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Intellectual Capital Statement –The German Process Approach

Master's Thesis

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Strategic Management
Spring 2006

Abstract

- Title:* Intellectual Capital Statement – The German Process Approach
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- Type of Paper:* Master's thesis in Strategic Management at School of Economics and Management, Lund University. Presented June 2006.
- Problems:* Today's knowledge based economy brings new challenges. In order to manage the intellectual capital in a company and to reduce the knowledge asymmetry between the company and its external stakeholders a new approach is necessary.
- Purpose:* The purpose of this research is to examine how two German companies, reinisch AG and SØR Rusche GmbH implemented an intellectual capital statement process and to explore the potential benefits to be reaped from it.
- Method:* The foundation for this thesis is a number of interviews with key persons in the case companies. An exploratory approach has been used in order to provide a framework for the conducted study.
- Conclusion:* The Intellectual Capital Statement facilitates the mapping of interdependent and simultaneously impacting intellectual capital factors in a unique way. The process-orientation of the German approach differentiates it from its predecessors and gives an advantage over alternative procedures. By combining these aspects with the possibility to communicate the company's efforts and progress in the field of intellectual capital, the German Intellectual Capital Statement (Wissensbilanz) provides an effective management tool.
- Keywords:* Intellectual Capital, Wissensbilanz, Intellectual Capital Statement, Intellectual Capital Reporting, Process-based

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Preface

Wenn jemand eine Reise tut, so kann er was erzählen – He who makes a journey has got something to tell. (Claudius, M., German national poet)

Keeping this in mind, we set out to travel and gather knowledge, find out what we did not know that we did not know, spurred on by our tutor Leif Edvinsson – for this we thank him.

We would also like to thank Anja Flicker at reinisch AG, Christoffer Siebert at SØR Rusche GmbH, Dr. Kay Alwert at the Fraunhofer Institute in Berlin and Mart Kivikas at Wissenskapital E&K GmbH for taking their time for personal interviews and for showing the creative environments they are working in. Furthermore, we would like to thank Dr. Manfred Bornemann at IAC in Graz, Dr. Inge Wulf at the University of Oldenburg and Andreas Nilsen at the Swedish Chamber of Commerce in Düsseldorf for their valuable contribution and support.

Lund, Sweden, June 2006,

Carl Källstrand and Johan Sandh

1. Introduction

This chapter gives a brief overview of the background of the subject and defines some of the key concepts that will be discussed in the thesis.

1.1 Background / Context

“If there is one distinguishing feature of the new economy that has developed as a result of powerful forces such as global competition, it is the ascendancy of intellectual capital.” (Bontis, 1998)

In 1494 the Venetian monk Luca Pacioli published the first accounting textbook. It showed how to use the technique of double-entry book-keeping, which developed into being one of the most fundamental cornerstones of a modern company. Today, Pacioli’s scheme gives an insufficient picture of the situation in the company. The reason is that “the components of cost in a product today are largely R&D, intellectual assets, and services. The old accounting system, which tells us the cost of material and labor, isn't applicable.” (Stewart, 1994) The search for a more accurate way of describing a company’s total assets and it’s potential has led to the concept of intellectual capital.

There is no clear point of time when the term intellectual capital turned up in the economic literature and research. For example, Tom Stewart somewhat ambiguously states that the term was first used in a correspondence between John Kenneth Gailbraith and the economist Michael Kalecki in 1969 (Sveiby, 1998, updated 2001), just to revise this by later stating that the term “...dates back at least to 1958...” (Stewart, 2001).

In the 1980’s, among others, the Commerce and Manager Professor Hiroyuki Itami studied the effect of invisible assets on the management of Japanese companies. The resulting work “Mobilizing Invisible Assets” was published in 1980 (Sullivan, 2000).

Another key figure in the development of the Intellectual Capital research was Karl-Erik Sveiby, founder of the “Swedish Movement” of knowledge management. In his first book

“The Know-How Company” from 1986 he described how knowledge intensive companies were managed given the lack of a traditional production (Sullivan, 2000).

In 1991 the concept of intellectual capital gained momentum when an article by Tom Stewart was published in the fortune magazine describing defining IC as “the sum of everything everybody in your company knows that give you a competitive edge in the market place” (Stewart, 1991).

The same year the Swedish insurance company Skandia founded an executive post for intellectual capital (the worlds first) and Leif Edvinsson who was named vice president developed the Skandia Navigator which served as a measuring tool for the company’s IC. This work subsequently led to the development of the IC value scheme which today is known as the UNIC model (Edvinsson, 2002).

The concept of IC has developed during the last 25 years and has found its way from the academic into the commercial world. The following definition can today be found on the webpage of Intellectual Capital Sweden, a company specialising in intellectual capital ratings: “all the value creating elements in an organisation that are not captured in traditional financial statements, but are of critical importance to a company's long-term profitability” (www.intellectualcapital.se, 2006-05-28).

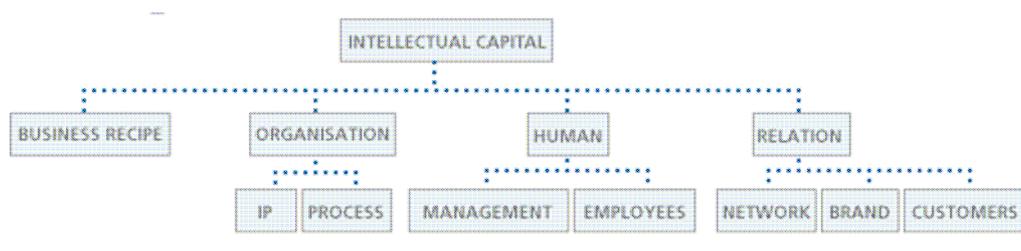


fig.1 The components of intellectual capital as displayed on www.intellectualcapital.se

Intellectual capital consists -according to this definition- of three parts: *Organisational capital* is made up of all internal processes and intellectual property. The *human capital* consists of the knowledge and explicit and tacit skills of the company’s management and employees. *Relational capital* is formed by the company’s brand and all the relations that the company has built with customers, partners and suppliers during its existence.

Among the different methods for evaluating intellectual capital the German process approach, “Wissensbilanz” has gained special attention. The name Wissensbilanz was first used by Professor Günter Koch at the research establishment Seibersdorf in Austria (www.wissensbilanz.de, 2006-06-25). This method that was developed in Seibersdorf and that has been referred to as “Forschungswissensbilanz” was in connection with the university reform in Austria made compulsory by law for all Universities in Austria from 2006 (www.wissensbilanz.de, 2006-06-25).

As this development was underway, the European Union decided to set new goals for the European economy. In the Lisbon summit in 2000 the European Union set a strategic goal for the EU “to become the most competitive and dynamic knowledge-based economy in the world” (www.europarl.eu.int/summits/lis1_eng.htm, 2006-05-29). This goal was set without any method of measuring the outcome and thereby the development in this direction is unguided (Alwert, 2005).

In February 2003 The Danish Ministry of Science, Technology and Innovation published "Intellectual Capital Statements - The New Guideline", a description of how to prepare intellectual capital statements and how to communicate them. This publication was complemented with "Analysing Intellectual Capital Statements" an analysis model which acts as a starting point and a way of structuring the information in an ICS for the professional reader. The publications are based on experiences from companies and organisations that have tested the first guideline that was published in November 2000. The team behind the research was led by Jan Mouritsen, professor at the Copenhagen Business School. In Danish, the approach has also been called Knowledge Accounting (www.vtu.dk/icaccounts, 2006-06-11).

In 2004, as a response to the changing and increasingly knowledge-focussed economy, and an increased awareness of the idle knowledge in small and medium enterprises, an initiative was taken by Dr. Rolf Hochreiter at the German Federal Ministry of Economics and Technology supported by a group of specialists in intellectual capital. This led to the forming of Arbeitskreis Wissensbilanz (AK Wissensbilanz), the project group that initiated the pilot project “Wissensbilanz - Made in Germany “. This is considered to be the starting point for the German process based ICS.

The first phase of the project included 14 German companies, which led by AK Wissensbilanz's expert team with members from Sweden, Germany and Austria developed a process based ICS. AK Wissensbilanz is structured around a core team of experienced consultants that work with the development of the method as well as with the implementation in the companies. An expert group of intellectual capital experts gives support to the scientific part of the development and a network of moderators brings all ICS moderators that have been schooled by AK Wissensbilanz together. The clear mission of AK Wissensbilanz is to continually develop the intellectual capital statement and spread its practical use. In 2004, based on the experiences of the first phase, a guideline for the development of an intellectual capital statement was developed which should enable companies to develop an intellectual capital statement on their own. (www.akwissensbilanz.org)

In 2005 the second phase of the project started with the goal to go from the pilot companies in the first phase to a country wide movement. In order to do so, a network of users and consultants was needed to allow trainers to qualify as intellectual capital statement moderators and managers to quickly and efficiently implement an ICS in their companies. Seminars, information activities and the networking between experienced and potential users are the means by which the goal is to be reached (www.akwissensbilanz.org).

In phase three which is planned to end spring 2006, AK Wissensbilanz offers 15 small and medium enterprises to develop an ICS with professional guidance. The goal is to consolidate the experiences from phase one and two and to apply the ICS on industries and stages of the company's lifecycle where it has not yet been tried. The financial market, through banks, investment companies and analysts will be involved in a more direct way. A further goal of this phase is to test if the ICS can assist in the following situations: supporting the startup of a company in the technology business, making the generation shift in an owner managed company easier and managing a financial crisis (www.akwissensbilanz.org).

A further measure in order to ease and spread the use of the ICS is the development of software to aid the process of implementing an ICS in a company. The software which is tested with the pilot companies is being developed by Incowia GmbH together with AK Wissensbilanz and will be available free of charge from AK Wissensbilanz (www.akwissensbilanz.org).

For a list of the participating companies and of the members of AK Wissensbilanz, please refer to appendix 1 and 2.

1.2 Purpose

The purpose of this research is to examine how two German companies, reinisch AG and SØR Rusche GmbH implemented an intellectual capital statement and to explore the potential benefits to be reaped from it.

In addition to, and with the help from, fulfilling the above purpose, our aim is to make a contribution in an area where the amount of literature is rather limited and, above all, country specific. The latter in the sense that what has been done up to now to a very large extent is restricted to the native language and intended foremost for the country's own interests within business and the academic sphere. By broadening the reader's as well as our own view and avoiding recycling yesterday's news, this is a fully feasible goal.

1.3 Target Group

This thesis is aimed at academics as well as professionals interested in the field of intellectual capital and knowledge management. Above all our wish is to provide an addition to the so far relatively small number of English texts discussing the German process approach to the intellectual capital statement. Our aim is to provide the reader with information that can increase knowledge and understanding of the subject, be it in a professional setting when considering to implement an ICS, or in a learning situation at a Swedish or foreign university.

Furthermore, the interest in the German approach has gained the attention of an increasing number of organisations, for example Ministry of Economics, Japan (METI) and OECD, focussing on developing the current research on intellectual assets. Hence, it is our hope and firm belief that this thesis will make a contribution to this development.

1.4 Disposition

The thesis starts with a short discussion of the underlying phenomena that has brought the need for an intellectual capital statement. In the thereafter following chapter the methodological foundation and the empirical, theoretical and analytical methods that have been used are described. In chapter three, some of the most recent publications on the subject intellectual capital as well as the methodology and construction of the German intellectual capital statement are described and discussed. Chapter four describes the case companies and gives an introduction to the respondents. Backed up by the personal interviews and company visits, all aspects of ICS and the implementation process in particular in the two case companies are discussed in chapter five. The empirical findings are then analysed and discussed in the last chapter.

2. Method

This chapter presents the methodological foundation of this thesis and the theoretical, empirical and analytical line of action.

2.1 Selection of Method

For the empirical part of this thesis we started by identifying the most suitable organisations to study, choosing from the 14 that were involved in the development of the German approach and the key persons in these organisations. In order to get a deeper understanding of the subject, a qualitative approach was chosen (Holme, Solvang, 2001). To obtain reliable and in-depth information we opted for personal interviews.

The basis for our thesis are the interviews with Anja Flicker, Christoffer Siebert and Kay Alwert that were carried out in that order. The respondents are all very respected and skilled in their respective field. Background and present position of the respondents is presented below:

Anja Flicker

Specialist in knowledge management at reinisch AG. She was appointed "Wissensmanagerin des Jahres", Knowledge Manager of the Year, in 2002 and recruited by the reinisch AG management in 2004 in order to play a great part in creating reinisch's first Intellectual Capital Statement. Together with Stephan Riediger, she is today responsible for the ICS and knowledge management work within reinisch.

Christoffer Siebert

Member of the management team at SØR Rusche GmbH in Oelde. Played a key part in the first phases of the ICS implementation. Due to daily contacts with all stakeholders, internal as well as external, Siebert is also considered to be the person within SØR Rusche GmbH who, alongside Dr. Thomas Rusche himself, has got the most solid knowledge and experience of all aspects of the ICS.

Kay Alwert

Kay Alwert is a member of the research team at the Competence Center Wissensmanagement at the Fraunhofer-Institute for Production Systems and Design Technology IPK in Berlin. He obtained his degree in civil engineering at the university of Karlsruhe in 1997. He thereafter worked as project manager and since 2000 also as a knowledge management consultant. In 2001 Kay Alwert joined the Fraunhofer IPK as a research associate responsible for valuation of intellectual capital. He worked with the implementation of intellectual capital reports in 14 companies as a member of the core team of the project group Arbeitskreis Wissensbilanz where he had an important role in developing the Guideleines "ICS – Made in Germany". Kay Alwert's PhD dissertation, "Wissensbilanzen für Mittelständische Organisationen", was published in 2006.

To solely focus on the German approach for reporting intellectual capital can be criticised for lacking comparison with other methods, but our intention was to picture the implementation of an ICS in the two case companies and the effects their method and the process approach has brought. When using an inductive method and when empirical material is combined with theory, it is important to be careful with generalising the results since the empirical observations can be subjective.

2.2 Selection of Theory

The theoretical side of this thesis forms a base for the analysis of the cases. It focuses on describing the reasons for reporting intellectual capital, the problems connected with it and to a limited extent alternatives to the German approach for intellectual capital reporting. The theoretical part of the thesis gives a broaden picture of the subject but could still be criticised for beeing to narrow.

2.3 Data Collection

The literature was found by using the article database ELIN at Lund University, the Emerald Insight database and the Proquest database. Another tool that was used in the information search was the Google Scholar homepage, a search engine specialising on articles. The references of the articles were used to find additional material. In addition, material have been provided directly from the authors as well as through contacts on different levels within AK Wissensbilanz.

The first two interviews took place at reinisch headquarters in Karlsruhe and at SØR Rusche's headquarters in Oelde. The interview with Kay Alwert was conducted over telephone. To assure that no important information was lost, the interviews were -with the permission of the interviewees- recorded and then transcribed to allow for an easier processing of the answers. Extra care has been taken when translating the answers in the interviews from German to English to avoid losing fine nuances.

2.4 Criticism of the Sources

Qualitative research is sensitive to influences from the persons involved in the gathering and analysis of material. It is therefore important to be critical to the research and to the results. In order to reduce the risk of unwanted influences on the material we have tried to question our procedures and analysis as much as possible. We are aware that our personal standpoints and those of the respondents may have had a heavy influence on the findings, but our intention was never to produce a thesis that can form the base for a 100% general conclusion.

When criticising the sources, it should be mentioned that including more respondents, i.e. employees on different levels, could have given a broader picture of the subject. However, increasing the number of respondents by including employees on different levels would, if it would affect at all, most likely only provide a slightly different nuance in a small area of the subject, which makes such criticism negligible.

Concerning the quality of our sources, the respondents are considered to be the most suitable for presenting the processes in the companies (see respondent descriptions above). The written sources are all generally accepted which limits the risk of inaccuracies.

2.5 Delimitations

By choosing to focus on two companies only, the risk of being too limited and lacking representativeness is obvious. Even though SØR Rusche GmbH and reinisch AG to a large extent are to be considered as representative for the 14 companies and organisations participating in the project “Intellectual Capital Statement – Made in Germany”, there is one distinction where a mentioning is called for. When it comes to communicating the results from the ICS work externally, SØR and reinisch both are at the forefront. This differentiates them slightly from the other 12 companies. However, instead of seeing this as a limitation, it can be considered as an absolute precondition in order to gather the amount of information needed for the thesis. An extensively open way of communicating the ICS has not only met external stakeholder’s demands, it has also contributed massively to the creation of this thesis. Since the case companies have focused on somewhat different things, reinisch on the complexity analysis and SØR on the assessment procedure, yet another subtle distinction between the two contributes to the representativeness.

In order to picture the the most up-to-date stand in the development, the latest published intellectual capital statements from both companies have been used as sources when gathering data. In the case of SØR the latter is quite obvious since they have only published one ICS up to now. Reinisch on the other hand have published two statements, but in order to keep the base for comparison reasonably fair, the latest version has been used. Still, the older one has not been totally neglected. Quite the opposite, the appliance when understanding the ICS as an improvement-measuring-tool has been invaluable.

Even though a comparative study with companies and organisations that have implemented ICS based on other premises or with differing starting points could have been interesting, this has been excluded. The same exclusion has been made regarding other management tools.

One aspect of the ICS which is being rather superficially addressed in the thesis is the statutory and transactional issue. The motive for not paying any considerable attention to this aspect is that it was of rather minor importance for the case companies. Nevertheless, an interesting starting point could have been e.g. Basel II, a round of deliberations developed by the Basel Committee on Banking Supervision (BCBS) in Basel, Switzerland. It is set to create a new global standard for how banks and certain other financial institutions measure risk and allocate capital. The aim is to produce uniformity in the way banks and banking regulators approach risk management across national borders (www.twobirds.com 18-06-06, www.basel-ii-risk.com, 18-06-06). However, using the International Accounting Standards (IAS) or Basel II legislations as starting point would have moved focus from the uniqueness of the process based German approach and would hence have required a different empirical foundation.

3. IC Theory

The theory chapter starts with a description of the components of an ICS followed by a discussion of the ICS and its potential to play an important role in the new economy.

3.1 Overview: Intellectual Capital Statement - What is it?

“Intellectual capital has been considered by many, defined by some, understood by a select few, and formally valued by practically no one.” (Stewart, 1997; Sveiby 1997)

This statement summarises the state in the field of intellectual capital fairly well, but the last point is no longer valid. With its roots in the Scandinavian intellectual capital statement, the German intellectual capital statement or “Wissensbilanz”, developed by the project group AK Wissensbilanz provides a powerful tool for valuation, development and reporting of intellectual capital, as well as increased value creation through its strong process orientation.

3.2 The need for Intellectual Capital Statements

There are many reasons for implementing an intellectual capital statement. Andriessen (2004) divides the most important reasons into three main categories:

- Improving internal management
- Improving external communication
- Statutory and transactional motives.

Improving the internal management includes several problems to be addressed. The old adage “what gets measured gets done” is one reason for structuring and measuring the development of intellectual capital. This statement has however been criticised by for example Stewart (2001) who refers to it as “one of the oldest clichés in management”. According to his view,

“companies have always managed things –people, morale, strategy, etc. that are essentially unmeasured” (Stewart, 2001).

Another and more valid reason could be to improve the management of intangible resources (Andriessen 2004). Two aspects of this are compensation plans for managers which could be based on non-financial measures and the lacking awareness of the importance of intangible resources (Marr *et al*, 2003).

Kaplan and Norton aim at giving an insight into the value drivers that influence the performance of the company (Kaplan and Norton, 1992). These value drivers are often intangible and form the basis for the creation of resource based strategies (Andriessen, 2004).

Monitoring effects from management actions and transforming strategy into action plays an important role for the IC community (Compare fig. 4). Marr describes it as ”strategy assessment and execution” (Marr *et al*, 2003).

When trying to improve external reporting several aspects are adressed: Closing the value gap between book and market value, improving information to stakeholders about the real value and future performance of the company, reducing information assymetry, increasing the ability to raise capital and enhancing the company’s reputation and thereby affecting stock price (Andriessen 2004).

The intellectual capital statement is directed towards all stakeholders who are considered important to the company or organisation. Normally, a demarcation is made between internal and external target groups. Internal target groups are managers, the board and employees, wheras creditors, potential employees, customers and partners are examples of external readers of the ICS. These groups have different focuses and in order to optimise the use of the ICS, the information and the presentation of it may have to be customised to serve the needs of the readers (Wissensbilanz -Made in Germany, Guideline, Bundesministerium für Wirtschaft und Arbeit, Dokumentation Nr. 536).

3.3 The Gap between Market and Book Value

One of the reasons for implementing an intellectual capital statement is to be able to describe the difference between the book value and the market value of a company. The relation between a company's market value and its replacement value (the cost of replacing all its assets) is often referred to as Tobin's q . It is a concept that was developed by the Nobel-prize winning economist James Tobin. In the long run the Tobin's q ratio will tend to be 1.0, meaning that the book value and the market value is equal (Bontis, 1998). For companies that to a large extent are based on intellectual capital, like software companies, the ratio tends to be around 7.0, whereas companies in industries that are characterised by large capital assets, for example in the steel industry, have a Tobin's q of 1.0 (Bontis, 1998).

Sveiby exemplifies a high Tobin's q with the case of Microsoft: "Shares in Microsoft, the world's largest computer software firm, changed hands at an average price of \$70 during fiscal 1995 at a time when their so-called book value was just \$7. In other words, for every \$1 of recorded value the market saw \$9 in additional value for which there was no corresponding record in Microsoft's balance sheet" (Sveiby, 1997).

As the economy is moving away from traditional manufacturing, and as services, consulting and high-technology are playing an increasingly important role, analysing historical performance for forecasting becomes increasingly difficult. This development brings with it that knowledge about the intellectual assets is crucial to assess a company's future performance. In today's financial statements this information is -if present at all- very scarce.

Information about for example relations with partners and customers, intellectual property and the potential of management is published but on an irregular basis and in a dispersed way. This makes a thorough analysis very difficult to perform. Reliable reporting tools could be very useful to reduce the information asymmetry between companies and the capital market (Alwert, 2005).

3.4 Legal Requirements & Accounting Standards

Another starting point for the ICS is to fulfill legal requirements. The contribution from intangibles can hardly be measured by traditional accounting based methods. The international accounting standards (i.e. IAS 38) already recommend the inclusion of an explicit intellectual capital on the balance sheet (Edvinsson, 2004). The recognition of internally generated intangibles is only obliged provided that six criterias are being met. Sometimes development costs are considered as an asset in the balance sheet, mainly in the automobile industry (Wulf, 2006). Generally, internally generated brands, mastheads, publishing titles, customer lists and items similar in substance shall not be recognised as intangible assets (IAS 38.63). However, even if the accounting standards and rules are refined, they are “not yet able to represent the full potential of the networked intangible business model of the 21st century based on IC” (Edvinsson, 2004).

3.5 Recruiting

One important consequence that the new economy brings with it, is that finding and keeping employees with cutting edge knowledge becomes crucial for the success of a business. In the struggle between companies for the best workers and managers, financial rewards must be competitive, but equally important is the know-how in the company, career opportunities, company culture and working climate. Companies that in a credible way demonstrate strength in these areas are likely to have an advantage in the search for and retention of skilled workers (Alwert, 2005). The problem of finding the best employees has been described by Bruce Talgan. In his book “Winning the war for talent” he states that the demand for talented individuals will be greater than the supply for the foreseeable future. Not only the salary is important when recruiting and retaining the best skilled workers. The possibility to work with interesting tasks and develop on a personal level is important (Edvinsson, 2002).

3.6 Cooperation with Partners –Networking

Finding suitable suppliers or strategic partners for out- or insourcing activities is becoming increasingly important and this requires a clear communication especially as the globalized economy means that these partners often are located abroad. However, it is important to find a match between the cooperating companies when it comes to culture, goals and strategies and clear information on these subjects at an early stage in the search, since this will reduce the likelihood of disappointing negotiations or agreements (Alwert, 2005)

3.7 Finding Markets and Customers

As the number of companies offering similar products or services on the market is increasing, the price is no longer the single determining factor for the customer's decision making. Factors like brand image, quality, service and customer satisfaction are just as important. The information that is reaching customers via the traditional marketing channels does not give enough trustworthy information about future potential of the company or its products. This is especially true when the relation to the customer is of a long term character. Facts and numbers as they are presented in the intellectual capital statement can give powerful support to the statements in the traditional marketing (Alwert, 2006).

3.8 Organisational Management

One of the most important reasons for reporting intellectual capital is to make it available for the internal process management. As mentioned earlier, the increasing importance of know-how in a company highlights the importance of focussed management activities in this area. Alwert (2005) states that organisations tend to neglect systematic management and development of intangible key success factors. The result is sub-optimal performance as these factors are managed with gut-feeling or even left uncontrolled. In smaller organisations that are managed by the owner this works, but as the organisation grow or is being left for managers to control, a tool that can systematically manage these factors is crucial (Alwert, 2005).

3.9 The Conflict between Reporting and Process Management

As stated above there are many different groups of external stakeholders that have an interest in the ICS. The published ICS is mainly directed at potential customers, employees and partners, as well as investors, owners and banks. A potential problem lies in the fact that every target group is looking for a different kind of information. A document with a stringent form that can be added to the financial report can not be accomplished with today's methods.

The graphical layout options result in a plethora of possible ICS:s, which leaves room for different interpretations and may also lead to an embellished presentation of the facts. Due to this and to the fact that the ICS has been used as a marketing instrument it has suffered from the accusation of being just another marketing tool (Alwert, 2005). The main focus of the ICS is to give support for managerial decision making regarding intellectual capital. Since these factors are often difficult to manage it is of great importance to describe the state of the company's intellectual capital in a precise manner.

It is because of the purpose of providing information for external and internal stakeholders that a conflict can arise. The best solution to this problem is to include the management perspective in the external reporting to show the stakeholders in what direction the company is being navigated. This also makes it more difficult to use valuation strategies to make a certain factor look better (Alwert 2005).

Baruch Lev states that intangible assets, with a few exceptions, have always been expensed in financial reports (Lev, 2001). In this context it becomes increasingly interesting to examine the possibilities with the graphical layout options of the ICS rather than the restraints mentioned above. The potentiality of the ICS to become a part of the solution to what Lev refers to as the "systematic undervaluation of intangibles" (Lev, 2001) is one of the more interesting aspects when discussing ICS in a reporting context.

3.10 A Brief Introduction to the Implementation Process

This chapter gives an introduction to the process based method as it is described by AK Wissensbilanz and to the analytical and graphical tools that are used when discussing and analysing the factors of intellectual capital. For a complete description please refer to "Intellectual capital statement -Made in Germany, Guideline", the document on which this chapter is based.

There are a number of factors that, if already existing in the company makes the implementation of an ICS easier and more cost efficient. The following questions should be asked before the implementation of an ICS in a company is attempted:

- Are many of our employees engaged in intellectually challenging tasks?
- Have we already dealt with controlling and management systems (such as Quality Management, process optimisation, BSC,etc.)?
- Does our management want and support intellectual capital statements?
- Is our organisation willing to devote time and resources to intellectual capital statements?
- Do the employees regard intellectual capital statements as important projects?
- Can we involve employees from various areas of our enterprise in intellectual capital statements?
- Are we willing to discuss our strenghts and weaknesses openly and in a constructive manner?
- Is management open to proposals and change?
- Do we recognise "soft" factors as important success factors?
- Are future topics already touched upon and broadly discussed?
- Do we have a documented and communicated business strategy?

The larger the amount of yes-answers on the above questions is, the better are the prerequisites for an implementation.

The process of constructing an ICS is divided into six steps and four milestones (see fig. 3). The first milestone has the internal management as primary target and contains three steps:

describing the initial situation, assessing, and evaluating intellectual capital. This is the ICS in its simplest form. Milestone II gives support to the self evaluation by finding and assessing indicators. These indicators will form the base for the external communication. With Milestone III a document directed at a specific target group is at hand. The information is presented in a structured and attractive way. Milestone IV provides a complete ICS which is also suitable as a management tool.

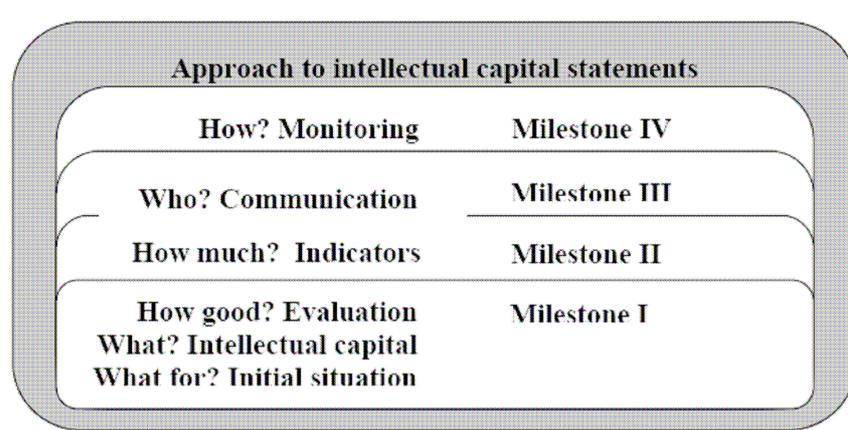


fig 3. Steps and milestones in the intellectual capital statement process (Intellectual capital statement -Made in Germany, Guideline).

Step one: The first step in the ISC process includes valuing and documenting the current situation of the company together with its strategic orientation. Risks and possibilities are discussed in a workshop consisting of the whole ISC team and are related to the organisations vision and strategy. A knowledge strategy is developed starting in the companys existing business strategy (see fig. 4).

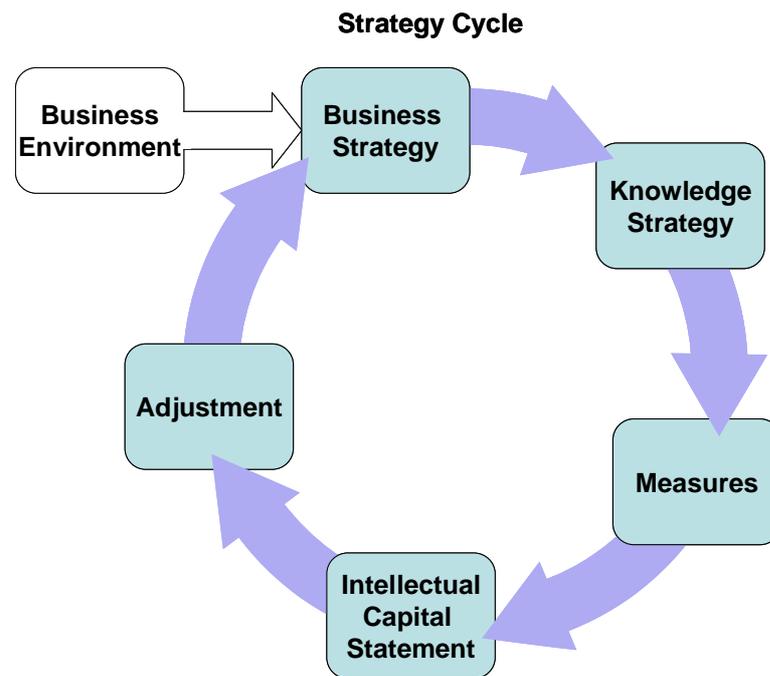


fig. 4 The strategy cycle (Intellectual capital statement -Made in Germany, Guideline).

Step two: The assessment in step two includes addressing the three factors that form the intellectual capital: human-, structural and relational capital (see fig. 5). In a brainstorming workshop the whole project team discuss questions like: how are suitable employees found, recruited and retained? How is interaction and communication managed? How is performance communicated to customers?

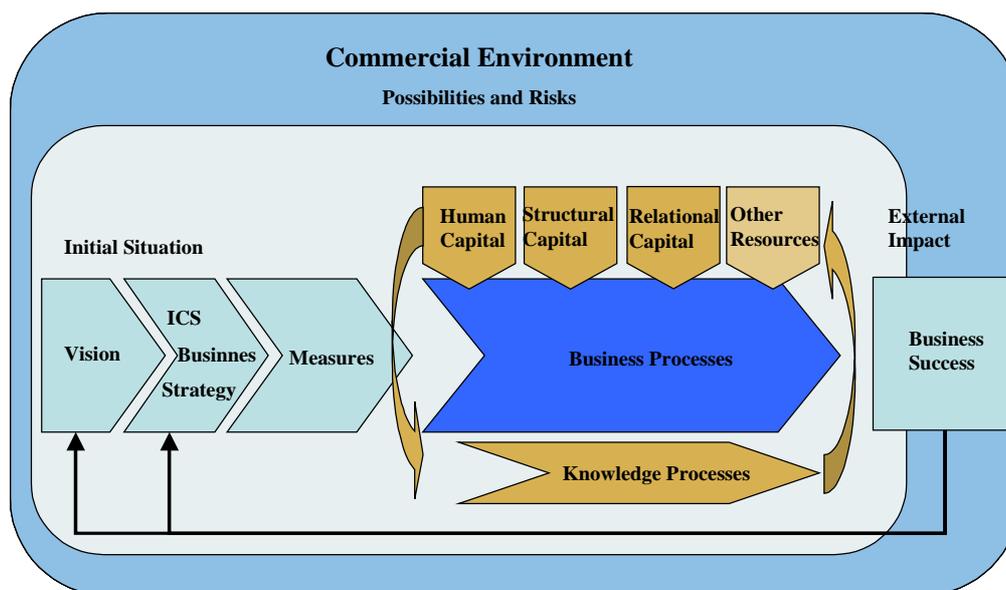


fig 5. Intellectual capital influences business models (Intellectual capital statement -Made in Germany, Guideline).

Step three: The evaluation of the intellectual capital is performed by benchmarking with the help of two perspectives. *How well do the factors contribute to the operative business?* This gives a picture of how the factors are contributing to satisfying customers needs and to assuring that the current business is running smoothly. *How do the factors affect the strategic orientation?* The factors are valuated as sufficient, insufficient or better than necessary. The strategic perspective takes the future orientation of the company into consideration. Taken into account are quality, quantity and systematical development of the factors. The results from this evaluation are presented in table form where every factor gets a value for each of the two dimensions. To provide the reader with this information at a glance it can be presented as a an IC knowledge map (see fig. 6) where the size of the white circles symbolize how systematically they are developed and their position in relation to the axes show the quantity and quality of the factors.

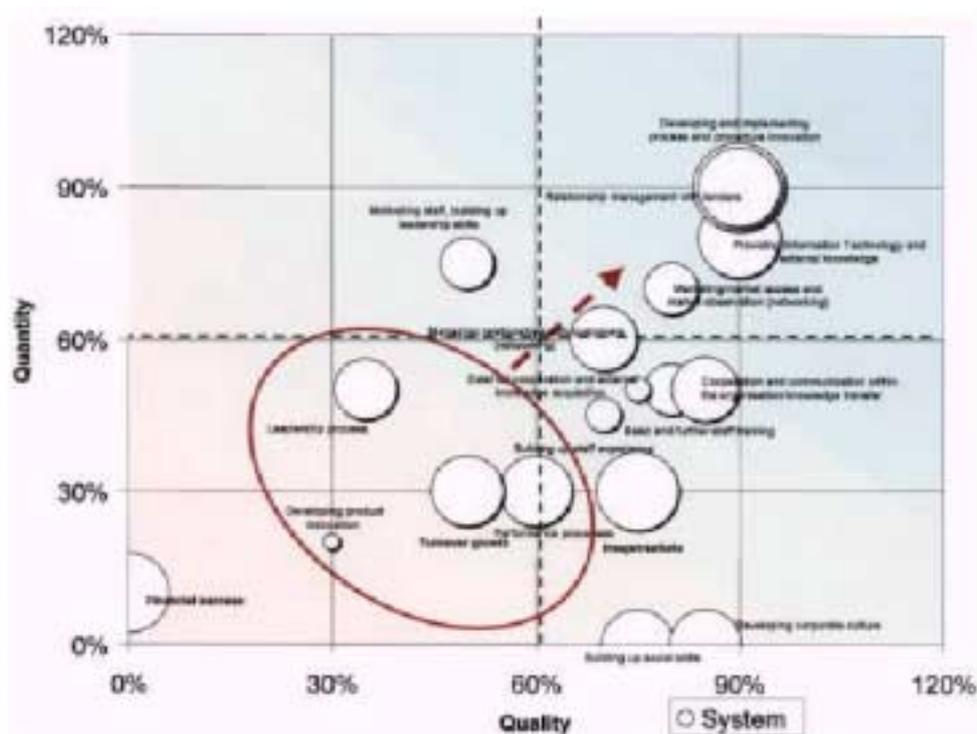


fig. 6 IC Knowledge map (Wissensbilanz -Made in Germany, Leitfaden).

Step four: In step four, the factors of intellectual capital are being verified and legitimized with the help of numbers and facts. These indicators can be imported from previous reporting systems but the new context in which they are to be used must be considered. The results can be presented in table form for an easy overview.

Step five: When communicating the results of the ICS process, the context in which the intellectual capital factors have been discussed should be presented clearly and in a way that is adapted to the target group. (For a discussion on different target groups see the chapters 5.9, 5.10, 5.11). When considering the different options for structuring and presenting the results it must be kept in mind that the ICS must not appear to be a pure marketing tool.

Step six: Whereas steps one to five focus on describing the current state in the organisation, step six is concerned with managing and developing the intellectual capital. To show how the different factors influence each other and to facilitate the most efficient possible use of scarce resources, the influencing factors of intellectual capital are included in a matrix. By giving each factor a number which describes the influence it has on the other factors, complex interrelationships and interdependencies can be described. In fig. 7 below, the highlights show that the factor performance processes in row one has a strong influence on building up staff experience and motivating staff in column three and five, these two in turn have a strong influence on performance processes together with the leadership process (shown in column one).

... is influenced by ...		1	2	3	4	5	6	7	8	9	10	11	12	13
Cause														
Performance processes	1	●	1	2	1	2	1	1	2	1	2	2	3	2
Basic and further staff training	2	1	●	1	1	1	1	0	1	1	1	1	1	0
Building up staff experience	3	1	1	●	1	2	1	0	2	1	2	2	2	1
Building up social skills	4	1	0	0	●	2	2	1	3	0	0	0	2	0
Motivating staff, building up leadership skills	5	2	2	1	1	●	3	3	3	0	1	2	2	1
Leadership process	6	2	2	2	2	3	●	2	2	1	2	3	2	2
Developing a corporate culture	7	1	1	1	1	1	1	●	2	0	1	0	1	1
Cooperation and communication within the organisation/knowledge transfer	8	2	1	2	0	2	1	2	●	2	3	1	2	1
Providing information technology and explicit knowledge	9	1	0	0	0	0	0	0	0	●	0	0	0	0
Developing product innovation														

fig. 7 Intellectual capital interaction matrix (Intellectual capital statement -Made in Germany, Guideline).

If the numbers are summarised horizontally, the active sum (how strong the factor influences other factors) is obtained. At the bottom of the columns the passive sum is obtained (how strong the factor is influenced). A ratio of these sums presented in a diagram gives very interesting results at a glance (see fig 8). The factors in the upper right corner (zone 2,3) are highly active and reactive which makes them suitable for starting processes. When changing these factors great care is necessary as uncontrolled effects can easily be achieved. According

to Kay Alwert, zone 2 is highly dynamic, but direct intervention is somewhat risky due to possible uncontrolled effects. It is a good area to break the "stasis" of a company and to move a lot - to the good, but maybe also to the bad (Alwert, 2006) The opposite is true for factors in the lower left corner (zone 6). The upper left corner (zone 1) contains effective levers that stabilise the system after a change. Those are best for direct intervention. They are very active (high influence) and independent, which means that they are good for a controlled management (Alwert, 2006). A change in the factors in the lower right corner only brings a cosmetic change as the active sum is low, they are however suitable as indicators. Zone 5 contains factors that are slow and suitable for experimentation and zone 7 factors that have a weak influence with small side effects. The circle in the middle contains the factors that are somewhere between the other zones and that are relative ineffective when it comes to managing the system (Intellectual capital statement, reinisch 2005).

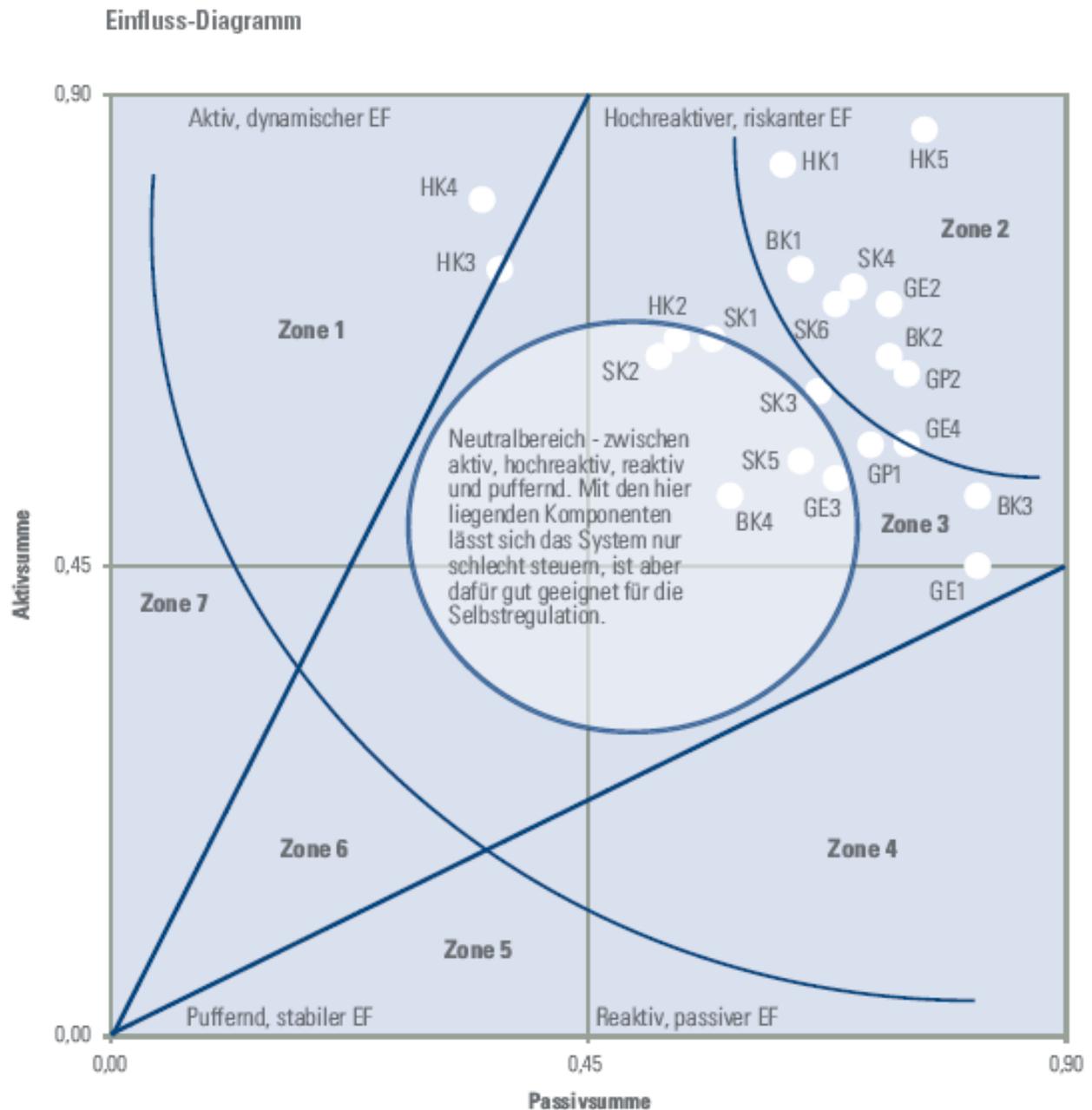


fig 8. Interaction map (Intellectual capital statement, reinisch 2005)

The result of this ICS process can also be shown by way of an interdependency network (see fig 9). Reciprocation and circle effects -“generators” can be pictured in a clear and easy-to-understand way. By combining the tools described above it is possible to judge which factors have the greatest potential, the largest need for development and where improvements will give the greatest effect.

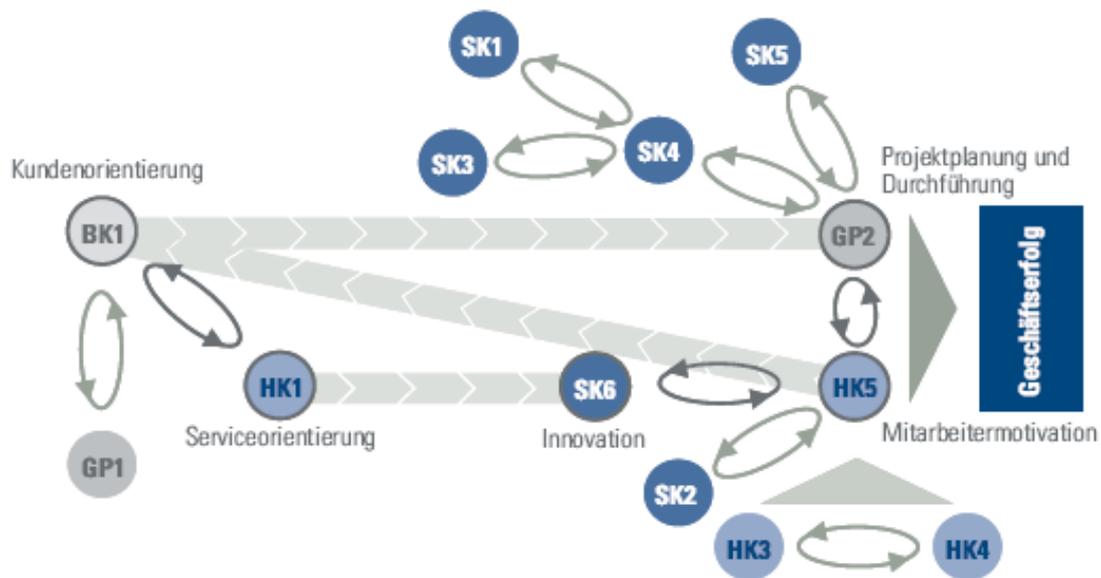


Fig. 9 Interdependency network. This example from reinisch AG's intellectual capital report shows how different factors of human capital (HK) interact with structural capital (SK) and relational capital (BK). In addition business processes (GP) are included. In this way interactions and interdependencies are clearly shown. (www.reinisch.de 2006.06.25)

3.11 ICS, Balance Sheet and Balanced Scorecard

Even though a comparison between the German approach with its distinctive process approach and a traditional balance sheet appears to be a rather odd one, there are factors of interest when going into details. The differences and similarities with a traditional balance sheet have been described by Alwert (2005). Although the similarities with a traditional balance sheet may seem obvious (the name “Wissensbilanz” in German gives associations to a financial *bilanz* –balance sheet), Kay Alwert makes clear that the focus of the German approach primarily is internal management and secondary external reporting (Alwert, 2006). A process perspective rather than an asset perspective is also the distinguishing mark of the German approach.

The difference between the ICS and the Balanced Scorecard (BSC), as developed by Kaplan and Norton in 1992, is that a BSC is primarily a tool for realising the company's strategy. In doing this, four perspectives are considered: financial, customer, internal business and learning and growth. There are two basic similarities between the ICS and the BSC: both focus primarily on intangible resources and both use indicators to measure these factors. The difference lies in the fact that the BSC focuses on transforming the strategy into action and making it measurable in four balancing perspectives, whereas the ICS systematically values, develops and also externally communicates the interactive dimensions of intellectual capital. The two tools are however good complements and a BSC can for example be used to implement strategies regarding the intellectual capital (Alwert, 2005).

Moreover in today's dynamic world, a company can only benefit from change if it co-evolves with others. The BSC tends to lock in the already existing key success factors and let managers measure what they want to measure. This also brings with it that potential is not fully used towards the end of a BSC set goal. These ideas have been argued by for example Voelpel, Leibold, Eckhoff, and Davenport lately.

The ICS on the other hand does facilitate the mapping of interdependent and simultaneously impacting factors. All factors of the intellectual capital that can be studied in detail are strongly context dependent and are interdependent with the organisation which means that an isolated action oriented consideration is difficult or impossible (Alwert, 2006). However, this might be simulated by the explicitness of ICS (Edvinsson, 2006).

3.12 Process View versus Asset Based View

Not only are there other management tools, of which the above mentioned BSC is the most famous, competing against, and to some extent complementing the ICS. There are also other perspectives, putting focus on other factors when reporting intellectual capital. One school, by us labelled as the Anglo-American school since its main spokesmen are based in California and Scotland respectively, is particularly interesting. Whereas the German approach is focussing on value creation throughout the processes, the Anglo-American tends to make a demarcation around the value extraction part, i.e. intellectual assets. One of the most famous

spokesmen for the latter is Patrick H. Sullivan, author of “Profiting from Intellectual Capital: Extracting Value from Innovation” (1998, John Wiley & Sons), amongst numerous other books and articles on the subject. If Sullivan represents the Californian part of the Anglo-American view, Gordon McConnachie can be referred to as “the Scottish contributor”, even though this is only partly true. McConnachie is based in Germany, but is Board Chairman of the National Intellectual Asset Centre in Scotland. He is, together with Sullivan, considered to be one of the most renowned experts on the extraction of value through the application of an intellectual asset and capital management (IA&CM) approach (McConnachie, Hargreaves, 2001).

3.13 Criteria for a Good Intellectual Capital Reporting Tool

Starting in the topics discussed above Alwert (2005) lists a number of criteria for a good tool for reporting intellectual capital. Firstly, it has to describe the intellectual capital in a complete manner that allows the data to be compared externally. It has to be reliable and comprehensible as well as possible to understand for an external reader. The tool has to facilitate the work with complex structures and links in the organisation, be able to measure changes and show the outcome on company performance. Strengths and weaknesses must be shown in a clear way and the tool should be compatible with other management instruments (Alwert, 2005).

Secondly, it is preferable especially for smaller companies, that the tool is easy to understand and implement, cost efficient and based on a modular workflow where breaks in the progress still brings results and doing the same work twice is avoided (Alwert, 2005).

4. Empirical Background

This chapter provides the reader with an introduction to the studied companies reinisch AG and SØR Rusche GmbH. The businesses in which the companies operate as well as a brief background of their relation to Intellectual capital statements is given.

4.1 The Case Companies

The two case companies have been selected for the study to comply with the set goals and purposes of the thesis, i.e. examining and describing the German process approach. In order to cover the widest possible range of aspects of implementation, experiences and results of the Intellectual Capital Statement work in the two companies respectively, the area of business as well as the background in general differs considerably between them. However, when it comes to the actual ICS specific points of comparison, the similarities are many, which make collations between the two fully feasible. SØR Rusche GmbH and reinisch AG were picked out of the 14 participating organisations in “Deutschland – Fit für den Wissenswettbewerb” under advise from Mr. Mart Kivikas, Edvinsson & Kivikas Wissenskapital GmbH, in order to lay the best possible foundations for the thesis. The first contact with the companies as well as the intermediation of the contact persons was also taken through Mr. Kivikas.

Since the purpose is to focus on Intellectual Capital Reporting and not on non-related particularities of the companies as such or on the industries in which they are active, only a brief introduction will be given to SØR Rusche GmbH and reinisch AG. However, factors like for example culture and tradition are important in this context and should not be neglected.



fig. 10, A strict, formalised version of the company name forms the reinisch logotype.



fig. 11, The logotype breathes style and exclusiveness. The Scandinavian spelling is also emphasised.

4.2 reinisch AG

Especially companies in technically advanced areas of business, have a demand for technical descriptions on all levels of complexity. reinisch's main business is to provide them with technical documentation and product catalogues. They also offer consulting services to clients and develop and operate process and system solutions in addition to providing solutions for information management. The outspoken goal is to ensure that information and knowledge is documented, managed and published efficiently (Flicker, 2006).

The company is family owned and was founded in 1991 by the current owner and CEO, Franz Reinisch. Originally, the company was situated in Bretten, close to Karlsruhe and Stuttgart in the south-western part of Germany. The geographical location, with its closeness to car manufacturers like e.g. Mercedes-Benz with many of its suppliers nearby, was strategically perfect. This close proximity of the branches to the customers is still a very deliberate strategy from the company, today having eleven establishments in Germany as well as presence through own offices in Austria, Switzerland, Turkey and Spain. Due to the fast expansion, the headquarters in 2001 moved from Bretten to Karlsruhe, still present close to many significant customers (www.reinisch.de, 2006-05-22).

As mentioned above, one important segment for reinisch is the vehicle manufacturing industry. Although it is considered to be one of the major client segments, there are other industries with similar needs for product documentation such as operating instructions, catalogues or maintenance / repair instructions and all other aspects of information management, all of which are of great importance as clients for reinisch. Hence, more or less all companies which manufacture complex products for the global market, e.g. mechanical and plant technology, transportation, medical technology and aviation sectors, are crucial as potential- as well as de facto clients (www.reinisch.de, 2006-05-22).

Furthermore, reinisch has expanded the original service offer by not only offering classical documentation services, process creation and electronic print or publishing. Reinisch also provides system solutions in the areas of document and content management, product care in the after-sales area, services for product development, translation management and knowledge management (Flicker, 2006). The latter is of course of greater interest in this context. Not

only is the knowledge management related work within the company interesting enough to focus on in this thesis, it in itself has in a way become a part of the company's service portfolio.

In 2006, reinisch AG and its almost 400 employees will celebrate its 15th anniversary as a company with an extraordinary fast growth and 15 years of new establishments, acquisitions and several prizes for fast growth and entrepreneurship, e.g. Deloitte Technology Fast 50 and top 100 in Entrepreneur of the year competitions numerous times (www.reinisch.de, 2006-05-22).

4.3 SØR Rusche GmbH

50 years ago, in 1956, the first SIR gentlemen's clothing retailer had its grand opening in the Ratscafé (i.e. "town-hall café") of Bielefeld in Eastern Westphalia in the north western part of Germany. The founder was Egon Rusche, father of the current CEO and owner Dr. Thomas Rusche. In 1967, after a legal dispute with the company 4711 concerning a perfume called SIR, the company ended up with the new spelling SØR. The anecdote behind the new name is that Egon Rusche was sitting at the breakfast table, having a typically Scandinavian crispbread sandwich. According to the story, this led his thoughts to the Danish speciality "Smørrebrød", and he decided to take on the Danish spelling, SØR (Rusche, 2006). Suitably, the pronunciation is the same, and the new name rapidly became an important image builder and a vital part of the company's profile.

Today, SØR has got 27 stores in western Germany, from the island Sylt by the North Sea to the fashionable Maximiliansplatz in Munich. As a part of SØR's branch-location-strategy, which is addressed and discussed further on in the thesis, there are to date no stores in the former German Democratic Republic. The company has got about 140 employees, with the management team based in Oelde, not far from Bielefeld, where the first store was opened by Egon Rusche (Rusche, 2006).

Like reinisch, SØR is managed by the founding family. The big difference between the two is SØR has got a history with ramifications going back to the end of the 19th century, whereas reinisch is a relatively young company. As market leader in the premium segment of men's

outfitters with a particular focus on the growing segment of high quality sportswear, the company has occupied a dominant position within its line of business. The own branded collection, which is made in Lohn and sold exclusively in the company's own specialist shops combined with a national mail order service has also contributed to the unique position SØR is in today (Rusche, 2006).

The company and the Rusche family have also made themselves a name through their art interest. The SØR Rusche Collection is generally known as a collection of first class paintings by smaller Dutch and Flemish masters, with the motto "Von den Kleinsten das Beste" (The best from the smallest). The collection, that consists of works by 16th, 17th and 18th Century Dutch and Flemish masters, was brought together by four generations of the Rusche family (Sotheby's, 2006-05-27).

Furthermore, in 2005, Dr. Rusche was awarded with the title "Wissensmanager des Jahres" (Knowledge Manager of the Year), an award presented by Commerzbank, Financial Times Germany and the business magazine Impulse (www.commerzbank.de, 2006-05-24).



Fig. 12, Landscape with waterfowls and other birds by the Dutch painter Dirck Wijntrack (1625 – 1687). An example of one the masterpieces that have been a part of the SØR Rusche Collection (Sotheby's, 2006-05-27). In a way it also symbolises the importance of traditions and culture in SØR.

5. Empirical Findings –The Story

The aim of this chapter is to give the reader an understanding of the background of the implementation of an ICS in the case companies. Furthermore, a more general picture of the topics of interest in the first phases and in respect to the background will be given. It does not only treat the whole ICS process within SØR and reinisch, but does also address topics not directly linked to the case companies. One of the most important findings in the empirical part is that the process orientation of the German intellectual capital statement is its most valuable hallmark.

5.1 First Steps – “Fit für den Wissenswettbewerb”

The idea of an Intellectual Capital Statement (ICS) within the reinisch organisation was originally presented in 2003 by Franz Reinisch, owner and founder of reinisch AG. Although the tool today is mainly used to control, develop and understand processes within the organisation, Mr. Reinisch’s purpose was another. He focussed on finding a purely financial measure of the intellectual capital. Knowing the large amount of invaluable knowledge and expertise that never appeared in the financial reports, Mr. Reinisch addressed the problem by prototyping the ICS tool. Not only would it give a clearer picture of what the company was all about, if the process was successful, the implications on relationships with creditors, financial institutions and investors would improve massively. The first step towards an ICS was taken when the pilot project “Fit für den Wissenswettbewerb” was instigated by Fraunhofer Institute for production systems and design, Wissenskapital GmbH and the German Federal Ministry of Economics and Labour in 2003 (Flicker, 2006).

In SØR’s case, Dr. Thomas Rusche, the inheritor of SØR and current CEO, had a personal interest in ICS related tasks. He had heard of the first steps in the pilot project through his contacts at Fraunhofer. Knowing SØR’s background, the interest was mutual. From AK Wissensbilanz’s point-of-view, having a retail firm among the 14 companies, mainly consisting of companies with their roots in manufacturing or technologically advanced areas of business, could possibly assure a broader base for relevant comparisons and evaluation of the project as a whole (Siebert, 2006).

Virtually, what happened was that SØR in 2004 was appointed by the Federal Minister of Economics under advice from Fraunhofer Institute to be one of the 14 participating companies and organisations within the AK Wissensbilanz. As mentioned above, Dr. Rusche was enthusiastic about the idea, and after the appointment there was no doubt that SØR would participate in the project, which the rest of the management team was informed about shortly after (Rusche, 2006) (Siebert, 2006).

5.2 Prerequisites and Problems to solve

From the day when Franz Reinisch and Thomas Rusche respectively decided that ICS work was an important part in determining their companies futures, knowledge management has been an important part of the daily business. However, the starting point differs considerably between the two. Mr. Reinisch on one hand, with his wish to put a financial number on intellectual capital, and Dr. Rusche on the other with a will to profit on various dimensions within the ICS, e.g knowledge transfer and transparency.

Knowing the slightly different starting points, it is relevant to examine if there were any problems in particular that were planned to be taken care of or solved with the help of ICS. It does not seem to be the case in neither of the companies that the reason for the kick-off was a big crisis or some kind of stagnation. Nevertheless, there were issues to be adressed. For reinisch, the discussion about finding some kind of model to, as stated above, put a monetary value on intellectual capital had been ongoing for two to four years before the process started. But the discussion was not only about the value extraction in itself. Quite the opposite, focus had rather been put on the actual processes which were to create the value. Communication structure, Intranet and procedures where all important factors taken into consideration in the discussions. (Flicker, 2006)

From an ICS perspective this is particularly interesting. The very essence of the difference between the German approach and the Anglo-American approach is often stated to be the distinction of value creation versus value extraction. The fact that reinisch, unknowingly or not, seemed to have taken side for the German approach made the company exceedingly suitable for the pilot project.

Although SØR, in conformity with reinisch, did not implement ICS in order to solve any major problems, the awareness of what kind of issues a new way of thinking could resolve grew along the process. The increased awareness occurred thanks to the process-orientated approach, in which the importance of subsets is visualised. Christoffer Siebert exemplifies this with a procedure that has always been of great importance in a company where a close, long-term relationship between the sales people and the customers is crucial. Through proper ICS work in the area of knowledge transfer between older personnel and younger, part-time workers and full-time workers as well as between different branches, the improvement potential is huge.

5.3 Definition of a Market Leader – The Importance of Anecdotes

Whereas reinisch chooses not to benchmark against its competitors in any further extent, or at least chooses not to communicate this data externally or internally, SØR parades with the epithet “Market Leader in our Segment”. Even though it easily could be interpreted as an outcome of the ICS, it originally stems from a survey made by the Boston Consulting Group a couple of years before the ICS was planned. Still, it is quite interesting and probably not a coincidence that it is SØR that chooses to use this kind of information. According to Kay Alwert at Fraunhofer Institute in Berlin, SØR is by far the company among the 14 examined organisations in his dissertation that utilises anecdotes, success stories and its fascinating family background the most. A lot of this is thanks to Dr. Rusche, who is very literate and a well-reputed publisher. It is seen as a great asset, and is being promoted in the guidelines from the team behind “Fit für den Wissenswettbewerb”.

5.4 Support and Enthusiasm within the Organisation

The implementation of an ICS does not necessarily have to affect the daily work of all employees. However, the impact of the work is of a magnitude that it will not pass by unnoticed within the organisation. One example of this is the encouraged knowledge transfer between experienced sales persons and new employees in SØR. Therefore the attitude towards ICS from at least all key persons and participants in the workshops is significant. The experiences from reinisch, shows that generally, people seemed to greet the modernities with cautious optimism. Still, reactions like “I am an acknowledged competent engineer, I know

my procedures and methods well enough to achieve the goals this organisation is aiming at” did occur. That kind of reactions were in a way aggravated by the fact that reinisch at that point of time was, and still is, an extremely successful organisation, having won several prizes for fast growth and entrepreneurship, e.g. Deloitte Technology Fast 50 and reached top 100 in Entrepreneur of the year numerous times. But as the introductions to the workshops and to the project as a whole went on, the attitude and understanding became increasingly positive. The small number of former rather defensive employees seemed to, if not “buy the whole package”, then at least admit that there were parts of the project which made a lot of sense, and begun to appreciate the potential to a larger extent.

SØR’s starting point once again differed from reinisch’s. Since Dr. Rusche more or less made the decision to join the pilot project on his own, the acceptance from the other members of the management team at first was rather mixed with a feeling of surprise. Luckily, it never affected the implementation at the top level.

5.5 Culturally Dependent Intellectual Capital Statements?

On the E&K Wissenskapital GmbH homepage, the RICARDIS (Reporting Intellectual Capital to Augment Research, Development and Innovation in Small and Medium Enterprises) study is being quoted in the discussion about cultural differences and how they can affect success. Accordingly, Scandinavian and German culture should be more promising than an Anglo-Saxon or southern European culture in this context. This statement can be seen from two perspectives; one focussing on the difference between the anglo-american point of view and the German approach in a strict ICS context, and one from a broader perspective, treating culture in general, nevertheless still with a tight linkage to ICS. The latter of the two has set the framework for the below discussion of how reinisch and SØR are addressing this topic.

Anja Flicker’s opinion is that the the cultural differences in Europe probably are not sizable enough to require any special adaptations of the work process. Therefore, creating customized guidelines for different countries would be an unnecessary effort. More important from a cultural point-of-view is, according to Anja Flicker, that the working climate within the workgroups is good, and that the different members in the project group can communicate without barriers. Managers and employees must be able to communicate in an open and

constructive manner, and hierarchical level should not be the decisive factor when determining who will get the last word (Flicker, 2006).

5.6 Intellectual Capital Statement process and Hierarchical Levels

Obviously, the starting point for the ICS work is top management level, where the actual go or no-go is decided. Still, it should be emphasized that once the actual processes and the formation of workgroups starts, a limitation to management level will adventure the whole idea of the ICS.

Momentarily, there are four projects running directly connected to the ICS in the reinisch organisation:

- A relatively limited project consisting of a mere two staff members
- One project directed at managers for development of leadership competency
- Two projects with members from all hierarchical levels in the organisation independent of location (Flicker, 2006)

For SØR, the collection of a great deal of the crucial measures and key success factors in the ICS is directly dependent on the involvement from sales people with daily customer contact. Although this means participation from people ranging from part-time workers and clerks up to the very top of the hierarchy, it has not yet lead to any explicit intricacies. This might be explained by the fact that SØR really appreciates their employees as the number one key success factor and hence has created an atmosphere through which the appreciation has reached a high level of penetration in the organisation (Siebert, 2006).

5.7 The Time Perspective

Already before the start of the ICS project, reinisch had implemented a Balanced Scorecard. This potentiated a reduced workload and saved time since a shorter workshop with management was sufficient in order to utilize parts of the balanced scorecard and customize them to the ICS. Having a clear strategy combined with some kind of systematised

management tool will, according to Kay Alwert, save a substantial amount of time in the ICS implementation process. As mentioned above, this is also the experience from reinisch.

When it comes to the actual report, almost unlimited time can be invested in writing and re-writing the text. Reinisch considered it very important to commit one person full-time to the ICS project. A total of about 550 man hours were spent on the process, a lot of work was however invested in adapting the guidelines to the conditions in reinisch. Anja Flicker considers the guidelines to be a good description of the method, but not a complete instruction sheet of how to carry out the procedure. However, this is not to be seen as an overly harsh criticism towards the guidelines. Quite the contrary, the understanding of the fact that creating guidelines which provide a made-to-measure approach for every potential ICS implementing company thinkable is not feasible, is big.

Actions to shorten time and to ease the process as a whole are constantly being developed. Currently, new software aiming at replacing the rather user-unfriendly, excel-based software that is used at the moment is in the pipeline. Anja Flicker has tried out a beta-version of the new software and her opinion is that it could be helpful for companies with first experiences from producing ICS:s (Flicker, 2006).

Even though there had been no presence of a management tool in SØR before the project started, the ICS creation process was relatively short. Three days were spent on the workshops with two-three days of preparation. Thereafter about two weeks were spent on writing the actual document. Altogether, eight people were involved in the process at this stage. Regarding the guidelines, SØR did not make very much use of them; it was mostly with the help of the project team during the workshops that the procedure was clarified. Having taken the time aspect as well as the total efforts and benefits into consideration, SØR is now preliminary planning on presenting a new ICS every second year (Siebert, 2006).

According to Kay Alwert, the relatively small investment in time and money that the production of an ICS demands is one of the major advantages in comparison with other methods. The efforts the project team has put into developing a cost-efficient method has led to a procedure measuring about four to six weeks for a medium sized company. This corresponds to about 20 – 30 man-days. As a comparison, the development of a classical

“Forschungswissensbilanz”, i.e. Research IC Report, as developed by Günther Koch in Seibersdorf, Austria was originally estimated to require a whole man-year (Alwert, 2006).

The investment in an ICS is relatively small compared to its contribution in supporting management decision making. The applicability of the documents externally as well as internally does also make the ICS approach superior to many management tools. This is important especially for small and mid-sized companies that have limited resources to use for management activities. (Alwert, 2006).

When discussing ICS in a time context, the pace in which the summary of the results is carried out is another main issue. A faster summary of the results influences the validity of the ICS. This addresses the contents of the ICS, which are to be seen as perishable goods in the sense that a slow-going process might lead to a final product partially out of date and hence of no use (Alwert, 2006).

5.8 Suitability from an Industry Affiliation Perspective

According to Anja Flicker there are no big differences when it comes to managing knowledge in different industries. There is possibly a slight difference between companies where the workforce to a larger extent has got an academic background and companies with less graduated employees, but the main difference lies in whether procedures and patterns in the organisations are systematically organised or not. On the whole, knowledge management is not dependent solely on the industry in which a company is active (Flicker, 2006).

Kay Alwert is of the same opinion. Far more important than industry belonging is how knowledge intensive the company is. There are of course industries that can be considered as more knowledge intensive than others and thereby might have a different point of view and initial position regarding the potential benefits of an ICS. (Alwert, 2006)

5.9 Embellishment and Credibility

If the self-assessment of the company is embellished, any positive effect would be short-lived. The reason for mapping intellectual capital from an external perspective is to be able to display progress and development year by year. Credibility is a very important aspect and formed one of the main topics of discussion in reinisch before the process started. Questions were raised by employees regarding the credibility of a report based on self-assessment. Including only favourable facts, leads to a more critical attitude from external target groups. The inclusion of sensitive facts has however to be balanced if the same ICS is to be used internally and in the communication with customers or partners. In the reinisch case, where only one ICS is present, a satisfying solution for all target groups had to be found. Unavoidably, this meant having to make a certain amount of trade-offs in order to combine the needs from banks and the need for clarity in the internal communication with a more marketing-adjusted language. Nevertheless, it should be emphasised that the final ICS contained sufficient, fully reliable material for all groups (Flicker, 2006).

5.10 Two Intellectual Capital Statements

After finishing the ICS, reinisch has had internal discussions about producing target group-adjusted intellectual capital reports, but has come to the conclusion that it would be too time consuming. Among other things, a shorter and simplified version for parts of the workforce has been contemplated, but this could bring problems in the sense that the customer could be better informed than the own employees on some aspects. Keeping the information under control could also become problematic. Future ICS:s will therefore look similar except for next years somewhat shortened version which is produced while waiting for the actions from the first ISC:s to show effect (Flicker, 2006).

The internally communicated ICS will differ from the external in case that the information presented in the external ICS does not meet the demands of the internal management reporting due to different criterias (Wulf, 2005).

According to Kay Alwert, the internally communicated ICS will *almost* always differ from the external. There must however be no difference regarding the factual content between the

two versions. A good way of adapting the ICS to the needs of the different target groups is to make the external version shorter and more targeted in comparison with the internal version. However, some of the organisations that participated in the project “Fit für den Wissenswettbewerb” chose to include all information in the published versions, among those were SØR (Alwert, 2006).

The transparent approach is also confirmed by Christoffer Siebert, who emphasises the importance of transparency in the ICS. For SØR, this led to an exceptional amount of frankness in the final statement (Siebert, 2006).

The external communication of the ICS has up to now been struggling with the fact that the needs and demands from external stakeholders have been somewhat indistinct. Even though the demands from each of the stakeholders individually might be unclear, the definition of them is more or less finally settled. Hence, the external target groups for the ICS normally are divided into the following three categories:

- **Potential new Employees:** Finding potential new employees means focussing the communication on what makes the company special. Furthermore, the advantages of working within the organisation from a personal development and career perspective should be highlighted.
- **Customers, Clients and Partners:** What is communicated to customers should always be very specific, and leave no space for misinterpretation. Nevertheless, the client’s demand for information is significant, and the level of details must never be oversimplified because of the intention to provide easy-to-read information.
- **Capital Market:** The most discussed and most specified of the external target groups is the capital market. This is the area where it is most likely that a higher grade of customisation and adaptiveness will be seen in the future. More specifically, the changes will be made in order to provide the capital market with assimilable information. Thanks to guaranteed confidentiality, an extensively high degree of transparency in the communication with banks and creditors is not considered as a problem (Alwert, 2006).

At the present time, no workshops or trainings are given for investors in how to read an ICS. This is, as mentioned above, mainly due to the fact that the requirements of the creditors are

not yet completely known. To resolve this, a study to find out exactly what information is sought by banks and lenders is currently under way. Reportedly, an education for interested finance people will be formed as a result of the study. It would be possible to form such an education already today, but the interest from the investor side has been rather cool, since they to a large extent regard the ICS as an instrument full of information not essential for investment decisions. The first goal is therefore to understand the requirements, develop an ICS that fits the target group, and then train the financial side in how to read it and thereby make them realise that the ICS is full of information that can be *very* essential for investment decisions (Alwert, 2006).

Regarding the question of credibility, it is of course always better to communicate everything. There is however no conflict between the trustworthiness of the company and focussing on what the target group wants to know. Credibility is only affected when there are factual differences between what is externally and internally communicated. The problem then has got less to do with credibility than with pure falsification, which can have far more serious consequences. A falsified ICS is to be considered as just as serious as a falsified financial balance sheet. Hence, once the ICS tool becomes more common, falsifications and doubtful behaviour will end up with serious legal difficulties (Alwert, 2006).

5.11 Target Group Interest

The primary use of an ICS is internal management. Still, the public debate has been surprisingly focussed on the use of the ICS as a tool for communicating with investors. This discussion has to a large extent been driven by alliances, associations and politicians, whereas the companies themselves primarily have focussed on internal management. The common view from companies regarding the external aspect is that it is considered a bonus. Nevertheless, the benefits from using the ICS as a communication tool when possible are increasingly appreciated and the utilisation of this aspect is growing steadily. On the external side the strongest interest stems from the capital market but, as mentioned above, there are still some mutual issues to resolve regarding needs, demands and goals before an effective utilisation of this area is a fact (Alwert, 2006). In the article Deutsche Bank Research from 2005, Inge Wulf states that the topic intellectual capital is in gaining importance within credit institutions, which could be a sign of a slowly changing attitude (Wulf, 2005).

5.12 Less Suitable Companies and Organisations

Like stated above, ICS tends to have its greatest potential in companies with a proportionally high share of employees occupied with knowledge intensive tasks where communication and coordination between employees is important. It can therefore be anticipated that it is less useful in organisations that to a large extent are working in a distinctively automatised way and where communication processes are of secondary significance.

In very small companies, the benefits are probably diminutive due to the high grade of transparency and knowledge about the current situation. For example, in a company consisting of the owner and two employees, all three do most likely have a deep insight in most of the processes concerning the company. If this is not the case, it might be a good idea to thoroughly reflect and analyse the situation before considering an ICS implementation. However, this does not mean that a one-man business would have no use of an ICS, but implementing it with support from the current guidelines, which are developed for a communication process between members of staff in companies that are somewhat bigger would most likely mean a greater deal of adjustments in order meet the specific conditions.

The maturity and structure of the company also affects the suitability. In organisations with a less developed structure it is normally more difficult to produce an ICS, i.e. it is more complicated and more time consuming. If the company has got previous experiences of management tools like balanced scorecard, quality management or management information systems in any form, the implementation of the ICS will be simplified. This is due to the fact that certain factors have already been discussed and can be modified or even be ready for incorporation in the ICS immediately. The ICS is then turned into an integration tool and the process runs with less friction. On the contrary, in a badly structured organisation, where no management systems are in place and perhaps even the functioning of the operative controlling is suboptimal, the implementation of the ICS will be more difficult (Alwert, 2006).

5.13 ICS in Larger Enterprises

The question of suitability for larger enterprises is a very contemporary issue. EnBW Energie Baden-Württemberg AG, a major player on the German energy market with around 19.000 employees, has presented a first intellectual capital statement only a couple of weeks before the publication of this thesis. Due to time constraints and the purpose of this thesis, a complete evaluation of that report cannot be included here. Nevertheless, the most important aspects of an implementation in major enterprises can, above all in order to provide a background for future comparisons, be presented.

The German ICS approach, as applied in the SØR and reinisch cases, is not adequate for major enterprises without modifications. This is due to the fact that a large company is difficult to represent with the help of a group of people that is manageable in a workshop situation. A representative group means that all functions and levels of the hierarchy should be represented. This would in a company with perhaps tens of thousands of employees require groups of 100-200 people. The most convenient and efficient way to administrate this problem would be through the set-up of separate workshops. The results would then have to be aggregated in order to create a complete ICS. Exactly this was also done in the EnBW AG case, supported by the project group AK Wissensbilanz (Alwert, 2006).

5.14 Important Results

In the reinisch case, the definition of the key success factors was considered to be the most important contribution from the intellectual capital statement. Even though no new key success factors were “invented”, the fact that the project group, put together of people from different parts of the company and from different parts of the country, could agree on a number of key success factors that were common for reinisch as a whole, was considered important. Even if different branches had different opinions and experiences regarding for example customer contacts, instead of promoting different views and encouraging conflict, consensus could be reached. By discussing and putting the key success factors on paper, the project group could give a tangible form to the gut-feeling of what was important. The process of putting the key success factors on paper also brings a commitment for the

management with it. Once a factor has been recognised as significant for the company's success, the need to work with and develop it becomes obvious (Flicker, 2006).

The results in reinisch were considered very positive even if they partly were somewhat unexpected. When starting the process of mapping and presenting the intellectual capital, there had been hopes that a concrete monetary value of the intellectual capital would be one of the final results. According to Anja Flicker, there is at the moment no sufficient and convenient quick-fix-method for valuing intellectual capital in monetary terms which meets reinisch's needs perfectly, but also states that all work that is put into the ICS is a step in that direction (Flicker, 2006). Even though for example Bontis most likely is of a different opinion regarding the existence of sufficient methods, Flicker's statement is interesting in the sense that it underlines that the majority of the benefits, at least in reinisch, are stemming from the process orientation.

Kay Alwert has made similar experiences in the other 12 companies that participated in the project. Since the outcome of the project was uncertain and the process was taking place in all companies more or less simultaneously, the expected results were communicated in relatively broad terms. In order to evaluate the outcomes, Alwert underlines the importance of communication tools like the workshop based assessment, the outcome analysis and the complexity analysis. Whether the companies would appreciate the applicability of the mentioned communication tools or not was an element of uncertainty for the project team. Eventually, the outcome was considered very positive among the participating companies. It was also stated that a great deal of the positive effects stemmed from the process approach in itself (Alwert, 2006).

In the case of SØR, the most important effect was that the organisation's idle knowledge was defined and turned into a red thread that could be used in the day-to-day business. Also important was the understanding of the role of the employee: a salesperson at SØR is considered to be the company's most important asset. The age structure of the salespersons has to be given attention; a balanced age structure is likely to attract customers of all ages. The knowledge transfer between different age-groups in the company was also a topic that was brought up in the ICS (Siebert, 2006).

5.15 Concrete Measures taken

In reinisch, the ICS has led to a number of concrete projects taking form. Firstly, the communication structure (how information is passed on, what tasks different employees are working on etc.) will be transformed. Secondly, a project for developing management skills is underway under the name reinisch Academy. Customer debriefing is covered in a third project, and a somewhat smaller project is dealing with customer contacts (Flicker, 2006)

At SØR, the results differed from reinisch. The concrete measures that have been or will be taken can be divided into four groups:

- **Establishing a new leadership culture:** Intensifying knowledge transfer, raise the density of communication, improve the assertiveness and increase the expertise of employees.
- **Optimizing and evaluating branch locations:** This includes opening branches focussing more on sportswear, acquisitions of owner managed shops in the premium segment and expansion to Stuttgart and other German speaking countries.
- **Increased Proactive Customer Management:** Includes coaching of the customer service process, intensive service for regular customer, opening up for hedonistic target groups, IT supported customer card and next step method.
- **Developing the SØR Collection:** Raising average prices through quality offensive, raising the level of fashion and expanding the SØR sportswear collection through profiled branding. (SØR ICS, 2004)

One of the goals regarding branch strategy has been slightly revised. According to Christoffer Siebert, legislations and bureaucracy above all regarding value added taxes have made an establishment on the Austrian market difficult. On the Swiss market, there is another obstacle. International Menswear Group, an international organisation for retailers of men's exclusive clothing in which Dr. Rusche represents Germany, has got a code-of-conduct which stops members from entering markets where other members are already established. The latter obstacle could probably be overcome rather easily, but the likelihood for this to be realised in a short perspective is rather small. Hence, expansion to other German speaking countries is currently not on the top of the agenda (Siebert, 2006).

6. Analysis and Discussion

The following chapter summarise and discuss the implications of ICS in reinisch and SØR and gives practical suggestions when considering the implementation of an ICS as well as suggestions for further research.

6.1 Analysis and Most Important Outcomes

The two companies reinisch and SØR are very different in terms of industry affiliation, background and culture. They are however similar when it comes to the fact that they are both knowledge intensive companies with the need to intensify the efficiency of knowledge transfer and communications. There are more similarities, though. One of the most distinct and remarkable resemblances in an ICS context concerns the relationship between starting point and actual outcomes. Even though starting points as well as outcomes differs considerably, the relationship between them is essentially the same. This in the sense that reinisch as well as SØR had some kind of picture of the goals they wanted to achieve, that was only partially fulfilled. Still, what they accomplished with their ICS work yielded a great deal of satisfaction in both companies. Slightly simplified, the experiences and outcomes can be summarised as “not quite what we expected, but still the result at the end of the day is more than satisfying”. This is one of the main benefits from properly carried out ICS processes. In a way this is an analogy to so-called quizzics, meaning that throughout the ICS creation process and after the implementation, things that “we did not know that we did not know” become obvious and hence to a larger extent taken into consideration in the future. In this study it applies to the fact that the case companies have reached a deeper understanding of the interplay between the factors of intellectual capital. This insight can be seen from two perspectives: The company is aware of a factor but not of its importance, or the company wants to improve the performance of a factor but is not aware that this can be done indirectly by improving other factors (as illustrated in chapter 3.10).

Reinisch and SØR were both satisfied with the ICS project and its outcomes and will, as stated above, in the future improve their performance by focussing on asking the right questions.

The possibility of evaluating the intellectual capital with the help of the ICS tools and presenting the results in a way that provides management *and* external stakeholders with a detailed, yet clear picture of the status and development of the intellectual capital is a very valuable feature of the ICS. This is largely thanks to the various mapping tools the ICS tool box provides. For example can the use of knowledge maps that at a glance shows the potential of the company's strategy contribute to an increased understanding of management's intentions with their strategic goals and eventually an increased transparency. One instrument in particular that has to be mentioned in this context is the so called interaction map. When used properly, its potential as a visualiser of the interdependence between the factors of intellectual capital is superior. With one easy-to-read and easy-to-understand graph, the aggregated interdependence in the organisation is communicated. For example, it is most likely a pure waste of time to put an effort into improving factors in the lower right corner of the graph, since those factors has no influence whatsoever on the other mapped factors. Knowing this, time and money as well as a great deal of work is saved by taking measures in order to improve factors where the benefit can be reaped, not only from the factors in themselves, but also through their influence on the above mentioned factors. Hence, the interaction map must be considered to be the single most important mapping tool within the tool box. This mapping tool can also be seen as a "map for board members", providing board members and management with cost-benefit information.

The cost efficiency of the ICS makes the tool very valuable for companies and organisations that have limited time and resources available for management activities. A valid point about the ICS is that it is perfectly suited for companies with a structure that to a certain extent resembles major enterprises, but still not large enough to have the resources of the giants. In other words it is somewhere at the verge between big and small that the greatest benefits can be reaped from an ICS stemming from the German approach as it has been applied in the case companies. Nevertheless, it is an easily adaptable instrument which with the right adjustments can be successfully implemented in organisations of varying size. This is, to say the least, proven by the fact that the ICS has found its way into larger organisations lately. An evaluation of the EnBW Energie Baden-Württemberg case will give a first indication of the feasibility in major enterprises. Such an evaluation could possibly also give a hint about the future importance and spread of ICS.

When discussing the above issue, a related attribute should be emphasised, namely the flexibility. Reinisch and SØR have implemented, developed and worked with the ICS each in their own way. Fitting the tool to the conditions and prerequisites of the two companies calls for a flexible instrument. In this context, it is important to underline that it is the instrument that should be fitted to the company's conditions and not the opposite way around. Performed properly, the idea of the ICS as a communication tool that presents an individual image of the company is fulfilled.

Naturally, when conducting a case study, it is not likely that an unsuccessful case can or will be studied or discussed in transparent manner. This is a valid point of criticism towards this thesis: studying two successful companies can lead to a lack of negative experiences in the presentation. However, even though the presented outcomes and reflections so far are predominantly positive, there are things to be aware of regarding the German ICS approach. For example, considering ICS as a miracle cure or a one-time quick-fix would be a fatal mistake. With the implementation comes hard work and involvement from the whole organisation, not only as a non-recurring action, but as a long term project and a natural part of the daily duties and responsibilities. If the potential benefits of an ICS implementation are to be reaped, an equal input of hard work is required.

Furthermore, before the acceptance from creditors and banks as well as implementing companies and organisations grows substantially larger, an ICS implementation can be questioned from an external competitive intelligence point-of-view. This does of course not include the internal perspective, from which the potential creation of competitive advantages is huge. In other words, the more popular this type of approach towards intellectual capital becomes, the greater the potentials will be. When/if one day all organisations will have an ICS, competitive advantage will be created through having the best ICS, not only by being one of the few having one at all, even if it is a good one. It is our firm belief that companies that already today are in the forefront in this area, e.g. reinisch and SØR, are well prepared for facing the future competitive landscape.

Condensing all the contents and outcomes of this thesis into two key-words is obviously impossible, but if an attempt would be made, *visualisation* and, most of all, *process* would be the most fair way to summarise "Intellectual Capital Statement –The German Process Approach".

6.2 Practical Tips

When considering the implementation of an ICS in the company there are a number of things to keep in mind:

- Size do matter but knowledge intensiveness, structure, maturity and previous experiences are more important factors.
- Create a representative group that can discuss the company's intellectual capital in an open and constructive manner.
- The ICS is primarily a tool for internal management and development of intellectual capital but can be used to communicate with customers, partners and creditors.

6.3 Suggestions for further Research

A valid reflection is that the potential of the ICS is not reflected in the amount of published articles. Especially English articles are virtually non-existent. It would therefore be very valuable with further studies that follow up on the project "Intellectual capital statement – Made in Germany".

A study that more in depth focuses on the comparison of the ICS with other approaches would bring new dimensions to the outcomes of this thesis. Furthermore, the aspect of statutory and transactional motives would be an interesting starting point in order to dig deeper into the accounting area.

Other aspects of interest could be e.g. the EnBW case, a long-term study of reinisch and SØR, an extended company comparison, focus on the differences and similarities between Denmark, USA, Germany and Japan. There is also a big gap which welcomes projects and research crossing language- and national borders..

Taxonomy

Arbeitskreis Wissensbilanz	The project group which developed the Guidelines for the ICS
Bilanz	German Balance sheet
BSC	Balanced Score Card
Bundesministerium für Wirtschaft und Arbeit	The German Federal Ministry of Economics and Labour
Wissensbilanz – Made in Germany	“Intellectual Capital Statement – Made in Germany“, German project with 14 participating organisations implementing ICS:s
IC	Intellectual Capital
ICS	Intellectual Capital Statement, the English term used for the German “Wissensbilanz“

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Edvinsson, L., Lund University (ongoing advisory Spring/Summer 2006)

Kivikas, M., Wissenskapital E&K GmbH (Spring/Summer 2006)

Wulf, I., University of Oldenburg, (Spring/Summer 2006)

Appendix 1

The following companies participated in the first pilot project of AK Wissensbilanz:

- aap AG
- ACTech GmbH
- Bad+Heizung Concept AG
- Blumenbecker GmbH
- Bürgel Bad+Heizung GmbH
- Caritas
- Domino World
- KGM Geräte- und Maschinenbau GmbH
- reinisch AG
- Schneider Bau GmbH & Co. KG
- SØR Rusche GmbH
- SSL Maschinenbau GmbH
- VR Bank Südpfalz eG
- XCC Software AG

Appendix 2

The core team in AK Wissensbilanz consists of the following persons:

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