assessed by the authors that only when digging a step deeper and breaking every activity into smaller parts than possible in this thesis due to the limit information at hand, the influence of the cost pressure on the activities will be made clear.

We assess the lack of consideration of the cost pressure in both the resource based and activity based analysis to be a quite severe missing link in those analyzes. Without considering this, SAS runs the risk of formulating yet another faulty strategy that does not address the underlying threats and opportunities present in the market. With a background in this it is considered that the VRIO and Value Chain analyzes cannot stand alone, when forces like this are present in the industry. The authors recognize that the cost pressure in the industry has had an influence on SAS resources and activities that is not made clear through the VRIO and value chain analysis. It is assessed that this can only be done when also considering the results of an externally based analysis like the Positioning and Five forces analysis. Barney and Wernerfelt (cf. 5.1) further back this by acknowledging that the influence of attributes is determined by the market situation the company finds itself in. The authors thereby notes that resource based view theorists backs the viewpoint that a resource based analysis is best seen in conjunction with a market based analysis.

To further heighten the understanding of how interconnected or not the different analyzes are, a resources from the VRIO analysis and an activity from the value chain analysis will be examined as to how they are addressed by the three different analysis carried out. The digital platforms section from the VRIO analysis is examined here, as it is a resource that could not have been at hand when Porter proposed his frameworks. It is therefore found interesting to examine if they can take this resource into account and add value to the findings of the VRIO analysis. Marketing and Sales from the value chain analysis are used here as it a group of primary activities that is essential for understanding the link between SAS and their customers.

The digital platforms operated by SAS are analyzed through the VRIO framework to assess if they give SAS a sustained competitive advantage. It is noted that the digital platforms currently at hand to SAS and under development have enabled them to exploit the opportunities given by the technological development. It is however found not to be a source of sustained competitive advantage as similar solutions are offered by other airlines as well. The positioning analysis produces many of the same results, as it states that the technological development has proved important to SAS but is also pursued by many other competitors. The positioning analysis does however shed light on some factors not considered through the VRIO analysis. It acknowledges that digital platforms can be an important aspect of a possible differentiation strategy, and have helped SAS restructure its resources and thereby support the activities that delivers differentiation and lower costs across the organization. The result is not directly shown in the value chain analysis but the technology that delivers these assets can be seen in many value activities and throughout SAS' operation.

The VRIO and positioning analysis are in this case assessed to compliment each other by the authors. The VRIO analysis uncovers that it is important for SAS to continue developing the digital platforms and recognizes that it is a valuable resource. On the other hand the positioning analysis enables us to put that into context with the view of the customers and the technological development by SAS' competitors and in their environment. When put into this context we are able to use the digital platforms in a strategic context with a basis in the generic strategies. Furthermore the external view can, through further analysis, help address how to make the digital platforms rare, and thereby enable them to provide a competitive advantage in the eyes of Barney. The missing answer to how we move a resource from being non-rare to rare is a key critique of the VRIO analysis noted in section 6.1.

The marketing and sales activities of SAS are analyzed through the value chain analysis, to enlighten if they support a competitive advantage. The analysis centers round SAS marketing and promotion activities as well as their EuroBonus program. SAS brand marketing activities centers round frequent travelers, which is connected to SAS history and their knowledge on their customers. Furthermore the EuroBonus program is seen as an important tool in strengthening customer loyalty and retention. The marketing and sales activities are thereby shown to provide a competitive advantage through heightened customer loyalty and the sales factor encompassed in the EuroBonus program. The sales and marketing activities have not been separately discussed in neither the VRIO analysis nor the Positioning analysis. As mentioned earlier in this summarizing analysis, the positioning analysis does however recognize the marketing opportunities found in the history of SAS.

Whereas the activity based analysis shows a clear competitive advantage based in the marketing and sales activities, the authors do not assess that this is reflected in the VRIO analysis. To further back the competitive advantage found in the value chain analysis, the human resources and capabilities found in the VRIO analysis could have included an analysis of the sales and marketing staff at SAS, or the physical resources could have included marketing platforms or the like. If this had been part of the VRIO analysis it could in the eyes of the authors heighten the understanding of why marketing and sales is a competitive advantage by analyzing the underlying resources behind the activity. This stresses that not all possible sources of sustained competitive advantage can be uncovered through the VRIO analysis, if it is not conducted at a very granular level taking all resources and capabilities in the company into consideration.

After examining the correlations or lack of the same with a basis in selected parts of the three analyzes, our discoveries will be brought together. The authors recognize that the theoretical findings from the sections above are only based on the SAS case and are not necessarily applicable to other businesses or industries.

The VRIO analysis does as described above not take the strategic opportunities into account, which is found to be a clear lack in the framework. This is exemplified by the history of SAS and the utilization of the digital platforms going forward. In these cases we need to include the positioning analysis to be able to reflect on the strategic opportunities the resources can provide. The VRIO analysis does thereby not provide the tools for putting the resources into a strategy formulation context.

On the contrary the VRIO analysis sheds light on aspects of the resources that otherwise would not have been uncovered. The negative impact of the SAS history is an example of that, as it provides important details that are not found through the positioning analysis.

The positioning analysis can enable SAS to see how some of the resources can be developed to heighten their possibility of creating a sustained competitive advantage. Putting the resources in a market and strategic context does this. Furthermore it is found that the external focus on for example the cost pressure in the industry, is vital for getting a full understanding of the company's strategy and formulating one for the future. By doing so the positioning based theory heightens the value of the VRIO and value chain analyzes.

As a link between SAS' position in the market and their customers, the value chain analysis shows what activities that can support the demand of the customers. The activities can thereby support the strategy opportunities found through the positioning analysis. The comprehensiveness of the value chain framework limits in our case full utilization of the theory, as it is necessary to take a look on each activity on a very detailed level to fully understand the specific activities support of sustaining a competitive advantage.

## **Part 7: Conclusion**

In Part 7 the conclusion of the thesis will be presented as well as the implications of the thesis and possible subjects for further research.

## 7.1 Conclusion

Over the past 25 years the airline industry has experienced a paradigm shift, which has opened the market for new thinking and new business strategies around the industry. Many causes for this paradigm shift has been discussed, amongst others the rise of the online flight search engines, changes in the macroeconomic environment and as a result of this, changes in customer preferences. This has caused increased cost pressure in the industry and heightened the competition as new airlines have been launched. SAS has however not fared well in this rather harsh environment, as they have changed strategic focus 7 times over the past decade as well as failed to deliver positive economic results for the majority of that decade.

With a background in this, the thesis has sought to examine established strategic literature, with the purpose of providing SAS with tools for sustaining a competitive advantage in a harsh environment. This led to the following problem statement:

"How can traditional strategic theory support a sustained competitive advantage for Scandinavian Airlines (SAS) in a rapidly evolving airline industry?"

The thesis has included three different strategic analyzes; Barney's VRIO framework with a background in the resource based view, Michael Porter's Generic Strategies and finally a Value Chain analysis developed by Michael Porter with a basis in the activity based view. Using three different views on strategic thinking has ensured that SAS has been examined from an internal and external perspective, and enabled the authors to analyze the strengths, weaknesses and applicability of the theories in the real world setting.

The first part of the analytical framework has identified the primary resources of SAS and how they can or cannot help SAS build and sustain a competitive advantage. The resource was assessed with a basis on how valuable, rare and inimitable they are, and to what extend they can be utilized in SAS organizational setting. By doing so, it was realized that only SAS geographical locations and to some extend their runway slots could be seen a sources of sustained competitive advantage. This does not mean that other resources can be ignored, as they are still of value to SAS and their survival. With a basis in this we can also conclude that the VRIO framework has some lacks, as it does not enable SAS to move resource from not being to being sources of sustained competitive advantage.

The activity based part of the analytical framework has examined SAS' value creating activities, with a basis in Michael Porter's Value Chain. This has uncovered that SAS possess different activities in their organization, which can be sources of sustained competitive advantage. This includes marketing and sales activities, customer services activities as well as offerings for their primary segment, the frequent flyers. These activities are found to be linked across their value chain, it is thus found important to continue to do this and strengthening the link even more across the value chain. The Value Chain analysis is however found to be very comprehensive to apply to a real world setting and especially external researchers. This means that not all value adding activities could be examined.

The externally focused generic strategy theory proposed by Michael Porter has been used to examine SAS' position in the market and future strategic opportunities. By using Porter's thoughts it was made clear that pursuing a differentiation strategy is the only viable option for SAS. This was however found to dismiss the most important opportunity present for SAS, which is the utilization of the acquisition of Cimber to create a LCC like business unit in SAS group. This opportunity can only be sought when adopting the views of opposing theorists, which is recommended to do by the authors. The analysis has thus stressed the need for viewing SAS strategy in an external context, taking competitors, customers and the environment into consideration. But it is found to be quite

limited in its strategic options and SAS thereby runs the risk of dismissing viable opportunities if Porter's thoughts are followed blindly.

In the summarizing analysis it is made clear that these three analytical parts cannot stand on their own and needs to be used in conjunction to heighten the possibility of supporting a sustained competitive advantage in the case of SAS. The VRIO analysis provides insights on the resources needed for supporting a competitive advantage, while the positioning analysis enables us to develop those resources and put them into a strategic context. Finally the value chain analysis shows what activities are needed and how they must be implemented through the organization to build the competitive advantage.

As concluded above the three different strategic theories each provide their part of the solution for creating a sustained competitive advantage. But is only when the strongest parts of each theory is combined, SAS can understand the parts that can give them a sustained competitive advantage now and in the future.

## 7.2 Implications and subjects for further research

The thesis recommends that SAS can use the acquisition of Cimber to focus their main business on a differentiation strategy, while competing with Norwegian and other LCC's on a separate platform. The platform should not be seen as a completely separate company but as a low cost platform that benefits from SAS already established position. This can be a quite comprehensive maneuver, the comprehensiveness is not considered in the analysis. SAS' resources and activities need to be adjusted to cope with these organizational changes. Furthermore the analysis does not consider what can happen when the staff is transferred from one company to another in regards to possible strikes and disagreements between the staff and management. This can have effects on the degree of success of the implementation of the changes and is found to be an interesting focus for further research. The future research should thus concentrate on a more sociological approach, as the people involved in the changes and their attitudes towards this affect it. After conducting the analysis it has become clear that the theories chosen, together gives a detailed description on SAS different factors that sustain and support competitive advantage. It is though also come to our acknowledgement that Porters activity based view is an extremely comprehensive framework to apply and interpret from on a detailed activity level, especially for external researchers. This has meant that the value chain analysis only brings an overview of the value giving activities and not a detailed picture of each underlying value driver.

As a closing remark it is found important to note that this thesis only examines the theories based on SAS and their position in the market at the moment. It is thus acknowledges that the results are not necessarily applicable for other companies and markets. Had the thesis been conducted on the basis of another company, the limitations and strengths of the theories could have been different.

# **Bibliography**

Online articles, websites and reports from websites

AFP. (17. 06 2013). *Top stories dw.de*. Hentede 08. 06 2015 fra dw.de: <u>http://www.dw.de/airbus-boeing-land-major-deals-at-paris-air-show/a-16887471</u>

Airfrance. (27. 06 2015). *Corporate airfrance.com*. Hentede 27. 06 2015 fra airfrance.com: <u>http://corporate.airfrance.com/en/the-company/subsidiaries/</u>

ATAG. (02. 10 2015). *Facts and figures atag.org*. Hentede 02. 10 2015 fra atag.org: <u>http://www.atag.org/facts-and-figures.html</u>

Aviation Benefits. (30. 09 2015). *Environmental Benefits aviationbenefits.org*. Hentede 30. 09 2015 fra aviationbenefits.org: <u>http://aviationbenefits.org/environmental-efficiency/sustainable-fuels/passenger-biofuel-flights/</u>

Aviation Media. (21. 08 2012). *Aviation fleet management aviationmedia.aero*. Hentede 13. 06 2015 fra afm.aero: <u>http://www.afm.aero/magazine/airports-and-routes/item/295-airline-fleets-it's-all-in-the-planning</u>

Baumgarten, H. (01. 08 2013). *standby.dk*. Hentede 29. 09 2015 fra standby.dk: <u>http://www.standby.dk/sas-tjener-pa-okonomisk-snuptag/</u>

Berlingske. (18. 09 2015). *Emner berlingske.dk*. Hentede 18. 09 2015 fra berlingske.dk: <u>http://www.b.dk/emne/bjoern-kjos</u>

Berlingske Nyhedsbureau. (28. 02 2013). *Newsbreak.dk*. Hentede 29. 09 2015 fra Newsbreak.dk: <u>http://newsbreak.dk/sas-saelger-flymotorer-for-millioner/</u>

Blue & Green Tomorrow. (02. 08 2012). *Features blueandgreentomorrow.com*. Hentede 29. 09 2015 fra blueandgreentomorrow.com: <u>http://blueandgreentomorrow.com/features/the-scandinavian-nations-setting-the-green-energy-pace/</u>

Bondesen, R. (25. 11 2009). *Nyheder dr.dk*. Hentede 30. 09 2015 fra dr.dk: <u>http://www.dr.dk/nyheder/penge/rejsebureauer-presset-fra-flere-sider</u>

Carlsen, C. (19. 11 2012). *virksomheder borsen.dk*. Hentede 13. 06 2015 fra borsen.dk: <u>http://borsen.dk/nyheder/virksomheder/artikel/1/246211/sas reddet - sidste aftale paa plads.html</u>

Centre For Aviation. (16. 03 2010). *Analysis centreforaviation.com.* Hentede 29. 09 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/european-lccs-gain-passengers-while-network-carriers-lose-passengers-in-2009-22518</u>

Centre For Aviation. (07. 10 2011). *Analysis centreforaviation.com*. Hentede 29. 09 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/iag-to-establish-new-lcc-subsidiary-iberia-express-60215</u>

Centre for aviation. (27. 08 2012). *Analysis centreforaviation.com.* Hentede 29. 09 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/sas-aims-to-capture-a-larger-share-of-the-thriving-scandinavian-leisure-market-81160</u>

Centre For Aviation. (25. 01 2014). *Analysis centreforaviation.com*. Hentede 29. 09 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/european-airlines-face-overcapacity--resurgent-labour-recent-profit-warnings-make-alarm-bells-ring-174270</u>

Centre For Aviation. (03. 04 2015). *Analysis centreforaviation.com*. Hentede 30. 09 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/europes-airlines-underachieve-in-profit-margins-but-lccs-typically-perform-better-than-fscs-217527</u>

Centre For Aviation. (27. 08 2012). *Aviation Analysis centreforaviation.com.* Hentede 10. 06 2015 fra centreforaviation.com: <u>http://centreforaviation.com/analysis/sas-aims-to-capture-a-larger-share-of-the-thriving-scandinavian-leisure-market-81160</u>

CIA. (21. 06 2015). *World factbook cia.gov*. Hentede 21. 06 2015 fra cia.gov: <u>https://www.cia.gov/library/publications/the-world-factbook/</u>

Cimber. (30. 09 2015). *Front Page cimber.dk*. Hentede 30. 09 2015 fra cimber.dk: <u>http://www.cimber.dk/</u>

Danmarks statistik. (18. 05 2010). *NYT fra Danmarks statistik*. Hentede 21. 06 2015 fra dst.dk: <u>http://www.dst.dk/pukora/epub/Nyt/2010/NR219.pdf</u>

*Direct news centreforaviation.com*. (03. 02 2015). Hentede 29. 09 2015 fra centreforaviation.com: http://centreforaviation.com/members/direct-news/sas-completes-acquisition-of-cimber-207790

Easyjet. (18. 09 2015). *Route Map easyjet.com*. Hentede 18. 09 2015 fra easyjet.com: <u>http://www.easyjet.com/en/routemap</u>

Eurobonus. (08. 08 2015). *Eurobonus flysas.com.* Hentede 20. 09 2015 fra flysas.com: https://www.flysas.com/upload/Eurobonus/Members%20guide/eb\_cond\_aug08\_DK.pdf

European Commision. (2010). *High-Speed Europe*. Bruxelles: European Commision.

Eurostar. (19. 06 2015). *London-Paris eurostar.com*. Hentede 19. 06 2015 fra eurostar.com: eurostar.com

Germanwings. (01. 04 2015). *About us germanwings.com.* Hentede 10. 06 2015 fra germanwings.com: <u>https://www.germanwings.com/content/dam/germanwings/downloads/EN/germanwings-facts-and-figures\_en.pdf</u>

Google Maps. (19. 06 2015). *Route calculations maps.google.com*. Hentede 19. 06 2015 fra maps.google.com: https://www.google.dk/maps/dir/Bergen,+Norge/København/@58.0614878,4.5195183,6z/dat

<u>a=!3m1!4b1!4m13!4m12!1m5!1m1!1s0x46390d4966767d77:0x9e42a03eb4de0a08!2m2!1d5.3</u> 220544!2d60.3912628!1m5!1m1!1s0x4652533c5c803d23:0x4dd7edde69467b8!2m2!1d12.568 3371!2d55.6760968

Greater London Authority. (13. 05 2013). *Press Releases london.gov.uk*. Hentede 10. 06 2015 fra london.gov.uk: <u>https://www.london.gov.uk/media/assembly-press-releases/2013/05/airport-capacity-in-london-is-currently-underused-says-new</u>

HHL. (2010). *Future Scenarios for the European Airline Industry.* Leipzig: Center for scenario planing, Leipzig Graduate School of Management.

Hollinger, P. (13. 01 2015). *internation financialtimes.com*. Hentede 13. 06 2015 fra ft.com: <u>http://www.ft.com/intl/cms/s/0/a2f9121c-9aa0-11e4-86c2-00144feabdc0.html#axz3cvn6QY5p</u>

IATA. (21. 06 2015). *Price development iata.org*. Hentede 21. 06 2015 fra iata.org: <u>http://www.iata.org/publications/economics/fuel-monitor/Pages/price-development.aspx</u>

Kjær, C. (11. 08 2015). *Finans tv2.dk*. Hentede 01. 09 2015 fra tv2.dk: http://nyhederne.tv2.dk/finans/2015-09-11-sas-boss-langdistance-ruter-bliver-billigere

Kolby, M. (05. 03 2015). *Transport business.dk.* Hentede 13. 06 2015 fra business.dk: <u>http://www.business.dk/transport/strejke-kostede-sas-53-mio.-kroner</u>

Krog, A. (12. 11 2012). *Analyser check-in.dk*. Hentede 21. 09 2015 fra check-in.dk: <u>http://www.check-in.dk/ekspert-stater-kan-slippe-af-sted-med-ulovlig-sas-stoette#.Vf\_ZCFywNvc</u>

Krog, A. (13. 02 2013). *analyser check-in.dk*. Hentede 21. 09 2015 fra check-in.dk: <u>http://www.check-in.dk/sager-om-statsstoette-til-sas-kan-tage-flere-aar#.Vf cj1ywNvc</u>

Lønstrup, D. (04. 09 2013). Økonomi politiken.dk. Hentede 22. 06 2015 fra politiken.dk: <u>http://politiken.dk/oekonomi/vi\$rksomheder/ECE2066797/spareplanen-virker-sas-har-overskud/</u>

Lassen, L. (20. 11 2012). Hentede 21. 09 2015 fra <u>http://www.business.dk/oekonomi/sverige-og-norge-klar-til-at-saelge-sas</u>

Lufthansa. (18. 09 2015). *Configure Your Flight lufthansa.com*. Hentede 18. 09 2015 fra Lufthansa.com: <u>http://book.lufthansa.com/</u>

McKinsey & Company. (01. 09 2008). *Insights & Publications mckinsey.com*. Hentede 15. 07 2015 fra mckinsey.com: http://www.mckinsey.com/insights/strategy/enduring ideas the ge and mckinsey ninebox matrix

Merchant, N. (29. 02 2012). *Articles hbr.com.* Hentede 02. 10 2015 fra Harvard Business Review: https://hbr.org/2012/02/why-porters-model-no-longer-wo

Miljøstyrelsen. (30. 09 2015). *Luftforurening mst.dk*. Hentede 30. 09 2015 fra mst.dk: <u>http://mst.dk/borger/luftforurening/biler-busser-og-andre-koeretoejer/euro-normer-for-bedre-miljoe/</u>

Momondo.com. (19. 06 2015). *London-Paris Momondo.com*. Hentede 19. 06 2015 fra Momondo.com: momondo.com

Norwegian. (25. 01 2012). *Media Norwegian.dk*. Hentede 08. 06 2015 fra Norwegian.dk: <u>http://media.norwegian.com/dk/#/pressreleases/historiens-stoerste-flyordre-i-europa-norwegian-koeber-222-nye-fly-726510</u>

Norwegian. (30. 09 2015). *Route Map norwegian.com*. Hentede 30. 09 2015 fra norwegian.com: <u>https://www.norwegian.com/uk/flight/route-map/</u>

Norwegian. (21. 06 2015). *Travel Services Norwegian.com*. Hentede 21. 06 2015 fra Norwegian.com: <u>http://www.norwegian.com/en/travel-information/travel-services/wifi/</u>

*Nyheder check-in.dk*. (01. 10 2013). Hentede 29. 09 2015 fra check-in.dk: <u>http://www.check-in.dk/sas-afslutter-wideroee-salg#.VgwhNVywNvc</u>

OneWorld. (21. 09 2015). *Member Airlines oneworld.com*. Hentede 21. 09 2015 fra oneworld.com: <u>https://www.oneworld.com/member-airlines/overview</u>

RB Børsen. (23. 11 2005). *diverse business.dk*. Hentede 22. 06 2015 fra business.dk: <u>http://www.business.dk/diverse/sas-turnaround-2005-er-gennemfoert</u>

Ritzau Finans. (14. 01 2014). *Nyheder borsen.dk*. Hentede 18. 09 2015 fra borsen.dk: <u>http://borsen.dk/nyheder/virksomheder/artikel/1/274432/norwegian betaler bedre loen end</u> <u>sas.html</u>

Ritzau Finans. (30. 06 2014). *top 1000 borsen.dk*. Hentede 18. 09 2015 fra borsen.dk: <u>http://top1000.borsen.dk/nyheder/sas-ledelse-og-ejere-det-egentlige-problem</u>

Ritzau. (18. 11 2013). *Nyheder Borsen.dk*. Hentede 08. 06 2015 fra borsen.dk: <u>http://borsen.dk/nyheder/virksomheder/artikel/1/270633/arabiske flykoeb for 547 mia kr.h</u> tml

Ritzau. (02. 03 2015). *nyheder npinvestor.dk*. Hentede 13. 06 2015 fra npinvestor.dk: <u>http://npinvestor.dk/nyheder/sas-kabineansatte-hos-sas-strækker-våben-og-går-i-arbejde</u>

Ryanair. (18. 09 2015). *Route Map ryanair.com*. Hentede 18. 09 2015 fra ryanair.com: <u>http://www.ryanair.com/da/billige-flydestinationer/</u>

SAS. (18. 09 2015). *Aircrafts on order sas.com.* Hentede 18. 09 2015 fra sas.com: http://www.sasgroup.net/en/aircraft-on-order/

SAS Eurobonus. (28. 09 2015). *Om kortet saseurobonusmastercard.dk*. Hentede 28. 09 2015 fra saseurobonusmastercard.dk: <u>http://www.saseurobonusmastercard.dk/om-kortet/fordele-i-kortet/forsikring/</u>

SAS Group. (30. 09 2015). *Alt om rejsen sas.dk*. Hentede 30. 09 2015 fra sas.dk: <u>http://www.sas.dk/alt-om-rejsen/ombord/</u>

SAS Group. (03. 03 2008). *Annual Report - sasgroup.net.* Hentede 29. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/wp-content/uploads/sites/2/2014/09/SAS-Annual-Report-2007-English.pdf</u>

SAS Group. (12. 03 2015). *Annual Reports sasgroup.net*. Hentede 29. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/wp-content/uploads/sites/2/2014/09/SAS-Annual-Report-2008-English.pdf</u>

SAS Group. (18. 09 2015). *Board and Management sasgroup.net*. Hentede 18. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/board-and-management/</u>

SAS Group. (20. 09 2015). *customer care sas.dk*. Hentede 20. 09 2015 fra sas.dk: <u>http://www.sas.dk/alt-om-rejsen/ved-ankomsten/sas-customer-care/</u>

SAS Group. (28. 09 2015). *Customer offering sasgroup.net*. Hentede 28. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/customers-and-customer-offering/</u>

SAS Group. (22. 06 2015). *Market Overview sasgroup.net*. Hentede 22. 06 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/market-overview/</u>

SAS Group. (09. 10 2011). *Media Center flysas.com.* Hentede 29. 09 2015 fra flysas.com: <u>https://www.flysas.com/upload/International/SKI/Media-</u> <u>center/Mediakit/Oct09/SAS'%20environment%20focus.pdf</u>

SAS Group. (20. 06 2015). *Press center flysas.com.* Hentede 20. 06 2015 fra flysas.com: <u>https://www.flysas.com/upload/International/SKI/Press-center/SAS%20in%20history.pdf</u>

SAS Group. (2015). SAS 2015 Q3 Interim Report. Stockholm: SAS Group.

SAS Group. (2010). SAS Annual Report 2009. Stockholm: SAS Group.

SAS Group. (2011). SAS Annual Report 2010. Stockholm: SAS Group.

SAS Group. (2015). SAS Annual Report 2014. Stockholm: SAS Group.

SAS Group. (14. 09 2011). *strategy sasgroup.net*. Hentede 29. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/4excellence-strategy/</u>

SAS Group. (30. 09 2015). *Vision statement sasgroup.net*. Hentede 30. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/this-is-sas/</u>

SAS. (29. 09 2015). *History sasgroup.net*. Hentede 29. 09 2015 fra sasgroup.net: <u>http://www.sasgroup.net/en/history-milestones/</u>

SAS. (01. 01 2007). *Press release flysas.com.* Hentede 10. 06 2015 fra <u>https://www.flysas.com/upload/International/SKI/Press-center/SAS%20Timeline.pdf</u>

SAS. (18. 09 2015). *Route Map flysas.com*. Hentede 18. 09 2015 fra flysas.com: <u>https://www.flysas.com/en/uk/Generic/Services/Route\_map/</u>

SAS. (18. 09 2015). *The Fleet sas.com.* Hentede 18. 09 2015 fra sas.com: <u>http://www.sasgroup.net/en/the-fleet/</u>

Scandinavian Airlines. (19. 09 2015). *Book Flight sas.dk*. Hentede 19. 09 2015 fra SAS.dk: <u>https://book.flysas.com/</u>

Scandinavian Airlines. (18. 09 2015). *International flysas.com.* Hentede 18. 09 2015 fra flysas.com:

https://www.flysas.com/upload/International/USA/media%20kit/Media%20kit SAS%20Introd uction%20SAS.pdf Seerup, T. J. (19. 08 2015). *Finans tv2.dk*. Hentede 10. 09 2015 fra tv2.dk: <u>http://nyhederne.tv2.dk/finans/2015-08-19-sas-aabner-nye-direkte-ruter-til-usa</u>

SkyTeam. (21. 09 2015). *Front Page skyteam.com*. Hentede 21. 09 2015 fra skyteam.com: <u>http://www.skyteam.com</u>

Star Alliance. (21. 09 2015). *Global Network staralliance.com*. Hentede 21. 09 2015 fra staralliance.com: <u>http://www.staralliance.com/en/benefits/global-network/</u>

Star Alliance. (21. 09 2015). *Member Airlines staralliance.com*. Hentede 21. 09 2015 fra staralliance.com: <u>http://www.staralliance.com/en/about/member airlines/</u>

*telegram information.dk*. (12. 11 2012). Hentede 29. 09 2015 fra information.dk: <u>http://www.information.dk/telegram/316786</u>

The Guardian. (18. 09 2015). *business theguardian.com*. Hentede 18. 09 2015 fra theguardian.com: <u>http://www.theguardian.com/business/michael-oleary</u>

Thompson, S. (28. 12 2012). *Airlines route-news.com*. Hentede 08. 06 2015 fra route-news.com: <u>http://www.routes-news.com/airlines/item/887-heathrow-airport-slot-trading</u>

Trading Economies. (21. 06 2015). *GDP growth tradingeconomies.com*. Hentede 21. 06 2015 fra tradingeconomies.com: <u>http://www.tradingeconomics.com/forecast/gdp-annual-growth-rate</u>

U.S. Governments PO. (24. 10 1978). *Law gpo.gov.* Hentede 21. 06 2015 fra gpo.gov: <u>http://www.gpo.gov/fdsys/pkg/STATUTE-92/pdf/STATUTE-92-Pg1705.pdf</u>

University of Michigan. (09. 04 2004). *Lectures globalchange.umich.edu*. Hentede 02. 09 2015 fra globalchange.umich.edu:

http://www.globalchange.umich.edu/globalchange2/current/lectures/Technology/technology.htm)

Virgin America. (10. 06 2015). *About ou airline virginamerica.com*. Hentede 10. 06 2015 fra virginamerica.com: <u>https://www.virginamerica.com/cms/about-our-airline</u>

Voss, L. H. (27. 03 2007). *CBS Library.* Hentede 05. 04 2015 fra Leading Capacity: <u>http://www.leadingcapacity.dk.esc-</u>web.lib.cbs.dk/documents/ipdocument.asp?AC=0000001000013340C

Whitlam, S. (12. 09 2012). *Heathrow acl-uk.org.* Hentede 08. 06 2015 fra www.acl-uk.org: <u>http://www.acl-uk.org/UserFile/File/slot%20trading%20presentation.pdf</u>

World Airline News. (08. 12 2014). *News worldairlinenews.com*. Hentede 30. 09 2015 fra worldairlinenews.com: <u>http://worldairlinenews.com/2014/12/08/sas-acquires-cimber-cimber-to-receive-12-bombardier-crj900s-from-sas/</u>

**Books and Book sections** 

Bain, J. (1956). Barriers to New Competition. Cambridge: Harvard University Press.

Barney, J., & Clark, D. (2007). Resource-Based Theory. Oxford: Oxford University Press.

Bickerton, P., Bickerton, M., & Simpson-Holley, K. (1998). *Cyberstrategy - Business strategy for extranets, Intranets and the Internet.* Oxford: Butterworth-Heinemann.

Björnelid, R. (2012). SAS - Kunsten at sænke et flyselskab. Stockholm: Lindhart & Ringhof.

Daft, R. L. (1983). Organizational Theory and Design. New York: West.

Hendersen, B. (1979). Henderson on corporate strategy. Cambridge: ABT Books.

Hill, C., & Jones, G. (2004). *Strategic management theory: an integrated approach.* Boston: Houghton Mifflin.

Jespersen, J. (2004). Kritisk Realisme – Teori og praksis, I L. F. O. P. B. Olsen (red.), *Videnskabsteori i samfundsvidenskaberne: på tværs af fagkulturer og paradigmer.* (2. udgave udg., s. 145-177). Frederiksberg: Roskilde Universitetsforlag.

Kotler, P., Keller, K. L., Brady, M., Goodman, M., & Hansen, T. *Marketing Management.* Harlow: Pearson Education.

Kuhn, T. S. (1962). *The Structure of Sceintific Revolutions*. Chicago: University of Chicago Press.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (1998). Strategy Safari. New York: The Free Press.

Montgomery, C., & Porter, M. (1991). *Strategy: Seeking and securing competitive advantage.* Boston: Harvard Business Review Book.

Penrose, E. (1959). *The Theory of the Growth of the Firm.* Oxford: Oxford University Press.

Porter. (1985). *Competitve Advantage.* New York: The Free Press.

Porter, M. (1980). *Competitive Strategy.* New York: The Free Press.

Rumelt, R. (1984). Towards a Strategic Theory of the Firm. I R. Lamb, *Competitive Strategic Management* (s. 556-570). Englewood: NJ: Prentice Hall.

Selznick, P. (1957). *Leadership in Administration*. Evanston: Row Peterson.

Yin, R. (2013). *Case Study Research 5. ed.* London: Sage Publications.

Yukl, G. (1989). *Leadership in Organizations*. Essex: Pearson Education.

Articles from journals and periodicals

Barney, J. (1991). Firm Resources and Sustained competitive advantage. *Journal of Management*, 99-120.

Barney, J. (1995). Looking inside for Competitve Advantage. *The Academy of Management Executive*, 49-61.

Barney, J. (1986). Strategic Factor Markets: Expectations, Luck, and Business Strategy. *Management Science*, 1231-1241.

Bowman, C. (2008). Generic strategies: a substitute for thinking. The Ashridge Journal, 1-6.

Cutcliffe, J., & McKenna, H. (2001). Establishing the credibility of qualitative research findings: the plot thickens. *Journal of Advanced Nursing*, 374-380.

Demsetz, H. (1973). Industry Structure, Market Rivalry, and Public Policy. *Journal of Law and Economics*, 1-9.

Dierickx, I., & Cool, K. (1989). ASSET STOCK ACCUMULATION AND SUSTAINABILITY OF COMPETITIVE ADVANTAGE. *Management Science*, 1504-1511.

Evans, D., & Smith, A. (2004). AUGMENTING THE VALUE CHAIN: IDENTIFYING COMPETITIVE ADVANTAGE VIA THE INTERNET . *Journal of Information Technology Theory and Application*, 61-78.

Foss, N., & Sheehan, N. (2009). Exploring the roots of Porter's activity-based view. *Journal of Strategy and Management*, 240-260.

Hill, C. (1988). Differentiation Versus Low Cost or Differentiation and Low Cost: A Contingency Framework . *Academy of Management Review* , 401-412.

Johnson, R. B. (1997). Examining the validity structure of qualitative research. *Education*, 282-291.

Johnston, R., & Mak, H. (2000). An emerging vision of Internet-enabled supply-chain electronic commerce. *International Journal of Electronic Commerce*, 43-59.

Mahoney, J., & Pandian, R. (1992). The resource based view within the conversation of Strategic Management. *Strategic Management Journal*, 363-380.

Perakyla, A. (1997). Reliability and validity in research based on tapes and transcripts. *Theory, Method and Practice*, 201-220.

Porter, M. E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard Business Review*, 1-38.

Porter, M., & McGahan, A. (1997). How Much Does Industry Matter, Really? *Strategic Management Journal*, 15-30.

Rugman, A., & Verbeke, A. (2002). Edith Penrose's contribution to the resource-based view of strategic management. *Strategic Management Journal*, 769-780.

Rumelt, R. (1991). How much does industry Matter? *Strategic Management Journal*, 167-185.

Seeger, J. (1984). Reversin the Images of BCG's Growth/Share Matrix. *Strategic Management Journal*, 93-97.

Stiles, W. (1993). Quality control in qualitative research. *Clinical Psychology Review*, 593-618.

Teece, D., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Managment. *Strategic Management Journal*, 509-533.

The Economist. (03. 04 1997). Freedom in the air. *The Economist*, s. 1.

Treacy, M., & Wiersema, F. (1993). Customer Intimacy and Other Value Disciplines. *Harvard Business Review*, 1-21.

Weber, R. (1990). Basic content analysis 2. Ed. *Quantitative Applications in the Social Sciences*, 17-18.

Wernerfelt, B. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 171-180.

Yelle, L. (1979). THE LEARNING CURVE: HISTORICAL REVIEW AND COMPREHENSIVE SURVEY. *Decision Sciences*, 302-328.

#### Interview

Kromann-Mikkelsen, T. (13. 05 2015). (M. Skar-Gislinge, Interviewer)