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# Intellectual capital statement – Made in Germany

## Guideline

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# Intellectual Capital Statement – Made in Germany

Guideline 1.0  
on the preparation of an intellectual capital statement

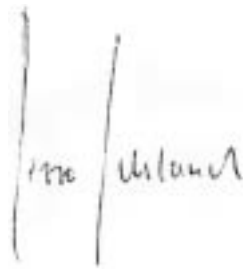
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## Foreword

The ability to make the best possible use of both internal and external knowledge is vital to small and medium-sized enterprises. The intellectual capital statement (or report) offers a strong foundation for this, providing the means to achieve a comprehensive inventory and evaluation of an enterprise's intangible assets.

Such intellectual capital statements have been drawn up in recent months with the support of the Federal Ministry of Economics and Labour in a number of small and medium-sized enterprises. The experience, lessons and recommendations for action gleaned from these pilot projects have been used to compile this Guideline. I hope that its publication will provide a sustained impetus for the broad implementation of the intellectual capital statement and of knowledge management in both small and medium-sized enterprises, and in the trades sector.

A handwritten signature in dark ink, appearing to read 'Rezzo Schlauch', is positioned above the printed name.

Rezzo Schlauch

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Parliamentary State Secretary at the  
Federal Ministry of Economics and Labour and  
Commissioner of the Federal Government for Small- and Medium-Sized Enterprises



## Who does the Intellectual Capital Statement Guideline 1.0 address, and what objective does it pursue?

The Intellectual Capital Statement Guideline targets small and medium-sized enterprises (SMEs), as well as other forms of organisation which have a comparable structure. In particular, it targets all decision-makers in an organisation, from the managing director via the controller and those responsible for personnel matters, to the quality management commissioner, strategy managers, knowledge managers, as well as the heads of sales and marketing.\*

The Guideline aims to offer help to those responsible for drafting an intellectual capital statement. This support is provided by explaining important principles and useful methods which have already proven themselves in other organisations. It also provides a large number of tips and practical guides to drawing up an intellectual capital statement.

## What is the structure of the Guideline, and how can it be used?

The Guideline discusses in practical terms the various aspects of the intellectual capital statement. In addition to explaining the main terms and preconditions, it contains the tried-and-tested intellectual capital statement model drawn up by the Intellectual Capital Statement Project Group (AK-WB). The lion's share of the Guideline is taken up by a detailed description of the experience gathered in implementation in order to offer guidance for a company's own implementation. A Glossary and an Annex with references and further details make it easier to understand. The Guideline is supplemented by a collection of case studies and implementation reports which can be accessed by visiting the Intellectual Capital Statement Project Group Website ([www.akwissensbilanz.org](http://www.akwissensbilanz.org)).

In order to make the circumstances described in the text more understandable, as well as to provide a feeling for practical relevance and implementation, the Guideline offers a large number of **examples** in text boxes



The **Tip** symbol in the page margin is used to refer to extremely important experience which has been gathered in the implementation of the intellectual capital statement to date.



In order to be able to double-check at the end of each chapter whether all points have been adhered to and ensure that nothing has been left out, the pictogram with the question mark at the edge of the page is used to easily identify questions in a **checklist**.



**Definitions of the central terms** for the intellectual capital statement can be found in blue boxes and are marked with a "D" symbol.

In using the Guideline, we suggest that you go through the individual questions contained in the chapters, look for partial answers, take suggestions from the examples and follow the tips when you draw up your own statement. In addition to this document, helpful documents and up-to-date forms can be obtained on the Web at [www.akwissensbilanz.org](http://www.akwissensbilanz.org).

\* For reasons of legibility, no distinction is made in the text between male and female staff members. The project report addresses both genders equally.





# 1 Intellectual Capital Statement – Made in Germany

The political arena, economists and the public appear to agree on one thing: The future of Germany as an industrial location can only be safeguarded in the face of international competition by ensuring high-quality work and innovation. This means that the much-much-vaunted **information and knowledge society** is no longer simply an abstract play on words. Constant changes as a result of globalisation, increasing use of technology and shortening product lifecycles



already mean that for many enterprises their **headstart in terms of knowledge** is often their only **competitive advantage**. German SMEs in particular rely on quickly recognising changes in the economic environment and countering them with solutions that meet current demand, as well as with up-to-date structures and technologies. One missed development or opportunity can sound the death knell in economic terms. And in contrast to multinational groups, in most cases small and medium-sized enterprises (SMEs) cannot circumvent domestic cost pressures by quickly relocating abroad. For these companies, retaining this future earning capacity and innovation in

Germany as an industrial location is therefore a matter of their own economic survival. As with customer satisfaction or employee motivation, the “knowledge headstart” and “innovative potential” of an enterprise is however difficult to report in terms of hard data and facts, and is hence not easy to manage. For instance, the – often owner-managed – SMEs and their “bosses” are frequently left with no option but to rely on “classical” management methods or to trust to their entrepreneurial instincts when it comes to **medium- and long-term survival** in the market. However, in an environment which is both changing and becoming increasingly complex, the right strategy cannot always be at their fingertips. And even if the direction of the organisation’s strategic development is clear and corresponding measures have been initiated, traditional controlling and management tools cannot provide information on whether the desired targets are being achieved or not. This is partly because classical financial reporting is orientated towards the past, and partly because the **intangible assets** which constitute the lion’s share of innovative potential are not yet recorded in such statements. In this context, but at the latest in the critical transition phase from a family-run enterprise to a management-operated company, the question of the “soft” success factors and their systematic management becomes more and more significant. For a variety of reasons, not only the management and employees, but also external target groups, such as potential lenders or partners, demand transparency on internal structures, competences, the corporate culture and other factors which may exert a sustained influence on future added value.

Portraying and evaluating these intangible corporate values in a structured manner is hence the supreme **goal of intellectual capital statements**. An intellectual capital statement basically shows the assets of an enterprise which are not directly accessible, but which are vital to

future economic success. The existing knowledge of an organisation that is critical to success, the so-called **intellectual capital** – plays a vital role in the creation of innovative products or services in the coming financial years which can be sold at a profit. The targeted promotion of the individual employee skills, valuable customer relations and market-orientated product development are thus among the critical success factors in a knowledge-driven economy. In addition to other “newer” management tools, many SMEs



hence already rely on **knowledge management** as a consistent approach in order to identify, select and target the availability of internal and external knowledge and to integrate it in the added value. The method put forward here for intellectual capital statements also calls on tools that are already available and supports initiatives that have already been launched. Strengthening enterprise-specific **core competences** can be planned and supervised in the intellectual capital statement to systematically ascertain the measures that are required. Here, the existing benchmarks can also be used, such as from a Balanced Scorecard Model or from benchmarking. The intellectual capital statement evaluates strategically-valuable

customer relations (Customer Relationship Management), as well as strategic alliances with partners and suppliers.

Hence, the intellectual capital statement is on the one hand a tool for the systematic development of strategy and of the organisation. It makes it possible to targetedly **manage** projects and initiatives internally so as to improve intellectual capital management.

On the other hand, it can be used for **external communication** in order for instance to acquire funding for future investments. Since classical balance sheets have to date only included past events and largely tangible assets such as real estate or technical plant, entrepreneurs, banks and other investors are in fact faced by a dilemma. The information which they need for an **investment decision** is not available, and purely tangible assets as reported in customary balance sheet accounts are not sufficiently authoritative in forecasting the potential earnings and innovation of an enterprise. For instance, the (subjective) opinion of financial analysts as to this criterion which is vital when it comes to buying shares or granting a loan and to the management of small and medium-sized enterprises remains at present based solely on intuitive lobbying for their idea. The consequence is that either no loan is granted, or that the cost of funding it is (too) high. This problem is made worse by the new guidelines on granting loans contained in **Basel II** which is to officially enter into force at the end of 2006. Previously, large groups and corporations were able to objectivise their credit worthiness and future ability via ratings. The intellectual capital statement is an aid here to SMEs. It offers a structure for the presentation and evaluation of competences that are critical to success and the innovative potential of the enterprise. The intellectual capital statement portrays the intangible assets, and hence supplements the traditional balance sheet with the criteria missing today. If an enterprise is able to make its intellectual capital transparent on the financial market in such a form, it becomes easier to

take up loans, and funding costs for innovative and risk-prone investments will be reduced. For instance, it will also become possible for small and medium-sized enterprises to report their entire corporate value – including the intangible assets. At the same time, the **intellectual capital statement** offers banks and investors a **better basis for their decision-making on investments** in these enterprises.

In addition to the efforts on the administrative policy side, such as the EU's Lisbon agreement on Europe as the **world's most dynamic knowledge-based economic area** or the **Federal Government's innovation offensive**, 'enabling' enterprises is a decisive step on the path towards supporting Germany as a successful location for innovation. For this reason, the project supported by the Federal Ministry of Economics and Labour entitled **"Intellectual Capital Statement – Made in Germany"** is pursuing the goal of providing German SMEs with an aid which will enable each enterprise to clarify and refine its specific strengths and innovative potential in a precisely targeted fashion. For instance, it is to be hoped that a contribution will be made to reactivate the "Made in Germany" trademark as a seal of quality and as an innovative promise once more, and to prepare Germany to compete in terms of knowledge.

This Guideline for the preparation of intellectual capital statements was developed in the framework of **"Fit to compete with knowledge"** initiated by the Federal Ministry of Economics and Labour. This initiative concentrated on the following goals:

- targeted development of intellectual capital in Germany as a location for innovation,
- support in systematic management of organisational trends,
- the possibility for SMEs to improve their Basel II rating by providing complementary information on their intellectual capital,
- early awareness creation among SMEs of the significance of knowledge as a resource and preparation for coming statutory amendments and standards (cf. IAS 38, DRS 12),

- support in employee acquisition and skill-building by increasing transparency about the knowledge offered and needed, and
- increasing productivity and competitiveness by activating as yet untapped potential.

This Guideline was drafted by a project consortium consisting of the Knowledge Management Competence Center of the Fraunhofer Institute for Production Systems and Design Technology (IPK), Wissenskapital Edvinsson und Kivikas Entwicklungsunternehmen GmbH and Intangible Asset Management Consulting. Building on the methods of the Scandinavian intellectual capital statement pioneers and all available experience<sup>1</sup>, the consortium implemented a pilot project to adjust the preparation of intellectual capital statements to the German situation and to test it in reality as it is faced by small and medium-sized enterprises. To this end, prototype intellectual capital statements were drafted together with 14 representative German SMEs. This Guideline 1.0 is the result of this cooperation and summarises the project to draft an organisation-specific intellectual capital statement.

„At the beginning I didn't have the faintest idea, but then I started to find it highly interesting to see how it all fits together, how important individual factors such as product innovation are for us and what a lever they can be.“ (Development Project Manager)

(Xcc Software AG)

1 An overview of the references and examples used can be found in the "References" Annex.

Furthermore, the following statements can be made as a result of this project, based on the experience of the project consortium and of the enterprises involved:

- The implementation of an intellectual capital statement was perceived by all organisations as a positive contribution to the competitiveness and the development of an organisation.
- The drafting of an intellectual capital statement makes possible efficient communication with a variety of target groups (stakeholders) describing knowledge that is important to competition by means of a structured portrayal and knowledge-orientated language.
- The intellectual capital statement method proposed by the project team has proven its value to for all SMEs involved.
- The enterprises involved benefit from the implementation of an intellectual capital statement by gaining a perspective of the enterprise which in most cases is entirely new, and implement measures derived from it very soon after completion of the project.
- The intellectual capital statement is compatible with other existing management tools, but does not explicitly build on them. It can therefore also be used as an independent management tool.
- In the course of the project, it was possible to massively reduce the implementation effort for the SMEs by using the approach described in this Guideline.

Many of the 14 pilot firms have recognised in the first intellectual capital statements that the transparency of contexts and interactions of the soft factors, as well as the impact on business success to be anticipated, offers more than a **well-founded basis for decision-making** for management. Above all, it has convinced many managers in the SMEs involved that this tool also makes organisational **changes quantitatively measurable**, which in turn means that the effectiveness of measures to strengthen intellectual capital can be measured to determine their success. Furthermore, the discussions in the intellectual

capital statement workshops have shown that the “common language” concerning the company’s intangible assets already promotes a structured debate on them, and that the intellectual capital statement as a whole can hence be used as an exceptional **medium for internal and external communication** of competences and soft success factors. It was also important to openly interpret the methods to be applied from the outset; this means that it was important for most of the decision-makers responsible for the intellectual capital statement in the small and medium-sized enterprises involved to be able to define individual influencing factors which were directly related to their specific added value process. 13 out of the 14 pilot firms are using the intellectual capital statement for internal management of their intangible resources, and 10 enterprises either would like to use the intellectual capital statement for external portrayal of their intellectual capital, or are already doing so. It is to be hoped that reading this Guideline will encourage many other enterprises in Germany to implement the “intellectual capital statement” tool and reap its benefits, both in terms of their competitiveness and of their innovative potential.

„When working together on the pilot project, it was above all the valuable suggestions and discussions that brought us a variety of new conceptual approaches to deal with knowledge, which is the capital of our future, even more successfully in future.“

(reinisch AG)

## 2 What is an Intellectual Capital Statement?

If one considers current international practice followed in preparing intellectual capital statements<sup>2</sup> and evaluates the common factors, it can be established that intellectual capital statements show an organisation's intangible assets. These are mostly taken as resources, and in line with the structure of intellectual capital, are distinguished as follows into **human capital** (employee skills, employee conduct, etc.), **structural capital** (IT, intellectual property, organisational culture, process organisation, etc.) and **relational capital** (customer relations, relations with suppliers, relations with the public, etc.). Many current intellectual capital statements incorporate the intellectual capital in a value-added model which takes account of the strategy (knowledge strategy), the performance processes, the results and the impact achieved.

Accommodating common practice and knowledge from the project, the following definition is proposed:



### Definition of an 'intellectual capital statement'<sup>3</sup>

An intellectual capital statement is an instrument to precisely assess and to develop the intellectual capital of an organisation. It shows how organisational goals are linked to the business processes, the intellectual capital and the business success of an organisation using indicators to visualize these elements.



**Tip:** Don't be put off by the terms. Most organisations discover entirely new perspectives through the intellectual capital statement and give these names of their own. Work should still concentrate on increasing added value.

„The statement combines known facts/processes from a fresh point of view. The conclusions reached from these, in particular for management, were amazing. The clarity of the statement is surprising in light of the complex nature and variety of the data entered.“

(ACTech GmbH, HKR)

<sup>2</sup> Links to intellectual capital statements can be found at [www.akwissensbilanz.org](http://www.akwissensbilanz.org)

<sup>3</sup> An intellectual capital statement is not a balance sheet in the classical financial sense. It gives account for the use of intellectual capital and balances target achievement. It also does not refer to knowledge in the sense of content. Problems of understanding with regard to the meaning of intellectual capital statement can be explained in historical terms by difficulties in the translation of the English terms "Intellectual Capital Statement" and "Intellectual Capital Report".



## 3 Why report on intellectual capital?

### 3.1 For whom should an intellectual capital statement be drawn up and why?



The target group of an intellectual capital statement can be all interest groups and persons who are of importance to the organisation. They can be divided into internal and external target groups. The internal groups include, in addition to management, above all employee and organisational units, whilst the intellectual capital statement for external purposes largely addresses investors, potential employees, customers and partners.

For optimum use of the intellectual capital statement, a variety of information-related needs must be met for each target group. In addition to the content and structure, design and layout can also play a major role here in order to bring across the desired message attractively and usefully.

Experience shows that three questions are at the centre:

- What are the target groups interested in?
- What can we offer at all?
- What do we want to pass on?

Answers to these questions are dealt with in detail in Chapter 5.8.

There are quite different motivations for drafting an intellectual capital statement. These are characterised by the starting situations with which enterprises are confronted, and which increasingly become a challenge for small and medium-sized enterprises in particular:

- systematic management of the organisation,
- acquisition of loan and equity capital,
- meeting legal requirements,

- employee recruitment and retention,
- developing cooperation, and
- customer acquisition and retention.

**Systematic management of the organisation:** Any systematic management of intellectual capital depends on measuring and evaluating it. Without corresponding tools, the future development is left to coincidence or to the intuition of individuals.

**Acquisition of capital:** The more transparent an organisation is, the lower is the risk for investors. They can understand how resources are invested and where the added value comes from. Competition imposes boundaries on transparency by describing those to whom one does not permit to have access to the complete set of information.

**Meeting legal requirements:** National and international accounting standards (such as IAS 38, DRS 12 and E-DRS 20)<sup>4</sup> already recommend showing intellectual capital in the Notes of the classical balance sheet. A law has been in force in Austria since 2004<sup>5</sup> which obliges institutes of higher education to submit intellectual capital statements in order to give account of their business activities.

**Employee recruitment and retention:** The hunt for so-called “high potentials” shows that whilst financial aspects play a major role for employees, the intangible factors may be decisive in more and more cases, such as the public reputation of the enterprise, expertise, advancement opportunities, the corporate culture and the concomitant working climate.

<sup>4</sup> cf. References

<sup>5</sup> Austrian Universities Act (Universitätsgesetz), UG 2002, section 13 Performance agreement

**Developing cooperation:** Development of global added value chains requires much better communication with the business environment. Authoritative information on expertise, corporate culture and existing relations with the market plays a major role in developing a sustainable business relationship.

**Customer acquisition and retention:** Customers want to know from whom they are acquiring a product or service. Greater transparency and certainty as to advertising promises through showing facts and figures regarding the promised performance and competences are a strong advantage in acquiring new customers and retaining existing ones.

### 3.2 What are the benefits from the drafting process?

Many organisations which have drawn up an intellectual capital statement report that a number of further beneficial aspects can be expected to follow from the very process of drafting:

- The drafting of the intellectual capital statement across hierarchical levels heightens understanding of how the enterprise works. Management receives an impression of what is happening in operative business, and employees are given an impression of the challenges faced by management. This leads to improved coordination of joint goals and future tasks, in turn making for permanent (and mostly decentralised) decision-making.
- Covering and defining the most important influencing factors makes it possible to find a common language which avoids misunderstandings and promotes constructive discussions.
- Agreeing at the outset on only a few influencing factors and knowledge of the contribution which they make towards the result makes it easier to focus learning and improvement activities.

- Questioning and reflecting on established procedures and processes is an important starting point for designing and improving processes.
- Discussing the influencing factors and performance drivers in operational teams creates synergies and makes for an innovative atmosphere.
- Concentrating on customers and knowledge of their needs permits a better orientation towards added value and competitive advantages.
- A holistic perspective of the organisation and links existing between employees, structures, relationships and ultimately business success makes clear the status of the individual influencing factors and makes it possible to prioritise necessary activities and measures.
- An open, frank discussion of strengths and weaknesses, as well as a sound, honest measurement of intellectual capital, creates transparency and confidence between employees, organisational units and functions.



**Tip:** Many of the benefit-related aspects listed are due solely to the process of drafting the intellectual capital statement. Therefore, look on the workshops and discussions needed to draft the intellectual capital statement as an opportunity for communication and discussion of the situation of the enterprise, and allot sufficient time for them.



**Tip:** The right composition of the project team and the employees involved is vital to the process of drafting intellectual capital statements. Ensure that everyone who wants to take part also receives the opportunity to do so and that the important opinion-leaders are supportive. This ensures a holistic view and promotes acceptance of the results by those members of staff who are not involved.

## 4 What preconditions should be met?

An intellectual capital statement is a tool for knowledge-intensive organisations which want to steer their future development by systematically involving their intellectual capital. In order to guarantee an optimum drafting process and the best possible cost-benefit efficiency, some preconditions should be laid down.

For a quick assessment of whether the intellectual capital statement is the right tool for you, you will find here a fitness check (Table 1). Answer the questions in the right-hand column of the table with yes (1) or no (0). The ratio between the positive and negative answers shows the degree to which the requirements are met. The column with the “comparative values” shows how the project team evaluates the 14 pilot enterprises involved in the project as regards meeting the conditions. This will permit you to see how you evaluate yourself in comparison to the pilot enterprises.

The more questions are answered positively, the easier it will be to drafting the intellectual capital statement. If the majority of the answers is negative, it will make sense to give particular attention to preparing the drafting process of the intellectual capital statement in these areas.



### Checklist on the preconditions:

What benefit can we expect from intellectual capital statements?

What goals do we want to achieve, and what goals can we achieve with intellectual capital statements?

What are our prospects for success?

What preconditions do we already meet, and which ones do we still have to work on?

Fitness check on preparation of an intellectual capital statement	Yes/No (1/0)	Comparative value
Are many of our employees engaged in intellectually challenging tasks?		6 out of 14
Have we already dealt with controlling and management systems (such as quality management, process optimisation, BSC, etc.)?		10 out of 14
Does our management want and support intellectual capital statements?		12 out of 14
Is our organisation willing to devote time and resources to intellectual capital statements?		12 out of 14
Do the employees regard intellectual capital statements as an important project?		6 out of 14
Can we involve employees from various areas of our enterprise in intellectual capital statements?		13 out of 14
Are we willing to discuss our strengths and weaknesses openly and constructively?		12 out of 14
Is management open to proposals and change?		10 out of 14
Do we recognise "soft factors" as important success factors?		14 out of 14
Are future topics already touched upon and broadly discussed?		12 out of 14
Do we have a documented, communicated business strategy?		10 out of 14
<b>Result</b>		

Table 1: Fitness check on the preparation of an intellectual capital statement



## 5 How is an intellectual capital statement drawn up?

### 5.1 The intellectual capital statement model of Project Group

The preparation of an intellectual capital statement requires careful planning. It is important that the basic concepts and principles on which organisations are based should be understood. For this, it is important to deal with important sub-areas of the organisation and to understand contexts. In order to make this step easier, the Intellectual Capital Statement Project Group proposes the model described (cf. Fig. 1).<sup>6</sup>

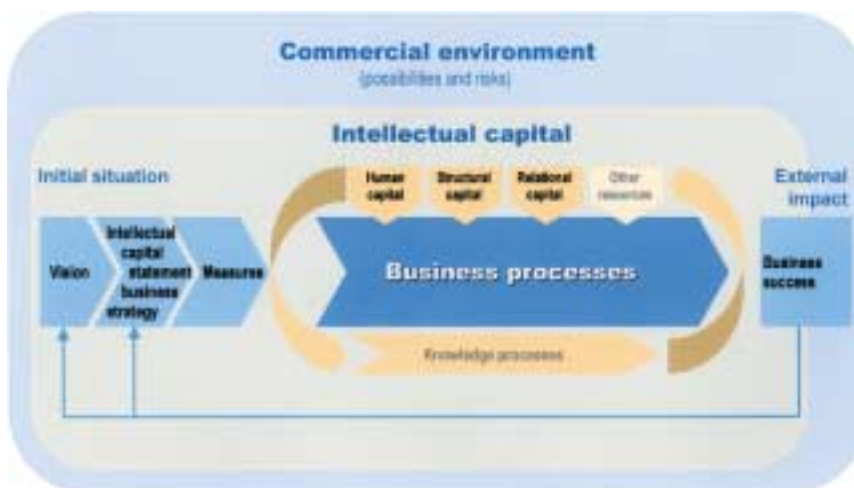


Fig. 1: The intellectual capital statement model developed by the Intellectual Capital Statement Project Group (AK-WB)

This model offers two things: Firstly, it serves to provide assistance in decision-making since it clarifies the various aspects contributing to business success. Secondly, it can be used as a tool to take stock of the intellectual capital used in the enterprise.

The starting point is the vision and strategy of the organisation with a view to the possibilities and risks encountered in the business environment. The organisation derives from this a

number of measures describing how it wishes to position itself as to the various dimensions of intellectual capital, namely human, structural and relational capital.

In this process, **human capital** characterises employee competences, skills and motivation. **Structural capital** covers all those structures and processes which employees need in order to be generally productive and innovative, in other words all those intelligent structures which remain when employees leave the organisation at the end of a working day. The **relational capital** constitutes the relationship with customers and suppliers, as well as with other partners and the public.

The intellectual capital statement measures and evaluates all these dimensions. It also covers the interactions between the dimensions of intellectual capital, the **knowledge processes**. This shows the status enjoyed by the individual factors for the organisation, which of them are particularly risk-prone or which have a stabilising effect. This makes it ultimately possible to show the adjustable screws and generators with which the organisation can plan a successful future.

The interaction of business and knowledge-based processes, together with the other tangible and financial resources which are not observed in the intellectual capital statements, leads to business success. From this result, the organisation draws conclusions for the future which can lead to changes in visions and strategies. The knowledge gained from the intellectual capital statement on the knowledge processes and the relevant resources make it easier to derive measures in a new cycle and to facilitate the **sustained orientation of the organisation**.

<sup>6</sup> The relevant basic literature can be found in the Annex in the chapter "References". It is recommended as a source of references.

## 5.2 Six steps to drafting an intellectual capital statement

The complete intellectual capital statement is drafted in six steps with four milestones.

**Milestone I** is the intellectual capital statement in its simplest form. As shown by Fig. 2, three steps are needed to achieve it: The first step is to assess the initial situation relating to business environment and strategy, of intellectual capital, and self-evaluation of intellectual capital. The target group of Milestone I is the management of the organisation which can extract measures for improvement on the basis of the results.

**Milestone II** targets the same group, but goes one step further in supporting the self-evaluation with indicators. In this way, self-evaluation is given further concrete form and supported using facts by means of which changes can also be measured independently of the employee's self-evaluation. The collection and assessment of indicators is at the same time preparation for internal or external communication.

**Milestone III** provides a processed document or a presentation of the organisation's intellectual capital. It is adjusted towards a specific (external and/or internal) target group and describes the most important information attractively and in a structured form.

**Milestone IV** works out a full intellectual capital statement which is also suited to monitor the organisation. It integrates amongst other things correlation analyses and assessments which provide information on how long it will take until measures which have been initiated ultimately lead to business success.

The first drafting of the intellectual capital statement is best effected in a cohesive step-by-step project over a period of between four and twelve weeks. Different time allocations can be calculated for the effort, depending on the initial situation and number of individuals involved. As a minimum, Milestone I demands an effort of half a man-month. Up to three man-months can be required for full

implementation up to Milestone IV. The goals pursued with the intellectual capital statements should in any event be compared with the milestones. This makes it possible to implement the intellectual capital statement in a cost-benefit-effective and step-by-step manner.



Fig. 2: Process steps and milestones in intellectual capital statements

## 5.3 Preparing intellectual capital statements – What needs to be taken into account?

Some fundamental principles are to be taken into account in drafting the intellectual capital statement in order to support the trouble-free operation of the project. In particular when an intellectual capital statement is drafted for the first time, is important that the person responsible for the project should deal with these principles in detail.

His/her function will be to coordinate and moderate intellectual capital statements. He/she should accordingly have understood the overall approach well and be able to familiarise the other people involved with the methods and aims.

### Definition of the system boundaries

In particular when an intellectual capital statement is drafted for the first time, the part of the organisation on which the work concentrates should be considered. There are almost always possibilities to define boundaries, be it locations, functions, markets or indeed individual processes. For reasons of the availability of employees, or

because of risk considerations, it may make sense to start with a prototype and then in the second phase to transfer what has been learned to the rest of the organisation. Whatever the decision taken, it should be carefully documented, and it should be clearly stated in order to avoid misunderstandings as the process continues.

### Putting the team together

The view of the organisation as perceived by the team members will be reflected later in the intellectual capital statement, and should therefore be representative. Where possible, you should hence integrate into the intellectual capital statement project team representatives of all parts of the enterprise and levels of the hierarchy. Ensure that operative employees are also involved, and not only managers. This will ensure that the discussion has its feet on the ground, and does not reflect only the management team's self-perception.

Depending on the size of the organisation, the work may be done by one or more teams. It is then however important for those teams to regularly exchange information on new knowledge and the status of their work. Over and above this, sufficient time should be planned for combining the results since there will be considerable potential for discussion.

#### Example of typical team composition:

- Chairman of the Board/managing director
- Representative of controlling/  
corporate planning
- Representative of sales service/  
Strategic marketing
- Representative of Public Relations
- Project management employee
- Representative of Personnel
- Branch head
- Sales employee
- Specialist worker

On principle, the involvement of management in the team has proven to be decisive to success, although the intellectual capital statement project leadership itself does not necessarily have to come from management.

### Project management

Coordination of a heterogeneous team which spans the different levels of the hierarchy is not an easy task. Allot sufficient time to find appointments and to coordinate employees and work packages. Professional project management makes a significant contribution to the success of the project.

### Implementation

Time is money. This simple truth naturally also applies to drawing up the intellectual capital statement. Depending on the goals of the intellectual capital statement, the "Pareto rule" should not be forgotten: "80 % of the results are achieved with 20 % of the resources necessary for a 100 % solution." This level should be sufficient initially to draft the intellectual capital statement. A higher level should not be targeted until specific advantages for the organisation are identified and further details required. Assess this even when assembling the team and plan the course of intellectual capital statements accordingly.

### General approach

The drafting of intellectual capital statements is a learning process for an organisation. A holistic view of intellectual capital in the overall context of the organisation requires management of complex contexts and leads to many realisations which frequently become clear to individual participants only after discussions with colleagues in a workshop. New arguments and proposals for adjustment will emerge. You should therefore allow sufficient time to adjust the results that have been worked out. These "loops" are important to compare the content to be found later in the intellectual capital statement with reality, and to keep it as complete as possible. The intellectual capital statement should not be a snapshot of a one-off meeting which no one can build upon later. Virtually no additional effort is thereby incurred. You should only take care that you allow one to two weeks' time between the team's meetings and allocate the participants the task of reflecting once more on the discussion and the results during this period. End the "loops" when no further important arguments come which influence the result.



#### Checklist on the principles:

For which part of the organisation do we want to draft an intellectual capital statement, what is still part of it and what is not?

Who do we involve in the project team? What is its role?

How do we organise and coordinate the project?

At what level of detail should we proceed?

How do we guarantee cost-benefit efficiency?

How do we deal with adjustments brought about by new knowledge?

The following chapters are sub-divided according to the process steps (cf. Fig. 2) of the intellectual capital statement and describe the individual steps towards drafting it.

## 5.4 Step 1: Describing the initial situation

Firstly, the initial situation of the organisation is measured and documented. This, analogous to Fig. 2 (p. 16), forms the starting point for intellectual capital statements and in addition to possibilities and risks in the business environment also shows the current strategic orientation of the organisation. This is particularly important to develop the knowledge strategy, which should be in line with the business strategy. The discussion on the current situation and future orientation of the organisation forms the basis for all further steps.

### 5.4.1 Possibilities and risks in the business environment

The possibilities and risks in the business environment of an organisation typify its activities. They form the basis of the intellectual capital statement, since they typify the future orientation

of the organisation and the development of intellectual capital. In almost all organisations there are documents and further considerations regarding developments and trends of the markets being observed, and hence indirectly also discussing possibilities and risks. These documents are to be collected and studied in advance.

The following information need to be considered: :

- competitors,
- customers,
- suppliers,
- employees (existing and potentially available),
- social environment,
- economic cycle (growth/internationalisation), as well as,
- political trends and legal provisions, etc.

The discussion of possibilities and risks should be implemented in a workshop with the complete intellectual capital statement team. It is helpful if you start collecting most of the information in advance from the available documents and let the participants have these a few days before the meeting, so that they can think about them in their preparation.

The main questions which should be discussed and answered are:

- Is there sufficient market demand for our products and services, or are they at a disadvantage because of better solutions provided by third parties?
- Is there potential for new, promising fields of business and services? Under what conditions and in what circumstances are these relevant?
- What is the general cyclical situation on the market as concerns prices and competitors, and what are the consequences for us?

- What social and political contexts influence our business?
- How high is the risk of losing parts of our intellectual capital (such as losing important employees, customers and cooperation)?
- How great is the risk of our intellectual capital being copied or becoming obsolete (such as by competitors copying procedures and technologies)?
- How is the organisation per se to survive (such as succession arrangements, finance, etc.)?

#### Example of possibilities and risks:

A sales representative speaks about an important customer's plans to develop a new field of business in another location (possibility). For management, the question arises of whether and how to deal with the customer: Should we focus on the existing business, or change with the customer? Do the (financial and intellectual) prerequisites for growth exist at all? What is the risk of losing the customer altogether if we do not grow with him? What investment volume will be required, and how big is the risk of it not being repaid? (risk)

The decision must be taken within two months because the customer will need roughly this amount of time to finalise his own preparations.

The managing director calls a short-notice meeting of employees who can make a contribution to this important topic. By using the questions, the opportunities and risks can be discussed in a structured manner and the results recorded.



**Tip:** The technique of including the individual questions in a document and listing possible answers to them in a brainstorming session with the whole project team is well tested and proven. The collection is then subsequently further specified and worked out by a small team.

### 5.4.2 Strategic considerations

Then, the considerations regarding opportunities and risks from the previous step should be related to the organisation's vision and strategy. The business strategy describes how to act on the market in future, which investments are needed for this, at which locations work is to be carried out covering which products and services, which research and development activities are to be introduced and implemented, and more. If the comparison of the opportunities and risks against the vision and the strategy leads to unanswered questions, the strategy must be adapted and revised.

For the long-term successful orientation of the organisation in a knowledge society, however, still further considerations are required regarding intellectual capital. The knowledge strategy derived from the business strategy is developed to this end. The knowledge strategy describes the organisation's position with regard to sub-areas of intellectual capital. It forms the basis of its care and further development. Answers to the following questions can help to develop the knowledge strategy:

- What made us strong in the past?
- In very specific terms, what intellectual capital and what knowledge do we need to implement our business strategy?
- How must the strategy be developed as regards customers and competition?



- What part of it is unique and ensures competitive advantages, what is vital to maintain our place in the market?

Fig. 3 shows the intellectual capital statement integrated in the strategy cycle. It becomes clear that the knowledge strategy is derived from the business strategy and steers the measures to develop intellectual capital. The success of the steps taken is measured and evaluated in the intellectual capital statement, and in addition to changes in the business environment, forms the starting point of a new cycle.



Fig. 3: The strategy cycle in connection with the intellectual capital statement

#### Example of a knowledge strategy

After a few considerations on the fundamental strategic orientation, it becomes clear that the firm is able to complete the existing contracts very well, but that there is no more demand for core services because of the re-orientation of this important customer. Possibilities to place the existing products with other customers have either been exhausted, or would require considerable investment.

Suddenly management is faced by the question of what intellectual capital, and in

specific terms which knowledge, is needed to be able to comprehend and deal with the re-orientation by the customer? After detailed discussions in the intellectual capital statement team, the following knowledge strategy is first of all determined:

“We will focus and specify our core competences (software engineering) and push forward product innovation with and for our customer. To this end, we will deliberately expand our external cooperation in the shape of freelance programmers and learn from their specialist expertise specifically in order to meet the new challenges.”



**Tip:** The wording of the knowledge strategy benefits from several rounds of improvements. An acceptable working definition is sufficient at the outset if during the project, work is still being done on the wording of the details!



#### Checklist on the starting situation:

Where do we want to be in 5–10 years?

What characterizes our business environment now, and what will characterize it in ten years?

What is the market situation, and where are the opportunities and risks?

What is our vision and strategy for future development?

What parts of intellectual capital are of strategic significance, and to what goal do we have to develop them?

## 5.5 Step 2: Assessing intellectual capital

### Example of assessing intellectual capital

A short time later, the managing director is alone in his car once again on his way to visit a customer. The recent discussion is still in his mind: If we take up the challenge with our customer, what do we have to change in our services and products? What part of this is affected, and what do we have to change internally in order to be able to meet the new requirements? Will our employees cope with the change? How can we build up the necessary relationships, and what is the consequence of this in terms of changes in our internal working atmosphere? The managing director decides to reconvene the intellectual capital statement team this very week and to compile these important influencing factors in a structured manner.

### 5.5.1 Performance processes

Organisations are as a rule constructed on a division-of-labour basis. All measures and steps aim to provide a product or service that is useful to the customer. It is also possible to describe this as the performance process, which usually commences with an order and leads via purchasing necessary components and preliminary services, as well as processing them (production or service) through to the actual product of the organisation. The Sales department ensures that the products are sold to current or potential customers. Consequently, the performance processes are the central, most important processes of an organisation around which all other processes gather. It is therefore important, first, to be clear about these processes in order to be able to better evaluate the impact of changes.



**Tip:** In order to obtain an overview of the most important business processes and their contexts, it is possible to consult existing business process models. Most organisations already have such models in one form or another. For instance, if quality management (QM) is already in use, such models and services may be found in the quality management documents.

In order to gain an impression of the different processes involved in performance provision, a workshop may be used to answer the following questions:

- What products and services do we sell on the market?
- What central processes are needed to provide these services?
- How much do the individual performance production processes differ, and in what way do they differ?
- Where are there weaknesses already known in processes?

### Example of the performance processes of an organisation

At the start of the workshop, the team discusses the main business processes which are affected by the change. To provide a starting point, an employee has obtained the business process model from the quality management documents, and presents the individually-listed processes for discussion. After a short period, it emerges that it is software development that is mainly affected by the changes, but that relocating the business however also has an impact on service, since in the long term a move to the location of the customer will become necessary.

Furthermore, the services would have to be adjusted in line with the requirements of the new product, meaning that additional internal effort is needed for basic and further training.

The group therefore decides to proceed by observing both central performance processes: software development and service.

### 5.5.2 Influencing factors of intellectual capital

In addition to performance itself, there are a large number of further (intangible) influencing factors which affect the efficiency and effectiveness of performance and the success of the organisation on the market. They are a part of the organisation's intellectual capital.

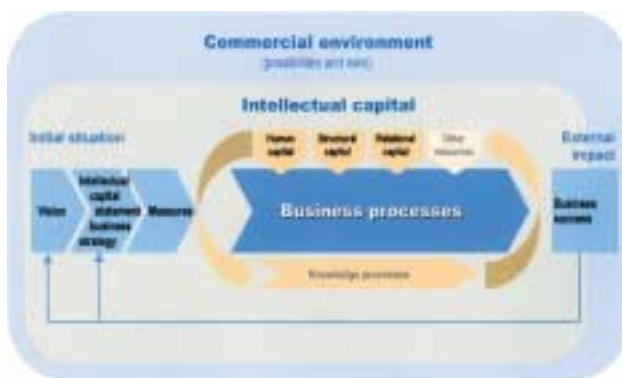


Fig. 4: Intellectual capital influences business processes



#### Definition of 'influencing factor'

In the event of changes, influencing factors affect business success and the organisation's achievement of its goals. They can also relate to tangible (such as plant and machinery), financial (for instance loan and equity capital flows) and intangible assets (such as employee skills and organisational culture).



**Tip:** If a change in one factor does not on principle lead to other changes within the organisation, it should not be considered as an influencing factor for the intellectual capital statement.

It is important to cover the influencing factors from the areas of human, structural and relational capital, in other words the intangible assets, in the intellectual capital statement. To this end, an initial brainstorming session is used to identify the factors which have the greatest influence on the processes of production and strategically-defined business success. Questions which in one shape or another almost every entrepreneur asks him/herself at some point help to start off the brainstorming session:

#### Human capital

- How are suitable employees found, recruited and retained?
- How are employees trained and given further skills?
- How are the competences and skills of employees systematically strengthened and refined?
- How is employee motivation and satisfaction ensured?
- How is employee performance promoted and challenged?
- ...

#### Examples of typical influencing factors:

human capital,  
basic and further training of employees,  
building staff experience,  
building social skills,  
motivating staff, and  
building management competence.



**Structural capital**

- How is interaction and communication managed?
- How are processes supported by IT?
- How do activities target customers and interested groups?
- How is the quality of processes and results ensured?
- How do we use our intellectual property?
- How are knowledge and experience shared among employees?
- How is knowledge exchanged within the parts of the organisation (departments, working groups, ...)?
- How do we create product innovations?
- How are processes and procedures improved?
- How do we ensure that innovations are sustained?
- ...

**Examples of typical influencing factors:  
Structural capital**

developing product innovations (research & development),  
 developing process and procedural innovations,  
 organising management processes,  
 developing a corporate culture,  
 cooperating and communicating internally,  
 providing information technology and explicit knowledge, and  
 transferring and ensuring knowledge.

**Relational capital**

- How is performance communicated to customers?
- What do our customers appreciate about us?

- How are partnerships with customers built up and maintained?
- How are customer wishes met and used to improve performance?
- How are external sources of knowledge made accessible?
- How is individual knowledge made accessible to others?
- What external impact should be achieved with customers, partners and the public?
- ...

**Examples of typical influencing factors:  
Relational capital**

caring for customer relationships,  
 caring for supplier relationships,  
 pursuing social commitment, work with associations and public relations,  
 caring for relationships with investors and owners, and  
 integrating external knowledge.

The questions help to improve understanding of the three key terms of human, structural and relational capital. The better this understanding, the easier it is to process all the other steps.

The **influencing factors** are assessed in a workshop with the entire project team. This should start with a brainstorming session in which each participant tries to write answers to the question by themselves on cards. The answers are collected by a pre-determined moderator and put together according to the criteria of types of capital (human, structural and relationship). Then, the cards are discussed and further grouped so that similar factors form a group. Per type of capital no more than 3–5 groups should be created which should be given as memorable a name as possible as influencing factors and given definitions.

### Example of assessing the influencing factors

In the workshop with the intellectual capital statement team, it was possible very quickly to identify 50 influencing factors, all of which influence the result of the organisation in some way. The factors and their importance were actively discussed, especially the meaning of the terms. This discussion was used as input for combining and defining the influencing factors. After two hours, the team had agreed on and defined the 18 most important influencing factors from the dimensions of intellectual capital, the business processes and business successes.



**Tip:** Make sure that the typical language of the organisation is used when naming and defining these factors. This ensures that the influencing factors and their definitions are also understood by employees who are not participating.



### Checklist for assessing intellectual capital:

What are our main services and products?

What important business processes do we use to produce them?

What is the intellectual capital that makes us successful?

How do we define the influencing factors of intellectual capital so that these are understood by all employees?

## 5.6 Step 3: Evaluating intellectual capital

In order to obtain a quick overview of the strengths and weaknesses of intellectual capital, the rapid and tried-and-tested method of self-evaluation is used in preparing the intellectual capital statements. An evaluation however requires a benchmark which determines against what background something is evaluated as tending to be better or worse. The intellectual capital statement makes use of two possible and typical references to evaluate intellectual capital:

- **Operative business:** How is the orientation of our influencing factors to be evaluated as they relate to the trouble-free running of our operative business? As sufficient, insufficient or indeed as better than necessary?
- **The strategic orientation of the organisation:** How is the orientation of our influencing factors to be evaluated as they affect our strategic orientation? As sufficient future requirements, insufficient or indeed already better than needed?

Ideally, each influencing factor is evaluated in relation to both perspectives. The operative perspective ensures that the current business, as well as the product and service provision, work without impediment at all times, and that customers can at present be satisfied sufficiently. The strategic perspective ensures that the enterprise is fit to face the future and is prepared for the changes which can be expected. The self-evaluation is implemented by a representative group of employees which ensures that a heterogeneous picture of the organisation is created and that where possible all arguments are taken into account.

The following questions help develop the initial evaluation relatively quickly:

- Is the quantity/volume of the influencing factor sufficient? Do we have enough to achieve our goals?

- Is the quality of the influencing factor sufficient? Do we have the right factor, and is the quality of that factor right in order to achieve our goals?
- How systematically are we already developing the influencing factor? Are there defined, regular measures and routines to care for and improve the factor?



**Tip:** Depending on the concrete definition of an influencing factor, it makes sense to adjust these questions. Sometimes, the evaluation of quantity or quality is difficult, for instance with corporate culture.

In the simplest case, a table (cf. Table 2, p. 26) is prepared which contains all the influencing factors identified so far. In addition, there are two columns for each evaluation dimension (quantity, quality and system), in one of which the estimated orientation is entered on a scale between 0 and 120, and in the other, written reasoning as to why the value is so high or so low. Table 2 also contains examples of reasoning for the assessments. These are created in the context of the internal discussion, and are mostly only to be understood internally. For external communication concerning Milestone III, these statements must be reviewed and edited.

The following scale can be used as an evaluation scale for the orientation:

- 0 % ... The quality, quantity or system cannot be sensibly identified or is not (yet) available
- 30 % ... The quality, quantity or system is partly sufficient
- 60 % ... The quality, quantity or system is mostly sufficient
- 90 % ... The quality, quantity or system is (always/absolutely) sufficient
- 120 % ... The quality, quantity or system is better or more than necessary

All intermediate steps (e.g. 55 %) are possible as evaluation results! Do not forget that the reference (operative and/or strategic orientation) is decisive for the evaluation.

Evaluation dimension 120 % was introduced to make it possible to identify the influencing factors where the potential exists to make savings. These areas can be created on the basis of changes in the business model, or simply by having received disproportionately high attention in the past. This takes place for instance with influencing factors which are the “hobby-horse” of employees in leadership positions.



**Tip:** In order to be able to reach a uniform evaluation quickly, a simple points card system can be used, like those used for ski jumping or in beauty competitions, with five coloured or numbered cards for each person present. The moderator sees immediately how the group assesses the factor and can lead a discussion of the deviating values discussed until a consensus is reached.

Impact	Orientation of the influencing factor (IF) (in %)				System used when dealing with the IF (in %)	
	Quantity	Reasoning	Quality	Reasoning	System	Reasoning
Employee skill-building	50 %	Skill-building is satisfactory in all areas, in production in fact rather good. Our competitiveness depends on the quality of our engineers. There is still room for improvement here.	60 %	Production is satisfactory or more 90 %; engineering skills should be higher 50 %; sales is still not so good; engineering is more strongly weighted!	60 %	To date, the good employees identified internally were used and taken from production into engineering; It is the level on the basis of traditional optimisation; with new sub-training, <b>everyone</b> is trained – we also <b>want</b> to only work with specialists!
Employee satisfaction	55 %	Production has a problem ... Prior to optimisation, there was "whinging" – some of the critics are now no longer in production! Satisfaction leaves room for improvement everywhere.	60 %	Employees now need more information than the specialists do because of the decentralised group structures.	10 %	What do we do about employee satisfaction? What is being done? Is it being measured? To date, there is no system: In individual places, systematic initiatives are being used ... but not everywhere.
Innovation	60 %	Is there enough innovation? With the currently-planned growth, we must innovate more than we are doing at the moment! Between 30 and 60 %; We are already losing contracts because the customer does not believe that we meet the requirements.	90 %	There is no/fine innovation and there are the big effects. Because of – activities in various markets, the general validity of individual ideas cannot be proven.	80 %	"Innovation happens because the initial planning was wrong!" Important difference: Prototypes versus routine types. Now, the innovation process is working in a systematic manner despite everything; there should not be too much "back and forth", otherwise everyday work does not get done.
Corporate structure	x		70 %	In recent years, there has been a massive improvement – we can now talk about mistakes with one another, which was difficult before; we are more open! ... Production 80 %; management 30 %; relatively heterogeneous assessment!	30 %	Extremely problematic to deal with ... if we are aware that culture is important ... it permits systematic management. Has already lived, together to the result; currently: little system in the sense of "deliberate culture development".
Flexibility/ process organisation	90 %	Internal standardisation does exist – and could also be counted as innovation; production is most flexible.	x		90 %	The processes are fairly flexible.
		We have plenty of experience ...		Production is 90 % ...		aware of experience ...

Table 2: Example of the evaluation of influencing factors (excerpt)

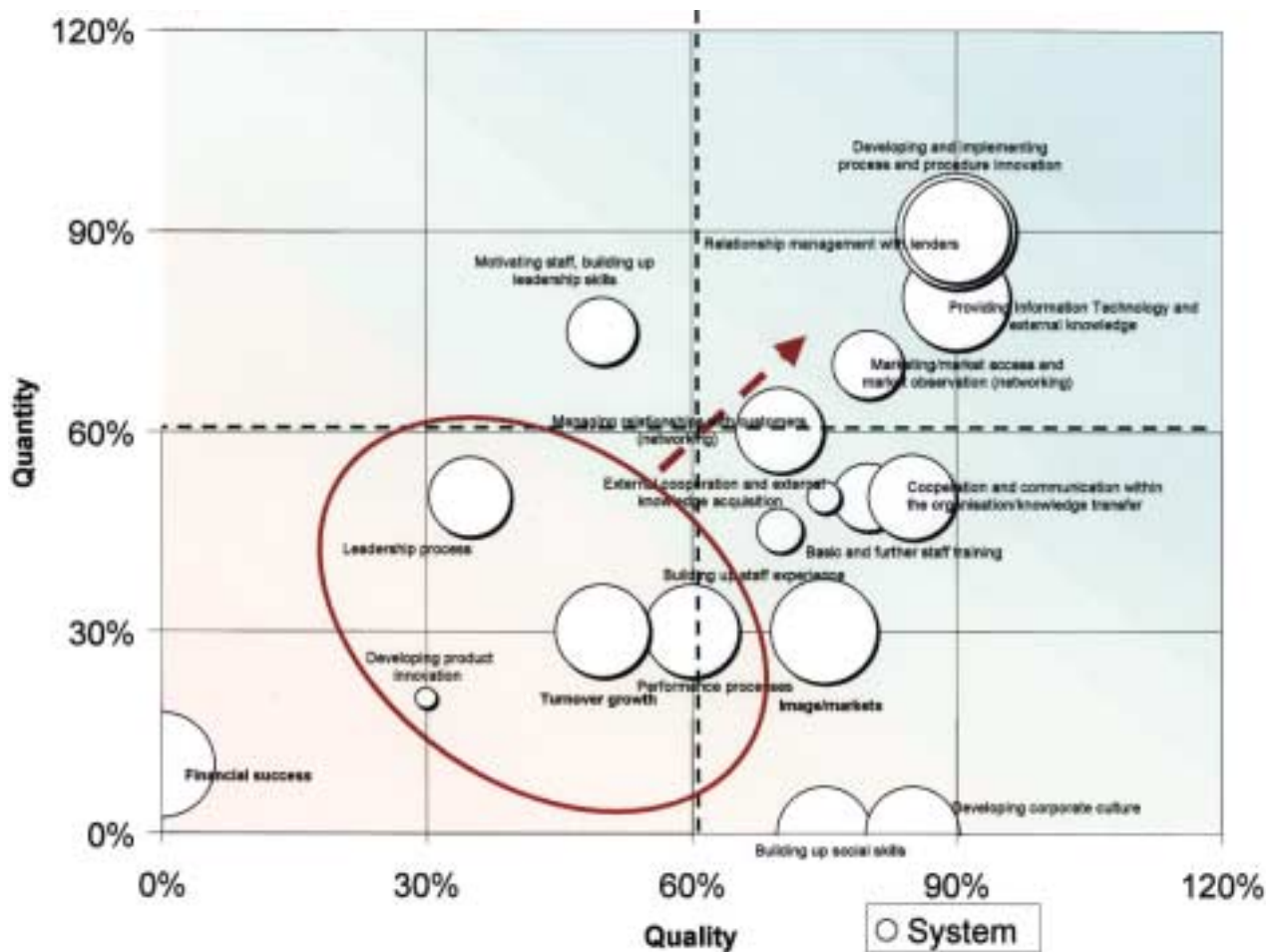


Figure 5: Evaluation portfolio/knowledge map



**Tip:** The moderator should ensure that no individuals dominate, but that a balanced perspective is created from all areas of the organisation.

This reasoned but nevertheless subjective evaluation shows how the orientation of the influencing factors is assessed within the organisation. Hence, a major first milestone is passed to develop an intellectual capital statement, and a profile of strengths and weaknesses can be created for the organisation's intellectual capital. Fig. 5 shows by way of example the result of an evaluation in a portfolio.

The quality of the factors is entered on the X axis, the quantity on the Y axis; the system is portrayed by the size of the circular areas. The optimal area is in the right-hand upper quadrants. The semi-circles lying in Fig. 5 on the axes (two on the X axis and one on the Y axis) are influencing factors for which in each axis only quantity or quality was evaluated. Taking the example of "financial success" it is possible to see that whilst the amount of the "financial success" is relatively easy to evaluate, nothing was said in this case about quality. With these factors, the optimum area is either at the top or on the right near the 90 % mark.

The evaluation also permits **deductions** to be made about future trends and the **sustainability of the organisation**: Small circles show a need for

action since without systematic management of the important influencing factors no sustainable development can be anticipated. There is even the risk that quality and perhaps also quantity will suffer in future, since the “weak factors” become obsolete if they are not looked after and competition develops further.



**Tip:** If all evaluations without exception are in the “green zone”, there are reasons in general to presume that a very generous evaluation was made. The probability of being equally marked with all influencing factors that are critical to success is not very high – an exception may be the market leader.



**Tip:** A normal distribution with a few problems, many “normal” values and few peaks is an indicator of a high capacity for self-evaluation.



**Tip:** It is of primary importance in the evaluation that the circumstances of the evaluations should match. It must become clear which influencing factors are better evaluated than others. The absolute evaluation is subordinate in this case. You should therefore implement evaluation in a single workshop. Ask often whether the latest evaluation has been made in relation to the evaluations of other factors already made.



#### Checklist on evaluation:

What are our strengths and weaknesses in intellectual capital?

With which influencing factors of intellectual capital do we already deal systematically, and with which not yet?

How do we reason our evaluations?

## 5.7 Step 4: Finding and evaluating indicators for intellectual capital

After the self-evaluation, the influencing factors of the intellectual capital statement are highlighted with measurable indicators in the shape of numbers and facts. The goal is better verification and higher legitimisation by changes becoming visible largely independently of workers’ self-estimation.



#### Definition of an ‘indicator’:

An indicator is defined as an absolute or relative benchmark which serves to describe a circumstance. The comparability of benchmarks is dependent on them being clearly defined themselves, on their always being calculated in the same way and on an interpretation framework being available (mostly the operative and strategic enterprise goals).

Indicators are always only as good as the data sources. When collecting the indicators, hence, it is better that fewer indicators should be used, but that they should be assessed “cleanly”.



**Tip:** Collect information early as to which indicators and benchmarks are already in use in various areas of your organisation (such as management, personnel, controlling, marketing, etc.). Where necessary, a large number of these benchmarks can work with slight adjustments also as indicators for the intellectual capital statement. Much less effort will be involved in the assessment, and over and above this the intellectual capital statement will bring together the different views that are already prevalent.



Although for the intellectual capital statement some indicators should be used from existing report structures, the new perspective from which they are regarded is important. Depending on the questions asked, different indicators may contain relevant statements on an influencing factor. It is not possible to make a generally valid statement on the selection

of indicators, since this depends on the respective corporate context and on the influencing factors that are defined.

Table 3 shows an excerpt of indicators from an intellectual capital statement (human capital and relational capital). The portrayal is borrowed

from the intellectual capital statement of the Seibersdorf Austrian Research Centre. The indicators are allocated to the individual influencing factors (such as basic and further training of employees, building up employee experience, etc.) and are highlighted with values for the different reporting periods, an evaluation of satisfaction with what has been achieved (smiley) and a goal for the new reporting period (arrow or concrete value). The entries for the goals are optional and only make sense if they are linked to concrete measures.

With the evaluation of the influencing factors and indicators assessed, the participants have a good overview of the intellectual capital that is relevant to competition. In combination with the defined knowledge goals, it is possible to establish initial priorities for future measures and development. An important milestone was achieved, at which it is possible to interrupt the preparation of an intellectual capital statement.

Human capital	2002	2003	Evaluation	Goal
Academics		21	☹	
Specialists		8		
Unskilled workers (uncompleted studies)		4		
Apprentices		3		
Trainees		0		
Acceptance rate of apprentices, interns and trainees		33 %		
Per capita further training costs (external)		1.014 €	☹	↗
Further training days per employee (external)	2,6	3,3	☹	↗
<b>Building up employee experience</b>				
Experience in years		4,7	☹	↗
Experience in years not incl. apprentices		6,2		
<b>Building up social competence</b>				
Estimation of the customers				
<b>Motivating employees and building up leadership competence</b>				
Index of employee questionnaire		0,61	☹	↗
Employee fluctuation (in and out)		0,31		
Absenteeism	5,6	5,7	☹	
Relational capital	2002	2003	Evaluation	Goal
<b>Relationship between management and customers (networking)</b>				
Number of customers		27	☹	↗
Number of new customers		8	☹	↗
Share of new customers in turnover		15,9 %	☹	↗
Customer satisfaction		82,8 %	☹	↗
Number of visits per customer		6,9	☹	
<b>Marketing/market access and market observation</b>				
Share of marketing costs in turnover		2,6	☹	
<b>External cooperation and acquisition of knowledge</b>				
Number of cooperation and cooperation partners		3	☹	↗
Number of suppliers		approx. 140		

Table 3: Excerpt example of indicators of an intellectual capital statement

**Checklist on indicators:**

What (existing and new) indicators support our previous evaluations?

How do we define the calculation of the indicators in detail?

Which values do the indicators have?

How are the indicators to be interpreted?

How can we assess indicators consistently and simply?

## 5.8 Step 5: Communicating intellectual capital

The results acquired in steps one to four make it clear that these can only be sensibly interpreted in context. Depending on the starting situation and on the strategic goals set, completely different conclusions can emerge. The intellectual capital statement, which is used for communication outside the intellectual capital statement team, must therefore provide a description of this context and an interpretation which in addition to the numbers and facts also shows the consequences from the point of view of the organisation.

The results can be communicated in a variety of ways, purely verbally in the shape of discussions and presentations, or in writing as a living report. The important thing here is for the intellectual capital statement to be adjusted to the target group. It should not bore readers or listeners, and should quickly give them all relevant, important information on the organisation's intellectual capital.

On principle, it is possible to distinguish between internal and external target groups. Whilst the report for external communication is on a more abstract level, and focuses more on the impact on the most important interested groups (stakeholders), the intellectual capital statement for internal communication is as a rule more detailed

and specific. Table 4 (p. 31) shows a few typical differences between intellectual capital statements for internal and external purposes.

### Example discussion on communication

After a further meeting on final release of the indicators, there are many documents with tables, pictures and texts on the table. "If our customers read that, they could get a completely false impression..." the controller says, referring to the highly critical self-evaluation. "We have deliberately given ourselves a critical evaluation in order to work out our strengths and weaknesses. Although that now looks rather bad in some parts, we are still the best in the sector, as you can easily see from the indicators. We should perhaps not publicise our self-evaluation." – "But we have to pass it on to our own people – and perhaps to the owners because there are quite a lot of changes coming", interjects the quality commissioner.

"We should nevertheless think about whether we should not publicise a great deal of the information since the fact that we are today the best in the sector is largely a result of our always having been critical of ourselves. What is more, the intellectual capital statement shows that we have seen the signs of the times and are deliberately changing. This puts us far ahead of the competition. While they are still battling with their process management, we are already in the midst of the systematic development of our intellectual capital. If we tell our customers this, I'm sure they will prefer to buy from us because they can see our goals and what we have to offer now and in future." An agreement is reached to distribute a full report on the results internally to all employees, whilst a "filtered" version prepared by Marketing and containing the most important information and indicators is distributed to the most important external interested groups.



Focus on the question in reporting	Target group internal	Target group external
<b>Who are the target groups?</b>	Management and supervisory council, employee organisations and departments	Equity and loan capital lenders (investors, owners, banks), customers, potential employees, suppliers and cooperation partners
<b>What do the target groups expect primarily?</b>	As external and additionally: Orientation as to how knowledge and processes to produce the company's product can be best integrated. In some cases highly operative motivation: who knows what and who is "responsible" for what and: How can it be done better?	Information on the organisation, strengths/weaknesses of individual knowledge areas, success and failure of knowledge development
<b>What is reported?</b> "Completeness" of the information	The more detailed the better; the boundaries are formed by personal data subject to data protection.	Strategically filtered – depending on the target group and level of involvement of the target group (partners are told more than competitors)
<b>How is the report prepared?</b> In portrayal and processing	As a presentation, report or brochure. Important indicators, stories and pictures are sufficient in most cases for the structured discussion. The internal portrayal is less laborious to prepare than external communication.	The clearly-structured portrayal of information in the corporate context is central to comprehension. The additional explicit addition of interpretations and their consequences is also important since external readers themselves have little or no insight into the organisation. It is also important to have an attractive design and graphic presentation.
<b>Instrumental benefit from the point of view of the organisation</b>	Management: What are our most important resources as to current and future developments? Where are we good, where are we bad? Where do we stand in comparison to others and to the best practice (benchmarking)? What must and can we do? What impact can be expected in the event of changes? How successful are the measures initiated to this end (ROI)?	Communication: Who are we? What can we do and what do we have to offer? Why are we good? What are we worth?

Table 4: Various target groups and criteria of communication

Intellectual capital statements offer a certain scope as to their structure and portrayal. The internal priorities and core issues can become the focus through a strong orientation to the strategy.

It is nevertheless important for the intellectual capital statement to have a clearly understandable structure and not to appear to be a pure strategy or marketing document. For this, the following structural proposal has proven itself:

**Example structure of an intellectual capital statement:**

- 1 Foreword – Why an intellectual capital statement in our organisation?
- 2 Company description
- 3 Business success and challenges
- 4 Business and knowledge strategy
- 5 Our intellectual capital
- 6 Future perspectives and measures
- 7 Collection of indicators

This structure represents the model of the intellectual capital statement portrayed above (cf. Fig. 1) and shows on the basis of the strategy and the



challenges faced by the organisation how intellectual capital leads to business success and influences the future of the organisation.

A number of elements have proven their value for an interesting portrayal of the intellectual capital statement, in addition to the results from the work packages:

- personal style,
- short stories and anecdotes from the organisation,
- professional, memorable design,
- illustrations of important statements and contexts, and
- diagrams to visualise the indicators.

The intellectual capital statement is an individual document that is highly specific to the organisation. It should therefore have a personal style and communicate “We as an organisation”. Pictures and statements by individual employees

support this and can considerably increase identification with the intellectual capital statement, and hence also with the organisation.

A major section of the culture of an organisation is also reflected in anecdotes and stories of special events or situations. These anecdotes can be used to communicate the strategy. A story in which the employees can recognise themselves can have a greater internal impact than all indicators together.

The picture of the organisation should also be reflected in the design and in the layout. It is therefore recommended to draft the intellectual capital statement within the organisation’s Corporate Design (CD) or Corporate Identity (CI). Illustrations have also proven their worth. They are often more quickly understood and show contexts better than text. Also, tables of indicators can quickly become boring. Here too it is therefore recommended to use diagrams to portray the numbers and facts. It becomes particularly interesting when some indicators have already been followed over a number of years and a trend line can be shown.



#### Checklist on communication:

For which target group can we provide an improved understanding of our organisation using the intellectual capital statement?

How do the intellectual capital statement and other communication media complement one another (such as marketing documents, annual report or business plan)?

How should our intellectual capital statement be structured?

Is all important information interpreted, and what scope remains?

What details should be for internal use only, and which should also be communicated to the outside?

## 5.9 Step 6: Managing intellectual capital

The results of work packages one to five provide a structured report on the “status quo” of an organisation. It shows the current situation and basic potential for development for the future of the organisation.

The management of the organisation is now faced by the challenge to deliberately tackle these developments, and hence to ensure that the strategy leads to success. In contradistinction to organisations which are highly segregated and orientated to plant and machinery, knowledge-intensive organisations are typified by a large part of the resources used coming from networking intellectual capital. These intangible resources are typified by many interactions which make the contexts complex and incomprehensible. Simple cause and effect chains, as with simple machines (switch on, machine runs), do not work in the area of intellectual capital. The problem with which management is faced can be put into the following words:

- How can knowledge-intensive organisations be sensibly managed and steered if the interactions

between influencing factors of intellectual capital are not transparent?

- How can one ensure that scarce resources are used at the right places and do not go up in smoke?

In order to achieve this, methods must be used which can deal with and analyse complex contexts. A method which does this is the sensitivity analysis acc. to Frederick Vester<sup>7</sup>. It makes it possible to analyse interactions within an organisation, or better still within a system. It also becomes possible to visualize the interdependencies between intangible influencing factors. Bornemann and Sammer<sup>8</sup> successfully transferred this method to intellectual capital statements and to the analysis of interdependencies in the intellectual capital field. This procedure is explained in the following cases.

In order to clarify interdependencies in intellectual capital, the individual influencing factors (IF) of intellectual capital are included in a matrix. Table 5 shows by way of example an excerpt from such a matrix. The individual influencing factors of intellectual capital and interactions on one another are entered first.

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

Table 5: Part of a matrix to analyse the interactions of intellectual capital

<sup>7</sup> cf. Vester (1988) or: Probst and Gomez (1999).

<sup>8</sup> cf. Bo 4 cf. References.

The visualisation of the interdependencies takes place in that the intellectual capital statement team allocates weights to the influence of each factor on all others.

The following scale is used for this purpose:

No influence = 0

Little influence = 1

Heavy influence = 2

Very heavy influence = 3

In the example in Table 5 (p. 33) it is highlighted in red that the performance process (line 1) has a strong influence on building up employee experience (column 3) and employee motivation (column 5). In turn, the performance process (column 1) is once again heavily influenced by changes in these factors (line 3, line 5) and additionally by the leadership process (line 6) (highlighted in green). There is hence a strong interaction between these factors. An example of a very heavy interaction lies in the influence of the leadership process on employee motivation. This means that even slight changes in the leadership process can have a major impact on employee motivation, whilst employee motivation for instance only has a weak impact on basic and further training.

#### Example discussion on managing intellectual capital

The internal presentation was successful. There is now an very challenging brochure on the table, both in terms of design and of content, which gives highly accessible information on the organisation's intellectual capital.

"But what is the consequence of all the data and indicators?" asks the procura-holder in a personal discussion about the effort to date. "In some areas the numbers are not so good, whilst in others they are OK. Where will we need to act? What are we going to do first?"

"For this, we would have to know what the impact of the change in an influencing factor is on the others – but it would be even more important to know the impact on the result. Let us try to show the cause and effect links." The managing director has already gone to the flip chart and is drawing connections intuitively. Slowly, an ever more complex picture emerges. Many lines link the influencing factors portrayed as points.

"By linking the orientation of the influencing factors with these contexts, it must be possible to recognise somehow where a measure has the greatest benefit..."

The results of this analysis can be portrayed in an **interdependency network** (cf. Fig. 6 p. 35).



#### Definition of an 'interdependency network'

An interdependency network is the graphical portrayal of the links between influencing factors in an organisation. It permits the visual identification of interactive dependencies.

Fig. 6 shows a section of a simplified interdependency network for the influencing factor which is central to this company, namely that of "Product innovation" (SK4). The individual lines only show the very strong relationships from the matrix (value larger than or equal to 2), since these enable the greatest leverage to be created.

The picture shows that product innovation has a direct and very strong impact on business success (E1 and E2). Product innovation itself is influenced by "cooperation within the organisation" (SK2), which in turn is very strongly influenced by employee motivation. Since the image has a major impact on employee motivation, an interdependency circle is closed, a so-called **generator**.

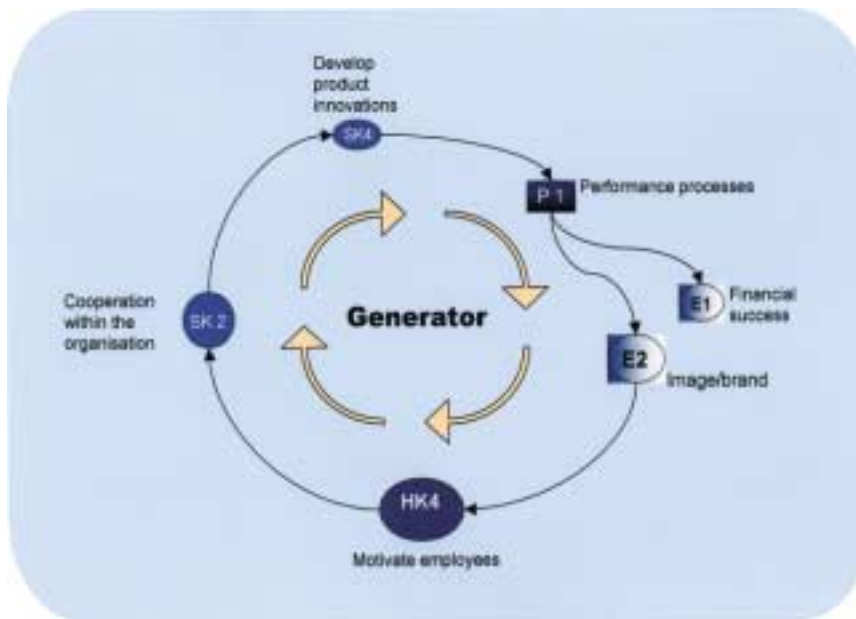


Fig. 6: Excerpt from an interdependency network

necessary perseverance and sustainability in implementation are lacking. If successes only start to become visible after one or two years, this must be accommodated in the strategy. Success checks on measures in these areas should take account of the delay, and initiatives and developments should be given sufficient time to bear fruit.

The interdependency analysis can provide a great deal of additional information which can only be mentioned here:

- By assessing the influences of factors of intellectual capital on all others, the significance of an influencing factor for the organisation can be estimated.



#### Definition of a 'generator'

A generator describes a closed loop in the interdependency network. It consists of two or more influencing factors which strengthen one another. A generator can be started up as a result of the change in one of the factors involved, whereby a major impact can be achieved with slight intervention.

- Statements on manageability and dynamics become possible based on how strongly a factor acts on all others, and how strongly it is influenced by them.

- By combining interdependency analysis and evaluation, beyond this, statements become possible on the potential of individual factors of intellectual capital, such as which areas have the greatest need for development and where improvement measures will have the greatest effect.



**Tip:** It is recommended for the analysis to reduce the entire interdependency network to essential contexts. If many influencing factors are viewed at once, there is a danger of losing one's orientation and missing important contexts.

The interdependency analysis makes it generally clear why many attempts to steer intellectual capital are unsuccessful. Often the



#### Checklist on management:

What is the impact of changes in our intellectual capital on business success?

Where does our organisation get its dynamics, and how can we efficiently and effectively deploy this energy?

Where can one sensibly intervene in added value processes in order to improve the result?



## 6 Outlook

Many initiatives all over the world have proven that the evaluation and portrayal of intellectual capital as a **part of the evaluation of an enterprise** can make a significant contribution to corporate development. The practical experience collected when deploying these tools, especially in Scandinavia, confirms this impressively. There appears to be virtually no doubt



that the tool “intellectual capital statement” will become established in organisations in the long term. This is because it is becoming increasingly important to know precisely which factors are important for added value and to support decisions, which have previously been taken intuitively, using facts as broadly secured as possible. As a result of this transparency on intellectual capital and its networking in the enterprise, scarce resources can be used much more precisely, and hence competitiveness increased.

Also the public interest and that of the specialist world for the topic was clearly recognisable in the **“Intellectual Capital Statement – Made in Germany”** project, and it was

possible to further encourage it by the venture entered into by the 14 pilot enterprises. For instance, many enquiries were received by the project consortium on articles and book publications of reputable economic media and specialist publishers; students, doctoral students and international experts contacted us to obtain information on the latest developments in this exciting field. After the experience from the pilot project, it is now possible both to refine the method for intellectual capital statements and to carry on the specialist and economic policy discussion on a broader and more detailed basis. Above all, the influencing factors defined in the pilot project can now be empirically validated and possible similarities of interdependencies identified within specific sectors and segments. This is only possible by expanding the group of enterprises involved in the “intellectual capital statement movement”. For this reason, the Intellectual Capital Statement Project Group is planning a second phase, which will be the **systematic dissemination of the method**, with the aim of equipping a total of several hundred SMEs in Germany with their own intellectual capital statement. To this end, not only should further pilot users be made “fit”, but above all multipliers such as corporate consultants or specialists from Chambers of Commerce and other associations should also be specifically trained to place the movement on a broader footing and give it an even greater impetus. Multimedia “tools”

„This enabled us not only to examine our strategy, but also to measure all important influencing factors and get rid of the bottleneck.“

(Wienforth B&H)

which further support and simplify the intellectual capital statements in SMEs are planned, as is a **new expanded version** of this aid: The **“Guideline 2.0”**.

This serves as the basis for a well-founded discussion of the macroeconomic impact, and should lead to a **joint effort between the political arena and the business community** to harmonise the assessment of intellectual capital. The **nationwide dissemination of intellectual capital statements** must therefore go hand-in-hand with efforts to compare the intangible core values between several organisations with similar structures and similar economic environments. The goal is to set in motion a process of **“harmonisation”** at the end of which a kind of certificate could stand which – like the international standards of quality management – defines criteria for a “good” and authoritative intellectual capital statement. The aim is to support not only the negotiation of generally-valid “rules” of intellectual capital statements for enterprises, but also the expansion of the overall perspective which will give further impetus to the intellectual capital statement. For instance, the Intellectual Capital Statement has already given thought to introducing a **regional intellectual capital statement** to steer the economic policy of towns, districts or Federal Länder. For instance, **“regions of excellence”** could be identified in certain industrial and service segments which in turn would help to spur on regional competition, and should assist the “Made in Germany” trademark as a whole in garnering greater transparency and plausibility in the global context.

The **administrative policy context** is certainly pushing this forward: For instance, the international accounting standards<sup>9</sup> already recommend a structured portrayal of the intangible assets in the Notes to the Annual Report. The lack of exchange of information between the capital market and enterprises, which is also focussed on with Basel II, has created a broad awareness of the topic among small and medium-sized enterprises as well, and a law already entered

into force in Austria in January 2004 which obliges higher education institutes to submit intellectual capital statements in line with a specific structural model. All this makes it clear that a movement has already been set in motion.

It remains to be hoped that many enterprises will recognise this development early in order not to have to react to immanent legislation, but to **actively help shape intellectual capital statements in practical terms**.

“Looking back, simply introducing the intellectual capital statement has changed a few things. Coming from an alleged position of strength, we have recognised what risks and trends from outside, as well as from inside, affect the survival of the organisation” says the managing director in the midst of the specialist association. “On the basis of the new outlook for knowledge which is shareable, which money or investments are not, but which can be also imitated at any time, we have undertaken massive restructuring in some areas. Over and above this, the targeted development of the specialist and social skills of employees and managers has led to new forms of interaction. Slowly, our fundamental stance as a market leader has changed in a constantly-changing business environment. We have become learners standing on solid ground, but we also react extremely quickly to changes and to some rather surprising customer requests. We have been able to expand sales with the existing capacity; what was even more important, however, is the increase in the individual’s quality of work and life as a result of improved internal coordination.”

9 cf. References DRS 12, DRS 20 and IAS 38.

## 7 Further information

### 7.1 What developments form the basis of the intellectual capital statement? An overview

Initial efforts to measure intellectual capital and evaluate its potential started in the nineteen-sixties, driven by Becker, Flamholz, and later Fitzenz<sup>10</sup> in the context of “**Human Resource Accounting**”. In parallel, **accounting and controlling**<sup>11</sup> developed. At the end of the eighties, comprehensive management information systems were already being devised, but the financial benchmarks were prevalent, and the existing knowledge of soft factors took a back seat.

Above all in Scandinavia, the combination of initially independent tools of strategic management continued, such as the **Balanced Score Card**<sup>12</sup>, **Managerial Accounting**<sup>13</sup>, **Customer Relations Management**<sup>14</sup> and other areas to **Intellectual Capital Management and Reporting**<sup>15</sup>.

Building on this, it is possible to distinguish between two main approaches: **overall monetary**

**evaluations** of the organisation, or **management approaches** based in most cases on a structural model of intellectual capital<sup>16</sup>.

The structure of intellectual capital<sup>17</sup> divides intangible assets mainly in human capital, structural capital and relational capital. This structure is currently used mostly to describe the intangible assets of an organisation using **indicators**<sup>18</sup>. Overall monetary evaluations<sup>19</sup> by contrast aim to quantify organisations’ total intangible assets in financial terms.

**More recent approaches** to the evaluation and management of intellectual capital try to include these aspects, as well as an operative link to everyday business (the business processes). Intellectual capital is related to the operative business processes and combined with management models such as the BSC<sup>20</sup> or the EFQM<sup>21</sup>. Any list should include the intellectual capital statement model of the ARCS<sup>22</sup>, by Joanneum Research<sup>23</sup>, of NOEST<sup>24</sup>, the DLR<sup>25</sup>, the Value Chain Scoreboard<sup>26</sup>, or indeed the intellectual capital statement model of the Intellectual Capital Statement Project Group (AK-WB) as described in this Guideline.

10 cf. Becker (1964); Flamholz (1974) and Fitzenz (1984).

11 An overview regarding intangibles is offered by Horvath and Möller (2003).

12 cf. Kaplan and Norton (1969).

13 cf. Society of Management Accountants of Canada (1998).

14 cf. Shapiro (1974).

15 cf. Sveiby (1997); Malone and Edvinsson (1998); Danish Ministry of Science, Technology and Innovation (2003), Mouritson (2003) or Roos and Roos (1998)

16 An almost complete overview is provided by Andriessen (2004) and Mertins et al (2004).

17 cf. Sveiby (1997); Malone and Edvinsson (1998).

18 An overview is offered by Gröbel, North und Szogs (2004)

19 Significance attaches to the “Tobin q” by Tobin (1969), VAIC by Pulic (1996) and “Knowledge Capital” by Lev (2004).

20 cf. Kaplan and Norton (1969).

21 <http://www.efqm.org/>

22 <http://www.arcs.ac.at/publik/fulltext/wissensbilanz>

23 [http://www.joanneum.at/cms\\_img/img1522.pdf](http://www.joanneum.at/cms_img/img1522.pdf)

24 [http://www.noest.or.at/downloads/NOEST\\_intellectual\\_capital\\_statement\\_Endbericht.pdf](http://www.noest.or.at/downloads/NOEST_intellectual_capital_statement_Endbericht.pdf)

25 [http://www.dlr.de/dlr/Presse/fubilanz/FuB\\_02\\_03.pdf](http://www.dlr.de/dlr/Presse/fubilanz/FuB_02_03.pdf)

26 cf. Lev (2001).



## 7.2 The pilot enterprises involved

After a public call for tender on 16.1.2004, roughly 60 enterprises expressed interest. Of these, the 14 partners were selected for the development of the prototypes using a sample with 11 criteria (size of company, sector, region, willingness to publish, degree of innovation, corporate network, focus of intellectual capital statement, probability of success, best practice probability, technological orientation and added value).

As can be seen from Fig. 7, various sectors from all over Germany are represented among the 14 small and medium-sized pilot enterprises finally selected. German Caritas represents a classical charitable non-profit organisation. Bad und Heizung Concept AG is a network of 32 tradespersons in the field of heating and bathroom fittings. On average, the organisations involved have roughly 150 workers and a turnover of approx. Euro 20 million. Below you will find a brief profile of each pilot organisation.

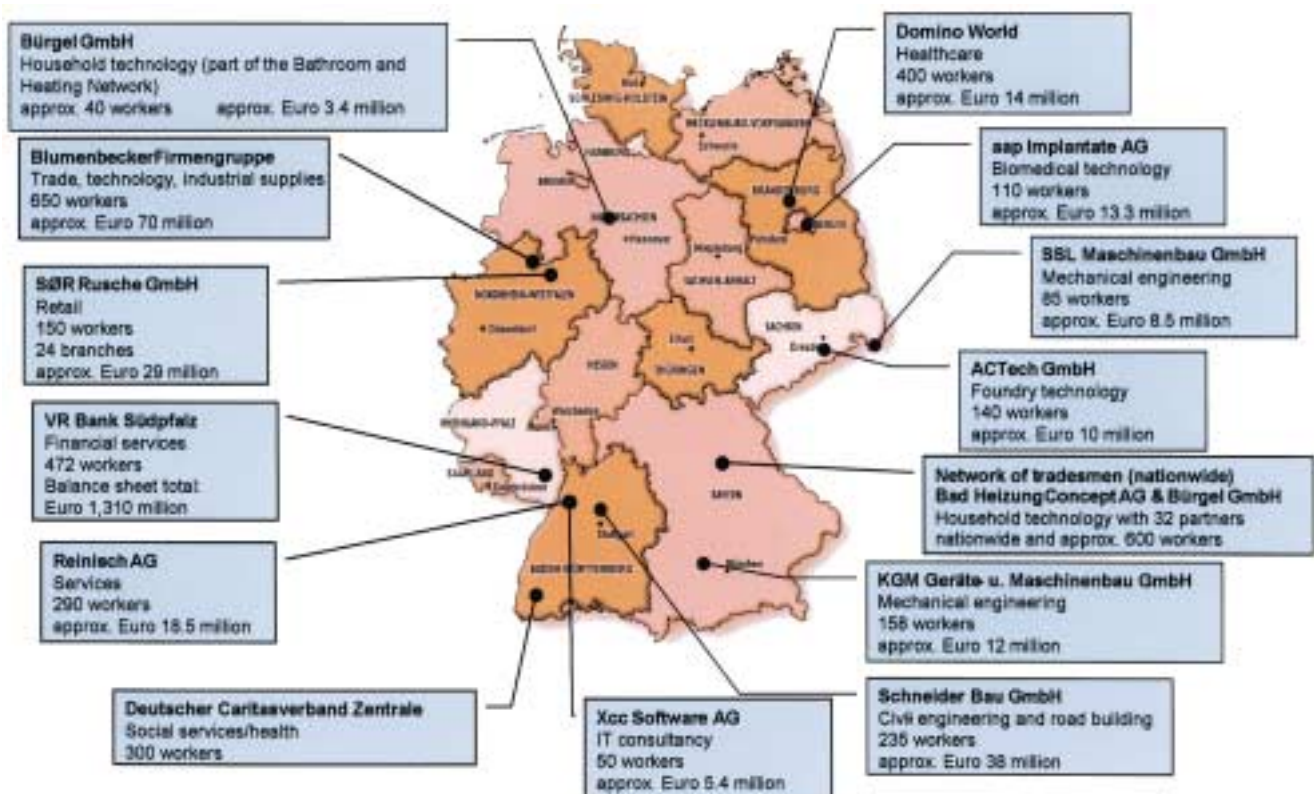


Fig. 7: Geographical distribution of the project partners over Germany



aap is a specialist in the field of biomedical implants for the musculoskeletal organ system. Our core skills lie in the development, production and marketing of implants for bone fracture consolidation (osteosynthesis), joint replacements (endoprosthesis) and biological bone replacement (orthobiology). High-tech metal processing, osteocementum and orthobiological materials form the technological basis for this. In addition to headquarters in Berlin, aap is represented by its subsidiaries Mebio and Coripharm in Dieburg, and by its holdings in geot and Osartis in Munich and Obernburg.



With its 150 workers, the Freiberg enterprise ACTech GmbH develops and produces sand casting prototypes and small series in the rapid prototyping procedure from all standardised or customer-specific magnesium, aluminium, steel and iron alloys. The customers are from the automotive sector, mechanical engineering, the pump and compressor industries, as well as the aviation and space industries, or are their suppliers and development service providers. Typical products include cylinder heads, engine blocks, turbochargers and gearbox housings. The enterprise, which was established in 1995, has undertaken more than 4,000 casting projects in which customers are supported from the initial plan through to mass production. To develop new processes, ACTech GmbH cooperates with Universities and research facilities such as the Technical University Bergakademie Freiberg.



bad & heizung concept AG is a conglomerate of 35 particularly service-orientated companies in the bathroom fittings and heating sector. The public limited company (AG) was established in September 2000, and considers itself to be an initiative and self-determined cooperation of trades enterprises with a high standard of quality. The members aim to learn from one another and to develop further together. The strategic business fields and success factors of the AG being are consistently refined in

workshops. Each shareholder makes an active contribution to this process. The aim is to optimise the individual partners' market presence, and the logo and seal of quality of the AG is to be established as a universal brand through the use of a joint corporate design.

**BLUMENBECKER** With its 650 workers, the Blumenbecker group of companies, including as well as headquarters in Beckum/North-Rhine Westphalia eight further companies both at home and abroad, turned over approx. Euro 70 million in 2003. The business activities of the enterprise, which has been in existence for more than 80 years, lie in the areas of automation technology, industrial service and trade. The spectrum of services in the field of automation technology range from individual control boxes through to complete systems. Whilst the Trade department with more than 50,000 articles offers a varied range for industry, trade and service enterprises, the industrial service of the Blumenbecker group of companies offers the maintenance, examination and servicing of motors, plant, pumps, lifting platforms, appliances, etc.



Established in 1919 by master locksmith Felix Kirsten, Bürgel GmbH developed as a specialist company for heating and bathroom fittings in Landeshut/Silesia, quickly attaining a workforce of 30. Now in the third generation, a branch was opened in Markersdorf near Görlitz immediately after the political 'changes'. In 2000, the operation was able to establish bad & heizung concept AG together with 28 colleagues, a cooperation-based venture of qualified specialist companies which have combined under a common logo and seal of quality to pursue joint marketing, experience and development strategies and to expand these further. The enterprise has at least 40 workers today in Nienburg who cover the entire area of modern household technology and have been connected with the enterprise for many years. The family-run company has always considered it to be a particular task to promote training in the trades. Today, young, committed tradespersons are

being trained in the following occupations: heating and ventilating fitter, plumber, electrician, refrigerating system engineer and office clerk. As well as many loyal regulars from the private sector, our clientèle includes public clients, the Church, industry and trade, as well as banks and groups.



The German Caritasverband was established in 1897, and today is one of the six central independent welfare associations in Germany. A total of almost 500,000 full-time employees work in the more than 25,000 Caritas facilities for health, youth, family, old-age and disabled assistance, as well as in the facilities providing assistance in social emergencies, in the help and self-help groups, in basic and further training. Over and above this, another 500,000 people work on a voluntary basis in Caritas services and facilities. They care for and advise more than 9.7 million people annually. The headquarters of the German Caritasverband in Freiburg creates the basis for professional, effective assistance. Headquarters refines the fundamental specialist skills in social work, ensures professional work in the local facilities and influences political decisions. It contributes to the public debate on poverty in our society, both at national and European, as well as at international level.



domino-world™ is an enterprise working in Berlin and Brandenburg in the field of healthcare whose skills lie in the care and support of the elderly and those in need of long-term care. The association, which has been in existence for more than 20 years, employs roughly 400 employees and maintains 11 non-institutional, partly institutional and institutional care and support facilities. domino-world™ practices a completely new therapy method, domino-coaching™. domino-coaching™ aims to solve the central problem faced by its customers - the restrictions posed by the need for long-term care itself - better than the competition, and to help patients to achieve greater health and quality of life. The method, which is based on holistic and systematic approaches, is integrated into a holistic management system according to Total Quality Management principles.



KGM Geräte- und Maschinenbau GmbH, established in 1982 as a service-provider for the German high-tech industry, employs 150 employees in the Kaufbeuren region and achieves an annual turnover of approx. Euro 11 million. The enterprise specialises both in the production sectors cutting, metal sheet processing, assembly of supports, bodies and construction units, and in surfaces such as coatings and electroplating. KGM GmbH produces roughly 4,000-5,000 different products per year, and supplies 90% of its production to companies in the aviation, computer, office machinery, electrical and machine tool industries, as well as the printing industry and medical technology.

**reinisch** reinisch AG, established in 1991, in addition to documentation services and process consulting and system solutions related to information management, also offers its customers product care in the after-sales area and services for product development. The company, which in addition to headquarters in Karlsruhe has six branches in Germany and six more abroad, plans and develops with its 340 employees partial and complete solutions for customers, such as from the electrical engineering, automotive engineering, mechanical engineering, and medical technology sectors. In recent years, reinisch AG was both a finalist in the "Entrepreneur of the Year" competition and among the TOP 100 of the most innovative small and medium-sized enterprises in Germany.

„What I liked most was the open communication and the exchange of opinion over all hierarchies during the self-evaluation.“

(Xcc AG)



The Schneider Bau group of companies, consisting of Schneider Bau GmbH & Co. KG, headquartered in Öhringen, Konrad Bau GmbH, seated in Lauda-Königshofen, and Heilbronner Schneider GmbH, is a construction company with a 100-year tradition specialised in the fields of road building, asphalt construction, civil engineering and canalisation, outdoor systems and redevelopment. The group of companies employs approx. 240 workers in Baden-Württemberg and offers tailored solutions adapted to the individual needs of both private and business customers.



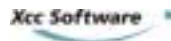
SØR Rusche GmbH, established in 1956, an SME with a staff of 122, is active nationwide in textile retail and achieved a net turnover of Euro 22.7 million in 2003. The family-run company headquartered in Oelde/North Rhine-Westphalia specialises in men's outer clothing, and is the German market leader in the premium segment of men's outfitters with a particular focus on the growing segment of high-quality sportswear. The SØR collection, which is made in Lohn, is sold exclusively in the company's own specialist shops. With their 24 branches from Sylt to Munich and a national mail order service, SØR Rusche GmbH is the only men's outfitter in Western Germany with a blanket distribution structure.



SSL Maschinenbau GmbH is one of the largest, highest-performance enterprises in the Oberlausitz economic region in Saxony. Since its establishment in 1991, the number of permanent employees here has continually grown to 71, of whom 22 are apprentices. In addition to cutting, the core business, this varied enterprise is in particular also active in the construction of special-purpose machines and plant, as well as in robot technology. Over and above this, innovative products are developed in our R&D department, largely in the fields of solar technology, as well as sport and fitness appliances. We counter the difficult local conditions caused by the close proximity to the Czech Republic and Poland by means of a strong regional and mail order work and a special employee and training policy. Additionally, speed is the key to successful survival on the market for a medium-sized mechanical engineering company.



VR Bank Südpfalz, with its 47 branches and a balance sheet total of Euro 1.3 billion in 2003, is one of the largest cooperative banks in Rhineland-Palatinate, focussing above all on the fields of accounts, service, investment and asset management, private and business funding, as well as savings and loan business, real estate and insurance. 460 employees look after the private and business customers of VR Bank Südpfalz, more than 38,700 of whom are members, and hence shareholders of the bank. As a major element of VR Bank Südpfalz, the regional competence facilitates a special, strong customer orientation which is regarded by VR Bank Südpfalz as being decisive for success in the long term.



Xcc Software AG, headquartered in Karlsruhe, is an IT consultancy and system integration company which has existed for 15 years and employs a staff of about 50. The core competence of the enterprise is in software engineering of embedded software, machine- and appliance-orientated IT systems and electronic services for "Smart Products". Xcc Software AG develops made-to-measure technical and industrial software solutions for their customers who are largely enterprises in the automotive sector, in electronics and in mechanical engineering and plant manufacture.

„The results of the intellectual capital statement present us with our current situation in black and white, and therefore provide us with a sound basis for decision-making. We can now complete the discussions about our situation and start carrying out measures for targeted improvements.“

(VR Bank)

## 7.3 Glossary

**Business processes** are chains of activities within an organisation and their network-like contexts. They provide the results of the organisation which are useful to the customers. They describe the interaction of people, operating resources, knowledge and information in cohesive steps, and in doing so can span a multitude of functions.

A **business strategy** describes how to act on the market in future, which investments are necessary for this, at what locations with which products and services one should work, and which measures should be initiated and implemented for research and development.

A **generator** describes a closed loop in the impact network. It consists of two or more influencing factors which amplify one another by means of feedback.

**Human capital** covers amongst other things the skills, abilities and motivation of employees. Human capital is 'owned' by employees who can take their knowledge home with them or on to their next employer. Human capital cannot be completely controlled by the organisation.

An **indicator** is defined as an absolute or relative benchmark serving to describe a circumstance. The comparability of benchmarks is conditional on their being clearly defined, always calculated in the same way and available within a set interpretation framework.

**Influencing factors** will affect the organisation's business success and the achievement of goals when they change. They can relate to tangible (e.g. plant and machinery), financial (e.g. flows of loan and equity capital) and intangible circumstances (e.g. employee skills and organisational culture).

**Intellectual capital** is mostly sub-divided into human, structural and relational capital. It

describes the intangible resources of an organisation.

An **intellectual capital statement** is an instrument to assess and to develop the intellectual capital of an organisation. It shows how organisational and business goals are linked to the internal processes and the intellectual capital of the organisation using indicators to visualize these elements

An **interdependency network** is the graphical portrayal of the influence relationships of an organisation. It permits the identification of interdependencies between them.

A **knowledge-intensive organisation** is typified by its focus on the use or creation of highly-specialised, topical knowledge. The result of this is

„If one takes a look at the context in the impact networks within the intellectual capital statement, only then does it really become clear what is expected of a manager today, namely to make targeted, correct and future-proof decisions whilst faced with an incomprehensible confusion of influences. The intellectual capital statement makes these contexts transparent and hence demonstrates where one can make fine adjustments.“

*(Manfred Wunderlich, B+M Blumenbecker)*



both long familiarisation periods and requirements for skills, continual learning, innovation and creativity, as well as expanded scope for employees to act and take decisions. The complexity related to knowledge-intensive tasks leads to a considerable communication and coordination effort since the expertise of different specialist fields and areas within the company is frequently required.

**Knowledge processes** may be for instance innovation and learning processes, but also processes to transfer knowledge between individuals and organisational units. They lead to further developments and changes in the organisation. Knowledge processes often run parallel to other business processes, and are frequently not explicitly defined or documented in organisations.

A **knowledge strategy** describes the positioning of the organisation in sub-sections of intellectual capital. It forms the basis for their care and further development.

**Leadership process:** The leadership processes are the central, most important processes of an organisation around which all other processes are grouped.

**Relational capital** describes an organisation's relations with customers and suppliers, as well as with other partners and the public.

**Structural capital** covers all those structures and processes which the employees need in order to be productive and innovative overall. It consists of all those intelligent structures which remain when the employees leave the organisation after work.

„Keeping employees thinking about a topic which carries us forward!“

*(Herr Köhler, Schneider Bau)*



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