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Nordic Innovation Centre

September 2006

Putting Intellectual Capital into Practice

Nordic harmonized knowledge indicators



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Title: Nordic harmonized knowledge indicators; Putting IC into Practice		
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<p>Abstract:</p> <p>“Nordic harmonized Knowledge indicators: Putting IC into Practice” or PIP, is a 32 months project, based on the work of 21 companies in the Information technology sector in the Nordic countries, with a special focus on small and medium enterprises (SMEs). The project focused on the formulation of a guideline for assessing, managing and reporting intellectual assets. The result of PIP is a guideline of SMEs to assess, measure and report intangibles which includes a framework assessment procedures, harmonized indicators for measuring performance and a template for reporting Intellectual capital. The indicators and methodology developed have also proven to be of great value for setting strategic a baseline for managerial business models in an efficient way.</p> <p>The benefits of the using the PIP approach are significant:</p> <ul style="list-style-type: none"> • Internally as a continuous tool for knowledge management and to set and follow up on management challenges. • Externally the IC reporting creates an informative link to external stakeholders such as market analysts and investors: The IC report had enabled at least one PIP company to achieve a lower interest rate by producing an IC report clarifying the companies’ value creation potential. <p>PIP is an open source guideline enabling SMEs to efficiently and effectively work with their intangible assets in a formalized manner.</p>		
Topic/NICE Focus Area:		
ISSN:	Language: English	Pages: 104
<p>Key words:</p> <p>Intellectual Capital, intangible assets, human capital, structural capital, relational capital, knowledge management, service, trademarks, copyright, intellectual property, Intellectual reporting, stakeholder reporting.</p>		
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Executive summary

PIP is an open source framework for assessing, managing and reporting Intellectual capital in small and medium enterprises in the Nordic ICT industry. The framework is based on the joined effort of the 21 participating companies. The lesson learned is that it is all about the journey, and not the final goal.

The result of PIP is a guideline for SME's to assess, measure and report intangibles enabling SME's to efficiently and effectively work with their intangible assets in a formalised manner. PIP includes a framework of assessment procedures, harmonized indicators for measuring performance and a template for reporting Intellectual capital. The indicators and methodology developed have also proven to be of great value for setting strategic a baseline for managerial business models in an efficient way. The keywords of PIP are: Assess, Measure, Manage and Report.

PIP is divided into iterative assessment phases in somewhat a parallel manner, involving the company and its internal and external stakeholders.

The approach involves the following steps:

- €# Identify the companies vision, mission, values and goals
- €# Assess the most valuable intangible assets based on the former
- €# Identify the appropriate indicators from the PIP set of indicators to measure the assets
 - o Align indicators to strategy to limit the selection to measure by:
 - o The company's internal position of asset: Human, Relational and Structural capital.
- €# The relation to strategic management: Resources, Activities and Effects
- €# Manage by using the indicators to monitor value creation.
- €# Report to make your stakeholders aware of your value creation potential

The IC reports and the case studies of the PIP companies are available on the project website www.si.is/nhki.

IC indicators, measurement and meaning, interpretation and benchmarking

Intellectual capital reports give an annual overview of the effectiveness of the management of the company's knowledge resources. Measuring IC is an internal process, a self-assessment and can be used for continuous improvements and organisational development. By continuously assessing the IC knowledge management becomes more in tune with the needs of management, employees and the market. Intellectual capital reports give an annual overview of the effectiveness of the daily handling of knowledge resources, knowledge management. To facilitate the first steps for IT companies towards IC accounting and reporting, we have created a harmonized list of indicators that give the intellectual capital statement bottom line.

The first steps in to IC accounting can be very time consuming but then it becomes quite easy to monitor changes to these key performance indicators as the process can to a certain extent be automated. Which general indicators should be present in an IC report and how they are to be measured, what questions or parameters, are underlying, to ensure the comparisons of apples to apples etc. The PIP framework lowers the threshold to overcome these barriers.

Selecting and setting general indicators and parameters to measure and monitor IC has been the core work of the PIP partners. It has to be kept in mind at all stages the vital indicators to some organisations can be useless to others, depending on economic environment, field of practice and organisational structure. It must also be clear that those indicators may be vital to point out a company's uniqueness. What makes it special in how it differs from others in its value creation? The diversity of meanings of a simple indicator sets the necessity of defining for each indicator how exactly it should be calculated or harmonized.

IC reporting best practice: The Use and Analysis IC reports

Can intellectual capital statements be systematically read and analysed in a way that is comparable with the reading and analysis of financial statements? Can their usability be made more transparent to stakeholders?

Unlike financial statements, Intellectual capital reporting is not based on a double entry system, ensuring assets and liabilities balance. It is based on a single entry system, so 'assets' can exceed 'liabilities', thus many see intellectual capital statements as giving less credible and less relevant company evaluations. This problem with the data does exist. Not all financial statement figures are, however, as unambiguous and informative as one would like to think.

Therefore, a detailed grid work of accounting standards has been established over time that specifies the correct use and interpretation of figures and concepts. One of the ongoing goals of PIP is to develop a similar set of standards for intellectual capital statement transactions to aid their interpretation.

The analytical method's goal is to create sufficient distance from the intellectual capital statement figures that a company presents in text and illustrations by grouping them in to three categories as to answer three general questions.

Intellectual capital statement

- # *What are the company's intangible resources and their composition?*
- # *What has the company done to strengthen those resources?*
- # *What are the effects of the company's work with those?*

Most companies write their intellectual capital statements, adapting element content and interrelationships to the company's particular situation. The content is therefore determined by the characteristics of the individual company. Intellectual capital statements therefore show wide variations, reflecting the differences in how they use knowledge resources and how knowledge is transformed to create value. The knowledge narrative, management challenges, initiatives and indicators are in principle unique to each company.

Critical evaluation is therefore dependent on the reader's ability to systematically analyse the information given in intellectual capital statements, analysis being based on figures disclosed. The goal is to evaluate whether the information provided by the company is relevant and the activities reasonable. The objective of the PIP framework is to provide an overview of the company's knowledge resources, including current knowledge resource stock, development initiatives and their effects.

Results and conclusions

Testimonials from the participants clearly state that they have benefited from participation in the project in various ways. The most obvious ones are realization of existing values in intangible resources and better management of those resources. Another is the attitude towards intangibles and how these are disclosed, both internally and externally. The PIP framework has in many cases created a common understanding for communicating intangible values and company strategy, both to internal and external stakeholders. The IC reports have proven to be a useful negotiation tool not only internally but also to external stakeholders and as such enabled the companies to raise venture capital and loans at better rates. Preliminary results from PIP member survey indicates that the companies within PIP show a strong sense of organizational learning and that they are in a better position to obtain business excellence in their performance.

Recommendations

It is important that this work be continued on various levels. As stated in project proposal, there is a post project phase where the IT organizations involved in the project, will introduce the results of the project to their members and hopefully develop national initiatives based on the PIP concept in the future. The existing project members will hopefully create a Nordic forum, a community of practice for communication and further advancement, as a follow up of the project.

PIP it has been shown that companies that are aware of their intangible assets are better equipped to manage challenges and more likely to enjoy success. The project has shown that assisting SMEs in developing and discovering their intangible potential has positive effects on society in general and SMEs play a major role in the economies of the countries involved. That is why further work with more companies and other industries needs to be supported, for example in a Nordic IC Centre for which the PIP framework demonstrates a roadmap on how to proceed with this work.

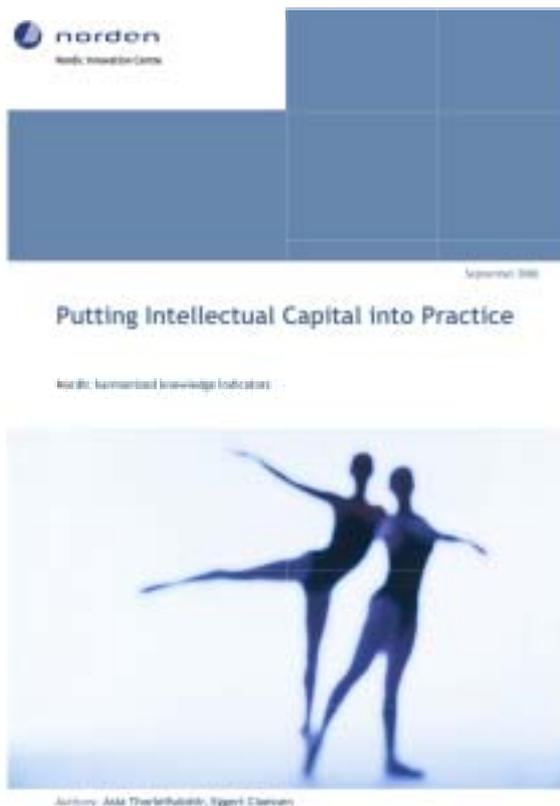


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1. Executive summary

It is believed that companies, that live up to their strategy, outperform their competitors and show more growth and better economic performance. Following the rise and fall of IT companies in market value during the years 1999-2002, the issue of reporting intangible valuables has been seen as a way to display the true value of companies. IC accounting is not only a way of assessing and reporting intangibles, but more importantly it is a way to monitor and manage intellectual capital. It provides a valuable benchmarking signal of how a company is succeeding in its knowledge management and a baseline for most organisational steering models. This is why companies need to report and manage their IC.



The Nordic countries have shown an initiative by launching special Nordic projects such as Nordika and FRAME, for reporting and measuring IC. These projects have resulted in reports that have enabled companies to further external and internal reporting, as well as raising the understanding of the intangible valuables. The importance of reporting IC applies especially to SMEs that do not enjoy the same possibilities as larger organizations to explain themselves to the business environment and therefore have the same possibilities to raise funding capital on a fair basis that takes into consideration the intangible valuables that the company possesses.

This report is the result of Putting Intellectual Capital into Practice (PIP), a 32 month project with the participation of 21 SMEs and IT sector organisations in the 5 Nordic countries. The project focus was on Nordic SMEs in the Information Technology sector. The project goal was to create an open source framework for transforming the knowledge base of SMEs in the IT sector. PIP was intended to provide a framework for assessing and

reporting IC. The main objective was to identify and harmonize indicators and measurements, both common and industry specific, and map out their interconnections and critical links to value creation. To aid in establishing how the company's strategy can be integrated and developed with respect to know-how, processes and stakeholder relations. To introduce IC assessment as a management tool to improve performance and assist the knowledge transformation process, as a support tool for strategic and operational decision-making. The project's rationale has been that IC accounting and reporting helps companies clarify the importance of intangibles in organizational performance and value-creation. That IC reporting is a tool to explain function and performance, vision and strategy to all stakeholders. That assessing IC is no simple task and there is a need for a structured framework for assessing intellectual capital.

The project was based on four phases with active role of participating companies and added value for participants. The activities of the project included; identifying indicators, meaning of indicators, agreeing on a measurement base, the dissemination and implementation of indicators in participating companies, seminars and follow up, identifying proper management tools for participating companies, measurement of input in new models provided by harmonized indicators as well as providing an outline template for IC reporting. Most importantly, for the participating companies, PIP has been a continuous learning



journey. This is why PIP came into existence, i.e. to enable SMEs to assist each other in developing a framework to shorten the route to working efficiently with IC. By harmonizing IC reporting and adding IC reporting to existing financial reporting the participants consider themselves to have a better chance of realizing the intangible values within their companies by providing a platform for comparison for the mutual benefit for stockholders, investors and the financial community.

The PIP framework has provided a platform for lowering the entry level for SMEs to work effectively with IC. This open source framework enables the transformation process of an organization into a knowledge-based company. As SMEs form the backbone of economic performance in the Nordic countries and because knowledge is recognised as a key driver of sustainable performance and innovation, it is of major importance that SMEs have this kind of framework to report and manage their IC.



2. Introduction

In a knowledge economy, the value of companies is not easily displayed in traditional financial accounts. As most of the value lies within in the intangible assets of the company, there is a need for an alternative reporting format. The intellectual capital report is the format that displays a companies' value creation potential. This is why companies need to report and manage their IC.

Background

To obtain the tools and information needed to assess and report Intellectual capital can be a hard and tedious task, which is why SMEs need a less complicated entry level for using IC tools. Realising this, the Icelandic participants in the NIC sponsored Nordika and Frame projects, decided to proceed on their own after the project closure by forming an IC disclosure work group within Business Excellence Iceland (see www.stjornvisi.is) with the objective of lowering the threshold for companies to assess their IC. The group created a list of indicators they considered of core importance to monitor and display IC, how to measure them and discussed their value for management and to the readers of IC reports. This work resulted in an Icelandic guideline for assessing and reporting IC¹. Harmonizing IC indicators and reporting was an important step to enable SMEs in Iceland to assess, manage and report IC. It has allowed for comparison between companies and/or industries but also it creates a common context for understanding the various aspects of intangible values. The rationale behind the Interest groups work was that harmonization would not only affect the SMEs but also have an impact on external stakeholders and thereby the value proposition that the company has to offer.

The exposure of this work was elevated in a pilot project on a Nordic scale that was arranged in co-operation the Association of Icelandic IT companies and with financial support from the Nordic Industry Fund (now Nordic Innovation Centre, NICE). The aim of this pilot-project, called Nordic Harmonized Knowledge Indicators (NHKI), was to establish a network of stakeholders, i.e. IT organisations and two IT companies from each of the five Nordic countries, to establish whether there was an interest in developing an IC assessment framework for SMEs. The objective was to assess the interest to start a fullscale project to continue with the work to produce harmonized indicators and a guideline for reporting IC thus forming a baseline for other managerial business models. The focus would be on Nordic SMEs in the Information technology sector. The main goal of the project would be to enable them to use these models, in a cost-effective way, allowing for benefit in transformation of knowledge base and economic return.

The pilot project met all its targets, submitted a project proposal to NICE in September 2003 and received funding for a new project called "Putting IC into practice" or PIP formally on February 15th 2004 (see www.si.is/nhki). The project was based on the results of the NHKI pilot project, the Nordika and FRAME IC projects, the work of the Iceland Excellence working group as well as initiatives such as the Danish Guidelines for IC reporting².

Introducing PIP

In its original form, PIP was introduced as a project aimed at enabling SMEs to assess, manage and report their intellectual capital in a formal manner. The PIP project was in a way special, as all research was done by the participating companies, instead of academics or consultants. This did not exclude other stakeholders, as every effort was made to create a liaison with accountants, consultants, academics, etc., but the main input was from the participating companies. It is also worth noting that the companies were compensated for their work, as PIP was supported by the Nordic Innovation Centre with 34% of the

¹ Thorleifsdóttir, Finnbjörnsson (2003), Mat á þekkingarverðmætum.
http://www.stjornvisi.is/faghopar/thekking/2002-2003/Thekkingarskyrsla_februar2003.pdf

² DTI (2000). A guideline for intellectual capital statements - A key to knowledge management, Danish Agency for Trade and Industry.



cost of the project, including project management. That the companies, as the base of research, receive funding is new in the field of IC research as this was not the case in the Nordika and FRAME projects. This fact had a great positive influence on the companies deciding to join the project.

The main objectives of PIP were:

- ⌘ To establish an easy approach to assess intellectual capital
- ⌘ To finalise a list of harmonised key indicators and the means of measuring them
- ⌘ To link the use of these indicators to strategy and management
- ⌘ And to set up a model for reporting IC

The PIP project had 30 months to reach its goals and was divided into four phases with specific tasks.

- ⌘ Phase One had tasks like: identifying indicators, deciding on meaning of indicators, creating liaison network with accountants, consultants etc. and preparation of results for dissemination
- ⌘ Phase Two had tasks like: implementing indicators in participating companies with seminars and follow up, external reporting of results from implementation and revision based on results
- ⌘ Phase Three had tasks like: identifying proper management tools for participating companies, measurement of input in new models provided by harmonized indicators and evaluation of contribution, both to the learning process and economic results
- ⌘ Phase Four concentrated on presenting the results of the project in this final report and secure means of further dissemination and post project continuum

The PIP project provided many learning points for the participants and the following highlight some of the main ones.

- ⌘ Innovation, customer relationships, brand value and employee motivation, along with other intellectual assets are the drivers of future value creating within the company
- ⌘ In order to manage these values effectively, they need to be aligned with strategy and measured
- ⌘ Assessing and managing IC is a learning journey that needs to be reported in order to communicate strategy and future value potential, both internally and externally
- ⌘ Although the value of IC assessment is primarily internal, the IC report is a formal way of supplying external stakeholders with answers to some of their most important questions
- ⌘ An IC report can create awareness of the intangible values within the company and its links to strategic management. If properly done, the IC report can show how the company is making optimal use of all resources by adjusting the internal structure for captivating processes and transforming knowledge to codified information.

Key learning points (part 1):

- ⌘ *PIP helped us develop our competency and improve our performance*
- ⌘ *PIP makes a very beneficial tool to steer company's long term strategy*
- ⌘ *PIP helps us carry out our value and innovations creation*

3. The PIP rationale

The PIP project has demonstrated a link between IC activities and performance in the participating companies. This is captured in the statement that the companies that are able to best pursue their strategy, by managing their intangibles, are more likely to excel in their industry. In order for SMEs to achieve this, a common language for intangibles is needed. PIP has done this in part by harmonizing indicators to enable more organisations to enhance their IC activities without extreme costs. This includes identifying the main value driver categories that are to be found within the management, relationships, and organisation of any company.

It is an accepted fact that the traditional balance sheet does not take into account the intangible factors that largely determine a company's value and its growth potential. These assets generally amount several times the value of the tangible assets. The rationale behind measuring intangible assets in a company is that:

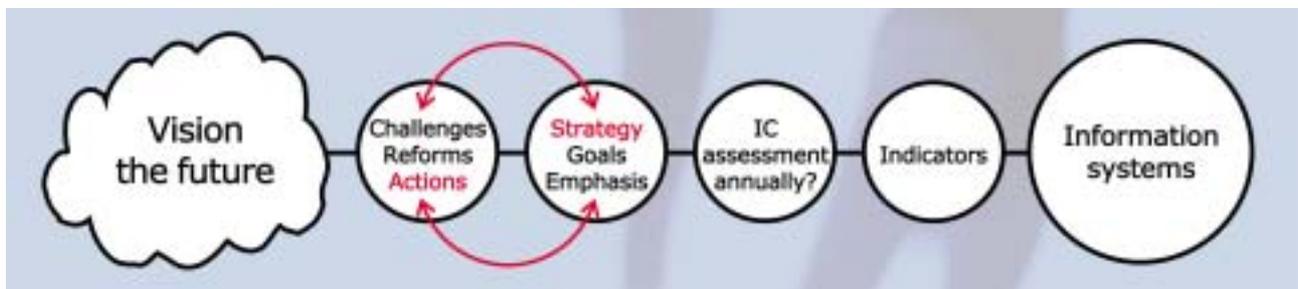


Fig 1: The PIP rationale (Thorleifsdottir, Asta 2003)

- ⌘ it more truly reflects the actual worth of the company
- ⌘ the process of measurement gives insights into performance drivers and value creation
- ⌘ demand is growing for effective governance of intangibles, already reported to some extent in social and environmental reporting
- ⌘ "What gets measured, gets managed"
- ⌘ it focuses on protecting and growing those assets that reflect value
- ⌘ it supports a corporate goal of enhancing shareholder value
- ⌘ it provides useful information to existing and potential investors
- ⌘ extends the companies values and goals and thereby its image

The main reason for using the PIP framework to assess, manage and report the IC in a company is to establish:

- ⌘ a strategy for performance rating and measurement of IC
- ⌘ a common method and framework for reporting
- ⌘ a common understanding of the value of such a method, both internally and externally

The first step is to construct an IC inventory, including a map or a model of how the intangible assets are placed within the organisation. The aim is to give a holistic view of a company, based on well-defined indicators on the basis of strategy, goals and values. The PIP framework assumes that IC can be divided into three main blocks of assets or capitals, i.e. human, relational and structural.

The categories of Intellectual Capital

Traditionally human capital is that part of IC which is possessed by the employees and leaves the company by the end of a day. Structural capital is knowledge transformed to information, embedded in internal systems, processes and information systems. These assets still remain within the organisation after daily closure and secure work procedures, quality and to some extent traditions available to new employees upon their arrival, as well as market assets. The third block, relational capital, sometimes referred to as customer capital, lies interactively above and within the formerly mentioned. It describes networks and alliances and assets such as goodwill/image, factors related to the market and internal organisation and processes, which give added value by highly skilled staff through good networking, internal and external.

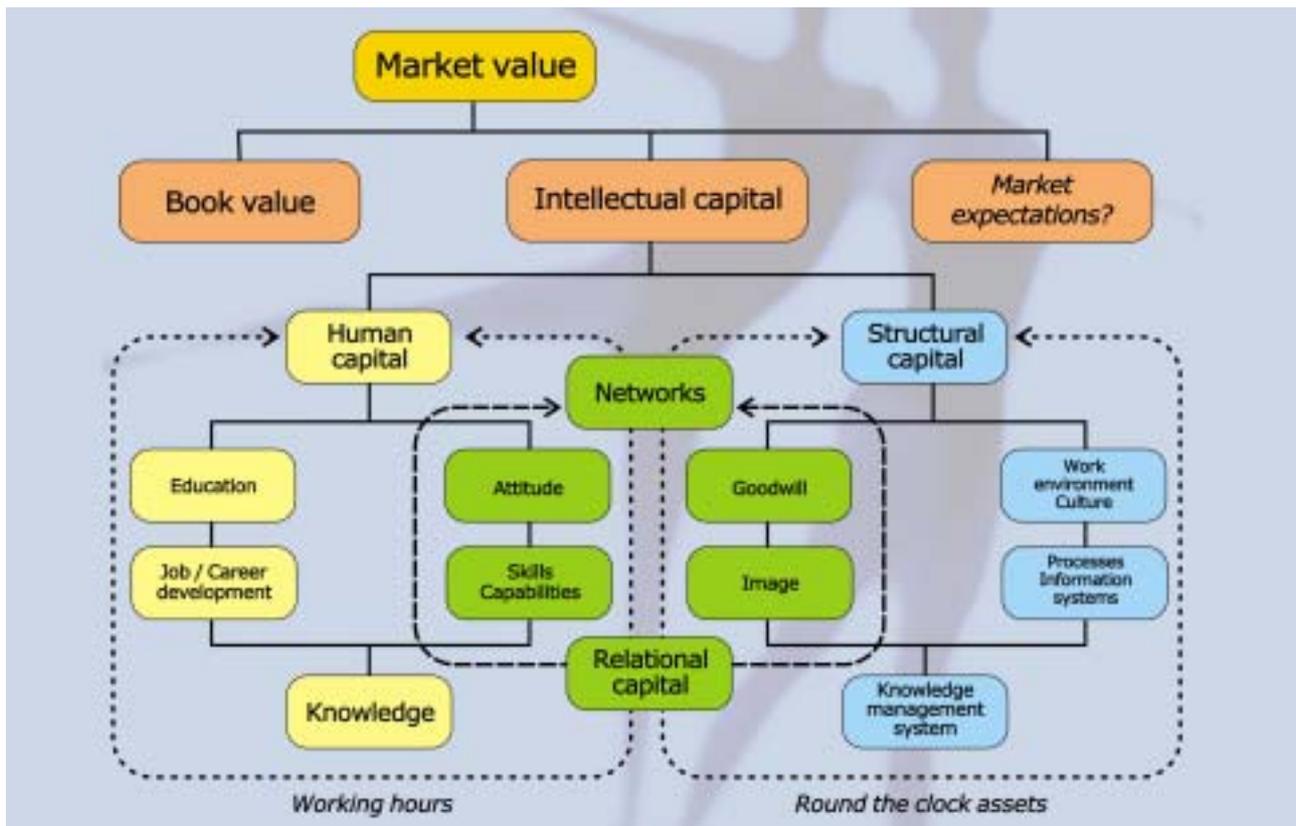


Fig 2: The Classification of indicators according to Capital source (Thorleifsdottir (2002) ³

The indicators are categorized according to the knowledge resource they relate to (HC, RC, SC) and used to show the company's knowledge resource composition, acquisition, use and development. Most indicators already contain the information required to classify them in more than that one dimensions. The dimensions can be considered to be inherent in the figures, referring to a particular aspect of a particular type of knowledge resource. This is often the case, but in practice, it is often difficult to set boundaries. Rules of thumb are used, just like in accounting standards, to classify financial transactions, which are used to classify assets in several ways.

In general, there are three types of indicators describing resources, activities or outcomes. In other words; what you have, what you do with it and the result or effect of that action. For resource figures, classifying the indicators according to type of knowledge resource usually will not present any major

³ Thorleifsdóttir (2002), "Networking organizations in explicit knowledge networking" Paper presented at "The Transparent Enterprise. The Value of Intangibles". 25-26. November, 2002



problems. Activity figures often create confusion, because some activities can upgrade different types of knowledge resources simultaneously.

An example of this is sending an employee to a process optimisation course can qualify as both an employee and a process activity but generally one should put the knowledge resource in focus. Customer group meetings should therefore be classified under customer resources and not under employee resources. This also applies to conference representation, because the company's image (customer resource) is in focus. The employee resource is not in focus even though employees represent the company at the conference.

Problems may arise when placing effect indicators within in the model, because they again may relate to more than one type of knowledge resource. For example, where are 'employee satisfaction with technologies' and 'customer satisfaction with employee competencies' to be positioned? In best practice, a figure is classified according to the qualities it describes. Therefore 'employee satisfaction with technologies' should be considered to be a technology quality and should be classified as a technology resource. Applying the same principle means that 'customer satisfaction with employee competencies' should be classified as an employee resource.

Many companies use abstract categories to describe their intangible assets, for example, 'innovation', 'flexibility', 'customer-orientation' and 'strong culture' are all abstract concepts, not initiatives. In the PIP framework, such concepts are used to form categories for grouping descriptive indicators and as such, an input to the discussion and reporting IC through knowledge narratives. In the PIP framework, some 15 categories of indicators are used, grouped by origin of resources:

Human Capital

- Employees
- Staff turnover and recruiting
- Skills and competence
- Employee satisfaction and attitude
- Executive competency

Structural Capital

- Information systems
- Quality management
- Innovativeness
- Competence development
- Working conditions
- Governance

Relational Capital

- Customers
- Market and image
- Visibility of expertise
- Networks

Table 1: The PIP prioritizing of indicator groups

When assessing, monitoring and reporting IC, it helps to harmonize the groups of indicators, to describe intangibles within the organisation. PIP has concentrated considerable effort on evaluating the viability and usefulness of various indicators. The experience is that indicators are considered to be the most practical way to represent particular intangible value. It has to be kept in mind that the indicators that are vital to some organisations are possibly useless to others. This depends on the economic environment, field of practice and organisational structure. It must also be clear that indicators can be vital to point out a company's uniqueness, i.e. what makes it unique, and how does it differs from others



in its value creation. To ensure comparison, it is necessary to document the process of how the measurements behind each indicator were found.

The PIP indicators and measurements

The main challenge facing the PIP companies when starting their IC initiative was which general indicators should be present in their IC report and how they could be measured. What questions or parameters are underlying the value presented? Is it possible to ensure the comparisons of 'apples to apples' to establish a common language for communicating and understanding IC within an organisation and between organisations? Here is where the set of indicators developed in the PIP framework come to good use. This is the reason why the indicators needed to be harmonized by deciding on their meaning and formalising the measuring technique by a fixed formulae or a fixed set of questions.

After the initial measurements, it becomes quite easy to monitor changes to these key performance indicators. The process can even sometimes be automated. The required indicators and the way they are to be measured are presented in a table. Prior to that, considerable analytical work and dialogue is needed. The building of a consensus on what are the most important assets doesn't happen overnight but it is easier when you have established a common language because many indicators are open to debate, even the simple ones such as employee turnover. There are many different opinions of the definition of turnover and how it should be measured. The diversity of meanings of a simple indicator set the route of defining for each indicator how exactly it should be calculated. This is demonstrated in the following example:

Group	Indicator	Formula	Goal
Human capital	Annual Turnover	Accession rate:	Cost of training
		New employees/ total workforce	/expenditure
		Separation rate:	Retention of knowledge
		Employees gone/total workforce	/Loss
		<i>Distributed by seniority</i>	2yrs, 5yrs, 8+yrs

Table 2: Route of defining each indicator

In PIP, there is a definite way of assessing turnover, both accession and retention rate. Accession rate (rookie rate) is one way of demonstrating IC growth in an organisation. The training of new staff is an initiative, the introduction to the companies working culture. Simultaneously new knowledge is being added to the knowledge pool of resources and as such enhances the possibility of innovation. A typical management challenge is: 'the recruitment and retention of personnel'. The challenge as such it is still very general and has no real content until initiatives and indicators are defined. Initiatives tell whether it is recruitment or retention that is needed and also where there is a need for recruitment or retention. Many software companies see recruitment and/or retention of highly skilled software engineers as a management challenge. The effect is reflected through changes in the resource.

The PIP framework has a list of some 40 indicators for this purpose (see appendix II). These indicators should be displayed in the narrative to support the story being told. The indicators should also be represented in a table-format on one single A-4 sheet, somewhat like in a financial account. The list of PIP indicators and how they are measured is open source so they can be used at will. It should be pointed out that selecting and setting general indicators and parameters, that can apply to all organisations, non-dependant on their field of specialization, public or private is a major task – but not impossible. The emphasis of PIP has been to provide a good method for measuring and assessing common indicators. The PIP companies have also selected the 5 most important indicators from each capital group (see appendix III).



Indicators, strategy and management

In all organisations, indicators must be evaluated on the merit of their contribution to the strategic vision of that particular organisation. This is where their impact on economic performance is vital. Specific indicators are time-dependant as they change over time with new management challenges, strategy or vision. The aim of specific indicators is to draw the attention to the company's business case. The selection process must be geared towards finding indicators, relevant for the core business of the organisation. Indicators are but means to register tendencies and monitor changes. Comparison over time will give the management an idea of the development of the indicators. With this tool in hand, it is possible to detect changes and developments in the company early on and make the necessary adjustments to manage them efficiently.

It must be emphasized again that indicators vital to one organisation can be useless to others, depending on the economic environment, field of practice and organisational structure. It must also be clear that those indicators may be vital to point out a company's uniqueness, i.e. what makes it special in how it differs from others in its value creation. The PIP framework can only try to assist in assessing specific indicators in proposing a good working model for a holistic approach of analysing the intangible assets of an organisation.

The issue is; that even common indicators have different importance in different industries. An example of this is when employee and customer satisfaction may correlate stronger with financial results in service-orientated industries with high direct customer contact, such as hotels and the banking industry – and less in industries with higher rates of R&D and creative professionals, since they are often motivated by different things. This is one of the major reasons why PIP has focused on SMEs in IT, as to work on common ground.

The importance of the PIP indicators for establishing good business plans and managing challenges is further discussed in chapter 4.



4. The PIP Process

This chapter describes the process which the PIP companies used to work with their intellectual capital. The process is based on a typical SWOT approach and on the basis of knowledge management as knowledge is seen as the most highly priced intangible asset and the backbone for innovation and future growth.

Through the work of the companies in PIP, it has become evident that many problems of the IC assessment and reporting process are collective, and so were most of the indicators the companies used, despite the differences between the companies. This further clarifies the need for a harmonized way to measure intangible assets, without losing a company's uniqueness.

The PIP process is mainly a three-part exercise for the organisation. These three parts are:

Assess - Manage - Report

First, there is a learning journey where the company undergoes a self assessment by evaluating its resources and objectives as well as formalising the values and strategy. Just going through the process of **assessing** the IC is the most valuable of all. All the PIP companies agree on the importance of the learning journey, and even if the company does not formally report but only assess the IC, it is a good achievement.

Then, these findings are used to **manage** the intangible resources in a more strategic way. Once there is an established a baseline of indicators, the ability to monitor changes and use this to optimize performance, the company has begun to use a management tool and lowered the threshold towards using the better known tools.

Finally, the organisation can use this approach to explain itself, its achievements and its future potential to external stakeholders by displaying its intellectual capital in an IC **report** or use the findings to create a common language within the organizations to ensure the same understanding on the strategy that the company wants to follow.

PIP Steps

The PIP guideline suggests the following process for assessing IC for the first time, as there are many aspects to consider that can cause complications and stall the exercise. These aspects include questions like:

- ## Why are we doing this?
 - o A definition of the objectives, aims and goals must be established
- ## What are our resources?
- ## Which information is it preferable to work with?
 - o Is the information available
 - o Where can it be found in order to do the assessment
 - o And can it be measured?

This requires considerable knowledge of the information systems, access to various survey results such as employee and customer surveys to set of. It is suggested that for the first time, work is divided into three steps.



Step I: To Assess

It is suggested that an initial brainstorming meeting be held to identify the most important intangible assets in the company. People from all departments should be incorporated in these initial steps where they try to determine what the important IC resources in the company are. This can easily be done through a typical SWOT yellow sticker approach. Then the location of the information on these IC resources has to be established, what are their indicators and determine whether they can be measured. Once the most important intangibles have been established, the IC indicators are classified into the three major groups of IC, human capital, relational/customer capital and structural capital. The group of participants is then split into three groups, each dealing with one class of IC. Ideas are analysed further and an attempt made to see if necessary information is available. Identified parameters are compared to the vision, strategy and objective of the company. The results were then reformed and prioritised again.

Step II: To Manage

The indicators, as the precursor of the report, the search and processing of data, is the most complicated part of this process. A good guidance is necessary, even external consultation. The work in this step reveals how good and accessible the information systems are in the company. Participants must be both resourceful and have an initiative. The data is there. It can be found in survey results, on the intranet and/or the web pages, in training system and employee records, accounting system, quality system or other systems. But a new way of thinking is necessary to be able to transform this data to knowledge. Processing these sources of data has to be harmonised to ensure comparison internally between periods and externally between companies.

PIP and knowledge management

Knowledge is an intangible asset composed of many factors that contribute to create the foundation of a company's market value. The purpose of assessing intellectual capital is to get an overview of these intangibles consisting of all knowledge and experience in the company, both explicit and tacit. It deals with how it is systematically captured and how efficiently it is shared. The assessment creates new value because by measuring IC the company can better build a dynamic, structured knowledge management system and therefore increase the ability to use and exploit knowledge thus increasing efficiency and creativity, ultimately to increase financial profit.

Knowledge management is, from a practical viewpoint, the daily management of IC from the human point of view, encouraging quality, reaction speed and adaptability in a rapidly changing environment. The importance of managing knowledge efficiently is growing since corporate knowledge ultimately determines market position. Mapping and reporting intellectual capital in organisations has become a base for setting strategy, making well-founded decisions and getting a realistic assessment of ways to gain the objectives and reach defined goals. On the managerial side, managing IC creates a baseline for most common organisational steering models such as Balanced Scorecard, EFQM and Benchmarking tools. In addition reporting intangible assets makes the intellectual capital more visible for investors and other stakeholders, as success primarily depends upon the exploitation of innovative ideas instead of physical assets.¹

¹ Thorleifsdóttir (2002), "Networking organizations in explicit knowledge networking" Paper presented at "The Transparent Enterprise. The Value of Intangibles". 25-26. November, 2002

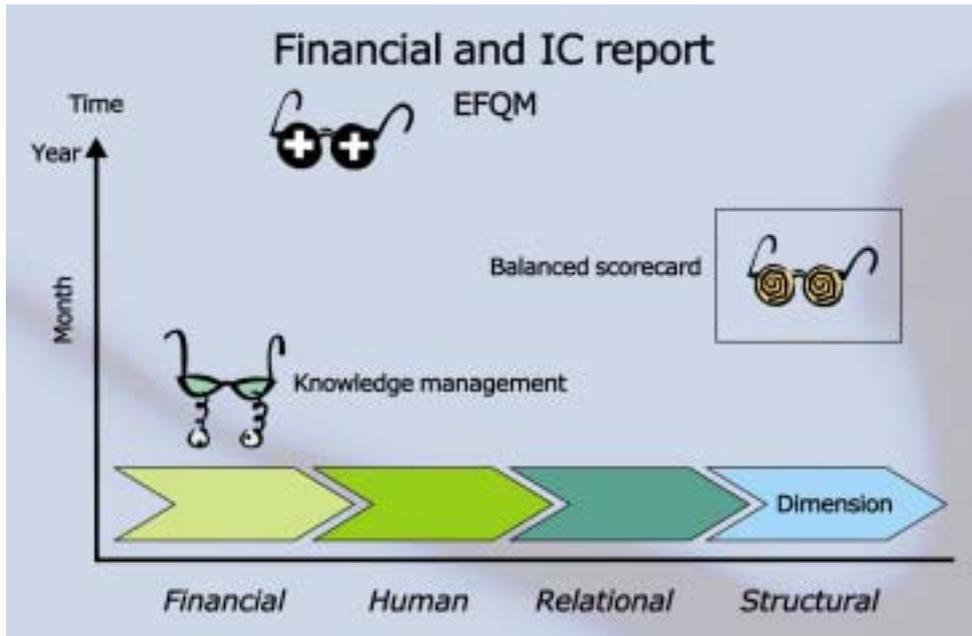


Fig 3: After assessing – Choose the right managerial glasses for the organisation

The use of harmonized intellectual capital indicators as a baseline for managerial steering models has had many ways of benefiting the PIP participants. The indicators provided a measure and common understanding of the elements of the IC report that function as a reporting medium to explain the intangible values of the company. As the PIP project is about using IC reporting with harmonized IC indicators as a baseline for this work, the discussion about managerial steering models will be conducted within the framework of the IC reporting guidelines that are the basis for how PIP participants have reported their IC.

This common or harmonized language for IC reporting should lower the entry level for using IC tools and evaluating their IC base and value, thereby making the learning process more applicable and affordable. In addition it should enable companies to profit and prosper from improving operations and increasing market value. By participating in the PIP project, the companies have improved their operations and value creation mechanisms. The question to be answered is whether these objectives have been met? Only time can tell but at the finish of the project, the participating members of the PIP companies perceived themselves as having a higher level of organizational learning and performance than other management groups.

The benefit of harmonizing IC indicators is their important relation to present popular organisational steering models such as Balanced Scorecard, benchmarking tools, EFQM and ISO standards. As IC indicators can form a baseline for these models in the form of the same information being needed, it is important that the rational behind measurement is harmonized. By harmonizing IC reporting and adding IC reporting to existing financial reporting, the companies have had a better chance of realising the intangible values within their companies, resulting in improvement in their operations. It has also provided a platform for comparison for the mutual benefit for shareholders, investors and the financial community as to enhance value creation.

Step III: To Report

The IC report is an overview of the company's intellectual capital, the knowledge resources. It is a statement of the initiatives and actions undertaken to maximise the value-creation and demonstrate its potential to take on challenges. An IC report is a powerful communication tool. It can be used efficiently in negotiation with external and internal stakeholders alike. It demonstrates how the company makes



ultimate use of its intangible assets through effective knowledge management by aligning them to its strategy to reach desired effects.

It should be kept in mind when planning to disclose intellectual capital that there are various stakeholder groups to present to. After processing the data it is time to determine the target group of the report. There is a considerable difference between writing an internal report, often used as a source for continuous improvements and development, or if the report is for general distribution for investors, venture capitalists and other stakeholders.

The Intellectual Capital report is a valuable supplement to the traditional financial disclosure as it is a foresight tool that describes the company's value creation potential.

Key learning points (part 2):

- ⌘ *When the company grows it is important that it continuous both in the old ways and new*
- ⌘ *The PIP project and the use of the indicators has given us new ways of forming new ideas*
- ⌘ *PIP enables us to give a much more colourful picture of the company*
- ⌘ *We leaned what are the important measures not only for us as a company but for our external stakeholders*
- ⌘ *We found that strategic use of the indicators helps us clarify the direction into which the company is going*
- ⌘ *The key figures help us monitor changes over time*
- ⌘ *PIP enabled us to use Meaningful metrics to highlight the values within*
- ⌘ *PIP is a learning progress that helps you take IC "under your skin"*
- ⌘ *PIP made the invisible more visible: we identified our key competence and made all our processes visible and enabled us to develop them constantly*
- ⌘ *PIP enabled us to identify the different types of knowledge within our company and demonstrate how information is transformed and knowledge exchange takes place*
- ⌘ *IC assessment is a very valuable management method*
- ⌘ *To harmonize indicators and methods to measure gives us a tool to benchmark and compare both internally and externally to competitors*
- ⌘ *PIP made us realise the not so obvious potential residing with in the companies*



5. PIP and management

From a management perspective, it is argued that smaller companies are at a disadvantage to larger organizations because of both financial and organizational capabilities. Because of this lack of resources, SMEs do not enjoy the same possibilities as larger organizations to explain themselves to the business environment. This is why they do not enjoy the same possibilities to raise funding capital on a fair basis that takes into consideration the intangible valuables that the company possesses. One of the rationales behind PIP is to address this.

IC reporting is important to SMEs as it reveals hidden assets that can have a major impact on the profitability and even core existence of the company in the future

Another is the use of managerial steering models. There are special characteristics of a SME that warrant special attention with regard to IC reporting. The SME can be different from larger companies in its stages of development because when they are successful they are normally associated with a clear focus and strong values like independence, flexibility, entrepreneurship and innovation. In addition they work in close contact with customers and suppliers, using a personal form of control and having a long-term view of the business relation. They however suffer as; informal structures, insufficient resources erratic decision-making, poor administrative and accounting procedures etc hamper the business.

IC reporting is not only intended for external communication such as valuation for shareholders and raising capital, but also for internal development

If future strategy relies on intangible elements, it is of importance for management to discover, explain and realize this intangible potential. As a result, this affects internal elements such as strategy formulation, assessment and management, internal benchmarking and motivation and compensation.

Relating these statements to the PIP experience, it becomes obvious that the PIP companies not only needed to report and manage their IC. They needed to know what to do with the information gathered from IC reporting as to improve management and performance. They needed to learn and to create the circumstances for knowledge creation. They also needed a less complicated entry level for using management tools. This is why the project aimed to provide a basis for such learning and also a simpler entry level to many of the tools that are considered to be complicated for SMEs to use.

For the management, the performance of a company is traditionally viewed from a financial perspective. The elements to check are the following:

Financial strength: What are the company's assets and liabilities?
Investments: How has the company invested?
Return: What is the company's return on investment?

This is based on the financial data available and describes a fixed reality in the past. It does not cover the value creation potential that for example a typical IT company has, due to the limitations in explaining the nature of the business within this reporting framework. It also poses problems for the managers of IT companies, as they have different reality in the business tools they use to manage their companies. This is why the use of IC reporting is important to them.

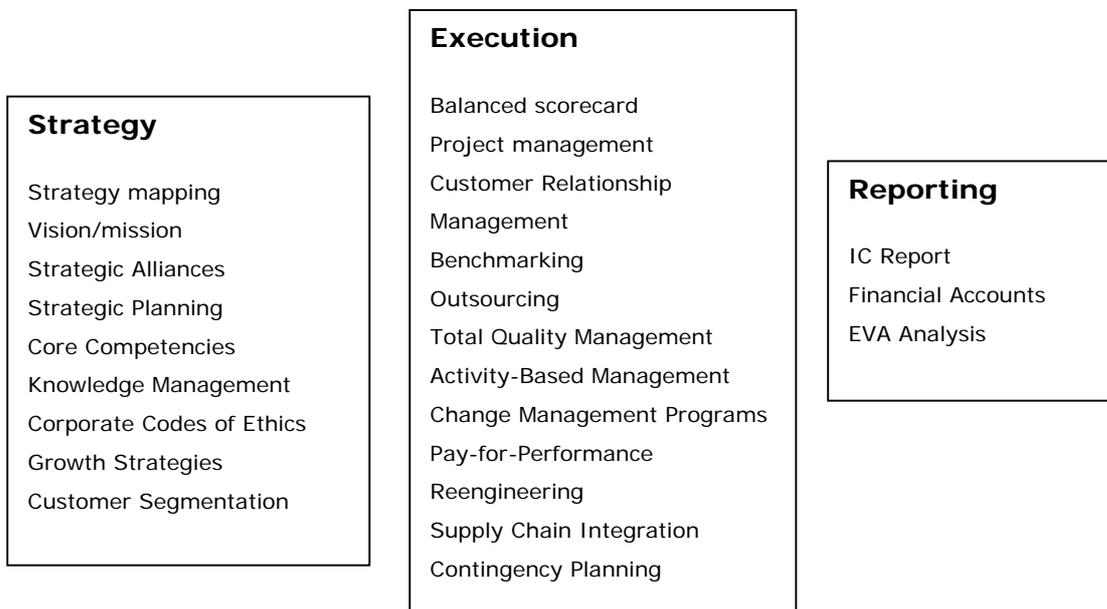


In comparison, the main components of the IC report are questions similar to the financial ones, but reveal another dimension of the resource base available to the company. The main questions answered in the IC report are about:

- Resources:** *How are the company's resources comprised?*
- Activities:** *What has the company done to strengthen its resources?*
- Effects:** *What are the effects of the company's management work?*

In terms of connecting the various managerial tools available, these sections can be categorized in the following three main categories of; strategy, execution and reporting, with various financial objectives. One of the objectives of the PIP project was to implement some of the modern management tools to ensure that the above criteria could be met. When introducing these tools, every effort was made, to make sure that the entry level was lowered as possible so that implementation would not exhaust the financial and managerial capabilities of the companies. This is where the harmonization of IC indicators came into the picture. The harmonized indicators that the project had decided on were used as input in all steps of the process and used in standard tools, where available.

This meant that the indicators were used for directing strategy, to guide execution, and last but not least serve as a basis for reporting results. One of the objectives of the project was to determine if this was possible. As can be seen in the testimonials of the participants, many of them reported positively in this respect upon completing the project. This grouping can be used to draw another picture to illustrate where the various methods and models fit:



This is not intended to be a finite list of options, only a guideline based partly on www.bain.com surveys on what tools are most widely used. But from these options, only a few will be discussed in detail. The reason being that the companies need a simple approach, a few tools that enable them to improve performance and demonstrate value creation. It should also be noted that the participants might chose other tools not listed here. It is also worth mentioning that the main focus for this paper is the strategy part. The execution is very different depending on the nature of the business of the company, even though all participants of the PIP project are IT companies. Finally, the reporting part is fully standardized when it comes to financial accounting and the participants have already spent time on and developed their IC report.



It was recommended, that participants take a look at some of these tools to see if they fit their company. It was also important, that even though the tools were not used, it was important to know what tools are available. In the following sections, each of the three boxes is addressed, to try to create a common context of understanding. The object, as always, is to make things simple, but try to maintain the elements of importance or the essence of the topic in question. The final selection of tools would depend on the choice of each of the participants but the PIP sessions used a strategy mapping tool for the strategy box, a monitoring tool in the form of a scorecard for the execution box and finally financial and IC reporting for the reporting box. All in the context of harmonized IC indicators.

First box - Strategy

To start with a little history, the origin of the word strategy is from the ancient Athenian position of strategos who was the head of each tribe. It has a meaning as army, army that is spread out over ground and to lead. The tactical aspect of strategy is appealing to business. Just as the goals of strategy for Pericles, one of the greatest Athenian strategoi, was to "limit risk while holding fast to essential points and principles" the goals of the modern business manager are to maximize shareholder value and minimize risk seem to be very similar in this respect.

Strategy was very much a line function to the ancient Athenians and the formulation of strategy was a leadership task. No single definition of the concept of strategy is available. Some state that the field of strategic management cannot afford to rely on a single definition as the word has been used implicitly in different way even though it has been traditionally defined in one. That explicit recognition of multiple definitions can help and suggests five definitions of strategy, i.e. as a plan, ploy, pattern, position and perspective and that they share some interrelationships². Some elements of strategy that have universal validity can be applied to any institution whilst other elements are heavily dependent on the nature of the firm, its constituencies, its structure and culture. There could be six critical dimensions to form a unified definition of strategy. These are strategy as a: coherent, unifying, and integrative pattern of decisions, as means of establishing an organization's purpose in terms of long-term objectives, as a definition of a firm's competitive domain, as a response to external opportunities and threats and to internal strength and weaknesses to achieve competitive advantage, as a logical system for differentiating managerial tasks at corporate, business and functional levels and finally as a definition of the economic and non-economic contribution the firm intends to make to its stakeholders.

Just as the question how knowledge is created in organizations the question about how strategies are formed in organizations is of interest. Some say that strategy has almost inevitably been conceived in terms of what the leaders of an organization plan to do in the future and tended to be treated as an analytic process for establishing long-range goals and action plans for an organization. Strategy has long been associated with entrepreneurship, and the process has been described in terms of the creation of vision by the great leader. But if strategy can be a personalized vision, then strategy formation has also to be understood as the process of concept attainment in a person's head. Accordingly, a small but important cognitive school has also developed that seeks to use the messages of cognitive psychology to enter the strategist's mind.

There are many books on strategy, formulation and execution but based on observations of the PIP companies, it is fair to assume that most of them are using their "gut" feeling for strategy purposes. This does not imply that the strategy is in any way inferior or worse than what some of the bigger companies use. The only difference is the visualization and documentation of the strategy and also how formal the process is. This implies that strategy is nothing but a "judgment call" for the executives of a company to make on what to do. To put this into perspective, it is necessary to make the strategy process more formal if you are to convince the external environment that there is value in your strategy. It is also

² Mintzberg, H. (1987). "The Strategy Concept I: Five Ps For Strategy." California Management Review 30(1): 11.



important to have some tool to communicate your strategy and describe the goals and guidelines that should govern the business you are running. This means that formal steps have to be taken.

The company needs to start with the development of a Mission Statement, which defines the company's business, its objectives, and its approach to reach those objectives. A Vision Statement describes the desired future position of the company. Elements of Mission and Vision Statements are often combined to provide a statement of the company's purposes, goals, and values. However, sometimes the two terms are used interchangeably.

Typically, senior managers will write the company's overall Mission and Vision Statements. Other managers at different levels may write statements for their particular divisions or business units. The development process requires managers to clearly identify the corporate culture, values, strategy, and view of the future by interviewing employees, suppliers, and customers; address the commitment the firm has to its key stakeholders, including customers, employees, shareholders, and communities; ensure that the objectives are measurable, the approach is actionable, and the vision is achievable; communicate the message in clear, simple, and precise language; develop buy-in and support throughout the organization.

The statements are commonly used in two different ways. The first is internally where it is used to guide management's thinking on strategic issues, especially during times of significant change. Help define performance standards and inspire employees to work more productively by providing focus and common goals. Guide employee decision-making and help establish a framework for ethical behaviour.

The second is externally where they are used to enlist external support, create closer linkages and better communication with customers, suppliers, and alliance partners. The statement could serve as a public relations tool as well. This leads to the strategic planning process, which is used to determine what a business should become, and how it can best achieve that goal. It appraises the full potential of a business and explicitly links the business's objectives to the actions and resources required to achieve them. Strategic planning offers a systematic process to ask and answer the most critical questions confronting a management team—especially large, irrevocable resource commitment decisions.

For this purpose, the participants developed a revised version of Kaplan and Norton (2004) strategy maps³. The dimensions of the strategy map were adapted to the IC reporting dimensions with the financial one added, as Kaplan and Norton have chosen not to use the generally accepted definitions of intellectual capital. An example of this revised strategy map is shown in fig. 4.

The critical success factors (CSF) of the company were then aligned with the company's vision/mission. The reason for selecting CSF instead of key performance indicators is to counter the argument that strategy maps confuse the two dimensions, importance and influence. Just because something takes place often does not mean that it matters. It also confuses real activities with the influence of these activities⁴.

The maps created by the companies, listed only a few critical success factors, not more than 12 and usually fewer. When presented with large and complex causality maps, the companies unanimously voted them to be too complicated to be of practical use. The companies agreed that, the simpler the model, the more it would help. The main thing was to identify the IC values and how they affect the company and how the future vision/mission of the company could be translated into a plan for execution.

³ Kaplan, R. S. and D. P. Norton (2004). *Strategy Maps: Converting intangible assets into tangible outcomes*, Harvard Business School Publishing Corporation.

⁴ Claessen, E. (2005). "Strategic use of IC reporting in small and medium-sized IT companies: A progress report from a Nordic project." *Journal of Intellectual Capital* 6(4): 558.

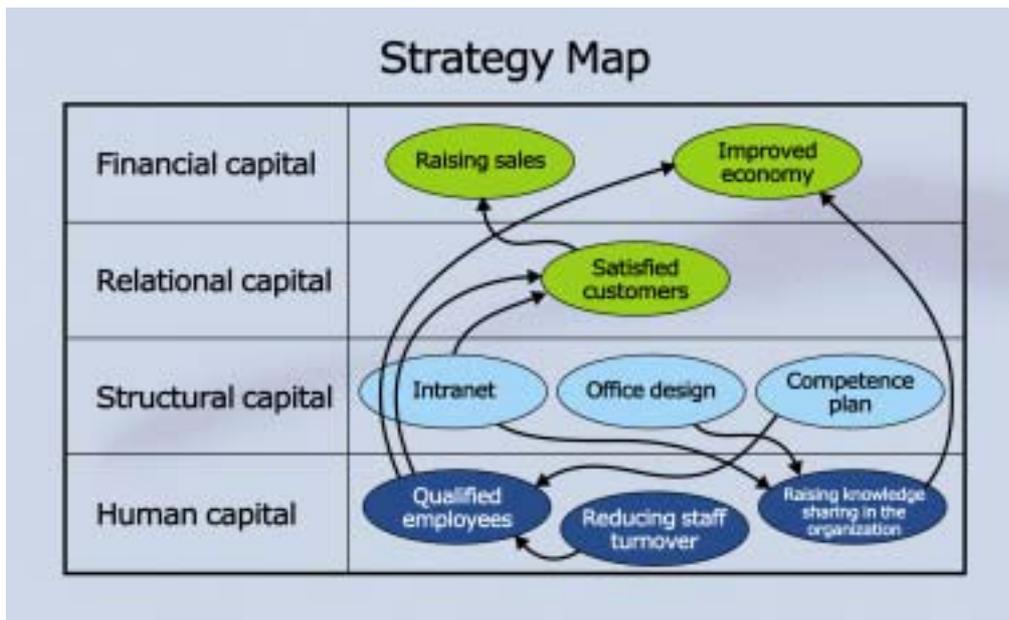


Fig 4: Strategy Map

The map was then aligned with the harmonised set of indicators and others that were company specific. From this, the companies developed scorecards in a Kaplan and Norton (1992) fashion. They made an effort to work on the limitations of this method in terms of identifying cause and effect relationships and using the scorecard as a strategy implementation tool. The companies were now at a stage where they had developed a model for deployment and could adapt the process to their companies, both in terms of affecting strategy formulation and reporting their IC.

The participants stated that they often struggled with the communication of the vision of rapid growth or being involved with heavy development of their product and services, which means poor economic performance for a period that exceeds the normal accounting year. They wanted a method for communicating their intent and future vision. This meant that the companies needed to envision a desired leadership position and establish the criterion for the organization.

The PIP participants identified these as management challenges once their company had gone through the exercise of assessing its IC and had a clear overview of its intangible resources. By using the indicators that the company saw as its most important intangible assets, these could be arranged into the 3 capital dimension; human, relational and structural capital. This formed a baseline for management to execute its strategy for each category. This is demonstrated in table 3.

This analysis helped clarify focus for execution, where scorecards were used to translate results into strategy maps for each of the three categories. The participants developed strategy maps for the three IC categories in addition to the main strategy map. This is shown in fig. 5

By using the IC dimension for the maps, the companies could use the input from the PIP format as input into the various strategy maps and scorecards, creating a common language and measurement for executing strategy to fulfill the vision/mission statement of the company.

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Strengthen customer relations to strategic partner for long relations	Increase the length of average customer relationship	R: Customers classified by duration / no of years of maintaining relations	R: The quality of products and services	R: Average no of years
		R: % of turnover due to long-term costumers	R: Is the company honest in its business with you?	R: Lost of customers / total No of costumers
		S: CRM system		R: Years of account
	Increasing number of products per customer	R: % of products with customer involvement	R: Shows focused innovativeness to benefit customers	R: % returning customers

Table 3: Management challenge

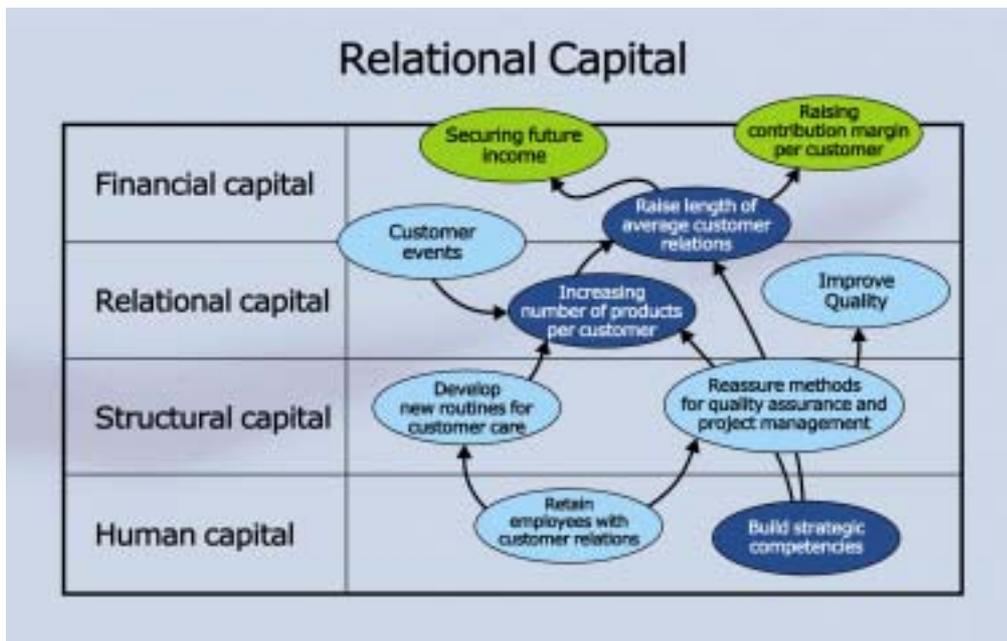


Fig 5: Strategy Map

Second box - Execution

When it came to the execution part of the IC process, the PIP companies used a wide variety of tools. The tools mentioned here concentrate on monitoring tools, i.e. tools that help the manager to make sure that the company is conforming with its strategy, vision and mission. The objective is to make sure everything is on the right track.

One of the most famous tools today is the Balanced Scorecard⁵, which is used for reporting and monitoring strategy formulation. The Balanced Scorecard defines what management means by "performance" and measures whether management is achieving desired results. The Balanced Scorecard

⁵ Kaplan, R. S. and D. P. Norton (1992). The Balanced Scorecard--Measures That Drive Performance. Harvard Business Review, Harvard Business School Publication Corp. 70: 71.



translates Mission and Vision Statements into a comprehensive set of objectives and performance measures that can be quantified and appraised. The harmonized IC indicators are very valuable as input here as they provide a basis for measure and management. The measures typically include the following: Financial performance (revenues, earnings, return on capital, cash flow), Customer value performance (market share, customer satisfaction measures, customer loyalty), Internal business process performance (productivity rates, quality measures, timeliness), Innovation performance (percent of revenue from new products, employee suggestions, rate of improvement index), Employee performance (morale, knowledge, turnover, use of best demonstrated practices).

A lot has been written about the balanced scorecard since first published in Harvard Business Review in 1992 and there are many books, courses and software available on the market. To construct and implement a Balanced Scorecard, managers had to articulate the business's vision and strategy as mentioned previously. They identified the performance categories that best link the business's vision and strategy to its results by using the indicators identified by the project. By using scorecards, the companies were able to ensure company-wide acceptance of the measures, create appropriate budgeting, tracking, communication, and reward systems. They could more easily collect and analyse performance data and compare actual results to desired performance and take action to close unfavourable gaps.

Benchmarking is another tool that improves performance by identifying and applying best demonstrated practices to operations and sales. Managers compare the performance of their products or processes externally to those of competitors and best-in class companies and internally to other operations within their own firms that perform similar activities. The objective of the benchmarking exercise is to find examples of superior performance and to understand the processes and practice driving that performance. Companies then improve their performance by tailoring and incorporating these best practices into their own operations-not by imitating, but by innovating. Companies use benchmarking to improve performance as it identifies methods of improving operational efficiency and product design. It reveals a company's relative cost position and identifies opportunities for improvement. It helps companies focus on capabilities critical to building strategic advantage. Last but not least it increases the rate of organizational learning by bringing in new ideas into the company and facilitates experience sharing.

Companies can put a special emphasis on their customers by adapting Customer Relationship Management (CRM). This is the process used to understand customer groups and to develop strategies to manage them in the most profitable way. CRM technology allows firms to manage large amounts of customer data and provides mechanisms for companies to carry out strategies based on the data. Data collected through CRM enables firms to differentially serve target segments by tailoring products to closely match customers' needs. CRM also provides data to educate employees, align their incentives, and position a company strategically to profit from evolving market needs. It requires managers to start with an effective customer strategy and segmentation. The companies have to measure CRM progress and impact and a section of the PIP indicators is aimed at measuring customer issues. CRM increases profits by improving customer retention, offering differentiated products based on customer needs, targeting customer acquisition and reward programs, designing effective customer service programs, developing one-to-one marketing campaigns.

One of the answers to the competitive pressures from Japan in the 1980's had an effect on management thinking in the West in terms of how to effectively respond to these threats. This gave rise to an extensive literature in excellence and turnaround. One of the most popular of these is Peters and Waterman (1982) "In Search of Excellence". The attention to quality models was also one of the observations from the competition from Japan. To encourage companies in this respect, different kinds of quality awards were established. The most popular is Total Quality Management (TQM), which is a systematic approach to quality improvement that marries product and service specifications to customer performance. TQM then aims to produce these specifications with zero defects. This creates a virtuous cycle of continuous improvement that boosts production, customer satisfaction, and profits.



Many of the PIP companies have adapted some form of TQM, often in the form of the development of effective measures of product and service quality. The PIP indicators can be used as a baseline for such systems. TQM improves profitability by focusing on quality improvement and addressing associated challenges within an organization. TQM can be used to increase productivity, lower scrap and rework costs, improve product reliability, decrease time-to-market cycles, decrease customer service problems, and increase competitive advantage.

During the IC process the PIP companies identified various ways of using the PIP indicator serious for setting management challenges. This demonstrated the ability to take indicators from an IC report, create goals or challenges based on these indicators, determine actions to reach these goals and show how the outcome of the actions on the initial challenge can be measured.

An example of such a challenge would be to Increase number of university graduates by 10% by taking actions aimed at increasing the hire of university graduates and, helping employees to finish their university degree. This challenge, of course, is dependent on management seeing value in the increase. This value depends on the contribution that increased education brings to the company. This challenge affects the human capital of the company.

An example of a challenge affecting the structural capital of the company could be to raise score regarding physical working conditions above a given value. To achieve this, the company hires specialists to monitor conditions and make recommendations; it invests related to working conditions according to action plan. If successful, the physical working conditions score will increase. The value for the company could be increased productivity and/or lower staff turnover which both result in better bottom line.

An example of a challenge affecting the relational capital of the company could be to improve customer satisfaction index by a given value. The actions needed for this to happen could include; increases in number of service staff to shorten response time, increase no. of hours spent on staff training and last but not least, communicate this to the customer. If successful, the customer satisfaction index will score will increase. The value for the company could be increased sales as a result of happier customers and their referrals.

It must be emphasized that even though a generic list of management challenges can be provided (see appendix X), these have to be reviewed in the context of the company and the strategy and outcomes it is seeking.

Third box - Reporting

The conventional financial reporting is available to all companies as such reports must be made to comply with state law. This reporting is not only intended for tax purposes as it is intended for the stakeholders of the company. The Danish guidelines for IC reporting define stakeholders as the persons, group of persons or institutions that impact on the company's ability to pursue and implement its objectives. The stakeholders of a company usually include customers, employees, suppliers, owners and society. To addition to informing stakeholders about the tangible aspects of the company, the situation of their intangibles can be included in their IC report within their annual financial accounts by providing a special stakeholder report section that addresses IC values within the company. For these reports the following parties can be described as stakeholders:



- ⌘ ***Investors are a target group for IC reports as they provide formal investments and venture capital. By reading IC reports, investors get real values in indicators for intangible elements. By using these indicators, they are better equipped to argue the expectations and potentials for the valuations of companies and justify their market value. This is very important as there are many investment opportunities available and IC reports are a valuable tool for comparing them.***
- ⌘ ***Customers and suppliers of the company. It allows them to evaluate and investigate the competences of the company. They can also use this as a basis for selecting partners, who are not only financially stable but also enjoy the intellectual competences necessary for a given project.***
- ⌘ ***Employees, present and future. It seems obvious, that companies want to have the most competent employees working for them and that they want to offer a desirable workplace. Many of the factors influencing the decision of the employee selection of a working-place are based on non-financial elements. The IC report enables both existing and future employees to evaluate their own position and the company. Thus they can better fulfil the expectations set forth in the vision and strategy the company is following thus influencing innovation and progress within the company.***
- ⌘ ***The company itself. By creating a better understanding of its intellectual competence, a company is able to enhance its image, not only towards the outside environment facing the company but also within itself. When using IC reporting the company reveals hidden assets that can have a major impact on the profitability and even the core existence of the company.***

The idea of using storytelling as way to get the corporate message across has been illustrated⁶. The question is if stories really have a role to play in the business world? As most executives operate with a particular mind-set, it is analysis that drives business thinking by cutting through the fog of myth, gossip, and speculation to get to the hard facts, undistorted by the hopes or fears of the analyst. The strength lies in the objectivity, which is at the same time also a weakness. But at a time when corporate survival requires disruptive change, leadership involves inspiring people to act in unfamiliar, and often unwelcome, ways. This is when the most logical arguments might not work but effective storytelling could as storytelling can translate dry and abstract numbers into compelling pictures of a firm's goals.

Just as knowledge can become wisdom, facts become a story. The story can influence the interpretation of the facts. The story also delivers the context in which the facts are evaluated. People are not rational which means that facts are not only the facts so that despite the narrative power of the traditional story, it does not necessarily spark action in an organization. Stories can have a multiple purpose, i.e. intended to motivate people or to share knowledge. Believability is also an issue when using storytelling in an organization. Stories have to be true and believable, since corporate audiences know too well the experience of being presented with half-truths.

Stories told in order to spur action need to make good on their promises and contain sufficient evidence of a positive outcome. But stories intended mainly to transfer knowledge must be more than true. Because their objective is to generate understanding and not action, they tend to highlight the pitfalls of ignorance and to make them cautious. This is why narrative forms could further different business goals.

The knowledge narrative of the IC report is a story with structure and evidence. The story visualises intangible values and helps to identify strengths and weaknesses. This is vital part of the strategy formulation process as information is the key to creating knowledge as demonstrated with the knowledge pyramid. As to how detailed the story needs to be, there is the point that the more specific all the elements are, the less intelligible it becomes. This is why it is not necessary for the IC report to state exact numbers like the financial accounts do.

⁶ Denning, S. (2001). The springboard - How storytelling ignites action in knowledge-era organizations, Elsevier.



The purpose, or use, is different. The story in the IC report has done its work, when the reader will already be thinking in his own context and situation how it could be different. The reader imagines a parallel story in his own mind where things would be different if their know-how and expertise were organised in a different way. The stories however need to be based on the same understanding of what the elements of the story are, or what they represent. Otherwise a common understanding or benchmarking is impossible. In terms of creating a competitive advantage, the story can provide the manager or strategist with the material needed to utilize his strategic capabilities to the fullest. Therefore the narrative becomes the springboard for change.

The question is whether intellectual capital statements be systematically read and analysed in a way that is comparable with the reading and analysis of financial statements so that they may become a major instrument for analysing investment possibilities? The PIP participants believe that is possible and in fact the experience of some of the PIP companies proves interest on behalf of capitalist in IC statements as a tool to evaluate future value-creation potential of a company and thereby offering lower interest rates. The goal of introducing a harmonized way of presenting IC related information is to create a base for interpreting the intellectual capital statement figures a company has chosen to present in text and illustrations. To do so it is necessary to compare the IC statement to traditional financial statements.

Intellectual capital reporting is not based on a double entry system, ensuring assets and liabilities balance. It is based on a single entry system and 'assets' can therefore exceed 'liabilities'. Many readers will therefore see intellectual capital statements as giving a less credible and less relevant company evaluation. Not all financial statement figures are, however, as unambiguous and informative as one would like to think which is why a framework of accounting standards has been established specifying correct use and interpretation of figures and concepts. A similar set of standards needs to be developed for intellectual capital statement transactions. One of aims of the PIP project is to provide a step in that direction. It will probably be some time before there is established a generally accepted set of figures that can give an Intellectual capital statement bottom line but a good step in that direction would be to present information on a companies Intellectual Capital in such a manner that it is possible to view the company's handling of the previously mentioned questions in an analytical way. As the content of intellectual capital statement is determined by the characteristics of the individual company, intellectual capital statements vary greatly. These variations also reflect the differences in how companies use their knowledge resources to create value for their stakeholders.

Although the knowledge narrative, management challenges, initiatives and indicators are unique to each company most Intellectual capital reports have the same critical elements; a knowledge narrative and the evaluation of management challenge and initiatives, supported by indicators. Critical evaluation is therefore dependent on the reader's ability to systematically analyse the information given, derived from the given indicators, based on measurement. The goal of such an analysis is to evaluate whether the information provided by the company is relevant and whether it will support future value creation. So the statement must provide a trustworthy overview of the company's knowledge resources, actions and initiatives undertaken to develop those resources and the outcome of these actions. Simultaneously keeping in mind the vision, mission and strategy of the company as displayed, as companies that set a strategy and follow it are more likely to provide their shareholders with profit.



Some lessons learned along the way:

- ⌘ *First decide where you want to go – then find the indicators that will help you measure your progress*
- ⌘ *It is worthless if the top management doesn't see the value*
- ⌘ *Structures are more reliable than humans*
- ⌘ *All companies have common intangible characteristics for tangible success*
- ⌘ *In a world of constant change it is difficult to depend on formulated thinking*
- ⌘ *PIP is a formal way supplying external stakeholders with useful information*
- ⌘ *PIP is a good way of locating gaps*
- ⌘ *PIP created a common way to communicate values within the company*
- ⌘ *PIP clarified and supported our strategic focus*
- ⌘ *PIP helped us identify our real needs*
- ⌘ *PIP enabled us to monitor changes*
- ⌘ *The IC report is an important strategic tool to communicate with our stakeholders*

6. Reading and analysing IC reports

The first question to be answered when reading the IC report is whether it can be systematically read and analysed in a way that is comparable with the reading and analysis of financial statements so that they may become a major instrument for analysing investment possibilities.

The experience of the PIP project was that this is possible and some PIP participants have experienced an interest on behalf of investors and analysts in their IC statements as a tool to evaluate their future value-creation potential, resulting in lower interest rates. The goal of introducing a harmonized way of presenting IC related information is to create a base for interpreting the intellectual capital statement figures that a company has chosen to present in the form of text and illustrations. To do so, the start is to compare the IC statement to traditional financial statements. To find a common starting point, intellectual capital statement figures are grouped in such a way that the three general questions can be answered for both reporting formats. This is demonstrated in the following table 4.

Financial statement	Intellectual capital statement
<i>What are the company's assets and liabilities?</i>	<i>What are the company's knowledge resources?</i>
<i>How has the company invested?</i>	<i>What has the company done to strengthen its knowledge resources?</i>
<i>What is the company's return on investment?</i>	<i>What are the effects/ outcome of the company's knowledge work?</i>

Table 4: Parallel sets of questions in financial and intellectual capital statements¹

Intellectual capital reporting is not based on a double entry system like financial accounting that ensures that assets and liabilities balance. It is based on a single entry system and 'assets' can therefore exceed 'liabilities'. Many readers will therefore see intellectual capital statements as giving a less credible and less relevant company evaluation. Not all financial statement figures are, however, as unambiguous and informative as one would like to think which is why a framework of accounting standards has been established, specifying correct use and interpretation of figures and concepts. A similar set of standards needs to be developed for intellectual capital statement transactions. PIP has provided a step in that direction. It is however some time before there is a generally accepted set of figures established that can give an intellectual capital statement a bottom line.

As the content of the intellectual capital statement is determined by the characteristics of the individual company, they vary greatly. These variations also reflect the differences in how companies use their knowledge resources to create value for their stakeholders. Although the knowledge narrative, management challenges, initiatives and indicators are unique to each company most IC reports share the same critical elements; a knowledge narrative and the evaluation of management challenge and initiatives, supported by indicators. Critical evaluation is therefore dependent on the reader's ability to systematically analyse the information given, derived from the given indicators, based on measurement. Figures represented in intellectual capital statements inform the reader of management challenges, initiatives implemented and their success in achieving the company's knowledge management strategy goals. It is therefore the vision and major goals of the PIP framework to supply the analytical stakeholder

¹ Analysing Intellectual Capital statements, 2003 <http://myndigheder.danmark.dk/PUBL.asp?page=publ&objno=121478342>



with a tool to enable the assessment i.e. if the performance of an organisation is up to the standards set and if it is accounted for.

The goal is to evaluate whether the information provided by the company is relevant and whether explains possibilities for future value creation. This is why the statement must provide a trustworthy overview of the company's knowledge resources, actions and initiatives undertaken to develop those resources and finally, the outcome of these actions. This should be linked to the vision, mission and strategy of the company, as companies that set a strategy and follow it, are more likely to provide their shareholders with profit.

The evaluation process of an IC report should address the following statements:

- ⌘ The IC report categorizes figures according to the knowledge resource they relate to. These will typically be human capital (employees), relational capital (networks and market) or structural capital (processes and technologies). The knowledge resource list is neither fixed nor final. New resources may be added while others may lose significance over time.
- ⌘ The IC report is used to show the company's knowledge resource composition according to category, acquisition and use, which in other words are 'the resources the company has', 'what the company does with them', and 'what the company makes out of them'. Each indicator should therefore be positioned with respect to which of the three knowledge resource aspects (HC, RC, SC) it relates to. Evaluating whether resource composition, acquisition and use is appropriate requires examination of indicator development over time.

Evaluation criteria

The Analytical model as proposed by the Danish Authorities looks at the following figures as basis for analysis based on resources, activities and effects.

Resource figures are the portfolio of company knowledge resources, which is the stock and composition of resources within employees, customers, processes and technologies. These figures represent the company's 'stock' of knowledge resources and define which 'resource building blocks' the company has at its disposal. The resources figures simply describe the intangible resources at hand. The figures relate to relatively stable units such as 'a customer', 'an employee', 'a computer', 'a process' etc. They answer questions such as 'how many?' and 'what proportion' and show how large, how varied, how complex and how intertwined these knowledge resources are. Linked to this are management actions, a portfolio decisions determining how many knowledge resources of each type the company is to own.

Activity figures describe the company's activities for upgrading knowledge resources, which are activities implemented to upgrade, strengthen or develop the resource portfolio. The figures also answer questions such as: What is being done? Describing the investment in the resources, through further training, process development, activities to attract customers, presentations and other public activities answering the key question: What does the company do to develop and improve its Intellectual Capital? The management actions are therefore improvement activities.

Effect figures express the consequences or the total effect of the company's development processes, the outcome. Just as in an accounting system, the model only shows the effects and does not attempt to explain where they come from. Such explanations are for the analyst to discover and value. So reading an IC report could be done as follows:



- # The knowledge resources column provides the basis for a 'portfolio assessment' of the company. The reader must determine whether the company's knowledge resource portfolio is competitive, indicates a high enough value creation potential to meet the future
- # The activities column shows the management's ability to develop the employees, the organisation and customer relationships
- # The effects column provides the basis for assessing whether the company's knowledge management set-up and activities work, giving an assessment of company stability

Evaluation criteria	Resources What you have	Activities What was done	Effects What happened/outcome
Knowledge resources			
Human capital Employees	employees	training	Increased efficiency
Relational capital Networks etc	customers	workshops	Improved products
Structural Capital Processes etc.	Quality system	Formalise process	Shortened time to market

Table 5: Examples of use

Tool for communication

The IC report, internal or external is a valuable communication tool. In the PIP framework, it has been always been a clear objective to address the needs of both internal and external stakeholders. This is despite the fact that the use may display information differently, depending on the purpose of the document. An internal IC report will be much more detailed as it also forms the baseline for improving performance and to communicate strategy and goals to employees. External IC reporting is made in order to provide documentation for factors that management finds important and able to change.

It is exactly the communication that management finds important. That it is possible to explain to external stakeholders so they can better understand the company, its situation and the strategy it follows.

In contrast, internal reporting is a monitoring tool, which enables the management to follow the activities and actions taken to carry out the company's particular strategy. In this aspect the IC accounting is a tool to strengthen knowledge management and as such the foundation for innovation. Communicating externally to change things internally may be useful sometimes, but most often has little success and at the same time there is a risk of mixed communication with the external target groups.

Reading through a myriad of IC reports makes it obvious that there is a need to establish a consensus of meaning, a semantic basis for knowledge assessments. The necessary first step along that route is to harmonize key performance indicators, which is what the PIP initiative has accomplished to some extent.

7. Implementing PIP - The quick guide

Assess/Measure – Manage – Report

To undertake the intellectual capital journey of assessing, measuring and reporting intangible assets is a good plan. The process can be described as follows:

Ensure support and select a team

The first thing to do is to ensure the full support of management. Then select the team, a group of experts on the many important areas of your company, a reporter for the work and someone with a good overview to lead the team.

Select key personnel with:

- ⌘ ***Financial knowledge***
- ⌘ ***Human resources knowledge***
- ⌘ ***Relational capital knowledge***
- ⌘ ***Process and information Systems knowledge***

Assess your company's IC - locate and prioritise IC resources

The start is a brainstorming session. A ½ day kick off session – with people from all departments: KEY PERSONNEL, involving, when possible, two 'specialist' from each department / area. The goal is to identify the intangible values residing with your company i.e. the knowledge resources, discuss.

Determine which are the most important IC resources and locate them. This is done by the evaluation and selection of intangibles.

- ⌘ ***Everyone should write down their the ideas on yellow stickers***
- ⌘ ***Following this:***
 - Classify ideas
 - Map them out against the intellectual capital dimensions:
 - ⌘ Where do they belong?
 - ⌘ Are they human, structural or relational capital resources?
 - Compare and align with the company strategy
 - ⌘ Are the IC assets of value?
 - ⌘ Do they support strategy?
 - ⌘ The vision, mission and core values?
 - Prioritise by importance to the company

Measure the resources, activities and outcomes - The identification of indicators

Now that the most important knowledge resources in the company have been identified it is necessary to find a way to indicate usefulness, so the next step is to compare those to the PIP list of knowledge resources, indicators and measurements.

If the proposed resources are there, simply use the PIP model, however you may need to analyse your findings further to match them to the model. Once the indicators are identified you must define if the



relevant data exist in your information systems or if you have to identify the necessary factors and decide if they can possibly be measured? Always keep in mind that Identified parameters be compared to the vision, strategy and objective of the company to define their relevance.

This is also affected by how good and accessible the information systems are. In most cases the appropriate data exist in survey result, on the intranet and/or the web pages, in training system and employee records, accounting system, quality system or other systems. It may be necessary to have the data translated, synchronised and transformed to knowledge. Make sure to document the process for each measurement upon which the indicator is base to ensure comparison internally between years and externally between companies.

Manage your IC

To manage you should:

- ⌘ ***Draw a simple strategy map***
- ⌘ ***Link strategy map to score card***
- ⌘ ***Link indicators to score card***
- ⌘ ***Monitor and act on trends***

Report to the world ...

The precursor of the report, the search and processing of data, is the most complicated part. After processing the data it is time to determine the target group for the report. There is a considerable difference when writing. In an internal report, the most obvious use is the internal communication of values and goals, used as a source for continuous improvements and development. When the report is external, it is targeted at external stakeholders where the emphasis will be on the knowledge resources, activities undertaken and their outcome.

Enjoy the journey

Keep in mind before beginning

There are some things that should be kept in mind when setting of on the long and winding IC journey. Most of those companies, that have undertaken such an initiative, will tell you it is a hard learning journey, but there is an equally high reward at the end. This is why the following points are offered as advice:

Work plan

- ⌘ ***Who participates in the project group?***
 - Preferably senior management
 - Employees empowered to change
- ⌘ ***Which other persons and resources to draw in?***
 - Specialists from all levels of the company
 - Other external sources, customers etc.
- ⌘ ***Project, duration, time schedule and deadlines?***
 - Be quick, thorough and patient
 - Do not monitor to often
 - Do not overreact
- ⌘ ***Management commitment***
 - The project is useless without this support

Knowledge collection

- ⌘ **What can we learn from other companies?**
 - Have a look at other companies IC reports
 - Focus on the ones from companies in your field
 - All good IC reports have value
- ⌘ **Is there a need for an auditor's verification?**
 - Not necessarily
 - If so, find one and involve as soon as possible

Anchoring

- ⌘ **How can data recording be organised so that it is as automatic as possible?**
 - Use your existing information systems as much as possible
- ⌘ **How should work with the next intellectual capital statement be anchored in the organisation?**
 - The second one is always easier, but not always done

Management

- ⌘ **How is the intellectual capital statement used as a management tool in practice?**
 - Better to manage what can be measured
 - A language for communicating vision and intent

Communication

- ⌘ **Is it clear which group(s) the IC report is targeting?**
- ⌘ **What are the three most important messages?**
- ⌘ **Where and when should the IC report be published?**
- ⌘ **How can attention about the IC report be created?**

Contents of IC report

- ⌘ **Management commentary**
 - The company and board report with a summary from financial accounts and auditors report
 - A brief description of the content and rationale behind the IC report
- ⌘ **Milestones in company history**
- ⌘ **Description of mission, vision and strategy**
 - Clarifying mission, values and goals
 - Explaining
 - § The business model of the company,
 - § Value creation, innovation processes and knowledge transfer
 - § Management/ organisational structures
- ⌘ **Resources, actions, results and goals**
 - A narrative supported by a few examples
 - § Human capital
 - ⌘ Listing the items that affect the value and the potential of the human capital within the company
 - ⌘ Attempt to validate the companies potential in fulfilling its mission and reaching its goals



- ⌘ Explain HR policies and values
- ⌘ Use indicators suggested in the PIP guidelines (and review simultaneously)
- § Structural capital
 - ⌘ List and explain how the company is equipped to reach its goals, ensure quality etc
 - ⌘ What intangible assets rest inside the company representing the knowledge captivated and preserved in the internal structures of the company as information
 - ⌘ List processes, service provisions, quality standards certification, internal information systems
 - ⌘ Products or software processes not valued in financial accounts
 - ⌘ Prior history and experience in development
 - ⌘ Challenges that the company faces and how the company's structure is designed to meet these challenges
 - ⌘ Performance based on indicators and other values
- § Relational capital
- § Explain goodwill in relation to its client base and networking
- § Factors that ensure market access for the company
- § What the company is selling and who the customers are
- § Percentages that give signs of trends
- § Customers and networks

⌘ **Indicators to support the narrative above**

When working with IC in the PIP project we also have to define measures that are relevant to any company and also comparable between companies. From the strategic point of view the indicators must clarify the direction the company are striving. From the governance point of view the measure must show that action taken have the right effect. From the capital point of view the measure must show the right value of the company. We find it essential to connect each indicator with the company vision, goal and critical success factors.

Sixten Björklund, Sentensia



8. Conclusion

The participants in the PIP project have commented on their progress during the duration of the project. In general they conclude that working systematically with their intellectual capital has improved their understanding of the companies inner actions. It has also had an effect on the confidence level of the individuals in terms of their perception of the level of learning and performance that they are capable of. The work with the company's strategy and capabilities enabled them to identify new sources of competitive advantage. There are clear examples of this in the testimonials of the companies that are included in appendix V. Collectively, the group identified a set of management challenges that they consider to be of importance when starting work like this in a company. An example of these challenges can be found in appendix V. This is in line with the overall objective of creating an entry level for working with intangibles that is do-able for SMEs.

A survey conducted at the end of the project affirmed this conclusion. The survey had measures on perception levels of organizational learning and excellence in business. The variables measured were based on Pedler, Burgoyne et al. and Peters and Waterman¹. The scales used had been used in other research and had been tested for statistical significance. The survey results showed that when compared to other management groups, the PIP participants and other members of their respective organizations scored higher on perception levels of both subjects. This difference was on the average about 10%. There was also a clear relationship between the perceived level of organizational learning and the perceived level of excellence in business. It is not possible to state that this difference can be accredited to the PIP project, but gives clear indication of future research in the area.

Finally, the participants commented on the fact that the project had been based on companies joined together in their quest for mastering intangible values. This made each and every company responsible for providing input and not just sitting at the receiving end. The participants commented on the quality of having the opportunity of talking to peers in their industry with the same understanding of the challenges facing their companies. This amplifies the need for industry sector organizations to work with their members to promote the use of the methods suggested by PIP to increase the overall competitive advantage of their members.

It is the hope of the project members that their work will assist other SMEs in securing their position in a world where large corporations are reaching further into the traditional SME domain. It is also hoped that this work will provide governments with the direction on what policies to put in place in order to secure national interests in a competitive world economy where SMEs are considered to be the backbone of economic performance.

¹ Pedler, M., J. Burgoyne, et al. (1997). *The Learning Company: A Strategy for Sustainable Development*. London, McGraw-Hill.
Peters, T. J. and R. H. Waterman (1982). *In search of excellence - Lessons from America's best-run companies*. New York, Harper Collins.



9. Appendixes

- I. IC report based on PIP companies deliverables
- II. The PIP indicators
- III. The PIP prioritized indicators
- IV. Guide to surveying for measurements (questionnaires)
- V. Management challenge
- VI. Case studies from PIP companies



Appendix I.

IC report based on PIP companies deliverables

Putting IC into practice

Harmonized knowledge indicators

Intellectual Capital Report based on PIP companies deliverables

By Asta Thorleifsdottir
September 2006



1. The purpose of IC report

Intangible assets form the core of every organisation demonstrating the management of these assets is of great value and can show the future value creation potential.

The aim of the PIP IC report is to present the companies IC to its external stakeholders as a supplement to the annual financial account. In the report we state the company's value creation and potentials and demonstrate the integration of our core values and strategy for value creation by using harmonized indicators. The aim is to monitor the impact of actions and initiatives to our goals. We demonstrate how the company develops its resources and cares for its values using IC monitoring as a management tool.

Internally, the IC report is a necessary tool. It focuses on both past and future and helps the company to become more self-conscious, and grow the capabilities useful for implementing set strategy towards the vision. Moreover, it can provide information about internal knowledge-gaps, inter-communication improvement towards better external competitiveness and challenges to company's development.

IC reporting is no less important than financial account. The answer is that it gives the additional information to simple numbers and percents in annual Balance sheet, focusing on value creation and company's potential reflection. Therefore IC report supports and integrates the needs of both internal and external stakeholders.

The report includes:

- # **Knowledge narrative** – Describing our values and intangible resources:
employees, description- gender, average life age, number of employees.
- # **Management challenges**- concerning our values, resources and objectives.
Speed product development by 10%
- # **Actions** –initiatives and actions, made to respond to the challenges met. Such as
 - o enhancing knowledge by formal training on courses or conferences,
 - o competency profiling plans,
 - o rotation of employees etc.
- # **Results** – reflection of the goal reached by the company and effect made, explaining the real achievement or development of the core intangibles.



2. The basic elements of a IC report

The CEO's message; Management commentary

Introduction

The first part of the IC report is a signature of the companies director. It is a short introduction of the IC reports purpose. It focuses on the company's main objectives and processes, the challenges facing the company and how it means to tackle those. IT a short account of the processes of value creation. First, it represent the company, giving a simple illustration of identity and purpose. This section contains a short account of company history, displaying its growth and facts about its current situation. It could be some figures from financial account, on employees or products. However it should not be expanded, for it also has to represent the purpose of the IC report itself. Writing internal report it is useful to give the organisational structure model, though, it is also suitable in the first external annual IC report (for better presentation of the company).

A short historical overview

To introduce the company's history and evolvement from its beginnings to the present. This is the section where you describe the main business area and challenges, including some key financial growth figures which of course can be graphically displayed.

The mission, vision, values and goals

This section of IC report describes the company's philosophy and approach, describing some of the important characteristics upon which the company is founded: A business continually adapts to a changing environment. Still the core ideals remain steady and provide a guide to strategic decision-making. These stable factors form the business vision and should be expressed in the company's mission. It may contain information on the sector of specification main services/products and their quality fulfilment etc.

The core purpose or the mission is the reason why the company exists it is carefully expressed in the mission statement. It aims to set the company apart form other competitors in the same industry. The profit motive is not highlighted in the mission statement – the aim is to show HOW the company will make its earnings. **The vision** demonstrates the future milestones the company aims at reaching in the future. Setting visionary goals is important to the company's identity, an example: *To be the leading provider of XXX.*

The core values are few (3-5) and do not change with time. The values aligned to the mission maybe corresponding to the following dimensions: Customers, employees, shareholders, innovation, creativity, integrity, society, business objective etc.

This is the section that communicates:

1. *The core purpose of the company*
2. *The key or core values to which the company is committed*
3. *The visionary goals which are to be pursued to fulfil the mission*



Appendix I. IC report based on PIP companies deliverables

The strategic value management – the key to value creation

This is undoubtedly the most important part of your IC report, which includes all core values and resources of the company and how they interact for the benefit of the company's value creation. To align the main values to the objectives, show the results of activities undertaken and place goals for each of the factors that impact the future value creation potential.

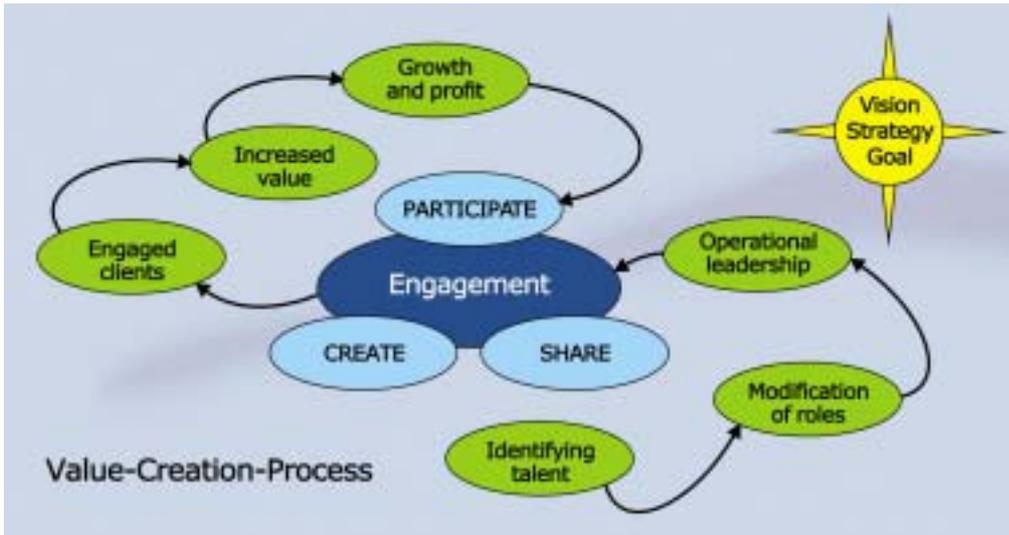


Figure 2: Demonstrates one example of how the various Intellectual assets can be linked for value creation.

The key **financial indicators** are often displayed here as they are the focus of the 4th dimension and are important to some of the intellectual capital indicators such as productivity.

100.000 Nkr	2001	2002	2003	2004	2005
Value add	12.995	18.930	19.824	22.231	24.531
Cost	11.690	17.478	18.720	19.733	19.733
EBT	1.088	1.182	1.272	1.695	1.695
Assets	15.477	15.538	15.584	16.326	16.326
Equity	6.941	7.363	8.261	8.419	8.724
Number of employee	27	38	38	42	48
Add value per employee	481	498	521	529	529
Cost per employee	433	459	492	439	501
Earning per employee	40	31	33	40	37

Figure 3: Financial key figures.



3. The narrative

The narrative describes the work undertaken in the past to ensure future value creation. It describes the resources, actions and initiatives undertaken to enhance the productivity of those assets and the effects, either already accomplished or foreseen. In fact this is the section that tells the reader about the management challenges and how the company works towards successful a bottom-line from all aspects. This is where you can evaluate the efforts of the management body and its success and/ or potential.

The use of the PIP indicators

The indicators selected to support the narrative must be carefully chosen with regards to the core values for example.

Employees

- o How we retain and recruit the best employees
- o How we listen, learn, share and conduct knowledge management
- o People-centric environment and culture
- o Trust, fairness and effectiveness of management

Customers

- o Loyal and satisfied customers, how we learn and cater for their needs
- o Customer involvement in innovation and improvement
- o Quality through processes

Shareholders

- o Trust by informing

Society ...

Environment ...

To link the strategy towards a holistic approach it is advisable to follow the scheme for constructing this part of IC reporting, similar to this:

It should be noted, not to overload the narrative with graphics or tables as the thorough information is placed in the end of the report (a table containing all indicators and measurements used , expressed by number, percentage, average etc.). The intangible resources are the enablers, the driving force of value creation.

For each of the following sections try to describe the resource, actions undertaken and expected results, the principles the guide actions that enable the company to achieve its objectives. It may be a good idea to display the organisational structure and value creation process graphically.

For each of the following sections graphics and pictures are good as they can say so much more than words – to emphasize your points.



Human Capital – the resources

Best described as the resources that leave the company everyday at the end of the day, sometimes never to return. Focusing mainly on the demography and competencies of your staff.

The employees

Describing the employees and how the company operates to retain and recruit the right people for the right job. How you create the most effective environment for learning and sharing, for a common identity and the team spirit, create the right motivation. You may account how your organisation may use various methods like cross-company project teams to substitute existing organizational units on project to facilitate knowledge sharing and learning across regions and themes. Here you may describe the core competencies of your teams. Do display some graphics but not too much.

Management and leadership

The management challenges relate to all stakeholders and operations. Leadership is the essential ingredient for change management – changing behaviours requires a clear vision. Stating a simple strategy

Structural Capital – the resources

This is twofold:

- ⌘ The physical working conditions , the basics of culture
 - Is there an open working environment, “the tables and chairs”

- ⌘ The Information systems
 - the systems that capture and codify the knowledge of your internal and external networks into reusable, effective information in processes for knowledge management and ...

The structural capital is the backbone of effective operations, ensuring the right reactions to customer needs. The greatest challenge of any manager is to create an enthusiasm about the value creation in sharing and codifying knowledge - to make individual knowledge available for others for a common benefit to all stakeholders.

Relational capital – networking people and linking to systems

This section describes the way you interact within company related networks. To establish how this works within your company it may be necessary to map out the networks, both internal and external. How you work in partnerships to support and increase the value.



4. A table of Common and specific indicators

The external IC report is necessary for all companies, as only financial account is not sufficient neither for investors, nor for costumers. At the moment most competent companies write their annual IC reports using different indicators. Such reports, though informative, are not suitable for comparison or evaluation of competing organizations.

In this section you display a table of indicators and measurements based on the PIP model. These are necessary to support your narrative. As these have been audited they are like the balance sheet of the annual account.

For this, there is a need for one model with harmonized indicators. Selecting indicators, applicable to all kinds of organizations (IT, Industry, public ...) is a difficult, but not impossible task. This is the main purpose of this hypothetical IC report model. On the other hand, setting a method for measuring common indicators is not enough, as this can eliminate some essential information, which can be provided by specific indicators.

It includes:

- # main common (and compulsory) indicators and measurements
- # specific indicators and measurements. Those are orientated to IT, industry or public service companies
- # questions to indicators. Those should not be put in the final annual IC report, but are essential writing IC draft report and collecting information on core intangibles

The Indicators and the underlying questions are to be found in a separate paper.

The company overview, Intellectual Capital balance sheet is presented on the next page

Auditors signature

We, the auditors believe this Intellectual capital report to be ...

Reykjavík, xx.xx. 20XX.

*Signed,
Jon Jonsson, auditor*



Appendix I. IC report based on PIP companies deliverables

PIP prioritized Human capital

Category	Indicator	Measure	Value	Trend	Notes	
Employees	No of employees	No of employees by end of year	10	z		
	Age distribution	Average age	50	y		
	Years in company	Average no of years in service / no employees	4,6	y		
	Education	Average years higher education (university or high school)	3,4	z		
	Absenteeism	Absent days per employee	2,6-	y		
	Gender		Board of Directors (no of female/total)	0/5	y	
			Management	0/5	y	
Total			1/9	{		
Productivity Index	Gross profit/no of employees	NOK	-	-	no measure	
Employee satisfaction	Human Capital Index 1 (Gallup Q6)	At work, I do know what is expected of me	4		(max=5)	
		At work, I do have the materials and equipment I need to do my job right	4,5		(max=5)	
		I do every day get opportunity to do what I am best to	3,5		(max=5)	
		The last 7 days, my boss or somebody else have given me recognition or praise for my work	3,5		(max=5)	
		My boss or somebody else cares for me as a person	4		(max=5)	
		Somebody at work encourages my development	4		(max=5)	

PIP prioritized Structural capital

Category	Indicator	Measure	Value	Trend	Notes
Management systems Information captivation / distribution	Information captivation / distribution	HR System?	No	y	
		CRM System?	Yes	z	
		Financial indicators available?	Yes	y	
		Knowledge management?	No	y	
Quality management	Formal quality system	Based on standards?	No	y	
		Formal process reviews	Yes	y	
		External audit?	No	y	
		Forma Client satisfaction monitoring	Yes	{	
Innovative-ness	Innovation process	Capability for innovation	-	-	no measure
		Client involvement, client stories	-	-	no measure
	New or improved products	New patents or trademarks/ no of staff	-	-	NA
		No of patent applications in process	-	-	NA
		Income generated from new products	-	-	no measure
„Governance	Organizational structure and strategy	Internal structure description, narrative description	Yes	z	

PIP prioritized Customer capital

Category	Indicator	Measure	Value	Trend	Notes
Market and image	Customers relation	Buying loyalty	4		(max=5)
		Safety	3		(max=5)
		Honesty	5		(max=5)
Networks	Supplier relations	Delivery security	3		(max=5)
		Honesty	4		(max=5)
		Risk of dependence	1		(max=5)
Visibility of expertise	Public media appearance	Is the product/service spoken of?	Yes	z	
	Strategy	Has the company a media strategy?	Yes	y	

1 Based on Gallup and other recommended employee surveys. See "First, break all the rules" by Marcus Buckingham. Every question is answered using a 1-5 scale (1= @, 3=? , 5=>), see Appendix IV.



Appendix II.

The PIP indicators

The Measuring of IC is a self-assessment and can be used for continuous improvements and organisational development. Having a set of harmonized indicators where to collect the data and a definition of how to measure makes the assessment of intangibles a manageable challenge for SME's



Appendix II. The PIP indicators

Human Capital

<i>Category</i>	<i>Indicators</i>	<i>Measurements</i>
Employees	No of employees	No of employees on payroll at the end of the year (- on leave)
	Age distribution	Average age / no employees Average no of years in service/ No of employees
	Education	University Masters/ PhD Certified knowledge
	Gender	No of female/ no male Equality index (from survey)
	Employee productivity	Gross profit (revenue-cost) / no of employees
	Cost of employee	Total salary cost / No of employees Total cost of employee / revenue (turnover)
Staff turnover and recruiting	Staff turnover	Staff parted/ No. Employees Turnover by seniority: average length of service in yrs Rookie rate = New/ No of employees
	Recruiting	Recruitment costs (training) no of applicants for positions (web?)
Skills and competence	Competency development/ in Service training	Total training costs training on courses or conferences % of working hours (days) registered as training or knowledge seeking
	Sharing of knowledge	% of employees who share knowledge for maximum value creation % of employees that find their knowledge appreciated and useful on the job Rating of cooperation
Employee satisfaction and attitude	Job satisfaction	Employee satisfaction index Average Absent days per employee Balance of work and private life from Survey Gender difference: Average female and male
	Common identity and team spirit	Cost of social activities/ employees Atmosphere from survey
	Service attitude	Attitude (Survey)
	Pioneering and innovation	Is the company encouraging and open to innovation? How are new ideas met?
	Motivation	% of employees that hold shares in the company # white papers published outside company –in own name
	Empowerment and innovativeness	Empowerment index from survey Independency in decision-making Clear roles and responsibilities Empowerment in action Attitude, support and encouragement
Executive competency	Employee attitude towards executives	Encouragement and feedback/rewards Executive visibility Executives knowledge of operations



Appendix II. The PIP indicators

Structural Capital

<i>Category</i>	<i>Indicators</i>	<i>Measurements</i>
Information systems	* Information captivation/distribution	Intranet /groupware Document management, Human resources management Customer relations management Knowledge management
	* How well do IT systems support core operations	Employee survey index Customer relational overview? Indications of possible enhancement in service or products Indications of better service needed to customers Financial indicators available? Paydays? Credittime
Quality management	Formal quality system	Existing? Yes / No Process reviews External audit? Internal reviews Review results % Projects meeting requirements Formal complaint process
	Call centre / online service	Existing Yes/No Goal review in accordance with set goals and customer satisfaction
Innovativeness	R&D costs	R&D cost / turnover Total time / years per employee in RD
	Innovation process	Formal innovation process Customer involvement Response process to new ideas Feedback to new ideas Employee index?
	New or improved products	New patents or brand names/ no of patents No of patent applications in process Income generated from new or improved products.
Competence development	Performance reviews	Survey: Do performance reviews lead to improvement in your skills or conditions
	* Competence plan /training	Existing Yes/ No % of employees with competency plans? % of competency plans meeting goals New employees training (fostering) Training cost per employee



Appendix II. The PIP indicators

Relational Capital

Category	Indicators	Measurements
Customers	Customer turnover/loyalty	New customers/ total customers % of income generated by new customers Lost of customers /total No of costumers Customers classified by duration/ no of years of maintaining relations % of turnover due to long-term costumers
	Customer groups	Public/private/ sector
	Customer satisfaction	Customer survey: % of satisfied customers % returning customers % customers who would recommend the company to others
Market and Image	Quality of products and service	Customer survey The quality of products and services
	Brands and IPRs	No of brands... Trademarks (visibility – survey)
	Benchmarking to competitors	Customer survey: Are products and services better as good or worse than that of the competitors
	Trust and integrity	Customer survey: Is the company honest in its business with you?
	Innovation	Customer survey: Shows focused innovativeness on its customers
	Marketing costs	Marketing costs/ total costs
Visibility of expertise	Website	Web site visits/ Serach engine visibility
	Public appearances	No of presentations, lectures published articles, White papers Press quotations to the companies work Awards
Networks	Cooperation	% of products with customer involvement.
	Stakeholders	Partner networks Stakeholder analysis
	Internal	Formal paths of Communication
	Business network	Market and network strategy Distribution channels No of partners selling company services



Appendix II. The PIP indicators

New and debatable Indicators

Human Capital

Human capital

Category	Indicators	Measurements
Staff attitude and satisfaction	Staff loyalty	Expected time in service
	Sick leave	no of sick days per employee
Executive competency	Employee attitude towards executives	Encouragement and feedback/rewards

Structural Capital

Structural Capital

Category	Indicators	Measurements
Information system	Investment in IT	Operational IT costs / no of employees
Service and process management	No of service requests	Statistics from appr. system
R&D	Costs	R&D costs and costs due to participating in tenders / new sales
Innovativeness	Developing processes	% of employees who develops tools and processes with colleagues / customers

Human Capital and Relational Capital

Human capital and relational capital

	ors	Measurements
Learning and developing (survey)	Sharing of knowledge	% of employees who share knowledge for maximum value creation % of employees who help customers/colleagues to learn % of employees who learn from customers and colleagues every day
	Efficiency	% of employees who believe to be more efficient with use of common tools and processes
	Team and customer efficiency	% of employees who believe colleagues and/or customers to be more effective using their tools and processes
Service attitude /customer focus	Company service attitude	% of employees who believes the company always delivers what it promises
	Customer Care	% of employees who give the customers fair treatment. % of employees who always treat customer with respect
	Problem Solution	% of employees who believe the customers always can count on them to solve problems in a fair and satisfying way.
	Company Reputation	% of employees who believes customers to be proud of the company
Encouraging environment	Company focus	% of employees who believe the company's products to be perfect for the customers
	*Pioneering and innovation	No of internal thesis and research projects related to products/services # of new ideas & white papers
Executive competency	*Communication and strategy	No of employees magazines per year % of planned strategy meetings held
Working conditions	*flexible and transparent conditions	No of employees with children



Appendix III.

The PIP prioritized indicators



Appendix III. The PIP prioritized indicators

PIP prioritized Human capital

Category	Indicator	Measure	Value	Trend	Notes
Employees	No of employees	No of employees by end of year	10	z	
	Age distribution	Average age	50	y	
	Years in company	Average no of years in service / no employees	4,6	y	
	Education	Average years higher education (university or high school)	3,4	z	
	Absenteeism	Absent days per employee	2,6-	y	
	Gender		Board of Directors (no of female/total)	0/5	y
Management			0/5	y	
Total			1/9	{	
Productivity Index	Gross profit/no of employees	NOK	-	-	no measure
Employee satisfaction	Human Capital Index1 (Gallup Q6)	At work, I do know what is expected of me	4		(max=5)
		At work, I do have the materials and equipment I need to do my job right	4,5		(max=5)
		I do every day get opportunity to do what I am best to	3,5		(max=5)
		The last 7 days, my boss or somebody else have given me recognition or praise for my work	3,5		(max=5)
		My boss or somebody else cares for me as a person	4		(max=5)
		Somebody at work encourages my development	4		(max=5)

PIP prioritized Structural capital

Category	Indicator	Measure	Value	Trend	Notes
Management systems Information captivation / distribution	Information captivation / distribution	HR System?	No	y	
		CRM System?	Yes	z	
		Financial indicators available?	Yes	y	
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		Formal process reviews	Yes	y	
		External audit?	No	y	
		Forma Client satisfaction monitoring	Yes	{	
Innovative-ness	Innovation process	Capability for innovation	-	-	no measure
		Client involvement, client stories	-	-	no measure
	New or improved products	New patents or trademarks/ no of staff	-	-	NA
		No of patent applications in process	-	-	NA
		Income generated from new products	-	-	no measure
Governance	Organizational structure and strategy	Internal structure description, narrative description	Yes	z	

PIP prioritized Customer capital:

Category	Indicator	Measure	Value	Trend	Notes
Market and image	Customers relation	Buying loyalty	4		(max=5)
		Safety	3		(max=5)
		Honesty	5		(max=5)
Networks	Supplier relations	Delivery security	3		(max=5)
		Honesty	4		(max=5)
		Risk of dependence	1		(max=5)
Visibility of expertise	Public media appearance	Is the product/service spoken of?	Yes	z	
	Strategy	Has the company a media strategy?	Yes	y	

1 Based on Gallup and other recommended employee surveys, See "First, break all the rules" by Marcus Buckingham. Every question is answered using a 1 – 5 scale (1= @, 3=? , 5=>), see Appendix IV



Appendix IV.

Survey-questions to assess IC

This appendix contains the questions upon which many of the IC indicators are based. The questions are arranged first by resource to which they belong: Human, Relational and structural Capital, and then by indicator category. They are loosely built on the frame of reference to employee satisfaction surveys, used in Iceland use to evaluate employee and customer satisfaction. It must be noted that many organisations offer such survey services, both large organisations such as Gallup or small online access survey companies.



Human capital: Relevant questions to indicators

The following statements make up the base to the Intellectual valuables in the human resource part.

Attitude and employee expectation

Job satisfaction

- ☞ On the whole I am satisfied in my job at the company.
- ☞ I know what is expected of me in my job.
- ☞ I have access to all the tools and data necessary to do my job well.
- ☞ When I am assigned tasks, the information is sufficient for me to do the job without a problem.
- ☞ I have received acknowledgement for a well done job in the last few weeks.
- ☞ My opinion matters at work.
- ☞ I feel the role/purpose of XXX indicates that my work is important.
- ☞ The Priority of tasks in my job are clear.
- ☞ When I have been assigned a task the information is sufficient for me to do the job without a problem.
- ☞ My colleagues apply themselves to do a good job.
- ☞ In the last 6 months someone at work has talked to me about my performance at work
- ☞ My job offers sufficient variety.
- ☞ I feel that the role/purpose of XXX indicate that my work is important.

Possibility of work evolvement

- ☞ I had an opportunity to learn and evolve in my work in the last year.
- ☞ I have plenty of opportunities to improve my skills in my work.
- ☞ My chances of a career are good with XXX.
- ☞ New employees get the necessary education and training in the start of their work.
- ☞ I have a chance to transfer within jobs with XXX if I am interested.
- ☞ My superior, or someone at work, encourages me to evolve in my work.
- ☞ My superior encourages me to increase my job training.
- ☞ I show initiatives in getting in-service training or ongoing education
- ☞ With XXX I get training in task outside my specified area which increase my ability.

Employees knowledge is useful

- ☞ I get a chance to at work to do what I do best every day.
- ☞ In my work I can use my talent and ability to the fullest.
- ☞ I use my time so the results will be the greatest.
- ☞ I feel I achieve something in my work.
- ☞ Goals I am given are sufficiently demanding.
- ☞ I feel I have enough knowledge to execute my job as well as possible.

Equality

- ☞ Matters of equal rights are well supported within the company.
- ☞ With XXX there is equality of the sexes when it comes to earning wages.
- ☞ The sexes have equal chances when it comes to promotion.



Appendix IV. Survey-questions to assess IC

Wages and reward

- ☞ My wages are fair considering the responsibility I carry in my job.
- ☞ In comparison to comparable jobs and working hours with other companies, I consider my wage terms to be poorer/similar/better.
- ☞ XXX's wage policy is fair and normal.
- ☞ Several good perks come with my job.
- ☞ If employees do their work exceptionally well or apply themselves at their job, it is noticed.
- ☞ Results on the job are considered when employees' wage terms are decided.
- ☞ I consider possibilities of a career to be good.

Employee loyalty

- ☞ On the whole I am satisfied with the company XXX as an employer.
- ☞ I am proud to work for XXX.
- ☞ I am ready to commit myself to the fullest for XXX.
- ☞ I plan to work for XXX in the next years.
- ☞ I enjoy job security at XXX.
- ☞ I would recommend XXX as a workplace to my friends.
- ☞ I am always positive towards XXX to an outside party.
- ☞ XXX does well in supporting good causes in the community.
- ☞ My colleagues respect their workplace.
- ☞ I find it easy to defend and support the actions of the managers of XXX outwards.

Work climate / Team spirit

- ☞ My superior or someone at work cares for me as an individual.
- ☞ If I make mistakes in my work I can rely on the support and the assistance of my superior.
- ☞ My colleagues help me out when I am overloaded
- ☞ I have a good friend at work.
- ☞ There is a good working climate within my department.
- ☞ Employees in my department work as a team.
- ☞ There is a good working climate at the workplace in whole.
- ☞ Employees of XXX as a whole, work as a team.
- ☞ There is good collaboration between departments at XXX.
- ☞ Forming of cliques and in-group is not common and does not affect communications at the workplace.
- ☞ Employees are not afraid to praise each other for a job well done.
- ☞ My colleagues praise me for a job well done.
- ☞ Work pressure is equally divided between employees in my department.
- ☞ I am happy with my colleagues.
- ☞ My colleagues put an effort into doing a good job.
- ☞ I often do more than is expected of me in my work to give my colleagues good service.
- ☞ In my department everyone is prepared to respond to changing work methods / work processes.

Employees' initiative

- ☞ I often try to seek new ways of doing my job better.
- ☞ I show initiative in getting continuing education/re-training.



Appendix IV. Survey-questions to assess IC

Innovating thinking

- ☞ New ideas are considered with speed and integrity
- ☞ My superior gives me flexibility to execute my projects.
- ☞ My company offers me training in projects outside my area to increase my skill.
- ☞ My superior listens to my ideas and opinions and is positive towards them.
- ☞ I am permitted to use my skills and try new working methods.
- ☞ I am encouraged to bring new ideas on how to improve things.

Mutual respect

- ☞ My opinion matters at work.
- ☞ I am asked for an opinion on decisions that regard my work.
- ☞ I can affect decision-making that is related to my work.
- ☞ My superior gives me flexibility to execute my projects.
- ☞ I have permission to use my talents and try new work methods.
- ☞ When mistakes occur it is more important to right the wrong than finding a culprit.
- ☞ I have an opportunity to work independently.
- ☞ I have the empowerment and the responsibility necessary to be able to do my job well.
- ☞ When people are hired to my department it is based on the applicants skills – nothing else.
- ☞ My contribution is valued at work.
- ☞ Have you been bullied by employees in the last 12 months.
- ☞ I have received an appraisal or acknowledgement for a job well done in the last weeks.
- ☞ In the last 6 months someone at work has talked to me about my working performance.
- ☞ Employees receive often enough praise from the CEO of XXX if they deserve it.
- ☞ My superior lets me know opinion on my work.
- ☞ Employee interview have achieved results for XXX and me.

Professional working methods

- ☞ I often don't have enough time to do what is most important in my work.
- ☞ I am pleased with the working arrangements/projects in my department.
- ☞ I know how to solve most problems / projects I handle in my work.
- ☞ I get sufficient information from colleagues to be able to do my work well.
- ☞ I have someone to discuss with when problems arise in connection to my work.
- ☞ I often get the most boring projects.
- ☞ XXX has clear long term goals / clear vision.
- ☞ I know my departments goals.

Employee Service orientation

- ☞ I have certain ideas of how XXX service to its customers can be improved.
- ☞ I often make suggestions of how my department's service to the customers can be improved.
- ☞ I always do my best in serving the customer regardless of how I feel.
- ☞ I enjoy giving good service.
- ☞ I often do more than is expected in my work to give the customers good service.
- ☞ Good service is a priority with the company.
- ☞ We respond fairly to customers' complaints.
- ☞ Last week I was able to provide all my customers with good service.
- ☞ To do my work better, I need more information on my performance, my department's goals and the new products and service which XXX offers.



Appendix IV. Survey-questions to assess IC

Attitude to service provided

- ☞ Customers get a friendly attitude from the employees.
- ☞ The company's advertisements give a correct image of the company.
- ☞ The company does well in meeting the demands of the customers compared to competitors.
- ☞ The company's customers get good service.

Competent executives and trust

Employees regard towards executives

- ☞ My superior creates the right atmosphere to gain set goals.
- ☞ My superior sets his employees realistic goals.
- ☞ I trust my superior well.
- ☞ I know where I stand towards my superior.
- ☞ Information I get from my superior is correct.
- ☞ My superior has good general knowledge of his work.
- ☞ My superior does not favor any one employee but distributes projects by professional opinion.
- ☞ Superiors have real interest in happiness and wellbeing of their employees.
- ☞ Executives decisions are always respected whether the employees agree with them or not.
- ☞ If I make mistakes in my job I can rely on the support and assistance of my superior.
- ☞ My superior has a good attitude when I go to him.
- ☞ I can always go to my superior when I need him.
- ☞ It is easy to go to the nearest superior with complaints and comments about what can be done better.
- ☞ It is possible to go to higher executives without causing problems for the nearest superior.
- ☞ Executives deal fast and well with complaints.
- ☞ My superior does well in employee interviews
- ☞ My superior does his job well.
- ☞ My superior gets things done.
- ☞ The CEO is interested in my work.
- ☞ Problems have to be permanent before my superior handles the matter.
- ☞ My superior encourages me to do continually better.
- ☞ My superior shares a clear vision.
- ☞ My superior is understanding when I have to take care of family and/or personal matters.

Communication and policy formulation

- ☞ I get sufficient information on important events and changes within the company.
- ☞ I consider enough information come from the executives on status, strategy and company plans
- ☞ General information flow within XXX is sufficient.
- ☞ The employees usually get enough information on what is happening within their own departments.
- ☞ The employees usually get enough information on what is happening within XXX.
- ☞ When changes are due, information is distributed from executives to employees through acknowledged channels but not as unconfirmed news in conversation.
- ☞ Information on the reasons for changes are clear.
- ☞ When changes are made they are followed through.
- ☞ I believe that executives have a clear idea of my field of work.
- ☞ XXX's organisation chart is sufficiently goal-oriented.
- ☞ Information on XXX' goals are clear.



Appendix IV. Survey-questions to assess IC

Job environment and culture

Work hours, work pressure and balance between work and private life

- ☞ My work pressure is too much.
- ☞ There is not too much pressure in my job.
- ☞ I feel there is a good balance between my work and private life.
- ☞ The job does not cause stress.
- ☞ Sufficient flexible working hours are offered within my department.
- ☞ I usually manage to finish my projects in normal working hours.
- ☞ How often in the past month did you feel you were losing control of important things in your life.
- ☞ How often in the past months were you sure of the decisions you had to make to solve your personal matters.
- ☞ How often in the past month did you feel that things were going your way.
- ☞ How often in the past months have you felt that problems piled up without you managing.
- ☞ When you have something to contribute at work, how often do you manage to get your opinions known.
- ☞ When you have something to contribute at work, how often do you manage to affect important decisions and changes.

Working conditions

- ☞ On the whole my working conditions are good.
- ☞ I am pleased with the furnishings and furniture at the workplace
- ☞ I am pleased with the office equipment I have
- ☞ The company's aim is to have healthy employees.
- ☞ I am satisfied with the air-conditioning in the company.
- ☞ The employees' treatment in coffee rooms and in common rooms is good.
- ☞ General maintenance of the house is good.
- ☞ I am pleased with the workplace's temperature.
- ☞ I am pleased with the cleaning of the company.
- ☞ The choice of food in the lunchroom is sufficiently good.
- ☞ It is easy to figure out salary- and holiday calculations.
- ☞ Data is sufficiently guarded in the company, such as confidential information about customers and employees.

Competency development – the company's contribution

- ☞ Employee interviews / performance reviews
- ☞ Employee interviews lead to improvements / progress for me in my job.
- ☞ In employee interviews I have a chance to bring forth my ideas and wishes.
- ☞ In employee interviews I get a response to my contribution to the company.

Work competency plan

- ☞ I get a chance to bring forth my ideas of involvement in the work.
- ☞ Plans of work involvement fulfill my goals of work involvement.
- ☞ Plans of work involvement are executed.
- ☞ As a new employee I get a certain assistance to learn about my job and the company culture (fostering system).



Structural capital: Relevant questions to indicators

The following statements can lie behind the Intangible assets in the structural organisation of the company.

Information system

Channels of information distribution

- ☞ Information from defined information systems, are useful to me in my daily work.
- ☞ I use defined information systems, to communicate knowledge and/or experience.
- ☞ Information systems support the company's core operations
- ☞ Information from information systems give me access to customer's business history.
- ☞ Information from information systems give indications of possibilities of increased service- /product supply to customer.
- ☞ Information from information systems give indications for the need for better / improved service to customer.
- ☞ Information from information systems, give immediately indications of the evolvement of ID-numbers in the management.

Intranet

- ☞ Information on the intranet is useful to me as an employee of the company.
- ☞ Information on the intranet is useful to me in my daily work.

Archiving or document management system

- ☞ Archiving documents to an document system is useful to me in my daily work.
- ☞ Archiving documents to an document system makes it easier for me to find necessary information.
- ☞ Archiving documents to an document system makes it easier for me to have an overview.

Groupware or knowledge management systems

- ☞ Project- / case-management in a groupware system, makes co-operation easier.
- ☞ Project- / case-management in a groupware system, gives me an overview on case status.

The use of employees of information / knowledge systems

- ☞ Information from a knowledge database is useful to me in knowledge requisition.
- ☞ I find interesting articles and introductions for the education of me and my job.
- ☞ I distribute information through the company's knowledge database.

Web access / workplace on the Web

- ☞ Daily I make use of professional web journals.
- ☞ I use a web portal to participate in conferences.
- ☞ I am a member of discussion forums, which are useful professionally.



Appendix IV. Survey-questions to assess IC

Quality system

Quality manual

- ☞ I make use of searching in a Quality manual.
- ☞ Quality goals set forth are realistic for my work.
- ☞ I make use of the quality goals set forth in support of my work.

Registered, defined processes

- ☞ Project description / Quality manual check list are useful to me in my work.
- ☞ Work according to process descriptions / checklists are proper to my work.
- ☞ The use of forms of the Quality manual are proper to my work.
- ☞ The use of forms has clearly simplified follow-up and control in my work.

Process reviews

- ☞ Process reviews always reflect executable goals
- ☞ How often are processes reviewed (quarterly, annually?)

Service- and production processes

- ☞ The goal for an acceptable response time are reviewed considering the results of service surveys /customer satisfaction.
- ☞ Information on customer history with the company are always accessible in supporting me in my work of servicing the customer.
- ☞ I have good access to information on project solutions already executed.

Ability for innovation

- ☞ Environment for innovations
- ☞ Ideas / comments from employees matter and are valued.



Relational capital: Relevant questions to indicators

The following statements can be used to assess intangible assets in the relational capital, The assessment is mainly done through market and customer surveys, based on a Likert scale.

Market position

Market image and visibility

- ☞ In your opinion how good is the company's reputation in the market?
- ☞ How well do you feel the company has shown you as a customer, integrity in your business actions?

Media visibility

- ☞ How often does the company, its products and expertise mentioned in media, in articles, interviews etc.
- ☞ How many publications do your employees have published per year
- ☞ How often do your employees present your products and/or expertise at meetings, workshops or conferences?

Image – customers' attitude and satisfaction

Evaluation of the company's employees' competence

- ☞ How do you feel about the company's employees' professional competence?
- ☞ Is the employees' knowledge and skills in accordance to your needs?
- ☞ How do you value the company's employees' professional competence?
- ☞ Do you consider the company's employees having great or little knowledge of the products and service which the company offers?

Does the company's service fulfill your needs

- ☞ What demands do you generally have regarding companies in this field?
- ☞ What is most important with regards to the company's service, such as it fulfills your needs?
- ☞ How important are Service factor connections to general satisfaction

How good is the service compared to that of competitors?

- ☞ How do you value the services in comparison to competitors? Excellent, good, acceptable needing improvement
- ☞ Imagine the perfect service provider in this business area, how would the company service integrity compare to that? Well, equal, poorly?

Trust and integrity

- ☞ Does the company show honesty and integrity when dealing with you?

Initiative

- ☞ Does the company show an initiative in communicating to you?
- ☞ Do the employees of the company show an initiative in communication to you?
- ☞ Do the employees show an initiative in their service provision?
- ☞ How keen are the employees in introducing new products to you?
- ☞ In introducing new products to you, do the employees focus on the needs of your company?



Appendix IV. Survey-questions to assess IC

Quality of service and goods

How good is the service

- ⌘ What is your general impression/experience of the services of the company?
- ⌘ What is your experience with regarding the service of XXX department of the company
- ⌘ How good is the service of the company
- ⌘ On the whole are you satisfied with the services of the company?

Employee skills

- ⌘ How do you value the professional skills of the employees of XXX
- ⌘ Is the knowledge and skills of the employees of XXX in proportion/ appropriate to the needs of your organistaion?
- ⌘ How do you value the competance of XXX employees?
- ⌘ Do you consider the employees highly competent in their knowledge of the products and services XXX offers?
- ⌘ How good is the employees attitude?



Appendix V.

Management challenge

The aim of the this appendix is to demonstrate how the PIP indicators can be used efficiently when taking on management challenges, for resources, actions and effects. The challenges were selected by the PIP companies.



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Employee Recruitment and retention	Marketing of the company to potential employees Effectiveness of recruitment	Number of newly hired employees Number of hired employees' in proportion to total employees Proportion of particularly important employee groups, e.g. IT employees Gender distribution Age distribution	Number of job advertisements Image and recruitment campaigns Presentations at educational institutions Public appearances, media coverage Training and education costs per new recruit \$ Training and education costs per employee \$	Number of applications received Number of unsolicited applications or inquiries Number/proportion of employees that recommend the workplace to others Number of presentations and stands at educational institutions and job fairs Percentage of students stating the company to be an ideal future employer Number of unsolicited applications or inquiries Number of visitors to website or average length of stay or proportion of revisits to website Average no of years in service Revenue Share of Products / Services < 3years old % Revenue Share of Products / Services < 5 years old %
Governance	Internal Communication Strategy implementation	Number of meetings in a year quarter Time allocation	Agreed meeting procedure Meetings and tasks related to the strategy	Number of decisions concerning future activities Growth of turnover by strategy implementation
Employee education and competence development	Raising knowledge sharing in the organisation Raising educational level for employees Reducing staff turnover	S: Intranet /groupware S: Knowledge management H: Total training costs S: Training cost per employee S: Competence plan/training Existing yes/no H: Turnover by seniority: average length of service in yrs	H: % of employees who share knowledge for maximum value creation H: % of working hours (days) registered as training or knowledge seeking H: training on courses or conferences S: % of employees with competency plans? H: Rookie rate = New/ No of employees	H: % of employees that find their knowledge appreciated and useful on the job H: Rating of cooperation H: University, Masters/PhD H: Certified knowledge S: % of competency plans meeting goals H: Staff parted/ No. Employees
Strengthen customer relations to strategic partner engaging in long relations	Raise length of average customer relations Increasing number of products per customer Build strategic competencies	R: Customers classified by duration/ no of years of maintaining relations R: % of turnover due to long-term costumers R: % of products with customer involvement. S: Customer relations management R: Customers classified by duration/ no of years of maintaining relations	R: Customer survey The quality of products and services R: Customer survey: Is the company honest in its business with you? R: Customer survey: Shows focused innovativeness on its customers	R: Average no of years R: Lost of customers /total No of costumers R: % returning customers



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Increase sales	Customer nearness Good work conditions Effective workday	Groups and positions (stationary/mobile) Cost of employee turn-over Mobile IT conditons Support systems: CRM-system Physical environment Skills and competence	Telephone booking Sales meetings Service attitude Sale competence	DB sales %sales customers tunrover/loyalty Sale pr. meeting Employee satisfaction Customers turnover/loyalty
To increase customer loyalty	Quality of the product Quality of the Partners Quality of services, consultants, marketing material	R&D Claims Quality process Customer Survey - quality of product (compaired with competitors) Partners Partner relations Skills of employees Number of years in service	Percentage of work in R&D Innovation process Claims process improve product? Partner acitivites: events, newsletters, no of sales meetings Presentations and education for partners Announcements - new features in product (resulting from partners) Help desk, online service Assistance through partner and/or customer web site	Customer retention effect: Average time in Maintenance (years) % claims (reduction) Customerproduct satisfaction % of total turnover (maintenance and product sale) Revenue - Customer satisfaction Revenue and number of new sales Partner retention Number of tickets Number of visits to web site
Competence development	Establish training program Competence plan	Competence plan Sales	Hours spent on competence building - Number of planned activities (inhouse training/courses/ education)	Percentage fulfilled training activities Employe development satisfaction (survey)- course evaluation- competence evaluation (testing /staff-turnover)
Increase revenue from customer contracts	Aftermarketing / service interactions Advertising Sales activities	Customer loyalty Cooperation Benchmarking to competitors Customer satisfaction Quality of products and service Advertising cost Advertising cost/total costs Image in market Sales cost Sales cost/total costs Customer turnover	No. of questions in customer survey Number of recorded client interactions No. of products developped with customer involvement Reply ratio in customer survey No. of advertisements in a given period. No. of recorded sales interactions in a given period.	Customers classified by duration/ no of years of maintaining relations Customer perception of products and services compared to competitors Customer perception of frequency of interactions Customer replies to relevant questions in customer survey Customer perception of the quality of products and services Customer attitude towards the image of the company Hits ratio (sales/declines) No of new customers No of lost customers Lost customers/no of customers at the end of the year



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Employees and staff turnover	Define goal for staff turnover and average length in service, age distribution and education	No of employees Staff turnover Age distribution Education Employees productivity Cost of employees	Advertising Age quit employees Age of newly hired employees Age applications Type of advertisement Advertising for educated people Applications education	No of employees on payroll at the end of the year Average length of service yrs Indicators for staff turnover?? No of years in service/ No of employees Age of employees/ No employees University education, Master/PhD, Certified knowledge Gross profit/No of employees 5m/27= 185.185,- Revenue/ No of employees 150m/27= 5,5m No of bilable workhours /No of employees Total salary cost/ No of employees Total cost of employees/revenue
Conferences	E-mail marketing: - Advertising - Free advertising (web) - E-mail newsletters - Target groups called Effectiveness participant recruitment	Number of E-mail addresses Number of receivers of the newspaper Number of E-mail addresses Number of E-mail addresses Number of calls Customer satisfaction Number of participants	Web site visits (number of hits) Number of responses Customer survey	Direct registration Customer survey Customer survey Registration Number of registered customers Number of negative answers Number of potential customers (postponed customers) % of satisfied customers % returning customers % returning customers from other departments % customers who would recommend the company to others % of participants per conference and per year
H: Increase number of university graduates by 10%	H: Number of university graduates: 30%	Increase hire of university graduates Help employees to finish university degree Employment ads - university degree required	Number of hired university grads. Number of finished university degrees Number of employment ads.	H: Number of university graduates: 35%



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
S: Raise score regarding physical working conditions in GWA above 4,25	S: Physical working conditions score: 3,85	Specialists to monitor conditions. Action plan enforced based on results of consult. Increase emphasis of working condition issues in GWA	Spending related to working conditions. Compliance to action plan timing.	S: Physical working conditions score: 4,15
R: Improve customer satisfaction by 5%	R: Customer satisfaction score: 2,8	Increase service staff Shorten response time Implement service level agreement Staff - technical training Staff - service training Inform the customer	H: Number of service staff S: Response time statistics H: No. of hrs. spent on staff technical training H: No. of hrs. spent on staff service training	R: Customer satisfaction score: 4,1
R: Increase number of university graduates	Recruitment drives at universities Tips from personal Adverticing Help employes to finish university degree	Total cost per hired person Number of hired with university education Part applications with right education Total cost per hired person Number of hired with university education Part applications with right education Total cost per hired person Number of hired with university education Part applications with right education Total cost per employee who finished degree Number of employees who finished degree	Number of hours spent Amount of money spent	Number of drives Number of applications Number of tips Number of applications Number of ads Number applications Number interested employees Number started effort Number finished degree
S: Increase employee satisfaction on physical working condition	Education initiatives Specialist to monitor condition Physical changes Increase emphasis of working condition issues in GWA	Change in satisfaction rate Relation between cost and change i satisfaction Number of valueable advice Effect on actions taken by specialists advice Change in satisfaction rate Relation between cost and change i satisfaction	Number of hours spent Amount of money spent	Indicator activities Part of employee educated Number of education occations Number of occations Number of occations



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
H: Improve customer satisfaction	Increase service staff Shorten response time Implement SLA Technical training Service training Inform customer	Indicator effects Number of service staff Relation between cost and change in satisfaction Response time Relation between cost and change in satisfaction Number of services with SLA/total amount of services Effect on customer satisfaction Amount of services out of SLA Relation between cost and change in satisfaction Relation between cost and change in satisfaction Relation between cost and change in satisfaction	Number of service staff Amount of money spent Number of hours spent	Number of recruitment activities Actions taken to shorten time Number of SLA implemented Actions taken to inform customers



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Recruitment and retention of employees and competencies	Marketing of the company to potential employees <ul style="list-style-type: none"> Image and recruitment campaigns Presentations at educational institutions Web visibility 	<ul style="list-style-type: none"> Gender distribution Number of hired employees Number of hired employees' in proportion to total employees Proportion of particularly important employee groups, e.g. IT employees 	<ul style="list-style-type: none"> Number of job advertisements 	<ul style="list-style-type: none"> Number/proportion of employees that recommend the workplace to others Number of presentations and stands at educational institutions and job fairs Percentage of students stating the company to be an ideal future employer Number of unsolicited applications or inquiries Number of visitors to website or average length of stay or proportion of revisits to website
	<ul style="list-style-type: none"> Hiring of experienced employees 	<ul style="list-style-type: none"> Age distribution Average no. of years service in industry 		
	<ul style="list-style-type: none"> Employee satisfaction surveys 	<ul style="list-style-type: none"> Number of surveys held Documented changes over time 	<ul style="list-style-type: none"> Proportion of employees participating in employee satisfaction surveys Number of participants in employee satisfaction surveys answering the questionnaire 	<ul style="list-style-type: none"> Number of employees who are satisfied or very satisfied Number of days absent per employee Number of employees having left the company in proportion to total number of employees Proportion of employees satisfied with IT resources Proportion of employees satisfied with physical conditions
	<ul style="list-style-type: none"> Performance reviews 		<ul style="list-style-type: none"> Number of performance reviews Proportion of employees at performance reviews Number of reviews in proportion to the agreed number of reviews 	
	<ul style="list-style-type: none"> Training planning 	<ul style="list-style-type: none"> Number of employees for whom a competency profile has been prepared 	<ul style="list-style-type: none"> Number of employees with competency development plans Proportion of employees with competency development plans Training costs 	
	Flexible and transparent working conditions: <ul style="list-style-type: none"> Transparent terms of employment with respect to hours of work, job specifications and requirements etc. Flexible hours Possibilities to work at home 	<ul style="list-style-type: none"> Employees with flexible hours Full-time and part-time employees Average no. of years service in company Number of employees having a home pc Number/proportion of home workplaces 	<ul style="list-style-type: none"> Number of overtime hours per employee 	<ul style="list-style-type: none"> Number of days absent in proportion to number of work days or number of days absent per employee Number of employees having left the company in proportion to total number of employees Number/proportion of employee exits



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
	Creation of common identity and spirit: <ul style="list-style-type: none"> • Social activities • Common 'rules of conduct'/values • Rotation through different departments /functions 	<ul style="list-style-type: none"> • Average no. of years service in company 	<ul style="list-style-type: none"> • Number of social activities or costs of social activities per employee 	
	<ul style="list-style-type: none"> • Mentor or introduction scheme for new employees 	<ul style="list-style-type: none"> • Average no. of years service in company 	<ul style="list-style-type: none"> • Number/proportion of newly appointed employees having completed tutor/mentor schemes 	
	<ul style="list-style-type: none"> • Good physical surroundings 		<ul style="list-style-type: none"> • Total costs of premises and office equipment (per employee, if appropriate) 	<ul style="list-style-type: none"> • Number of employees satisfied with physical conditions
	<ul style="list-style-type: none"> • Competency recording 	<ul style="list-style-type: none"> • Number of employees for whom a competency profile has been prepared 		
	<ul style="list-style-type: none"> • Competency development plans 		<ul style="list-style-type: none"> • Number/proportion of employees with competency development plans • Number/proportion of employees currently participating in internal or external supplementary training courses • Training costs • Number of participants per course activity held internally or externally (describe course purpose) 	<ul style="list-style-type: none"> • Number of employees having left the company in proportion to total number of employees
	<ul style="list-style-type: none"> • Formal supplementary training via internal and external courses and conferences 		<ul style="list-style-type: none"> • Total training costs • Total education and training costs in proportion to total payroll or per employee • Number of education and training days (per employee, if appropriate) • Proportion of hours spent on education and training 	
	Exchange of professional advice through daily work: <ul style="list-style-type: none"> • Feedback to employees on performance • Contact with different projects • Project work • Stationing abroad 		<ul style="list-style-type: none"> • Number/proportion of employees being or having been stationed abroad 	



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Development of company processes	Process optimisation: <ul style="list-style-type: none"> Process descriptions Implementation of process descriptions Benchmarking 		<ul style="list-style-type: none"> Time and money to develop processes 	<ul style="list-style-type: none"> Number of process descriptions
	Operating efficiency: <ul style="list-style-type: none"> Homogeneous order processing Precise delivery Procedures for handling errors 			<ul style="list-style-type: none"> Average lead time Number of production stoppages Proportion of orders delivered at the right time, place and in the right volume and quality Number of complaints or proportion of orders with complaints
	Develop competency in process control: <ul style="list-style-type: none"> Process managers who describe and maintain processes Educate employees to carry out quality assurance function 			
	IT support of work processes: <ul style="list-style-type: none"> Automation of production IT based design tools IT based operation and maintenance system 	<ul style="list-style-type: none"> Number/proportion of IT supporters and number/proportion of IT super users among the employees 	<ul style="list-style-type: none"> Total IT costs or their proportion of turnover (broken down into hardware, software, service, licences etc.) Increase in per cent in capacity of new pcs installations 	<ul style="list-style-type: none"> Proportion of employees satisfied with IT resources
	Resource control: <ul style="list-style-type: none"> Time registering Task contracts Financial management system 			<ul style="list-style-type: none"> Costs per unit produced
	Customer-oriented processes: <ul style="list-style-type: none"> Clear entry to the company for customers Improve communication with customers 			<ul style="list-style-type: none"> Proportion of phone calls answered within 10 sec or average wait time for calls to switchboard Proportion of letters answered within the time limit
	Quality assurance of processes: <ul style="list-style-type: none"> ISO model Process descriptions and process measurements Quality assurance manual on the intranet 		<ul style="list-style-type: none"> Number of audits, benchmarkings and self-evaluation activities 	
	Quality assurance of case handling: <ul style="list-style-type: none"> Updated guides for uniform and correct case handling Monitoring and registration of incorrect case handling Summaries of decision making practices within case handling User satisfaction surveys with decisions 		<ul style="list-style-type: none"> Total costs of implementing and developing quality management 	



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
	Quality assurance of projects: <ul style="list-style-type: none"> Development projects based on project model and manual Requirement specification for all development projects Documentation of projects Internal project evaluation Establishing co-operation groups for development projects Project management competency 	<ul style="list-style-type: none"> Number/proportion of employees with project management training or experience Number of business processes described (clearly explaining what a process is) Number of projects carried out in co-operation with external partners (explain what project type, project task, product or organisation) 	<ul style="list-style-type: none"> Number/proportion of employees in project management training 	<ul style="list-style-type: none"> Number of employees having completed project management training this year Number of certifications based on quality standards Number/proportion of projects run in accordance with the product development model
	Knowledge exchange across the organisation: <ul style="list-style-type: none"> Internal courses and after-hours meetings Experience groups/professional communities across departments Interdisciplinary project groups Job rotation Transfer pricing system 	<ul style="list-style-type: none"> Number of visits to knowledge centres (which are relevance to the company) Number of employee magazines per year Number of knowledge documents on the intranet Proportion of projects with project participants from more than one expertise area Cross-sales proportion of total turnover Average number of participants per project group (explain which types of project groups) 	<ul style="list-style-type: none"> Proportion of working hours spent on knowledge-related activities (participation in courses, seminars, development assignments etc.) Number of times employees use the CV base, or number of times employees use the CV base on average 	
	IT support of knowledge flow: <ul style="list-style-type: none"> Overview through the intranet of who knows what Experience accumulation in database 	<ul style="list-style-type: none"> Number/proportion of registered users of electronic network Number of electronic discussion groups 		
Visibility in the marketplace	Marketing and profiling with respect to customers: <ul style="list-style-type: none"> Newsletters and similar to relevant customers Prepare information material and cases Focused initiatives on key customers Cold calling Visibility in local area through cultural and leisure events Participate in projects receiving public attention Define core capabilities 	<ul style="list-style-type: none"> Proportion of new customers to total number of customers Change in number of customers (new less loss of customers) 	<ul style="list-style-type: none"> Information expenses per customer Number of presentations, conferences and training days held where customers participate Number of published articles, pamphlets and brochures 	
	Diffusion of company image within professional circles: <ul style="list-style-type: none"> Participate in conferences Articles in relevant professional journals and magazines 		<ul style="list-style-type: none"> Number of published articles, pamphlets and brochures 	



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
	<p>Visibility in the political system:</p> <ul style="list-style-type: none"> Publications in the form of articles, brochures, films etc. Presentations and teaching 		<ul style="list-style-type: none"> Number of presentations, conferences and training days held with customers as participants Number of published articles, brochures, films etc. 	
<p>Building up partnerships with customers</p>	<p>Dialogue with customer on co-operative process:</p> <ul style="list-style-type: none"> Co-operative model and brand-building model Customer database Involve customer in product development process Clients are given electronic access to own data After-hours meetings, courses and seminars for customers Focus groups (planned) Matching customers and employees Increase employees' empathy and communicative skills 	<ul style="list-style-type: none"> The 5-10 largest customers in proportion to total turnover 	<ul style="list-style-type: none"> Number of customer committees and idea groups Number of presentations, conferences and training days held with customers as participants 	<ul style="list-style-type: none"> Number of years the company has maintained relations with customers Number of customers buying the company's products and services in proportion to total number of customers having bought products and services (within a period corresponding to the product or service life) Proportion of lost customers to total number of customers or change in number of customers (new less loss) over total number of customers
	<ul style="list-style-type: none"> Customer satisfaction surveys 		<ul style="list-style-type: none"> Number of participants in customer satisfaction surveys in proportion to total number of customers Response rate for distributed questionnaires 	<ul style="list-style-type: none"> Proportion of customers who are satisfied or very satisfied with the company (weighted by question importance, if appropriate) Number/proportion of customers/users who would recommend the company to others
<p>Accumulation of insight into users' needs</p>	<p>Compiling knowledge of users' needs:</p> <ul style="list-style-type: none"> Involve users in product development process Knowledge agents in specific professional fields Focus groups 		<ul style="list-style-type: none"> Number of customer committees and idea groups Number of presentations, conferences and training days held with customers as participants 	<ul style="list-style-type: none"> Number/proportion of customers/users who would recommend the company to others
	<p>Match users' needs through development of new products:</p> <ul style="list-style-type: none"> Update methods and concepts Development projects R&D investment Patenting 	<ul style="list-style-type: none"> Number of patents applications Number of approved patents at present 	<ul style="list-style-type: none"> Total costs of research and development or these as proportion of turnover 	<ul style="list-style-type: none"> New products as proportion of total turnover or of total number of goods sold
	<ul style="list-style-type: none"> User surveys 			<ul style="list-style-type: none"> Number of customers who are satisfied or very satisfied with the company (weighted by question importance, if appropriate)



Appendix V. Management challenge

Management challenge	Actions and initiatives	Indicators (resources)	Indicators (activities)	Indicators (effects)
Development of access to or supply of external knowledge resources	Partnership with external resources: <ul style="list-style-type: none"> • Classify and evaluate partners • Define common objective for partnership • Partner satisfaction survey • Profile opportunities in the company 			
	Contact with research and educational institutions: <ul style="list-style-type: none"> • Update knowledge database • Close contact with universities 			



Appendix VI.

Case studies from PIP companies

- # Anza
- # Aptic
- # Ceadesign
- # Ciceronen
- # Danish Probe
- # Gat-Soft
- # GoPro
- # Itera Consuting Group
- # Movial
- # Move
- # Mercantilius
- # Sentensia
- # Studio 1-2
- # TM Software
- # Tölvumidlun



ANZA Case Study

ANZA was founded in 1997 in Reykjavik, Iceland. The company's main product is Information Technology (IT) outsourcing, ranging from on-site facility management to hosting in sophisticated data centers. ANZA's basic business concept is that companies should concentrate on their core business, meaning what they do best and what creates their revenues, while entrusting other business processes, such as IT, to qualified service companies.

ANZA is a subsidiary of Iceland Telecom, which holds just over 80% of the company's shares. ANZA has its headquarters in Reykjavik and a branch in Husavik. ANZA's services are provided to companies throughout Iceland.

ANZA recognizes that its employees are the company's most important assets. The company has an ambitious program in place for training and continuing education, to insure that employees' knowledge and expertise is kept up-to-date. ANZA's corporate culture is designed to foster active discussion and knowledge sharing. The company has developed a focused recruiting and employee retention program and has been successful in recruiting and keeping highly skilled and motivated employees. ANZA is an equal-opportunity employer and encourages a fertile environment by seeking diversity in its staff. ANZA's IT professionals include computer scientists, engineers, physicists and electronic technicians with excellent credentials and extensive experience in all areas of IT.

ANZA created its first Intellectual Capital (IC) report in 2005 (for 2004). The term *intellectual capital* refers to the intangible value existing within a company. The term *knowledge capital* is also commonly used. Both terms refer to intangible assets, as opposed to the tangible assets accounted for in a company's accounts and traditionally summarized in its annual report. The most important assets of a company in ANZA's field of business are intangible, and consist primarily of a

competent workforce and its coded and tacit knowledge.

As ANZA is not on the public stock market its annual report is only distributed to a small group of shareholders and ANZA's board of directors. ANZA's first IC report was created with this audience in mind. The intention was that the report could be used to make comparisons over time and set goals for the future. To facilitate comparisons with other companies and sectors, an external version of the report was also created and this report is available for distribution outside the company.

The IC report has already proved its value to ANZA's management team, and shareholders and ANZA's board of directors have recognized the value of the report. The IC report covers the three types of intellectual capital which constitute the main components in any description of a company's intellectual capital, and capture certain key data. The three types of intellectual capital covered are Human Capital, Structural Capital and Relational Capital. The relationship between these different types of intellectual capital is very important since it demonstrates how knowledge exchange takes place within the company.

Simply collecting intellectual capital information, which no one has been able to adequately define until now, and cataloging it have been useful exercises in their own right. Meaningful metrics are required to highlight the value of intellectual capital. The IC report has helped ANZA to assign a value to its intangible assets and to define goals regarding these assets as well as define indicators to measure if the goals are being reached.

The IC report is an important addition to ANZA's traditional annual report. In a larger context, it would be highly desirable to take into use standardized indicators for IT companies. This would facilitate comparisons and benchmarking within the industry.

Aptic AB

Aptic AB (Aptic) is a company developing its standard system Aptic ARC, which is a receivable ledger system. The system handles the whole process from the start by creating an invoice to the end when it is finally paid. Aptic strives to become one of the leading suppliers of this type of systems in Europe, and has come a long way on that road already.

At Aptic there are at the moment 19 people employed fulltime, and a couple of consultants hired on regular bases. The company is placed in Skövde, Sweden. Aptic's personnel have knowledge in the whole system development cycle. From setting up the requirements to making sure that the system works and runs in the customer's environment. Services like programming skills, education in the system and the area, project management, advices on process changes etc are some of the areas Aptic can supply personnel and knowledge in.

Companies and organizations that already have chosen Aptic's products and services are for example Siemens, the Swedish Social Insurance Agency, and PBK Outsourcing. Aptic's customers are placed mainly in Sweden, but also in other countries like Norway, Denmark, Finland, Estonia, Holland, Spain etc.

Key learning's from the PIP-project

Through the work with PIP-project Aptic has started to think in new ways about the employees, see them even more as a valuable resource in the company. Aptic has made a survey of which resources and knowledge the company has and want's to have in order to grow intelligently, not to fast and not to slow.

Aptic has always had an open forum for discussing new ideas, both high and low. When the company grows it is important that this continues, both in the old ways but also in new. The PIP-project and the work with using the indicators have given new ways to forming new ideas.

Through the use of some of the indicators, and continued use of this Aptic has been given a tool to take the temperature in the company, a way to get an indication if the company continues on the road as planned or if it has come on a side track. It also gives a measurement how the company develops in other terms than the economic aspect, which gives a more colorful picture of the company. Where it has been, where it is now, and where it is focusing on to become.

CREADESIGN CASE-STUDY: PARTICIPATING IN PIP

COMPANY DESCRIPTION

Creadesign Oy is an internationally awarded industrial design agency that specializes in industrial design based brand building. Since 1981, we have been creating and consulting customer-oriented and user-centered, unique design solutions. In addition to launching hundreds of brands, we have produced tens of patents and protections of design for our clients as well as numerous innovations of our own. Creadesign Oy has its headquarters in Helsinki, Finland.

FINDING IC

Creadesign is one of the 2nd generation companies. First time Creadesign heard the project Nordic Harmonised Knowledge Indicators summer 2004 and took part in 2nd generation Kick-off Meeting in Copenhagen, October 2004. After that promising meeting Creadesign started to find out more comprehensively, what is Creadesign's intellectual capital and how we could use the framework that the 1. generation had developed.

MEASURING

During first round we found many usable indicators and had a fruitful discussion concerning the indicators: "on the other hand this is very usable indicator and on the other...". After many iteration rounds we decided 9 Human Capital, 22 Structural Capital and 14 Relational Capital indicators to put in use 2005. In our first IC report we reported most of those indicators. We decided to focus on the marketing aspects of IC reporting and take the advantage of that. During year 2005 we put emphasis on reducing the number of indicators and we managed in that, too.

THE FUTURE

We have found IC reporting as a very beneficial tool to steer company's long-term strategy (inner point of view) and tell how we carry out our value and innovation creation (outer point of view). We have hoped that through the NHKI-project all the partners could develop a fixed framework for different kind of companies to report their IC value creation. And, as far as we know, this has happened. However, we have found out that a very fixed tool is impossible. Instead, it should be seen as a very valuable management method, which shall be all the time in progression. We will also in the future report our IC and develop it and reporting procedures even better!

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dayviewer, workforce management, charge, cinum, clltran, alert, voicesystem, dayviewer, workforce management, charge, c

Ciceronen Telecom AB

Ciceronen Telecom AB strategy is to be number one in Sweden and in a couple of years in Nordic area, when it comes to delivering web based management systems, in "real time" based on telecommunication. Everything is produced in Ciceronen's factory located in Gothenburg, Sweden. All development work occurs close to the customers, without any costs, and it will work in the industrial process.

In 2005 the strategy for Ciceronen Sweden has been to maintaining the industrial process in our factory. Now we are ready to exploit the market"

The PIP project

Ciceronen has been participating in the PIP project since the start in 2003. During this period we have developed our factory and parallelly worked with finding the key figures for IC reports. For us the IC figures have always been a help to get routines to handle the quality, environment and the employees. The process had helped us to highlighting some problems that have been difficult to pinpoint and manage early.

The PIP project will take time.

We have now got the experience that the IC reports is a continuing process and something that takes time. The company as well as its employees have had to get used to working with this new format and some mistakes have been made and minor adjustments have been necessary. The work with the IC reports has shown us the importance of lighting up all the process that the company is working with. The key figures will help us to see the change during over time, and help us to be a better and stronger company. For us it is absolutely clear that working with IC and IC reports is a great value to the company. We regard this process as a learning process and the mistakes made have helped getting the IC report "under the skin". We look forward to work with IC reporting in the future, and hope that we continuously can improve on profits extracted from the work

We hope you got a picture of who looked up on the IC report and who we can get help by by processing IC in our company. If you want know more about our working field and look at the application go to www.ciceronen.com choose "tjänster", demo, Username: cic Password:cic Enjoy yourself.

Best regards

Anders Heimerson, MD

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Case

Danish Probe is a leading software corporation that has received the international Comdex Award by Microsoft and Fujitsu-Siemens for the ABC Academy software. ABC Academy are used by more than 1 million users worldwide in corporate universities, mobile learning solutions and commercial learning markets.

About Danish Probe A/S

Danish Probe was founded by Jesper Lohse and Peter Jensen doing the creation of the ABC Academy software. The corporation is owned by the founders and Nordic Capital Funds.

Danish Probe has leading-edge knowledge about Learning Management Software and Future strategic Concepts on the global learning market.

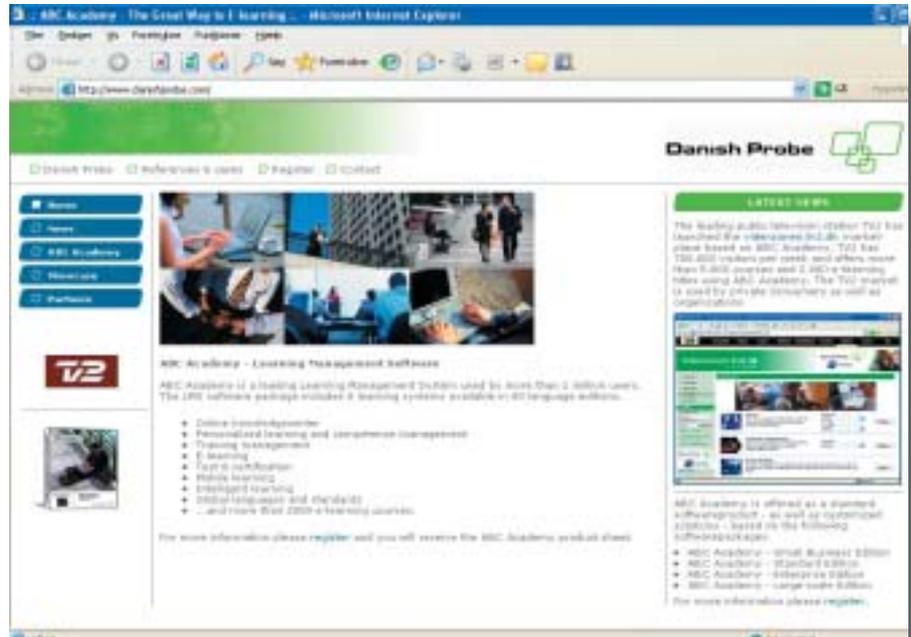
The learning market has potentially one of the highest growth rates on the Internet in the period 2006-2010. This makes it important for Danish Probe to present the right knowledge about the business potential to international shareholders, investors, strategic alliances, customers and partners.

The ABC Academy software is patented in most parts of the world and has been presented on major international events. The software is used by small, medium and large organizations as standard software for creating leading-edge corporate universities, mobile learning solutions or commercial markets such as the national learning market in Denmark on <http://videnzonen.tv2.dk> - launched by the danish television channel TV2 with 700.000 weekly visitors.

IC Report

Danish Probe has participated in the Nordic PIP-project, as a member of the Danish Industry Association, aimed at creating an international standard for IC Reporting. For two years the company has created an IC Report.

Starting up the IC Reporting process the management team analyzed the most critical indicators within the company for IC Reporting and compared the indicators to the jointly selected indicators by different organizations in the PIP-project. This to make sure that the IC Report was telling the right story about Danish Probe. All indicators were divided into structural, human and relationship capital.



The IC Report is generated based on online surveys, stakeholder workshops and interviews held with key customers, partners, strategic alliances, investors, employees and the management team.

All stakeholders answers an online survey using a 1-5 level model with selection of current and future indicator levels using yellow and green colors. A green color illustrates an indicator on the right track and a yellow color indicates the need for further strategic development of the indicator.

The IC Report is today almost automatically generated based on the online survey, historical values and strategic workshops.

Key Learning Points

The IC Report has been a great chance for Danish Probe to share common insight providing the right picture based on yearly indicators.

The annual IC Report is today an important strategic tool for communication between shareholders, strategic alliances, customers, partners, management and employees in one of the fastest growing Internet markets.

Danish Probe found during the initial two years of IC Reporting that more focus should be on market capital indicators for an innovative company in a fast growing market - and that there was a difference between Danish Probe and more matured companies. However all small and medium size enterprises is encouraged to make IC Reporting. IC Reporting provides a key strategic overview for the right decisions at the right time by the right people.

In the future Danish Probe expect to further enhanced the IC Report and the strategic use of IC Reporting.

More Information

For more information about Danish Probe visit www.danishprobe.com or contact.

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Danish Probe



<p>Case Study PIP Putting Intellectual capital into Practice</p>	
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<p>Company:</p>	<p>GAT-Soft AS Established 1991, 21 employees, revenue 21.5 MNOK Products: Personnel management software Situated in Porsgrunn – Norway</p>
<p>Project facts:</p>	<p>“2. generation group”, meaning we joined the project one year after the 1. generation. Project period: Summer 2004 – summer 2006, approx 350 hours spent on the project. GAT-Soft represented by Maryanne K. Slette (finance&adm) and Bård Stranheim (CEO) Main deliveries through the project: Value report 2004 and 2005. Publications: Article in Økonomisk Rapport, February 2006.</p>
<p>Evaluation:</p>	<p>GAT-Soft was already focused on the topic “intellectual capital” before entering the project. This is partly due to a business culture considered as open to modern management principles, but also based on the fact that we are developing personnel related software.</p> <p>Learning to know the members in the project group is one of the major achievements. Discussions and exchange of experiences has been valuable. Getting to know professionals in other Nordic countries has proven to be useful in several occasions already. The process developing common indicators is considered being too open, too long. A more ambitious plan to reach a standardized methodology earlier in the project might have been obtainable, giving us more time to share experiences using the standards. But this project is more a maturation process than just learning new techniques.</p> <p>Reading relevant literature and attending courses outside the project which again has enlarged our intellectual capital network, has also been of great value. It exists a great number of great managers out there, with a holistic mindset.</p> <p>Implementation of necessary measurements has given us increased focus on management and organizational development. Plus increased awareness of our areas needing development.</p> <p>What is developed has still a way to go to be regarded as a ready-to-use toolkit. Hence, this gives organizations even outside the target group formed by the participating companies, a good starting point.</p>
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GoPro and PIP – A Case Study

The Company

GoPro is a software development company that specializes in case management, document management and customer relations management software. Its best known product is the GoPro case management system, implemented for IBM Lotus Notes and Workplace and Microsoft .NET . Visit our website, www.gopro.net for further information.

Since the founding of the company, in 1993, it has collaborated closely with public sector organizations and private companies, especially in Europe, in order to produce a system that is compliant with existing legislation and work procedures familiar to the end user. The company's software is currently deployed in over 30 countries around the world, at all organizational levels.

Participation in PIP

Our approach to the project was to find out what was most important for us to measure and manage in terms of IC. We tried to find as many tangible indicators as possible to use when measuring our IC, that is to say, indicators based on fact rather than feeling. Most indicators come thus from measurable and countable figures and a few from surveys. Most of our senior staff were involved in the work, which we found extremely important.

The output of the work, the IC report, is very helpful for us and other stakeholders of the company, to see clearly, in one report, what our IC really is and what the true value of the company lies.

A Key learning point for GoPro:

In our original work we all agreed that one of our most valuable assets is our product, the GoPro Software and also our customers. Therefore it was very important for us to find an indicator that would give us an understandable and easy to interpret measurement for these two.

The indicator that we came up with was the "Average year in maintenance" indicator. It tells us how many years, on average, we can expect a new customer to pay us maintenance fee. This is both a measurement of customer loyalty and the quality of the product. Further this indicator makes it possible for GoPro to estimate the total value of a sale, as well as giving a valuable input to evaluating the worth of a customer base and products.

As a result of this measurement we have now started to look at a different pricing model, which consist of selling software as service and renting rather than an up front payment for the product. We have the confidence to look into this as an option because the statistic tells us that a new customers that signs up with us, will still be paying us maintenance after 6 years. The new pricing model has been very well received with the few customers that have been introduced to this new model. The sales cycle is shortened considerably and even though the cash-flow will be different, the Net Present Value of the cash-flow will be higher.

Other key learning points for GoPro:

- To go through the exercise of making an IC report is perhaps the most valuable lesson
- That IC can be measured and managed – you just have to find the right indicators and how to interpret them.
- That the IC report and the work around it becomes more valuable over time, because of the trend the indicators give you, year by year.
- That even though consistency in your IC report is important you will also have to review the indicators yearly to value if they need to be changed or new ones needs to be added, to measure your IC correctly.
- To standardize indicators between companies is very difficult and, at least initially, those indicators that are standardised will need to be few, simple and easy to interpret.



Itera Consulting Group Danmark

Itera Consulting Group Danmark is part of the Nordic based Itera Consulting Group ASA, which, with its head office located in Oslo, is represented with 300 employees in Norway, Sweden and Denmark. Itera Consulting Group ASA is registered on the Oslo stock exchange.

Itera Consulting Groups main strategy is to be number one when it comes to delivering next generation business solutions, based on technology from the worlds leading software providers Microsoft and IBM. The main objectives are primarily business oriented portal solutions based on Microsoft Office Systems, the Content Management system "Site In A Box", Business Intelligence, Business Performance Management and general maintenance of server solutions.

In 2005 the strategy for Itera Consulting Group Danmark has been to grow organically in pace with customer demand. At the same time focus has been made on strengthening the company's business competences by creating a Business Consulting department, strengthening the Operations department and the Business Intelligence competences. This has all been done with a continued focus on maintaining the profitability.

The PIP project

Itera Consulting Group Danmark has been participating in the PIP project since March 2005. We have, during this period of time, been taking an active part in the preparation of the projects recommendations, implemented the project indicators for the IC report and in connection with our annual accounts for 2005, we submitted our first IC report. Throughout the project period we have had great pleasure in working with the PIP network and collaborating with the steering committee and the other project participants.

IC reporting at Itera Consulting Group Danmark

The work proces of creating the IC report has contributed in creating a common system of terminology within the company. In addition, the process has helped us in highlighting and working with internal key areas, that earlier seemed hard to pinpoint and manage.

The preparation of the IC report has furthermore lead to a lot of fruitful discussions throughout the company. These have shed light on a number of

interesting areas, which will be interesting to work with in the future.

It also seems evident that we in the future must work more on connecting the IC report closer to the companys overall business strategy. Furthermore, we regard the IC report as a "first step" in the process of making a full Balanced Scorecard implementation, which is part of the companys long-term plans.

It has been positive to experience the warm reception of the IC report from both customers as well as partners. Both parties have expressed, that they regard it as a valuable addition to the companys financial accounts.

A process that takes time

We have, not surprisingly, experienced that the IC report is a continuing process and something that takes time. The company as well as its employees have had to get used to working with this new format and some mistakes have been made and minor adjustments have been necessary.

The work with the report has shown, that further work is needed with the list of indicators, so it can help create value for the company to the best extent. Furthermore, it has been proven to us, that we must get better in collecting data as a continuous process.

It is Itera Consulting Groups intention, that we in the future will seek to achieve an even better balance between a narrative and data based approach. The first version has, in our own opinion, a tendency to be to narrative oriented. This because we simply not have had access to the necessary data in this first version.

Finally, it is clear that if the IC report in the future is to be audited, in the same way as the financial account, our data material must be strengthend and lay the foundation for the report in the future.

All in all of great value to the company!

All in all we can conclude that working with IC reporting has been of great value to Itera Consulting Group. We regard this process as a learning process and the mistakes made have helped getting the IC report "under the skin" so to speak. We therefore look forward to work with IC reporting in the future, and hope that we continuously can improve on the profits extracted from the work.

Movial

Movial provides IP communication software, embedded Linux engineering and user experience services to device manufacturers and operators. Software developed by Movial is easy-to-use and helps customers launch products to market in shorter time.

The Connect product suite enables creation of converged IMS communication services. Movial's deep understanding of open technologies and commitment to our customers have been recognized by Nokia, HP, Orange and Telefonica.

Headquartered in Helsinki, Finland, Movial was founded in 2001 and employs over 100 employees.

www.movial.fi

Movial & Intellectual Capital

Intellectual Capital reporting helps Movial and our stakeholders understand what Movial does and what steps we have taken and are taking to develop our competency and improve our performance.

Since the beginning Movial's goal has been to develop management and steering of the intellectual assets - goal for Movial is to have repeatable software engineering, project management, HR, Financial and sales processes. In addition, we need to achieve modular yet flexible software architectures. We must have capabilities to produce products and projects with high quality independent of people involved in the creation of them.

Management of the "invisible" is always hard and during the project we have a) identified our key competences, b) made all our – not just key – processes visible. Having all processes visible makes it possible to develop them constantly. External IC reports have also been delivered to existing and potential customers and partners.

During the PIP –project we have learned a lot and the field of IC has become more familiar to us. We are looking forward to utilize the knowledge and tools learned through PIP –project.





Case study Move as

The company

Move has focused on mobile IT-solutions and mobile workforms since 1989. Move has remained in the vanguard of developments ever since thanks to our expertise, unique proprietary technology and partnerships with the very best technology suppliers.

Move provides you with your optimal choice of IT hardware and software, configured, tested and 100% ready for use. Professional buyers of IT-solutions have long stopped looking at the initial pricetag. What matters is to obtain a solution which minimizes the total cost of ownership over the solution's entire life span. Only 20% of total cost of ownership relates to the initial pricetag. Buyers are therefore putting resources and effort into ensuring the solution is cost-efficient – also after it is installed.



Move's groundbreaking support and maintenance routines minimize downtime – a serious cost factor for many medium or larger company. For example - all software is updated automatically by Move's experts, using the Internet. No one needs to turn off his computer. The update will be carried out when the PC is not in use.

Mobile IT-solutions are best put to use when combined with smart, mobile workforms. The laptop was not designed to be used stationary as a desktop. The laptop lets you work wherever it is convenient and natural for you to work. By optimizing the relationship between space, technology and humans, work can be done more efficiently. The human body has not been designed to sit still in front of a desk all day. Mobile technology should be used to make the workday less inactive. Mobile IT-solutions can facilitate smoother interaction between people on the move. Move knows how – with use of software and new routines, it is possible to realize more of your company's potential.

The PIIP project

The PIIP project has focused on how control of our intangible values will benefit our economic results.

Key-learning points from the project

1. If you know where you want to go, it's easier to find the "indicators" that will take you there
2. To get something done, the leader of the company has to find it important
3. Structures are more reliable than humans
4. Companies have common intangible characteristics for tangible success
5. In a world of constant change it's difficult to depend on formulated thinking
6. PIIP is a formal way of supplying external stakeholders
7. PIIP is a way of finding gaps



A case study on the PIP project.

The company is a leading operator in consultancy and supply of solutions within the sphere of Virtual Learning Environment (VLE), Learning Management Systems (LMS), e-learning and knowledge management. Since 2002 the company has developed a dominating position in the public school market. It is primarily in marketing, selling, implementing and supporting the award winning Norwegian Learning management system >>fronter.

Vision: To develop IT supported learning in the educational sector, public- and private organisations under the overall theme: First didactics – then IT. We will change 200 years of educational practice.

Core competencies:

- To analyze the internal and/or external knowledge management in organizations.
- To teach, coach and manage in implementations.
- To maintain and exploit long term relationships with our customers.



A strategic overview

We are the biggest private vendor in the public school market and have sold more than 220.000 licenses. In several segments we are in a market leading position. Our goal is to consolidate and even develop the leading position in the educational market. Furthermore we will slowly progress into the corporate market.

The PIP project

We have participated in the PIP project with great pleasure and benefits. It has been quite rewarding for especially the management to join the network in developing the indicators. Furthermore has the work with creating the indicators been very giving process in management terms. We started out very ambitious in the way that we planned to have a large number of indicators already the first year but the first lesson learned was clearly that these things takes time. We ended up with a few indicators but had covered a lot of ground in creating the indicators.

We chose to involve the employees a lot in determining the indicators and we did that in seminars where these factors were discussed and reviewed. There was a lot of positive spin-off this process in the way that employees became aware of the key factors in the daily jobs. We have not yet decided whether to publish the IC report but we will definitely continue the work with the indicators. It has been a very productive phase and below is the most important lessons learned.

- € **Indicators tend to be very individually from company to company which makes it hard to compare.**
- € **Indicators need to be defined extremely detailed if they are meant to be compared.**
- € **Working with indicators is a very healthy and giving process internally and will provide the management with some very crucial information.**

PIP PROJECT PARTICIPATION - MEASURING IC AT SENTENSIA



The Nordic harmonized knowledge indicators: Putting Intellectual capital into Practice –or PIP – has the ambition to provide the market with a standard setup of indicators to measure the intellectual capital primary for small and medium enterprise.

By participating in PIP we have learned a lot as a company. Measuring IC is not just to decide some indicators and measure them – you have to involve the whole company and define where we are heading and evaluate what is important. There are two major areas that you have to consider when deciding what measure to use.

- Which are important for us as a company
- Which are important to our stakeholders

When working with IC in the PIP project we also have to define measures that are relevant to any company and also comparable between companies. From the strategic point of view the indicators must clarify the direction the company is striving. From the governance point of view the measure must show that action taken have the right effect. From the capital point of view the measure must show the right value of the company. We find it essential to connect each indicator with the company vision, goal and critical success factors.

At Sentensia Q we have for several years been working with balance scorecard with the ambition to align the business with strategy. This has been a great help for us when working with IC. In fact we think that it is more or less necessary to have this kind of superior process in place when working with IC – at least if you want to have strategic benefit of IC.

The major difficulties working with the measures of IC in the PIP project were:

- Different measure means different things to different companies – it is a strong correlation depending on what kind of business you are in.
- It is very hard to strict define generic indicator and measurements – define them so they mean the same from company to company.
- Selecting predefined measures without relating them to critical success factors and the management challenges will not lead to success.
- It is hard to find in all aspects relevant indicators, relevant for us, relevant for the market and comparable between companies.
- To define and internally motivate why certain indicators are important for our company.

To be successful putting IC into practice we think that it is important to:

- Define a few (three to five?) compulsory measures in each perspective – “if you are measuring IC you must have at least these”.
- Define a selected number of optional measures that should be used.
- Make a very strict definition of each measure, both in how to measure and how to present the measure
- Describe how each indicator should be implemented and how it shows the value of company or how it helps pushing in the right direction.
- Indicators must be easy to measure and follow up

Studio 1.2

Management Challenge in working with Intellectual Capital

Participation in the PIP project and in other similar projects has provided a view on such a work seen from a management perspective. It is important to arrange, categorize and measure the knowledge elements in a company. However, it will never be an exact science as e.g. the double-entry bookkeeping or stock accounts where an exact sum or number is measured.

The biggest benefit from working with intellectual capital is the considerations in itself, to work, in a structured way, with hidden values in your company and become aware of the different types of capital in the company.

A company which has not worked with the different types of capital will miss many evident improvement projects but it must not be forgotten that the project must add value to the company.

Positive experiences from IC projects include:

- Introduction of employee and customer satisfaction analyses. Only valuable if the analysis is accompanied by action.
- Knowledge of levels of competence for different types of employees means that you find out where there is lack of competences in the company.
- Improved control of the hierarchy securing that the company is really managed at all levels.
- A simple recruitment system with a continuous picture of the key employees' competences and a system for test of new applicants securing that only the best competences are let in to the company.

Negative experiences include:

- IC project tend to expand too much and you lose control. Too many people become engaged in projects where the objective is not known.
- Often the systems become too complicated because you aim at the optimal solution which is seldom the best.
- You often try to measure something that can not be measured. The longer you try the closer you get to nothingness. You forget what key knowledge in the company really is and what it takes to create top results.

IC must support the company's targets and strategies in the short term (and in the long term). Everything must be related to fulfillment of specific targets to support the company's adding of values. IC must be simple and the company has to benefit.



TM Software

TM Software

TM Software, with headquarters in Iceland, is a privately held, international software company. With offices in 12 countries and 450 employees, we serve over 1,500 customers in more than 20 countries on four continents. TM Software has been recognised as one of Europe's most progressive companies for several years on the Europe's 500 list.

Our vision is to be an international leader in providing high-value software solutions in our selected sectors. Our deep knowledge of the industry sectors we serve ensures that our solutions are an essential and integral part of day-to-day operations. From assisting physicians in entering prescriptions electronically and without risk of contravening interactions, directly from the patient's bedside, to ensuring seafood safety with HACCP compliant quality control and traceability systems, TM Software is a trusted industry ally when security and reliability matter most.

Our mission is to turn business needs into software solutions. We achieve tangible benefits for our customers by producing mission-critical software products, sold as our own brands and reinforced by comprehensive Information & Communications Technologies (ICT) solutions in cooperation with leading international ICT companies worldwide.

What we learnt during PIP

TM Software's first attempt to publish information about our intellectual capital was in 2001, and at that time we believed that we were taking a valuable step with regards to reporting and understanding the intangible assets of the company whether it is for in-house purposes or reporting to other stakeholders. Time has proven us right and our participation in PIP (Putting Intellectual capital into Practice) has not only taught us that we were on the right track, it has also given us insight into what other comparable companies are doing with regards to IC reporting. The main benefit has been the learning process and cooperation with other participants of the project and the project leaders. The knowledge and tools we have acquired during the project will help us to take more decisive steps forward in the future.

The PIP project gave us the opportunity to learn what other companies are doing at the same time all members of the project were learning together and creating a valuable dialogue that was beneficial to us and hopefully other project members. An opportunity like this does not come often in the real world of operating and running businesses and therefore our emphasis was to make the most of the project. An additional benefit was of course the fact that the project members were not only from different companies but also from different countries, which broadened the view even more. The PIP project was well organized and run by project leaders that have great understanding of the subject which is essential in a project like PIP.

Now when the project is coming to an end we at TM Software are more than ever sure of the value of IC reporting, what is even more important is that we see that it has to be done in a standardized way to be of real value for the company and others who will read the reports. When we say standardized we are not only meaning the use of indicators or the setup of the report but also the way we collect information for the report. Standardization will not only make the report a better tool for benchmarking and comparisons but also give it more credibility, whether it is for the layman or the finance professional evaluating the value of the company.

Case study – Tölvumiðlun hf. - Iceland

The company:

Tölvumiðlun hf., the oldest software company in Iceland, was established in 1985 in Reykjavik, Iceland. The purpose of the company is to develop, sell and service software. Tölvumiðlun is a software house specializing in service to companies and institutions.

The operations of Tölvumiðlun are divided into three main categories: Software development, User service and management and office operations. Employees are 26 in total and most of them are working on software development and service.

The main projects of Tölvumiðlun are as follows:



Employee total solution

The employee total solution, HLaun³ consists of payroll, HRM and related functionality such as employee web, hiring system, analysis tools etc.

Payroll

The payroll system H-Laun is well recognized in the Icelandic market and enjoys a widespread usage.

Financial systems

The financial system SFS is developed for the local communities in Iceland. Majority of the local communities are users of the system.

Radiology Information System

Tölvumiðlun sells and supports Radiology Information System (RIS) from Eastman Kodak, in Iceland.

Network operation service and hosting

Tölvumiðlun offers network operation service and hosting service to companies and institutions.

Tailor-made software development

Tölvumiðlun develops various software solutions for institutions and companies.

Key learning points from PIP:

I believe PIP has indeed lowered the threshold for Tölvumiðlun to be able to work effectively with IC as well as forming a baseline for further usage of managerial business models.

Having produced three IC reports we are gaining more comfort and maturity in dealing with IC, both in measuring and reporting it.

I feel that the investment we put in the PIP project will surely be beneficial for the company in the long run, due to the fact that the reports reveal the not so obvious potential that exists within the company, not shown in annual financial reports, that do not describe our intangible assets.

Combined these two reports: The IC report and the annual financial report are a fuller and more complete account of the real assets and future potential of an IT company, especially a company like ours, a software house.





Innovation, customer relationships, brand value, employee motivation and skills, along with other knowledge and intellectual assets are among the drivers of corporate wealth. To be managed effectively, these intangibles need to be measured. In addition, they must be streamlined to strategy

- ⌘ *Learn to plan and initiate an IC process*
- ⌘ *Create a business plan for knowledge management*
- ⌘ *Define what intangible factors are crucial to value creation*
- ⌘ *Assess the progress of your IC management initiatives*

Master the four key elements of the IC process:

- ⌘ ***Assess***
- ⌘ ***Measure***
- ⌘ ***Manage***
- ⌘ ***and Report***



norden

Nordic Innovation Centre

Nordic Innovation Centre

The Nordic Innovation Centre initiates and finances activities that enhance innovation collaboration and develop and maintain a smoothly functioning market in the Nordic region.

The Centre works primarily with small and medium-sized companies (SMEs) in the Nordic countries. Other important partners are those most closely involved with innovation and market surveillance, such as industrial organisations and interest groups, research institutions and public authorities.

The Nordic Innovation Centre is an institution under the Nordic Council of Ministers. Its secretariat is in Oslo.

For more information: www.nordicinnovation.net.