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Competitive Intelligence

-A necessary complement to the Balanced Scorecard?

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Foreword

The research presented was created during the spring of 2008 at the School of Management and Economics of Lund University.

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Purpose: The purpose of this thesis is to evaluate if the BSC can become a better tool for management when it is complemented with CI.

Methodology: We have used a deductive methodology approach. The empirical findings have been collected from secondary data, which are illustrated through a case study of SAS.

Theories: Our theoretical framework mainly consists of the BSC, CI, the criticism of the BSC and benefits of using CI. We also describe strategic inertia, to clarify the risk of using an internally focused, rigid, static and mechanical management tool.

Empirical data: The empirical part includes the result from the secondary data collection about the airline industry and SAS.

Conclusion: The BSC is a widely used management tool that is turning the vision and strategy into operational goals. However, after analyzing the criticism received by the BSC, it seems as if its internal focus, rigidity, static-ism and mechanical mindset limits the company's ability to create a strategy that takes important external factors into account. As we see it, the BSC's limitations can create a risk for strategic inertia. We believe that the case study confirms CI's ability to complement the BSC.

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Nyckelord:	Strategic management, Strategiska beslut, Balanserat Styrkort, Strategisk tröghet, Competitive Intelligence
Syfte:	Syftet med denna uppsats är att bedöma om det balanserade styrkortet kan bli ett bättre verktyg för managers när det är kompletterat med CI.
Method:	Uppsatsen bygger på en deduktive infallsvinkel. Det empiriska materialet bygger på sekundär data, som består av en fallstudie av SAS.
Teori:	Den teoretiska byggsatsen fokuserar i huvudsak på det balanserade styrkortet och CI, den kritik som riktats mot det balanserade styrkortet samt även funnen kritik mot CI presentera. Vi beskriver också strategisk tröghet, för att klargöra riskerna med att använda ett internt fokuserat, stelt, stagnerat och mekaniskt verktyg för strategisk ledning.
Empirisk data:	Den empiriska delen inkluderar resultatet från sekundär data insamlingen angående flygplansindustrin och SAS.
Slutsats:	Det balanserade styrkortet är ett mycket använt verktyg vid strategisk ledning, som gör strategi och vision till genomförbara mål. Efter analys av kritiken som riktats mot BSC verkar det som att dess interna fokus, stelhet, stagnerade och mekaniska tillvägagångssätt förhindrar företag från att skapa en strategi som inkluderar viktiga externa faktorer. Det balanserade styrkortets begränsningar kan leda till strategisk tröghet. Vi anser att vår fallstudie bekräftar CIs förmåga att komplettera styrkortet på ett meningsfullt sätt.

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1 Introduction

In the first chapter the background of the thesis is described, followed by the purpose and research problem. Finally research questions, limitations and the outline of the thesis are presented.

1.1 Background

In today's competitive business environment it is crucial for managers to make the right strategic decisions to respond to fierce competition. Successful strategic decisions are based on information concerning both the internal and the external environment of the company. To be able to keep up with competitors a company must focus on becoming more internally effective as well as aware of the surrounding world. By identifying key figures of the company's performance and concentrating on improvement of these, internal efficiency can be achieved. One of the most popular and widely used control systems is the balanced scorecard (BSC) by Drs. Kaplan and Norton. The BSC translates an organization's mission and strategy into a set of performance measures and provides a framework for strategic measurements and management (Kaplan and Norton, 1996). The basic idea of the BSC is that the organizational performance should be evaluated from more than just a simple financial perspective. The BSC organizes performance to be measured according to four perspectives; the financial perspective, the customer perspective, the internal perspective and the learning and growth perspective. For each perspective key figures are used to measure their validity, helping top managers to see how well their strategy is working and how well it is implemented through the organization (Bonits *et al.*, 1999).

There are fundamental problems with the BSC and the model has been criticized and discussed widely among analysts (*ibid.*). The BSC is mostly considered as an internal document which restrains the external innovation process. This is an important critical limitation in the ability to account for the external environment and systematic linkages (Voelpel *et al.*, 2006).

Flamholtz states the danger of no empirical support for the BSC presented by Kaplan and Norton, and therefore questions if the four perspectives are the correct basic perspectives for an organizational evaluation. The validity of the four perspectives is also questioned since managers can be tempted to focus on the wrong things harming the organization as a whole (Flamholtz, 2003).

The BSC have also received criticism for being too rigid as a measurement tool. The BSC tends to force indicators of a company's performance into one of the four perspectives and if there is no fit at all, they risk to be neglected (Voelpel *et al.*, 2006).

The BSC creates a static-ism that struggles with the challenge of a highly competitive and changing business environment. The optimal implementation of the BSC leads to a high level of uniformity and goal orientation. The BSC is grounded in a mechanical mindset that has problems dealing with more complex business models. In knowledge-driven companies a simple cause and effect chain is not enough to understand the relationship between different indicators of performance (*ibid.*).

The criticism, received by the BSC, of being too internally focused, rigid, static and mechanical can risk leading to strategic inertia. Strategic inertia is often the word used for cognitive inertia in the case of development and implementation of competitive strategies. In an organization there is a risk that once a strategy is implemented it is hard to modify. The managers' mental map of the strategy is hindering them from acknowledging gradual changes in the environment. Since these external factors often change gradually, once they are acknowledge they can have become too extensive and in turn the company's capacity for successful adaption has been badly damaged. To avoid the problem of strategic inertia there need to be an ongoing process of overcoming long held mental maps and make managers aware of the more and less influencing external factors. The result of this will be an organization which constantly adapts to gradual changes in the external environment and prevents acknowledging changes too late when the organization is too underequipped to respond (Hodgkinson and White, 2002).

1.2 Problem description

The main problem with the BSC is that it is too internally focused, rigid, static and creates a mechanical mindset. It also tends to make the company work in a mechanic and

systematic way, doing no more than what it is expected to. Three out of the four perspectives covered by the BSC have an internal focus; the only external perspective considered is the customer perspective. In today's business environment, the BSC, as the sole strategic management system, might not be sufficient enough to steer the organization. The lack of external perspectives in the BSC and the negative consequences of that can result in strategic inertia. The researchers within strategic inertia suggest that, managers need to acknowledge externally changing factors to avoid cognitive inertia. Competitive Intelligence (CI) takes several external factors into account. It is our belief that, by complementing the BSC with CI, the internal focus, rigidity, static-ism and mechanical mindset of the BSC could be eliminated and in turn the risk of strategic inertia could be avoided. Overall, a better base for strategic decisions and follow-up procedures could be achieved.

1.3 Research questions

- Is CI an appropriate tool to use to avoid strategic inertia?
- Can CI complement the BSC and make it more complete and more applicable in today's business environment, and if so how?

1.4 Purpose

The purpose of this thesis is two folded. First it is to examine, with the help from existing theories and empirical findings, if CI can be used as a strategic tool to avoid strategic inertia in companies. Second, the purpose is also to examine if CI can complement the BSC's limitations and how.

1.5 Delimitations

This thesis concerns the BSC developed by Kaplan and Norton, since this is the BSC mostly used among companies today and also the BSC that is the target for the criticism that was found during our theoretical research. CI was chosen as the complementing tool to the BSC due to its focus on several external factors and its growing use within today's international businesses. The airline industry is affected by external changes due to its high risk nature and international operation, thus an interesting industry for our case study. To

make the case study more specific and concrete, SAS was chosen. When mentioning SAS we mean the SAS Group, which is the leading airline group in Northern Europe, and not Scandinavian Airlines Sweden, which is a wholly owned subsidiary within the SAS Group.

1.6 Disposition

Chapter 1: This thesis consists of six chapters. This introduction chapter has provided background information on the topic, introduced the problem, purpose and delimitations.

Chapter 2: The selected approach and the information collection procedure are described. This is done by first providing the choice of subject and case company followed by data collection and criticism of method.

Chapter 3: Arguments for how the theories chosen are connected to each other are explained. Starting with the BSC and the criticism it has received, followed by strategic inertia and CI. Three dimensions are created to show how CI can possibly complement the BSC.

Chapter 4: A presentation about the general airline industry and specific facts about SAS is presented.

Chapter 5: SAS is analysed based on the information gathered about the airline industry and the three dimensions distinguished through the theoretical framework. An extensive table with the findings is provided to make the findings easier to grasp.

Chapter 6: In the sixth chapter a conclusion and a discussion about our findings are presented. This chapter also includes managerial implications and suggestions for future research.

2 Method

This chapter starts with a discussion about how the purpose is reached, followed by the different methods we have chosen and how we have carried them out. It also provides an overview of how we collected necessary information and a discussion regarding the validity and reliability of the thesis.

2.1 Choice of subject and case company

The interest for the subject grew out of an aspiration to combine our previous international business studies with our strategic management studies in Lund. In strategic management we learned about the BSC. However, the BSC has received a lot of criticism when used in today's competitive and changing business environment. Strategic inertia can be a risk of using the BSC. Therefore, strategic inertia was studied to better understand the need for complementation. CI is a growing concept and it is becoming more and more important for strategic decisions within international businesses. We started to wonder if the BSC could in fact be extended by adding several external aspects from the CI's industry analysis model and creating dimensions that could be applied when using the tool. As we did not know much about the subject we tried to get a deeper understanding about it by gathering information, articles and literature about the BSC, strategic inertia and CI and its relevance for a company. We wanted to find a case company for our thesis that was both suitable and relevant at the time. By scanning financial magazines we found that the airline industry to be of great interest. It is a troubled industry and affected by several external factors. The airline, SAS, was chosen because it is in a troubled situation at the moment which can possibly be explained by the way it has misjudging the development of the market. Therefore, SAS has made less successful strategic decisions than some of its competitors. We thought that it could be very interesting to apply our theoretical findings on the chosen industry and company.

2.2 Research Approach

This thesis starts out by explaining the theoretical framework including the BSC, strategic inertia and CI. The BSC and CI are then compared to each other to find dimensions within CI that adds important features to the BSC. In the next section the airline industry with a focus on SAS is described. Finally, based on the dimensions

from the theoretical framework, the industry and the company of our choice are analyzed. The main research approach is deductive because the theoretical framework is used to analyze the empirical method in order to answer the purpose of this thesis. Further, it also has an inductive approach since the factors of main interest found in the third dimension are remodeled to fit reality and the case study of SAS.

2.3 Selection of dimensions

When creating the dimensions, it was solely explanatory dimensions found through the theoretical review, which were chosen. The dimensions are areas where CI can possibly complement the BSC. From the beginning there were eight dimensions. The eight dimensions were; time perspective, relation to strategy, factors of main interest, steering tools, level of application, the process, ethics and working pitfalls. However, after working with the dimensions we noticed that some of the dimensions did not have a complementary character or no relevance. Therefore, the eight dimensions were narrowed down to three; time perspective, relation to strategy and factors of main interest. These are the dimensions that are going to follow the discussion throughout the thesis and build the base for the analysis. We considered these dimensions to be the main important dimensions that the BSC lacks and that CI provides. The dimensions can be applied to any industry since they are created out of the theoretical framework and no influences from the empirical framework have been included.

2.4 Selection of Studied Objects

To receive information for the empirical framework and an industry of current interest we searched financial newspapers and magazines, such as Dagens Industri and Veckans Affärer. The airline industry is often a discussed topic mainly due to its influence on the environment and SAS is often discussed because of its troubled situation.

2.5 Information gathering

Information gathered for this thesis comes from secondary gathering of information. Many researchers have devoted time to the field of the BSC. CI has recently become a growing field within management therefore less research is available. The theoretical framework

consists of data that was originally collected for some other purpose. Literature was gathered from some of the main researchers in the area of the BSC and CI. The empirical framework consists of information from several secondary sources. Secondary data was collected from Lund University's as well as Kristianstad University's search engines which provided us with both scientific articles and non-scientific articles. The database of theses at Lund University and Uppsater.nu has provided us with more aspects on the subject. Lastly, the homepage of the SAS group as well as its manufacturers, Airbus and Boeing, have been scanned to find company specific information.

2.6 Methodological Criticism

This thesis is built on a single case study. A single case study does not give the possibility to see if the findings from the case would occur in another case as a multiple case study would do. However, it was never the idea to do more than one case study.

We assume that SAS's problems are a result of neglecting important external factors, when they could in fact be a result of many different things, for example internal problems with personnel.

The criticism that we have found about the BSC was never tested in practice, therefore we do not know if this is a common perception in companies. Further, the result from the analysis was not tested, meaning that the suggested strategies might not be the most rational strategic suggestions or not implementable at all. However, the suggested strategies were based on information that we found and perceived as important. The empirical framework is rather broad however not deep. The information gathering about the industry is far from the amount and quality of information that professional CI workers collect. Therefore, the level of reliability of the suggested strategies can be weak. We are not experts in any of the external areas suggested by the CI, however, we did what could have been expected of us to do and manage.

2.7 Validity

Validity observes the causal relationship between two variables. Validity also show if the findings are what they appear to be. A high level of validity is a relevant sign for a good

research (Saunders *et al.*, 2007). Since the BSC is criticized for being too internally focused our assumption was that it could become more useful for today's business if complemented with CI. However, if other references than the ones we used were analyzed the result would possibly take another form.

2.8 Reliability

Reliability refers to the extent to which data collection techniques or analysis procedures will yield consistent findings (Saunders *et al.*, 2007). If other researchers conduct our work in the same way they are likely to reach similar results because our dimensions are mainly derived from the theoretical framework and the external factors are taken from CI's industry analysis model, which make them possible to distinguish again. However, which dimensions and external factors to include in the analysis could differ since they are chosen in coherence with our personal evaluation. Since mainly articles and journals, written by authors not related to SAS or the airline industry were used, the empirical work is considered as less biased. However, in some parts the SAS Group's annual report is used as a source which can make the reliability of the information less reliable.

3 Theoretical Framework

First, a short discussion about the theories connection to each other and place in the strategic process is provided, followed by a presentation of the BSC, strategic inertia and CI. Lastly, to give a brief overview of CI's complementary character in relation to the BSC a table of the three most important dimensions is presented.

3.1 Choice of theory

Strategic decisions that are made without considering important changes in the external factors can encounter the risk of strategic inertia. Strategic inertia arises when long held mental maps of the competitive marketplace are used for new strategic decisions. The result is that when the external factors are eventually noticed they have become so extensive that the company's capacity for successful adaption has been badly damaged. To solve the problem with strategic inertia, managers need to be aware of various changes in the external environment that will or might occur in the future (Hodgkinson and White, 2002). A wide external perspective could possibly be achieved by applying the external factors accounted for in CI's industry analysis model. CI addresses the importance of focus on several external factors and keeping the information about them updated.

The three dimensions created can help managers to see the information gathered from three important perspectives and can therefore enable managers to avoid strategic inertia. Information about the important external factors builds a base for better strategic decisions. To make the linkages between the theories more clear, a simple model was created, that shows how the theories are combined.

When analyzing different management systems CI appears to be a new and developing theory. Its highly topical character is one of the reasons to why CI is used as a complementing theory to the BSC in this thesis. CI is also a management tool that more and more companies are investing money in. It exists several different management systems that could have been used as a complement, for example time management, open system approach and growth cycles. CI caught our attention when we were introduced to the theory in class, the interesting process of CI occurred for us as a suitable complement to the BSC.

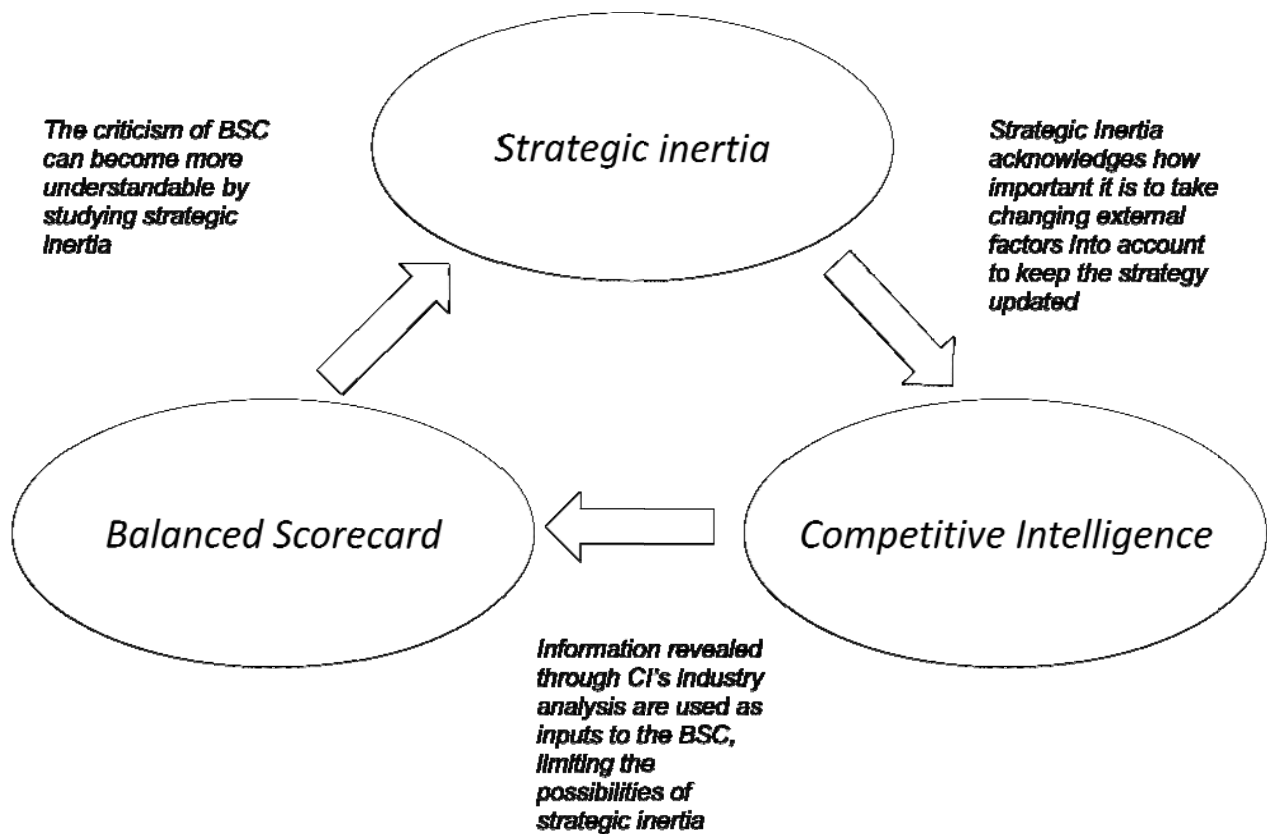


Figure 3.1 an illustration of how the theories are combined

3.2 The Balance Scorecard

The BSC is a strategic management system that is used as a tool to ally business activities to the vision and strategy of the company. The performance of the company is matched against its strategic goals. The BSC was founded in the early 1990's by Drs. Robert Kaplan and David Norton. They wanted to develop a system that provided a performance measurement framework for managers and executives. The BSC is based on the idea of adding strategic non-financial performance measures to traditional financial measures. The BSC measures a company's performance based on four perspectives; the financial perspective, the customer perspective, the internal perspective and the learning and growth perspective (Kaplan and Norton, 1996).

3.2.1 The origin of the BSC

The root of the BSC goes back as early as the 1950's when General Electrics used performance measurement in its organization. The BSC has evolved from its early use as a simple performance measurement framework to a complete planning and management system. The BSC is built upon key concepts from previous management ideas such as Total Quality management (TQM), including things like customer-defined quality, continuous improvement, employee improvement and primarily measurement-based management and feedback (Hepwoth, 1998). Kaplan and Norton recognized weaknesses and imprecision of the existing management approaches and encouraged a more systematic measurement system to be applied. Kaplan and Norton also pointed out the importance of linking the measures into a coherent system of a cause and effect chain. To develop measurable variables data is collected and analyzed relative to each perspective (Kaplan and Norton, 1996). A more in-depth explanation of the four perspectives is given below.

3.2.2 The Four Perspectives

The financial perspective

Kaplan and Norton do not in any way disregard the traditional need for financial data. Financial data is valuable when it comes to sum up the content of already made actions, indicating how well the financial measures contribute to improved profitability. Timely and accurate data will always be a priority. The financial perspective normally focuses on profitability and measures factors such as return on working capital, return on investment, cash flow, etc. The financial measures should be considered as the uttermost goal, and the other perspectives should help the managers to avoid the short term focus occurring when only focusing on financial measures (Kaplan and Norton, 1996).

The financial perspective is criticized for providing poor guidance in today's technological and high competitive environment, and should therefore be excluded from performance measurement systems. Instead, companies are encouraged to concentrate on customer satisfaction, quality, cycle times and employees' competence and motivation. When concentrating on these factors it will automatically result in achievements of the financial goals stated by the company in coherence with the operational activities (Kaplan and Norton, 1996).

The Customer perspective

Focus on customers and customers' satisfaction is given greater importance in today's management philosophy. If customers are not satisfied they will eventually turn to another brand or product that meet their needs better. Poor performance in this perspective can eventually cause a future decline, even if the current financial picture looks good. When developing measures for customers satisfaction, customers should be analyzed in terms of the segment and the kind of processes for which the company are providing products or services. In other words, the main focus is on identifying the customer segment and the market in which the company is mainly active. Examples of measurable figures for this perspective can be the customers' re-purchasing behavior, amount of new customers, market shares, etc. The costumer perspective makes it possible to formulate a strategy that generates high revenue for the future. If the company is able to create products or services that meet the customers' future demand it has a great opportunity to achieve a competitive advantage (Kaplan and Norton, 1996).

The customer perspective is criticized by Voelpel *et al.*, to be ignoring important stakeholders in the company's surrounding. The relationship to suppliers, local communities, alliance partners and unions are excluded from the BSC. The customer is the only external factor accounted for in the BSC. Today, networks are given more and more attention. The importance of being a part of a widely established network is crucial for a successful company (Voepel *et al.*, 2006).

The internal business perspective

The measures based on the internal perspective allow the managers to know how well their businesses are performing. It also shows how well the products and services meets the customers' requirements. It is important that the measures are carefully designed by people who know the processes most thoroughly. The measures in the internal business perspective are identified according to the effect they have on customer satisfaction. The task is to identify which processes that the company must be able to handle internally to meet the needs of its customers, and through that achieve the financial results stated by the managers (Kaplan and Norton, 1996).

The internal perspective has been criticized to take too little account for the external environment of the company. By collaborating with its network a company can increase its performance significantly (Iansiti and Levien, 2004). The BSC is based on the view of relatively isolated companies which is separated from its suppliers. This limitation, in regard to the systematic system, becomes larger the more a company has to deal with rapid and disruptive changes, as well as a global environment. The BSC focus on the individual company and are therefore not aware of the system in which it exists. Even if the company can identify which internal factors that it must be able to handle to meet the needs of its customers it still must consider external factors that affect the customers (Voepel *et al.*, 2006).

The learning and growth perspective

In this perspective employee training and corporate cultural attitudes are evaluated in relation to both individual and corporate self-improvement. In a knowledge-based organization people are the main resources. In today's rapid technological environment, there is a high pressure on workers to be in a continuous learning mode. Measures can here be used to guide managers to focus on training in order to avoid "brain drain". Learning and growth constitute the essential foundation for success of any knowledge-working organization. Kaplan and Norton emphasize that learning is more than training. It also includes things like mentors and tutors within the organization, as well as the ease of communication. It can be said that a company's learning and growth emerge from three resources; people, systems and routines. A weak link can often be found between the competence of the cooperators and the systems and routines needed to achieve the desired revenue. This can be compensated by investments in competence training, information technology and improvements within the company's daily routines (Kaplan and Norton, 1996).

The criticism towards this perspective is often connected to knowledge creation. The BSC follows the traditional logic of innovation, where internal R&D focuses on innovation from its beginning to its end. New ideas are kept as secrets from the external environment and especially from competitors. Kaplan and Norton did some extensions to this perspective so that innovation would be applied throughout the company. Innovation is becoming more open and increasingly networked. There is a tendency of companies opening up. The problem is to measure such distributed innovation. The BSC views innovation as an

internal business process and is seen as a routine more than a creative work. According to Bonits *et al.* the consequence of the BSC's mechanistic view is that the difficulties of managing certain aspects of corporate life are underestimated. The process of knowledge-creation should be integrated in all dimensions of measurement in the BSC (Bonits *et al.*, 1999).

Another problem with this perspective is that employees are almost treated as a side issue. The personnel are chunked into the learning and growth perspective. The BSC gives the feeling that innovation is a routine, something that can be done without involvement of the people or at least independently of them. The reason to why intangible assets are more likely to be underestimated is that neglecting them does not show up immediately and as clearly as in the case of tangible assets (Adams and Marr, 2004).

General criticism to the BSC

The four basic perspectives proposed by Kaplan and Norton has been discussed and criticized for being relatively rigid. Voelpel *et al.*, points out how the rigidity can come to force key figures of performance into one of the four perspectives. This limits the perspectives of a company since it leaves little room for cross-perspectives that might have an immediate impact on the performance. Important factors that do not naturally fall into one of the four perspectives are in danger of being neglected. Possible views of the company that could provide a better picture of the company is thereby ignored (Voelpel *et al.*, 2006).

Flamholtz points out another problem with the four perspectives concerning the fact that Kaplan and Norton have not provided any empirical support for the four perspectives. There is no evidence showing that these perspectives generate a balance for strategic management and evaluation of the business. The BSC seems to lack validity, since the four perspectives are vague and not well defined. Kaplan and Norton dose not clearly state what a perspective really is. It can be a critical success factor, an area of concern or a driver of financial performance (Flamholtz, 2003).

It is neither cheap nor uncomplicated to implement the BSC. It can be quite expensive for the company to acquire the software and methodology needed. The BSC can also

implement a sense of fear among the employees, since the employees performance is evaluated more individually (Hepworth, 1998).

The optimal implementation of the BSC can give consequences of a high level of uniformity and goal orientation. This increases the focus on the given goals but limits any further activities and initiatives that goes beyond the originally targets. This results in static-ism leading to a high level of lost energy that is not used within the organization. The employees might have a clear picture of the content of their work, in the objectives and achievements of the BSC, but they do little to achieve more than what they are told (Voelpel *et al.*, 2006).

3.2.3 The process of the BSC

When a company uses the BSC the strategic plan goes from a passive document into a more practical map for the daily basis of the company's goals. This process helps the managers of the company to distinguish what truly needs to be done in order to execute their strategies. Firstly, measures must be developed based on the priorities of the strategic plan and through them distinguish the key figures. The next step is to collect information related to the measures. The value in the key figures lies in their ability to provide accurate strategic feedback, showing the present performance of the organization and help managers to make superior long-term decisions. They should also distinguish where improvements are needed and evaluate the trend pattern in the company's performance and estimate how well the measurements are working (Kaplan and Norton, 1996).

To improve the performance the right key figures must be found, these are measurable characteristics of products, services, processes and operations that the company uses to track and improve performance. The key figures should be chosen to best represent the factors that lead to improved customer, operational and financial performance. These key figures should be tightly related to the customer and or the company's performance requirements and represent a clear picture for aligning all activities with the company's goals (*ibid.*).

3.2.4 The time perspective

The BSC looks at the company in different time perspectives; yesterday, today and tomorrow. The financial performance of a company is highly correlated to how well the company has operated in the past and how it operates today, and also how it prepares for tomorrows challenges (Skärvad and Olsson, 2003).

3.3 Strategic Inertia

A common problem with strategic decisions is that of cognitive inertia. Strategic inertia is often the expression used for cognitive inertia in the case of development and implementation of competitive strategies. The world is a large and complex environment. To facilitate the understanding of the world, managers tend to make mental maps. However, mental maps of the surrounding environment constantly need to be updated. Due to people's cognitive limitations the mental maps will always be somewhat incomplete and inaccurate (Barr and Huff, 1992).

Hodgkinson and Wright also argues that the strategic problem with cognitive inertia is that managers have a tendency of holding on to old strategic mental maps. The negative result is that managers are missing important gradual changes in the external factors. When the external factors eventually are noticed they have become so extensive that the company does not have the capabilities to change according to them. In the worst scenario, it leads to business failure. This is also called strategic drift, meaning that the environment is changing gradually but because the company is not acknowledging the changes, its strategy will not be aligned with the environment (Hodgkinson and Wright, 2002).

Managers also tend to make strategic decisions in the same way as they have been done in the past. The reason for this is that the pace of the environment is forcing managers to act faster and make less costly strategic decisions. Managers solve this problem by doing things exactly as they always have, neglecting changing factors (Barr and Huff, 1992).

The gradual changes in the environment and the use of obsolete mental maps can explain why the decline of a company is often a downward spiral. Barr and Huff also emphasize the importance of recognizing key environmental changes. They state that there is a clear link between managers understanding of environmental conditions and the firm's strategy.

Mental maps can damage the data information and information processing in several ways. First, the mental map of the managers will decide which information they see as most important. Second, the information found is interpreted according to the current mental map and third, the current mental map decides the direction and limits possible alternative actions to take (*ibid.*).

To avoid the problem of inertia and strategic drift there need to be an ongoing discussion among managers about the most appropriate strategy for the current environment. The main result of that should be that managers are able keep the strategy prepared to face various external changes that will or might occur in the future (Hodkingson and Wright, 2002).

3.4 Competitive intelligence

Competitive Intelligence (CI) is the process and the product of gathering, analyzing and then applying information about the external environment to a company's strategy. From the information that is gathered intelligence is extracted and provided to managers to help them make better strategic decisions. The benefits of having a CI function in a company can be significant. If the work of the CI professionals is well done the company will be ready to make decision and respond early and effective to opportunities and threats (Prescott and Miller, 2001).

There are many reasons why CI facilitates the work of the managers. For example, CI provides the managers with a better understanding of the business environment, the industry and the company better and helps managers learn about competitors corporation and business strategies. CI also helps forecast opportunities and threats, foresee competitors' next action and develop strategies, validate or invalidate industry rumors, create an information base and make more effective decisions (Kahaner, 1996).

To give a better idea of what intelligence really is two examples are presented. An automaker sends some of its employees and their spouses to live in a country where the automaker is planning to do business in the future. The employees learn the countries language, study the culture and visit government and business leaders even though the automaker do not plan to do business there for a couple of years. Another example is a

company which wants to start a paper mill in a town where one paper mill already exists. The company sends out employees to count how many trains with cargo that are leaving the existing paper mill everyday and take measurements on the rails to see if the railroad cars are fully loaded. This way the company will be able to see if the existing paper mill is operating at a hundred percent. If the existing company is working at full capacity then there might be work that it cannot take on and thus there might be a market for the new paper mill as well (Kahaner, 1996).

CI is mostly used within large multinational. CI is applicable whether the company's need for intelligence is about a product, an industry, a market or a competitor and the scope of information that can be important is extremely broad (*ibid.*).

3.4.1 History

The use of gathering information to find intelligence is something that has been used for several decades. According to Sjøilen, Alexander the Great had a well organized intelligence system. It included advanced cryptographic techniques and instructions on how to reward spies. The Romans also had foreign spies and personal guards to collect information. However, it is, according to Sjøilen, the Venetian Republic (8th century until 18th century) that developed the first organized business intelligence system. The Venetian Republic trained young men to gather information about trade customs on their trips abroad to bring home to their employers (Sjøilen, 2001).

What we today call CI was founded in the 1970's in the US. During this time the business climate was changing gradually and competition was becoming more intense. As a result to these changes, it was becoming more important to be informed about what was happening in the company's own industry as well as what the competitors were doing. In 1980, Michael Porter came out with his work "*Competitive –Strategy: Techniques for analyzing Industries and Competitors*". Even though Porter has contributed mostly to the field of strategy, he has contributed a lot to the field of CI. In his work, Competitive-strategy, he introduced a very simple model that facilitated the understanding of the forces that influence the competitive advantage of the companies. This model, the five forces are according to many the foundation of CI (Kahaner, 1996).

The Society of Intelligence Professionals, (SCIP) has been an important part of the emergence of the intelligence community. This non-profit organization was founded in 1986 and its members are growing rapidly, showing that there is a great need and interest for intelligence in businesses today. The SCIP works as a helping hand for its business members by offering education and network opportunities for people working in the field of CI (Prescott and Miller, 2001).

3.4.2 Ethics

The information gathered in the field of CI should be ethical and legal. It is very important that CI professionals are questioning their own actions and what effect these actions have on their own company and companies and individuals outside the company. Today, most information is available to anybody through open sources. Open sources makes it easier to stay ethically correct. However, when data is not available through open sources, CI professionals have to find information through other means such as human interactions (Collins and Schultz, 1996). For CI professionals it is very important to emphasize good business ethics since they do not want to be associated with industrial espionage (Søilen, 2001).

The question of ethics is especially difficult for international companies that are doing business in many different countries and where laws and regulation are not completely clear. Most international companies adapt the laws and ethics of the country that they are doing business in. Therefore, a company might be ethical in one country whilst not in another (*ibid.*).

It is important that the CI function follows the same code of conduct that is prescribed to the whole company. Guidelines provided to CI professionals should state what kind of information to collect, what not to collect and which means to use when collecting the approved information (Kahaner, 1996). However, according to Collins and Schultz, the code of conduct is not always followed in daily operations. The code of conduct is often more related to legal responsibility and less often related to ethical responsibility. Another problem is that ethical responsibility falls in the shadow of other more profit based targets (Collins and Schultz, 1996).

3.4.3 The intelligence cycle

The most basic part of the intelligence system is the actual intelligence cycle. This is the process of turning raw material into intelligence (Kahaner, 1996). It is rather simple and has only four steps. Søylen names these steps direction, collation, elevation and dissemination (Søylen, 2001).

Direction

Direction is about defining the right questions. Defining the right question depends much on how the questions are asked by top managers but also how the analyst understands them. When the right questions are defined, how to get the intelligence, which intelligence to get and the chance of getting the right information is facilitated. The direction of the questions much decides how the rest of the work will proceed and what the end product will look like (Kahaner, 1996).

Collation

Collation is the part where information is actually gathered. Primary sources should be what CI professionals should strive for even though secondary sources can be just as relevant. When there are no primary sources of information to rely on, CI professionals can turn to secondary sources. The collation also includes entering the gathered information into databases. In this way, the information can be analyzed properly (*ibid.*).

Elevation

The elevation is also called analysis. If the analysis is performed correctly additional value or new knowledge is created. The elevation part is a rather difficult part due to the problems associated with choosing the right analysis. If the analysis does not include the right amount of dimensions the result can become misleading due to the fact that information is weighted against each other, patterns have to be identified and different scenarios have to be drawn out of the information. When the gathered information does not fill all gaps, the analysts sometimes have to use guessing and assumptions to complete the work (*ibid.*).

Dissemination

Dissemination is about bringing out the finished product and presenting the findings to the managers. This is also where most CI project fails. The finished product should give answers to the questions that were outlined in the beginning. The analysts also need to be able to give focused possible scenarios. Finally, the results must come in the right time and include the latest and most recently updated information (Søilen, 2001).

3.4.4 Business Intelligence Team

The intelligence cycle clearly shows that intelligence is an ongoing process. In the process of the intelligence cycle the business intelligence team, (BIT), works on a number of different problems. They go back and forth in the cycle collecting information, analyzing it and bringing it to the managers who often ask new questions and then the process starts again. Specific for a BIT is that they use many different analyses to reach redundancy of method. The BIT also works under a short time frame since information is a perishable. The BIT is often a group of several experts, specializing in different areas. Experts can come from both inside the company and from external agencies (Søilen, 2001).

3.4.5 The time perspective

Today it is not realistic to plan far into the future due to the uncertainty of the external factors. However, it is more important than ever before, due to the fast changing environment, to anticipate, to create actionable preparedness and to identify changes in patterns and indicators before they are a fact (Furustig and Sjøstedt, 2000). According to Søilen, CI is mostly focused on what will happen in the immediate future and to some extent the near future. The immediate future has, depending on the industry, a time interval of 0-3 years while the near future has a time interval of 4-10 years (Sølien, 2001).

Søilen further argues that, within CI it is believed that predictions and assumptions about the future based on historical data can be very misleading. Historical data can show patterns of things that have happened due to certain causes. However, history never repeats itself completely. The present is not the same as it was when the historical effect once occurred and therefore a cause will not have the exact same effect now or in

the future. History should be studied within the intelligence function but it should be far from the only mean of analysis (Søilen, 2001).

3.4.6 An intelligence model

The five forces

The modified industry analysis model created by Hussey and Jenster is derived from the five forces model developed by Michael Porter. Micheal Porter states that the five forces; the degree of rivalry among existing firms, threat of new entrants and substitute, the bargaining power of the buyer and supplier are the forces that can influence an industry and determine the industry profitability. The degree of rivalry has to do with the concentration of companies in the industry and is a function of the other four forces. The threat of new entrants is connected to the investment needed and the risk of entering a market as well as the cost of exiting the market. The threat of substitutes is other products that are not directly competing with the product but can become an alternative if there is a change in price for example. The threat of the buyer is the power that the buyer has over the product and the price, this occurs when there are many competing firms and a low concentration of customers. The threat of the supplier power is similar to the buyer power, but now the supplier has the power. The company is the buyer and if there is only a few or just one supplier it can highly influence the price (Grundy, 2006).

The industry analysis model

Hussey and Jenster have interpreted the five forces model and developed a comprehensive model for analysis of the surrounding world. The value creating chain is located at the core of the model and depending on the industry and company it can go from a company-customer relationship to a much more complicated chain, with suppliers, suppliers' suppliers and customers' customers. Competitors, suppliers, customers, entry barriers and exit barriers are at the core of the model. Up until here the five forces model and the modified industry analysis is quite similar even though it uses different labels for the same micro environmental factors. Hussey and Jenster add eight specific macro factors, which belong to the macro environment of the firm and only affect the business indirectly. They are political, economical, judicial, social, infrastructural, demographical, technological and ecological. The judicial, technological and infrastructural factors are the base for all companies' strategies. A problem in many

companies is that they focus on those external factors that have affected them in the past and ignores the rest. This is very dangerous when the least expected external factors in fact can come to affect the company's strategy a lot (Hussey and Jenster, 1999).

3.4.7 Criticism to Competitive Intelligence

Ranjit highlights some problems with CI, even though many companies are using or starting to use CI and are gaining benefits from applying it; many of those companies are struggling with the process of gathering information. It is partly because of ignorance, companies think it is hard to know how to gather and analyze external information properly or effectively. It is also because of arrogance, companies are confident in their belief that they are serving customers better than anyone else, these companies constantly contend that competitors action do not matter. (Ranjit, 2008)

We believe that there could be a risk of only focus on external factors that have been important in the past when using CI. This is very dangerous when factors that have not been important or influencing the company in the past starts influencing it in the present. Finally, we also consider it to be important for the companies' CI departments not to be associated with industrial espionage. There is a very fine line between gather information ethically and unethically and the BIT needs to find the needed information without crossing the line of espionage

3.5 A summary of differences

To facilitate the understanding of how we believe that CI can complement the BSC, dimensions were created and divided into two parts; general dimensions and one specific dimension. The general dimensions are those that are constant throughout the CI process and independent of which industry or company it is applied to (*Figure 3.2*). The specific dimension consists of several external factors (*Figure 3.3*). All external factors are not always used, each and every company choose to investigate the factors that are of main importance for them. The main factors of interest should be evaluated from the time perspective and their relation to the strategy.

3.5.1 General dimensions

Time perspective

The BSC sees the company in three time perspectives; yesterday, today and tomorrow. The company's success depends on how well it learns from yesterday apply it today and prepares for tomorrow. CI focuses on the present, the immediate future and to some extent the near future. CI can complement the BSC with a wider future time perspectives when evaluating the company.

Relation to strategy

The BSC's main purpose is to turn the vision and the strategy of the company into operational goals. The performance of the company is then matched against its strategic goals. In comparison to the BSC, CI focuses on gathering information about the surrounding world of the company to help managers make better strategic decisions. The base for CI professionals is the present strategy and the work is to keep it updated and foresee opportunities and threats that are important to maintain the optimal strategy. CI is a good complement to the BSC because it builds a base for strategic decisions which performance will later be measured against in the BSC.

General Dimensions			
	BSC	CI	CI complement
Time perspective	Yesterday, today and tomorrow	Present, immediate future and near future	Future perspectives
Relation to existing strategy	Measure company performance against existing strategy	Builds base for new strategic decisions based on existing strategy	Builds the base for the strategies that performance will later be measured against

Figure 3.2 a table of the general dimensions

3.5.2 Specific Dimensions

Factors of main interest

The BSC is based on four perspectives; the financial, customer, internal and learning and growth perspectives. The four perspectives helps the company to see which internal

processes and goals that the company must be able to handle to meet the needs of its customers. The only external factor accounted for is the customers. CI takes many more factors into account than the BSC; entry barrier, exit barrier, suppliers, customers, competitors, political, judicial, social, demographic, economic, technological, infrastructural and ecological. CI complements the BSC by adding important factors that are ignored in the BSC.

Specific Dimensions			
	BSC	CI	CI complement
Factors of main interest	Financial, internal, learning and growth, customer	Micro environment: Entry barrier, exit barrier, suppliers, customers, competitors. External environment: demographics political, judicial, economic, technological, infrastructural, ecological, social	Important external factors

Figure 3.3 a table of the specific dimensions

4 The Airline Industry

In the fourth chapter the empirical framework for the thesis is presented which includes a general description of the airline industry and an overview of SAS.

4.1 Introduction

In this chapter, we begin with a brief introduction describing both what the airline industry and SAS look like today and previous occurrences in relation to them. Then, we go more into depth presenting the information, about the airline industry and SAS, which we found and perceived as important.

4.2 The Airline Industry

The airline industry is an industry of high risk nature with very thin profit margins and fierce competition. The airline industry has lost many passengers due to macroeconomic influences such as the downturn in the world economy, fear of terror attacks, SARS epidemics and the Iraq war. At the same time deregulation, such as the open skies agreement in 2004 has opened up the EU market for its member states. In March 2008, the agreement was taken one step further when opening up the skies between the EU and the US. More open skies have enabled more competitors to enter new markets. Today, the traditional legacy airlines, an airline revolving around a central connection point, and low-cost airlines are competing in the same market, against each other but also against other substitutable means of transportation as trains and cars. Another obstacle is that of the second largest cost for airlines, the oil price. It has increased substantially. Resulting in additional pressure on airlines to make their organizations more efficient and reorganize operations (Andersson and Delin, 2007).

4.3 The SAS Group

SAS is the leading airline in Northern Europe. In 2007 SAS flew between 152 destinations in 34 countries and brought 31.2 million passengers to their destinations. Over the years SAS has established itself as an innovative pioneering airline, it was the first airline to fly over the North Pole and introduce tourist class. SAS has been rewarded for its “Euroclass”

program for business traveler, and its frequent flyer program “Eurobonus” was voted “best in the world” by frequent traveler worldwide (SAS Annual Report, 2007).

However, today SAS is a troubled company with a bureaucratic and obsolete management structure, high labor costs and old aircrafts. Most of the problems existing at SAS took off when the monopoly that was protecting it was dissolved. The market then opened up, and made it easier for newcomers to enter (Björnelid, 2007). SAS has misjudged the surrounding environment several times; it bought propeller driven aircrafts right before the industry was starting to switch towards jets, it extended its fleet and started up long routes right before an economical recession and an increase in oil price, underestimated the entrance of the low-cost airlines, charged prices on fares far beyond the quality and service it offered and launched a the low-cost airline Snowflake that did not even last for 2 years (WIKI, 2008).

In May 2007 the CEO Mats Jansson presented a new strategy for SAS, Strategy 2011. Strategy 2011 rests on five pillars: focus on airline operations, concentration on its geographic position in Northern Europe, harmonization and development of its products and service to its customers, implement a cultural turnaround with great attention to customers’ needs and a deeper commitment from it employees and competitiveness in all parts of its organization (SAS Annual report, 2007)

4.3.1 Entering the market and surviving

The airline industry is an industry that is characterized by high risk and high fixed costs. Especially for newcomers it is hard to get access to airport facilities such as slots, in other words takeoff and landing times, and gates. Further, constrained airports are increased by long-term and exclusive leases on gates by the established airlines. The marketing strategies can also be seen as an entry barrier in the airline industry. These strategies have created strong loyalties among passengers and travel agents. Some airlines also use unethical methods to get travel agents to book customers on their flights by offering higher commission rates for large volumes of sale. This makes it hard for newcomers and smaller airlines with fewer flights to enter the market (Kleit, 1991).

Once an airline has created a steady foundation further obstacles occur. During the last couple of years there has been a huge increase in the oil price. The price on fuel is expected to stay on a high level for a long time (Dagens Industri, 2008). Hedging of oil can ease the consequences from the rising oil price but in the long-term perspective the high price is showing off in the financial picture of the company. Many airlines have cut down their hedging volumes due the global economic downturn. Not having any fuel price hedging in place is leaving the airlines very exposed to a risk of a rise in price (Dagens Industri, 2008).

American airlines have decreased the speed on their routes to reduce the cost for fuel. Another method to reduce fuel is to use airplanes powered by turbo propeller engines instead of jet engines since they use much less fuel than jet engines (Dagens Industri, 2008).

For SAS the cost for airplane fuel has increased with 70 percent during one year, forcing it to do extraordinary changes to increase the revenue. These changes are called swift measures, which are actions that quickly generate money in short time (Lans, 2008). SAS is highly affected by the oil price; a 10 percent higher price on oil will generate a 600 million kronor increase in costs. SAS is hedging oil at the moment and are discussing whether more or less hedging is appropriate (NA, 2008).

The demand for oil is not very price sensitive. Despite a doubling of the price it has only produced a small decline in demand. Due to few new oil reserves, raising costs for production and demand rising as billions of people in Asia and Latin America are starting to ask for oil, the price is not expected to drop (Rhein, 2005).

To be able to cut down on the costs extensive reorganizations are taking place in the airline industry. The airline industry, as many other industries, are outsourcing non-core operations and focusing more on core-businesses. According to CEO Mats Jansson, this is one of the reasons to why SAS has chosen to sell of many of its subsidiaries. For example, this year, 2008, SAS is putting pressure on its SAS Ground Services to reach specific cost reduction otherwise it will seek external solutions (SAS Annual report, 2007). Outsourcing makes SAS less complex and release money for the core-business (Veckans Affärer,

2006). A refining process is going to take place both geographically and on business level (Stockholm TT, 2007).

At the moment the downward slope of the dollar is affecting the airline industry sufficiently, since dollar is the currency mostly used in airplane leases. For non-American companies an advantage can be achieved by trading with the low dollar (Veckans Affärer, 2006).

4.3.2 Deregulation and increased competition

In 2008 the skies between the US and the EU became completely deregulated, in other words there are no restrictions on how much and where airlines can fly. With the new agreement any European based airline will be able to fly passengers to any American city, and likewise an American airline will be able to fly passengers to Europe. The open skies' agreement long-term advantage can come to be the offerings of many new services, intensified competition and consolidation between airlines. The new agreement will also facilitate flying from smaller cities (Hosford, 2008b).

The next topic for discussion is an open skies' agreement that opens up the domestic markets. That would mean that airlines would be able to fly unlimited within other countries. If this proposal would go through competition would definitely increase and lead to more competitive fares. However, it can also come to benefit airlines when more code sharing, alliance creation and new startups would be possible (*ibid.*).

A more open and global market is making the airline industry attractive for new competitors. The low-cost carriers, Ryan Air and South West airlines, are two airlines that have made the airline industry a tough industry. Typical for a low-cost airline is among other things to have; a single passenger class, a single type of aircrafts and a simple fare scheme (ANW, 2008). Due to fierce competition from low-cost airlines, traditional legacy airlines, can not compensate further for higher fuel prices with higher fare prices. Ticket prices have dropped as much as 50 percent during a period of 25 years (Czipura and Jolly, 2007).

SAS has high administration costs compared to low-cost airlines which make it hard for SAS to compete within the low-cost segment. The chairman of SAS, Fritz H Schur, is defending SAS against the low-cost airlines by saying that the low-cost strategy will not hold in the long-term because competition is not based on price it is based on volume (Grundberg, 2008).

Airlines from the Middle East are also an increasing concern for airlines in Europe as well as East Asia and Australia. Middle East airlines have had an aggressive expansion and caused a switch in traffic flows (Strategic Direction, 2006). These airlines in the Middle East region are financially strong and have a fortunate geographical location which enables them to offer passengers and cargo forwarders the fastest routes between Southeast Asia and European city-pairs (Thomas, 2008).

Airlines, especially in Europe, are now facing competition from alternative carriers as well. Air France for example, has faced increased competition from the High speed trains (HST) for a long time. The recently announcement of seven HSTs emerging into the Railteam, may result in increased competition for all European airlines. HSTs are said to be faster, more reliable, more punctual and a more environmental friendly alternative to short-distance flights (Buyck, 2008).

4.3.3 Change in demand

The airline industry has also undergone major transitions in the aspect of customers' demands. Only segmentation into business passenger with demand for flexibility and economy passenger with demand for low price is not enough. According to Teichert *et al.*, the traffic mix has changed. The amount of economy passengers has increased. The introduction of low-cost carriers has introduced new customers that are leisure travelers (Teichert *et al.*, 2007). However, there are a few things that passengers are not willing to give up. That is safety, being on time, baggage deliver, a seamless travel and scheduling. In fact, several people do not mind spending more on fares if they receive good service. Also, people traveling in business tend to be less price sensitive (Elin, 2008).

SAS's strategy is based on a low-cost foundation that expands in coherence with the customers demands (SAS 1, 2008). SAS has previously had a focus on business travellers.

However, it has lost many of its business travellers to low-cost competitors. According to SAS's new strategy a larger focus on private travellers is a priority. Fritz H Schur, chairman at SAS, believes that short lines and quick check-in processes will attract the customers (Dagens Industri, 2008a). SAS states in the annually report that it experience the customer segments to have more similar demands, high quality to a low price (SAS Annual report, 2007).

An increase in customer, both traveling through work and leisure, will most likely be seen in the growing international markets. The largest emerging markets are China and India where the urban population is booming and are getting improved living standards. In megacities such as Tokyo, New York, Seoul, Mumbai, Shanghai air travel by inhabitants will increase as these global business centers offer more and better job opportunities. Possible emerging markets to be on the look for in the future is , Algeria, Argentina, Columbia, Egypt, Indonesia, Mexico, Pakistan, Peru, South Africa and Vietnam (AIR, 2008).

Europe is seeing two new demands rising. Eastern Europeans are moving to where the jobs are in Scandinavia, Ireland and United Kingdom at the same time that people in the Northern Europe are interested in exploring, cheap shopping and work possibilities in the Eastern Europe. Also, the wealthy Northern Europeans are buying and part time living in the Mediterranean region (SAS 2, 2008)

Since 1975 SAS routes outside Europe has decreased steadily. Today, they have four routes to the US, one to Japan, one to Kina, one to Thailand and one to Dubai. India which is an emerging market has been abandoned as well as the megacities Shanghai, Hong Kong and Singapore due to high expenses (WIKI, 2008).

4.3.4 Co-operations and alliances

To deal with fierce competition and cost obstacles airlines are trying to find ways to take advantage from different alliances and mutual agreements. In the 1990's many former airline regulations decreased and opened up for strategic alliances. Star Alliance and SkyTeam are the two biggest alliances. Alliances are created to bring airlines active in the same areas closer, enabling them to serve customers better by offering a wider number of

flights from more destinations. Cooperation often includes the benefit of jointly marketing flights, so called code-share, sell tickets from the same website and office, and link the frequent flyer programs. The international extension of today's airline industry would not be possible without alliances and the cooperation benefits all partners (Czipura and Jolly, 2007).

SAS is a member of Star Alliance and was one of the founders of the alliance. Star Alliance is the largest alliance in the world with destination in as many as 162 countries. SAS can with help from the alliance offer customers globally networked routes with excellent connection at key hubs, in other words focal points, as well as perfectly consistent air travel and bonus programs on flights all over the world (SA, 2008).

SAS is also cooperates with Lufthansa through a joint-venture. The joint-venture benefits both the airlines through multilateral marketing and sales activities as well as flights between Scandinavia and Germany. The joint-venture is a topic of debate at the EU commission. If the comission would come to consider that the joint-venture provides SAS and Lufthansa with a monopoly it will be dissolved. This will have a significant influence on SAS, since the advantages with controlling the supply and price levels has a crucial value for the two airline companies (Björnelid, 2003) SAS is also airpartners with regional airlines such as Airbaltic and Estonian Air (SAS 3, 2008).

4.3.5 Primary manufacturers

There are two primarily aircraft manufacturers, Airbus and Boeing. This leads to less bargain power for the airlines, which have little or close to no saying about the supplier and the product-support system that they do business with. Regular aircrafts are machines that are built out of hundreds of different components. This means that airlines have a relationship with an abundance of suppliers. However, the hundreds of different suppliers and their systems are chosen by Airbus and Boeing who is operating the final assembly (Colin, 2008).

The low-cost airlines' strong financial situation provides them with a higher bargaining power towards Airbus and Boeing. By playing the two manufactures against each other they force them to decrease the price on airplanes (Dagens Industri, 2003).

4.3.6 Environmental concern

Airlines are estimated to contribute with two percent of the world's CO₂ emissions, emissions that are increasing with 3 percent yearly (Hosford, 2008a). The EU is requiring airlines to join a carbon cap and trade program no later than 2012. Through this program, carbon credits are used to pay for CO₂ emissions at the end of each year. Those airlines that at the end of the year have emitted less than expected can sell their extra credits to airlines emitting more than their quotas (CRF, 2008). Many airlines are taking their individual responsibility to answer to the public demand about decreasing carbon emissions. Many of the big airlines like, Delta, Continental and Virgin Atlantic are cooperating with environmental groups to give passengers the option to pay extra for their tickets and thereby compensate for how much their trip has emitted. Other airlines have taken the extra payment one step further and included the offset in the price and made it mandatory. However, since most of the airlines' extra payment programs are voluntary no more than 7 percent of passengers actually volunteer. This has resulted in very weak results for compensation for emissions (Hosford, 2008a).

Political solutions, such as taxes and fees, used to reduce emissions would have a negative impact on customers' demand. The International treaties' taxation on fuel is generally considered to be impossible to implement for international flights. Air traffic is of such importance for the economy of countries and movement of citizens that control measures for emissions from domestic air traffic have hardly been used (Lentoliikennejailmasto, 2008).

SAS has an offset program that charges a voluntary fee based on the length of the destination. SAS is also enabling passengers to decide what their money is going to contribute to, one alternative being renewable energy (Hosford, 2008a). SAS is also one of the first airlines that have introduced "Green in-flights", a new technology that means turning of the engines short before landing. Every "in-flight" with this new technology decreases the fuel consumption to half during in-flights and landings (SAS 1, 2008).

SAS's fleet consists of rather old aircrafts. SAS's aircrafts have an average life time of eleven years, compared to competitors who have an average life time of four years. If and

when airlines become legally responsible for their emissions, taxes on old aircrafts are going to be significantly higher than on new ones (Veckans Affärer, 2007).

4.3.7 Congestion and solution

The problem with congestion at airports and cities is a future challenge for airport infrastructure and air traffic management. Hubs will always constitute a very efficient mode of operation in terms of connectivity, passenger choice and environmental impact. However, there is congestion at many of the large hubs in Europe, and there will not be any expansion since they have already reached their limit. As a complement, secondary airports outside large cities are used. The takeoff and landing fees are often lower at these locations (SAS Annual report, 2007). Due to congestion, the opportunities for flights between a hub and a secondary city is rising and it is the most common source for new routes (AIR, 2008)

SAS's primarily uses the hub airports of Copenhagen-Kastrup, Stockholm-Arlanda and Oslo-Gardemoen. Copenhagen-Kastrup is the largest airport in Northern Europe while Oslo-Gardemoen comes in second place and Stockholm-Arlanda in third. Copenhagen and Stockholm is used for intercontinental traffic, while Oslo airport also has a large amount of European traffic (SAS 4, 2008).

There is a trend towards larger aircrafts due to increased congestions at airports, eventual diminishing frequencies and the overall growth of the world fleet. Long hauled super-jets will facilitate airlines to operate like low-cost airlines by being able to give point-to-point service. However, this will put extra pressure on nations that previously relied on their geographical position as the focal point for transfers (Strategic Direction, 2006). Improved safety of air navigation systems have contributed to a more efficient use of the airspace, contributing to the decrease in emission (LKJM, 2008).

5 The Analysis

The airline industry and SAS are analyzed through the three dimensions created in the theoretical framework and strategic directions for SAS are given. Finally, the external factors are placed in one or more of the BSC's four perspectives showing where they will be dealt with, suggestions for suitable measurable key figures are also given. To give an overview of the analyzed information a table is provided.

5.1 Introduction

Based on the two general dimensions; the time perspective and relation to strategy and the specific dimension; main factors of interest, the airline industry and particularly SAS, were investigated. CI suggests many external factors however, only the ones of main importance to the airline industry are investigated. There are factors that have not been discussed. Exit barriers and social are not investigated, that does not mean that they are not important. However, not as much information has been found about them as the other factors. Much of the information gathered could fit under more than one factor and it is hard to distinguish exactly where it belongs. As a result of that, some information is dealt with more than once under different factors. This is also the reason why the factors; Political and Judicial are combined.

For CI to actually complement the BSC, each perspective that receives an increased value from the discussed factors is presented. This facilitates the managers to know where the CI information should be used within the BSC. It is important to keep in mind that some factors from the CI analysis affects more than one perspective, however we have chosen to focus on the ones that are mainly affected. We have also given suggestion of which one or ones of the BSC's four perspectives that the external factors should be dealt with within. Suggestions for how the different factors could be measured are given through key figures, although we want to highlight that these are only suggestions and other key figures could be more suitable. The key figures chosen are both previously recognized within the four perspectives of the BSC and new figures that are believed to better measures performance of the suggested strategies. The table provided below is a compilation of the above explained parts to give a better overview of what the analysis shows.

	Information gathered through CI	Relation to time perspective	Relation to existing strategy	What SAS can do	BSC's perspective that are affected/ key figures
Entry Barriers	High risks, access to airports, loyalty to existing airlines, marketing strategies	Present	Enhance air service through Star Alliance and other strategic cooperation	Strengthening its own position	Customer/ market shares
Suppliers	Airbus and Boeing, low control over manufacturer	Present	Forced investments	Challenge the two suppliers against each other through Star Alliance cooperation	Customer, Internal/ money saved on aircrafts through joint purchases
Customers	Increase in economy passengers, demand for high quality, service and security	Present, immediate future	Harmonization and development of products and service	Differentiate itself by focusing on increasing overall quality and service	Customers/ Number of customers, new customers, lost customers and customer satisfaction
Competitors	Low-cost airlines, airlines with beneficial geographic location, high speed trains	Present, immediate future	Retain its place as Northern Europe largest airline	Increased cooperation with airlines, cooperate with High Speed Trains	Internal and Learning and Growth/ Market shares, tickets sold through others alliances websites

	Information gathered through CI	Relation to time perspective	Relation to existing strategy	What SAS can do	BSC's perspective that are affected/ key figures
Demographic	Increase in business and leisure travelers in emerging and upcoming markets, (China and India, Eastern Europe etc), and growing megacities	Immediate future, near future	Focus on Northern Europe	Reevaluate former international routes, set up new routes to upcoming countries	Customers/ Old key figures, revenue from individual routes
Political/ Judicial	Cap and trade program, deregulations	Near future	The frame for all strategies.	Prepare budget for emission permits, inter-domestic routes in Germany	Internal and Learning and Growth/ Costs due to emission, amount of competitors
Economic	Global downturn, increase in oil, outsourcing non core operations, the value of the dollar	Present, immediate future	Focus on core operations, outsourcing the rest	Hedging of oil, Cost and quality pressure on aviations service sell of non-core operations, trade where there can be benefits of the low dollar	Financial/ Money saved on hedging agreements compared to market price, maximum costs for aviation service, profitability
Technological	Larger aircrafts, more efficient navigation systems	Present and near future	No investments on aircrafts at the moment	Make options on future large aircrafts	Learning and Growth/ higher efficiency through larger aircrafts and improved technology

	Information gathered through CI	Relation to time perspective	Relation to existing strategy	What SAS can do	BSC's perspective that are affected/ key figures
Infrastructural	Congestion at hub airports in Europe, upcoming secondary city airports, new airports in emerging countries	Present, immediate and near future	Focus on Northern Europe	Move possible routes from airport hubs to secondary city airports,	Internal/ Availability at airports, costs for landing and take-offs at different airports
Ecological	Possibility to reduce emission through increase in travel time, turning of engines before landing. Offsets for emission are only voluntarily.	Present, immediate and near future	Responsible and sustained traffic growth	Continued development of "green in-flights" and extend the travel time, facilitate voluntary offsets	Learning and Growth and Customers/ Number of "green in flights", travel time, number of customers volunteering

Figure 5.1 a table of changing factors

5.2 Factors of main interest

5.2.1 Entry barriers

The airline industry has a nature of high risk and high fixed costs. The congestions at airports and loyalties towards established airlines are making it hard for newcomers to enter the markets. However, the increase in deregulation lowers the entry barrier for newcomers. These are all factors of the present. SAS's current strategy states that SAS should work with enhancing air service through Star Alliance and other cooperation. SAS need to strengthen its own position on the market to diminish the impact newcomers can have. SAS can strengthen its own position on the market through strong relationships with customers and cooperators. On the other hand, deregulations can also enable SAS with opportunities to more easily entering new markets. When integrated in the BSC this factor

would mainly create value for the customer perspective, since it opens up for new markets and new customers to satisfy. A suitable key figure for this perspective could be market shares.

5.2.2 Suppliers

At the present there are only two manufacturers, Airbus and Boeing, who are operating as intermediaries for hundreds of suppliers. No information was found about upcoming manufacturers that can come to challenge Airbus and Boeing, thus this information is important at the present. The fact that there are only two manufacturers puts SAS in a position where they have no control over the components going into neither the construction of the aircraft nor the suppliers of the components. Naturally, on a market with few suppliers, the suppliers possess the stronger bargaining power.

During 2008 there will only be forced investments to replace the turbo propeller aircrafts Q400s. An extended cooperation between SAS and Star Alliance's members when purchasing aircrafts can come to benefit them through increased bargaining power leading to better deals with suppliers. The suppliers would be taken into account in the customer perspective of the BSC, since it is a very important stakeholder that has previously been neglected. Further, efficient cooperation with suppliers will in the end benefit customers. Therefore, managers should also identify how they can handle the cooperation with suppliers most efficiently internally, in the internal perspective to meet the need of its customers. Suggestion for a key figure is; money saved on aircrafts through joint purchase.

5.2.3 Customers

The airline industry is seeing an increase in economy passengers, more price sensitive business passengers and great demand for safety, being on time, baggage delivery and a seamless travel and scheduling. These demands are a fact at the present and are likely to continue to grow in the immediate future. SAS's strategy is harmonization and development of its products and service and to pay more attention to customers' needs. SAS needs to differentiate itself not to fall in between the two segments of low-cost airlines and those that focus on good quality and service. SAS can come to achieve most if they stay with the frequent business passengers and less price sensitive passengers. These are the passengers that are valuing good quality and service, thus SAS would be focusing on

those things that customers are not ready to give up for a low price. Since this is a factor that already exists as a perspective in the BSC, CI can complement the BSC by adding a more in depth analysis of customers. The customer perspective will have broader information about how to satisfy the customer. It also points out how the internal process should be improved to better distinguish which operations the company must be able to handle to meet the customers' needs. Appropriate key figures are; number of customers, new customers, lost customers and customers satisfaction.

5.2.4 Competitors

SAS has competitors in the low-cost category, those with beneficial geographical location in the Middle East and those from the train traffic. Low-cost competitors and the train traffic are affecting SAS at the present and the airlines from the Middle East might grow into a big competitor in the immediate future. If SAS continues to have its main focus on Northern Europe it might lose market shares to competitors that will be hard to regain.

An extended cooperation with its air partners Airbaltic and Estonian Air and Southern European airlines can be a possibility to gain market share in the upcoming markets without taking a too large risk on their own. In the immediate future there can be an opportunity for SAS to start cooperating with the train traffic. In Sweden, this could mean cooperation with SJ, for example. Instead of losing passengers completely to train carriers cooperation would enable passengers to travel mostly by air and then from the airport reach their end destination by train. This factor will probably have an impact on many perspectives within the BSC, however mainly the internal and the learning and growth perspective. Information about competitors will pressure the company to work harder to identify the needs of its customers and to satisfy those. It also shows the company the need for learning and growth, decreasing the risk of falling too far behind on competitors. The suggested strategies can be measured by market shares of the airline industry, market share of the total transport industry in Europe, as well as tickets sold through different alliances' websites.

5.2.5 Demographic

In the emerging markets, China and India, the population is getting improved living standards. In Europe, many Eastern Europeans are working in Scandinavia, Ireland and

United Kingdom, which has led to an increase of customers demanding flights taking them back and forth over weekends. At the same time it has become popular for wealthy Northern Europeans to have a summer house in the Southern Europe, which contributes to demands for flights. Changes are occurring in megacities as well, which are growing and attracting more business people as well as tourists. Both the improved living standards in the emerging and developing markets and megacities are factors that will increase the demand for air transportation.

The development of markets is an ongoing process that will always continue to change the demographic picture. The change of markets in the airline industry is important both in the immediate and near future. Due to these factors SAS can reevaluate former routes to India and Shanghai among others. It can also benefit SAS to extend its focus on Northern Europe with upcoming parts of Eastern Europe and Southern Europe. Demographic changes create changes in customer demand. CI can identify the changes and they can naturally be dealt with, within the customer perspective of the BSC. Old key figures of routes to India, Shanghai, Hongkong and Singapore could be appropriate key figures when evaluated in relation to today's traffic demand. The amount of new suggested routes and revenue on these routes could also be used as key figures.

5.2.6 Political/Judicial

The EU is requiring airlines to join a carbon cap and trade program no later than 2012. The airline industry has recently deregulated the skies between, the US and the EU and there is an ongoing discussion about deregulating the skies within domestic markets. The cap and trade program and further open skies agreement will come to affect the strategy in the near future. Political and judicial directions build the bases for all strategic decision.

SAS can prepare its budget for future emission trading permits, both with the fleet they have today and in comparison to how much emission that could be reduced/saved with a new fleet. SAS's can have a good potential at succeeding on the domestic market of Germany. With the ongoing discussion of the domestic open skies agreement an extended joint-venture with Lufthansa might enable a successful entry. This factor shows managers which political and judicial changes that are going to have an impact on the company. Since they build the base for the companies' strategy, the company should take them into

consideration in the internal perspective. To overcome obstacles that are a result of laws and regulations a company need to be highly innovative which creates a need for learning and growth and that is also the reason why factor should be dealt with, within the learning and growth perspective. The company can be provided with a competitive advantage if it can compensate for the changes better than competitors. Emission offset costs with new and old aircrafts and the profit from the German market would be appropriate key figures.

5.2.7 Economic

Due to happenings such as SARS epidemics, terror attacks and the Iraq war, the economy is in a global downturn. This has affected the dollar, which value has decreased in a rapid pace. The oil price however, is at an all time high level and due to a constant increase in demand, especially from Asia, it is anticipated to rise even higher. Lastly, great reorganizations and outsourcing at SAS are taking place to reduce costs. The global downturn is a fact in the present, as well as the low value of the dollar, the high oil price and the outsourcing trend. These factors will most likely keep affecting the industry in the next couple of years, in other words the immediate future.

For SAS, further hedging of oil could come to ease the consequences of a further increase in price. Another strong reason to make oil hedging agreements now is the low value of the dollar, which could benefit SAS. SAS need to decrease costs and therefore it can pressure SAS aviation service with cost decreasing goals and quality programs. If goals are not met these services can be outsourced to external providers. Economical strategic changes should be taken into consideration within the financial perspective. The financial perspective sums up the already made actions and shows how they contribute to the profitability. A key figure for the economical suggestions can be; money saved on hedging agreements compared to market price and for the aviation service, maximum costs or decreased costs. As SAS make arrangements with oil and aviation services its overall performance can be measured according to its profitability.

5.2.8 Technological

There is a trend towards larger aircrafts due to congestions at airports, eventual diminishing frequencies and the overall growth of the world fleet. Technological development has made new aircrafts more environmental friendly. SAS's fleet is one of the

oldest ones in traffic. A lot of the technological developments are concentrating on how means of transportation can become more environmental friendly. Better navigation systems can make the turnaround for flights more effective, decreasing the airspace time and also decrease congestions at airports. Thus, the airline industry is an industry where technological investments must be made to keep its position on the market.

The need for new aircrafts is a present obstacle for SAS. SAS has decided not to make any new investments except for those that are forced investments. However, SAS can come to be forced to consider renewing its fleet within the near future. SAS can make preparations and options on future aircrafts enabling them to buy new aircrafts if its financial picture improves. This factor definitely puts a pressure on the company to invest into the learning and growth perspective because employees constantly need to be in a learning mode to understand today's rapid technological environment. If the employees do not know how to use new and more efficient technology an important source for improved profitability is neglected. It is therefore crucial to educate the employees in coherence with the technological development. The BSC can measure these suggested strategies with the increased effectiveness that the new aircrafts and new technology provides as well as the reduced costs they contribute to when emissions permits eventually become mandatory.

5.2.9 Infrastructural

At the present there are congestions at many of the large hubs in Europe, and there will not be any expansion since they have already reached their limit. As a complement, secondary airports outside large cities are used. The takeoff and landing fees are often lower at these locations. New, very comprehensive airports are being built in emerging countries such as China and India. The infrastructure is constantly undergoing extensive change. Thus, the infrastructure will come to affect the choice for destinations in the immediate and near future. SAS can evaluate secondary city airports to compare costs for takeoffs and landing with hub airports. Information that is gathered here can assist the internal perspective of the BSC. Reorganizing routes and using secondary airports, can come to decrease costs for SAS and lower fare price for customers, in the end increasing customer satisfaction. Key figures can measure the differences in costs for takeoffs and landing at hubs and secondary airports.

5.2.10 Ecological

The airline industry is estimated to contribute with two percent of the worlds Co2 emissions, emissions that are increasing with 3 percent yearly. Many airlines offer customers to contribute through a voluntary offset fee. The implementation of “Green in-flights” decreases the emission and the noise level around airports. Decreasing the fuel consumption by extending the travel time and turning of engines before landing are two solutions for decreased fuel consumption. The environmental situation is certainly a factor that fits into all three time perspectives; it is very discussed at the present and will continue to be important in the immediate and near future. SAS’s strategy is in coherence with the environmental concern and they are constantly working with achieving responsible and sustained traffic growth.

SAS can continue with the development of “Green in-flights”, trying to include as many flights as possible. SAS could also decrease the oil consumption by following other airlines and extend the travel time. Finally, it should be easy to volunteer to pay offsets. Perhaps, wherever the order is made, online, through a travel agency or through telephone, people should always be asked if they want to volunteer. SAS can even consider making the offset mandatory. Ecological is a factor that influences both the customer perspective and the learning and growth perspective. The demand for more environmental friendly means of traveling is increasing and that is pressuring SAS to reevaluate its technology. Therefore, SAS both need to understand and use the existing technology efficiently and learn about the new technologies benefits and prepare for its implementation. The actions taken by SAS can be measured through the key figures, number of green in-flights, reduced emission through extended travel time and amount of passengers volunteering to the offset.

6 Conclusions

In the sixth chapter a conclusion is presented. The conclusion consists of the findings of this thesis. This chapter also presents a discussion, managerial implications and future research.

6.1 Conclusion

The BSC is a widely used management tool that is turning the vision and strategy into operational goals. However, after analyzing the criticism received by the BSC, it seems as if its internal focus, rigidity, static-ism and mechanical mindset limits the company's ability to create a strategy that takes important external factors into account. As we see it, the BSC's limitations can create a risk for strategic inertia. Strategic inertia is often associated with long held strategic mental maps of a company and the competitive market place. These mental maps are hindering managers to acknowledge important external factors.

To overcome the problem with strategic inertia, in relation to the BSC, we thought that a management tool with external factors would be suitable. CI accounts for several external factors and could be used as a complementing tool. When the BSC is complemented with the external factors from the CI it appears to help building a flexible and successful strategic tool. Based on the theoretical framework, three dimensions were created; the time perspective, relation to existing strategy and factors of main interest. The first two dimensions, the time perspective and relations to strategy, are general dimensions and should be applied to the last dimension, factors of main interest. To be able to analyze the dimensions a case study of the airline industry with a focus on SAS was conducted.

The purpose of this thesis is to investigate if the CI can complement the BSC, making the BSC more applicable in today's business environment. This is illustrated by applying the complementary dimensions to the airline industry and SAS.

The empirical framework is built on the airline industry and SAS. The airline industry has undergone major changes in the last couple of years such as; deregulations, changes in customers' demands, heightened competition and an increased oil price. From studying SAS

and its current situation, there is a chance that it has misjudged the development of the market, due to its lack of updated information on external factors. SAS has been called a pioneer in the past but lately it has become a widely discussed topic due to its struggling situation.

The dimensions from the theoretical framework provide a broader information base about SAS. Several external factors are of main interest and appear to have a significant impact on the company and should not be neglected. We believe that the analysis of SAS makes a good example of how the three dimensions could have helped SAS to avoid strategic mistakes and how it can lead SAS to make more rational strategic decisions in the future.

The external factors, that appeared to be the most important and current was applied to the airline industry and SAS. These include, in our opinion, the most important external factors for the airline industry at the moment and they are; entry barriers, suppliers, customers, competitors, demographic, political/judicial, economic, technological, infrastructural and ecological. These were analyzed through the time perspective and relation to existing strategy. Based on the gathered information strategies for SAS were suggestions. The external factors were then placed in one or more of the BSC's four perspective to show where it should be dealt with. We concluded that strategic suggestions that could benefit SAS are;

- Strengthening its position by differentiating itself through high quality service
- Increase cooperation with strategic alliances, which will strengthening its position on the market and increase the bargain power against suppliers
- Reevaluate former international routes that are upcoming passenger markets. As well as evaluate destination to secondary city airports to reduce costs
- Prepare for a possible domestic open skies agreement, by increasing the cooperation with the existing partner, Lufthansa
- Increase the amount of oil hedging agreements, due to the assumed increase in price
- Increasing the costs and quality goals for the aviation service, if goals are not met external providers should be considered. Outsourcing will enable SAS to focus on core activities

- Look into the ability for investments in new larger and less fuel consuming aircrafts. With larger aircrafts less frequent flights will be needed in turn the fuel consumption will decrease
- Continue the development of “Green in-flights” and the overall concern about the environment, meeting the increased customer demands for environmental friendly means of travelling

In the final part of the analysis we give suggestions about which one or ones of the BSC’s perspectives that the external factors could be integrated to. We also give suggestions for key figures that could be used for measurement of their impact on the strategy.

We believe that the purpose of this thesis has been answered. CI has an ability to complement the BSC by making it more appropriate in today’s business environment, and to some extent reducing the negative aspects that have created the base for the criticism it has received. The internal focus of the BSC can partly be solved. The criticism of customer being the only external factor is no longer the case. Additional stakeholders are considered such as suppliers and alliance partners, as well as several macro environmental external factors. By adding more external factors the risk of neglecting important factors, because they do not fall into one of the categories is reduced, making the BSC less rigid. The BSC also tends to become static because its focus on set goals. The CI is an ongoing process that is constantly analyzing the environment in different time perspectives leaving little room for static-ism. Finally, since CI acknowledges many external factors, it is aware of the fact that a change in one can come to affect several external factors. Therefore, it would be very dangerous for CI to have a mechanical mindset like the one in the BSC, where one cause leads to one specific effect.

6.2 Discussion

We acknowledge that the dimensions found through our theoretical analysis can be disputable, the CI work is very complex and three dimensions are a simplification of the whole CI process. However, the three dimensions are chosen because they are frequently occurring in CI and are, according to us, the most important characteristics of CI and believed to be applicable on most industries.

CI was selected as a complementing tool to the BSC because of its extensive investigation of a company's surrounding environment. We consider CI to be able to improve the value and the quality of information that goes into the BSC. With the help from CI the BSC can become more aware of which opportunities and threats that exists in the surrounding environment. When CI is used as a complementing tool the creation of a strategy should be seen in two steps. First, CI will be used to analyze and identifying important factors that will have an impact on the company, the factors that are considered are analyzed in depth. The information revealed is then integrated into the BSC's four perspectives. Some factors from the CI can influence one or several of the four perspectives. For example, information about competitors can both influence the company's internal process forcing them to be more efficient, but also the learning and growth perspective since the company when learning and growing decreases the risk of falling behind competitors.

When analyzing the main factors of interest it is important to consider the interrelated relationship between them. Many external occurrences can fall under the same factor, for example the oil price can fall under economic, environmental and under technological. To only investigate them in isolation may not yield the same result.

We are aware of the fact that the criticism part towards CI is very thin, although much effort has been put into finding relevant criticism to the theory without success. Perhaps the level of criticism towards CI will grow in coherence with the amount of companies that implement it.

Further, we are also aware of the fact that the strategic suggestions are not always completely rational due to the way in which they were developed. The work of finding valuable information leading to identification of dimensions and development of strategic suggestions was accomplished within the time limit of the Master thesis. This makes it impossible to include all influencing aspects which could result in other possible strategic suggestions.

Finally, the conclusion might seem rather obvious; information about more external factors results in better strategic decisions and less risk for strategic inertia. However, the BSC is still one of the most widely used tools so there might be a need for case studies like these where the most obvious benefits are emphasized.

6.3 Managerial implications

Our thesis demonstrates how the BSC can be complemented with CI. CI brings valuable information to the BSC. Especially with important external factors that can have a significant impact on the strategic decision process. This study can be useful for managers of airlines as of which information they need to gather. Managers at SAS are probably those that will benefit the most from this work, since this is the company that the strategic suggestions were developed for. Managers can avoid strategic inertia by taking advantage of information revealed from CI. They can also better forecast opportunities and threats that are found from investigating the three dimensions in a company perspective.

6.4 Future research

In this thesis CI was used as a tool for complementing the BSC, making it more useful and minimizes the risk for strategic inertia. It seems as if CI could be used as a complement improving the applicability of the BSC. However, the BSC, strategic inertia and CI are areas that can be expanded. Possible future research areas are:

- CI is a new and developing theory used in today's international business environment. It would be interesting to see how widely used it is, and also analyze if it is a trend that will fade away or if it has become a permanent management tool.
- It would also be interesting to investigation how a company that uses the BSC, would practically implement the CI in its every day work and how it would be received by employees.
- The criticism of the BSC could be further investigated by doing interviews with managers at companies that are using the system, providing more reliability into the criticism.
- Since this thesis concentrates on the airline industry it would be interesting to do several case studies, possibly developing a CI framework for specific industries.

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