
Preliminary Experiences with InCaS

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Structured Abstract

Purpose – This article summarizes the preliminary InCaS project results and discusses next steps to improve as well as to disseminate the idea in order to gather additional experiences and data with the long term objective to better exploit Intellectual Capital.

Design/methodology/approach – This paper reviews the research objectives of InCaS based on the project objectives and documents the status quo.

Originality/value – InCaS was completed by the end of 2008, therefore a timely review and dissemination of results seems to be beneficial.

Practical implications – Early information and involvement of the scientific community as well as potential applicants will contribute to advance the InCaS methodology.

Keywords – Intellectual Capital Statement, Assessment, Guideline, Experiences, Methodology.

Paper type – Practical Paper

1 Introduction

To obtain competitive advantage, it is crucial for small and medium sized enterprises to utilise knowledge efficiently and to enhance their innovation potential. Furthermore, reporting these intangible assets systematically to customers, partners and investors, as well as creditors has become a critical success factor. Managing their specific “Intellectual Capital” (IC) is therefore becoming increasingly important for future-oriented organisations. Conventional annual reports and management instruments are not sufficient any more to deliver transparency on value creation and value creating potentials in organizations, because intangible assets are not considered so far.

An Intellectual Capital Statement (ICS) is an instrument for assessing, reporting and developing the Intellectual Capital of an organisation (InCaS Guideline, 2008).

Establishing an Intellectual Capital Statement in a company

- helps to determine strengths and weaknesses of strategic IC factors (diagnosis)
- prioritises improvement opportunities with the highest impact (decision support)
- supports the implementation of actions for organisational development (optimisation and innovation)
- enhances transparency and the involvement of employees (internal communication)
- diminishes strategic risks and controls the success of actions (monitoring)
- facilitates the communication of corporate value towards stakeholders (reporting)

Based on existing national experiences with Intellectual Capital Statements, an international consortium was formed to test, if these concepts could be

generalized into a European guideline or if regional differences require localized concepts. Special emphasis is given to Small and Medium sized Enterprises (SMEs) and their preferences regarding budget methods, one-stop-shopping and low barriers of entry. This article summarizes the current project results of InCaS – Intellectual Capital Statements in Europe – immediately after the formal end of the project and discusses next steps to improve the model as well as to disseminate the idea in order to gather additional experiences and data with the long term objective to better exploit Intellectual Capital in European SMEs.

2 InCaS Project objectives and results

InCaS focused on the following objectives:

- **Integration and consolidation** of national and international approaches on Intellectual Capital Statements (ICS) on the European level
- **Development of a consolidated European framework** for ICS adapted to the special requirements of SMEs
- **Facilitation of ICS comparability** by developing branch-specific ICS elements (Harmonisation)
- Development of **minimal requirements for IC reporting** (IC Benchmarking)
- **Bottom-up contribution to pre-normative standardisation** based on valid and representative empirical data
- **Testing and evaluation** of the developed approach for “proof of concept” and maximum dissemination impact
- Minimise complexity by **providing a simple implementation procedure** for ICS suitable to the needs of European SMEs in consideration of the experiences gained in practice
- **Development of a practical ICS Guideline** to enable SMEs to implement an ICS on their own

The following specific results of InCaS were obtained by delivering several work packages.

2.1. European ICS framework

To achieve a minimum consensus on the scientific level as well as a solid working frame for pilot-implementations, the first objective of InCaS was to review the state of the art and suggesting a common ICS methodology and implementation procedure by leading IC experts to be used by all InCaS partners. Both are now available on the project website www.incas-europe.org. In later project phases, this paper will be the basis for further contributions to standardisation, taking into account the practical experiences gained from the pilot-implementations.

The central formal result of the process of implementing an ICS in an organization, particularly in an SME, according to InCaS, is the IC management portfolio that relates strengths and weaknesses of Intellectual Capital (mapped on the x-axis) to relative strategic importance (mapped on the y-axis). Figure 1 illustrates a typical portfolio, where managerial attention should be focused to the upper left corner: in figure 1, HC3 presents employee motivation as one (of many) driver of IC. Current assessment is low, while importance is high, thus actions for improvement of this factor will support a higher marginal utility than improving a factor in the lower right sector (e.g. RC2).

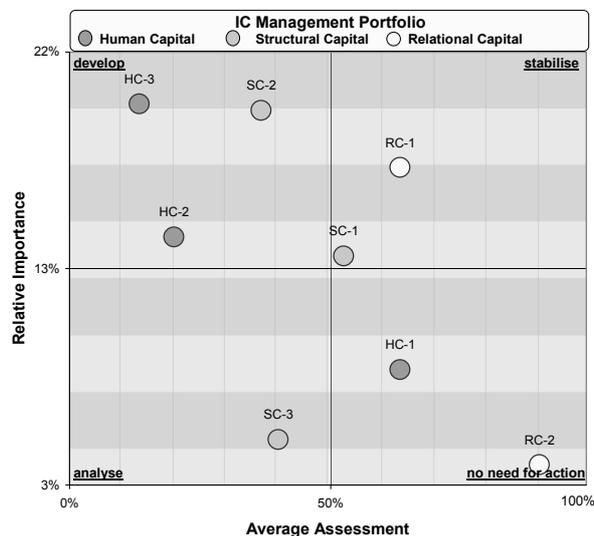


Figure 1 – Example of an IC Management Portfolioⁱ

2.2. 25 Pilot-implementations

Since InCaS refers to a strong empirical research and development approach, one of the basic ideas of InCaS was to choose 25 pilot-SMEs in 5 core countries to implement a first sample of their specific ICSs, supported by specially qualified trainers and consultants (implementation leaders). The results of these pilot-implementations were used in numerous ways:

- Empirical research results to foster further methodical development; particularly after the first round of implementation, several clusters for improvement and fine tuning of the methodology could be identified and where adapted for the second round. For example, several checklists were improved and clarified to better support the SME requirements. Hence, this approach actively supports the action-learning-concept and fast prototyping.
- “Real” ICSs published for proof-of-concept and raising public awareness; These reports are used as show cases for training purposes as well as national road shows and presentations to support dissemination.
- Good practice partners support marketing and multiplication of the InCaS method across the European SME community; this activity is still in progress. ICS of all participating SME-partners are available in five languages on the project website.

The implementation of ICS in SMEs follows a structured process which is visualized in figure 2. For further explanation, please refer to the InCaS Guideline (2008).

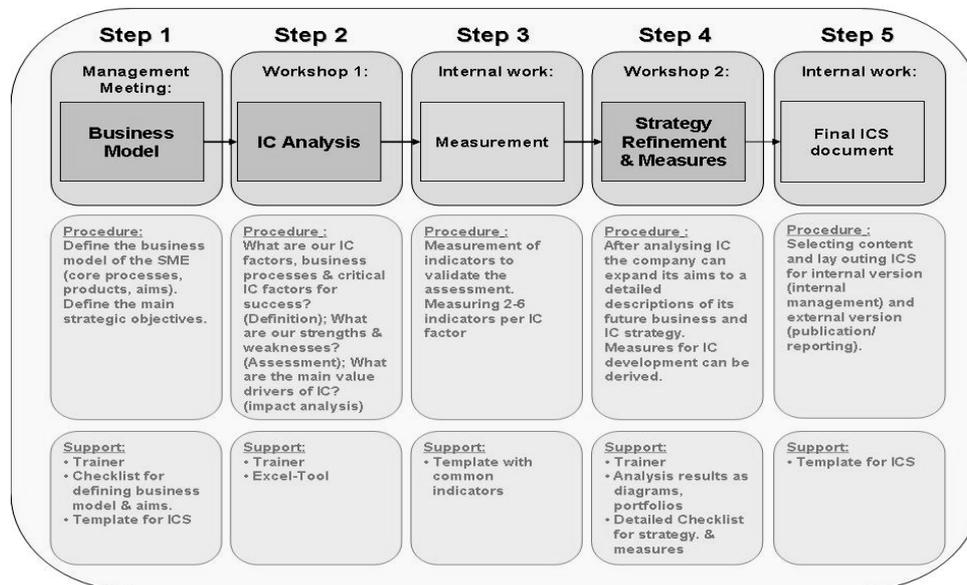


Figure 2: The InCaS Procedural Model (Fraunhofer IPK 2006)

Characteristic for the InCaS methodology is a team based approach to integrate perspectives of all levels and functions of knowledge workers and decision makers. The structured dialogue supports fast and immediate learning about organizational strengths as well as deficits. Most of the IC-evaluation process remains embedded in the organization and therefore contributes to immediate change processes. This is a specific SME requirement and distinguishes the InCaS methodology from other approaches which focus more on external reporting issues or on the financial market.

2.3. Supporting software “ICS-Toolbox”

A software tool (ICS toolbox) to support trainers and SMEs in the structured documentation of the IC evaluation and to accelerate the ICS process was developed. It builds on the experiences of pilot-SMEs and trainers as the two major user groups to support intuitive and self supported application. Consisting of several modules for methodical support and data management, the final InCaS toolbox will be connected to an online e-learning platform and a central database for IC benchmarking in phase III.

By early 2009, the toolbox is available as a Microsoft Excel template and can be downloaded by certified Trainers from the project website. A Microsoft Windows based application in English language will be available in the near future. Plans for further improvement of the software, continuous maintenance and support depend on finding a favourable licence scheme as well as funding. Based on EC-contracts, the software is property of national IAGs.

2.4. European ICS Guideline for SMEs

Summarising all research results and practical experiences as well as the reviews of IC experts, the capital market and standardisation bodies, the project's main aim was to publish a "European Guideline for Intellectual Capital Statements" serving as an instruction manual for further SME-users as well as defining minimal standards for IC auditing and benchmarking activities. The guideline is now available in print as well as a free download from the project website. By the end of 2008, 11.000 could be tracked. A benchmark for future expectations provides the German Leitfaden Wissensbilanz, a national initiative managed by Arbeitskreis Wissensbilanz since 2003, which was downloaded more than 40.000 times from only one of two hosting websitesⁱⁱ.

Based on this evidence and the fact that Germany represents a little less than one quarter of the EU population, it is realistic to expect up to 150.000 downloads in the near future.

The guideline covers the implementation process and is intended to support independent "do-it-yourself" implementation by SMEs. However, as the requirements are typically exceeding the managerial competence as well as capacity within a typical SME, employment of certified trainers is recommended. External support typically contributes to reduce unrealistic biases in the assessment of IC as well as improved formal consistency which is the ultimate requirement for an IC audit.

2.5. Sustainability and quality assurance concept

As a result of harmonisation and standardisation efforts, the InCaS implementation procedure and the minimal IC reporting requirements guarantee a certain level of quality. An important part of project learnings relate to several differences associated with individual implementation steps. Wordings as well as

procedures were interpreted flexibly by the trainers. Inadequate translations or unexpected interpretation led to interesting derivatives. In the future, the flexibility to adapt to specific situations and restrictions of a country, a branch or the business cycle of an organization should be possible. With the availability of more empirical data, these initial troubles will be overcome. The feedback process to improve the general methodology forms a precondition and should be used in a similar way as it was done during the InCaS project. Otherwise, the method could prove inflexible to individual needs or, on the other end of the spectrum, lead to fragmentation and Babylonian confusion.

An example for diverse discussions and heterogeneous implementations is the scoring process for IC with the objective to come up with the relative importance of IC in a specific organization. The current wording supports not only one procedure, but leaves room for several interpretations. The flexibility of the guideline is generally perceived as an advantage. However, the ambiguity could potentially cause irritation and confusion instead of the intended flexibility.

Another example relates to management know-how. Many SMEs acquired considerable knowledge on their specific processes, but frequently lack specific management know-how. This is particularly true for small enterprises, where founders are still in the top position. Deficits on management technique lead to ad hoc activities and notorious trouble shooting in contrast to systematic long-term development processes which typically make far better use of scarce resources. Managers are aware of their shortcomings and make it clearly visible in low average scores for the dimension of systematic management of Intellectual Capital.

The centralized InCaS audit, which was developed by Fraunhofer IPK in close collaboration with the InCaS core team, could serve a) as an independent procedure to collect empirical data about implementation, b) function as a guardian agent to protect the current and valid standards of the InCaS guideline and c) feed back useful methodological evolutions (!) of trainers and users to scientific evaluation and an improved updated InCaS guideline.

Additionally, an InCaS toolbox combined with a central database backed up by a solid maintenance model and data management system could ensure valid IC benchmarking as a low cost service for SMEs after securing funding and thus,

trigger further use of the InCaS method and ensure quality of ICSs all over Europe.

2.6. More than 100 European ICS-Trainers qualified

It was intended to instruct more than 100 trainers with the InCaS methodology, based on to the experiences with the 25 pilot-implementations. European IAGs, trainers and consultants should be enabled to provide a reliable service for SMEs and function as multipliers to spread the InCaS method in Europe. Fraunhofer Technology Academy offers certified trainings all over Europe in order to support these efforts.

Trainers and consultants usually serve a local clientele and follow economic interests. It is regularly not their first concern to contribute to learning and innovation but to defend their existing business and develop new options in competition, not collaboration to others. The conflict of interest of sharing knowledge and learnings from empirical work with potential competitors versus potentially benefiting from an improved method and more advanced tools is not easy to resolve. This probably constitutes a structural problem of European Union funded research projects and should be addressed. Open Source oriented academic research is not compatible with competitive business models.

Therefore a centralized and periodic renewed training model was developed and is being implemented by the consortium. It supports the systematic transfer of up to date methods and creates an alumni group of trainers with similar quality standards.

2.7. More than 1.000 SMEs know about the benefits of ICS and want to implement it

After 25 pilot-implementations and the optimisation of the ICS methodology, the European ICS guideline so far reached more than 1.000 SMEs throughout Europe by well-targeted marketing and dissemination activities. The InCaS multiplication concept not only set up a central website (www.incas-europe.org) and national marketing campaigns, but also includes an effective multiplier community (IAGs, trainers and consultants) and best practices for peer-to-peer marketing from SME to SME.

Two dichotomic trends could be observed during the first stage of the dissemination process: Interest in advanced management methodologies, particularly related to intangible assets, is high among SMEs. However, many of the organizations face some resistance to actively implement new management methods and improve transparency.

One phenomenon relates to the desire of being perceived as innovative while still being conservative in action. Organizations are uneasy with the potential long term effects of InCaS on corporate culture and external expectations. They are not entirely convinced on the economic benefits of additional methods. With availability of longitudinal studies on the economic and financial benefit of ICS, these reservations will be vanishing.

3 Additional Learnings

In addition to the intended project results, some other learnings could be recorded. They will have an impact on the further development of InCaS and on the focus of future research related to IC.

3.1 Organizational maturity is more relevant than sector

It was intended to identify branch modules, containing typical IC indicators for each branch. This should contribute to ICS standardisation and comparability between organisations. However, the first interpretation of empirical data suggests focusing on organizational maturity instead of branch. There are more similarities of Start up companies within different sectors than between a start up and a large and mature organization of the same branch. However, there are differences between industry and service oriented organizations. Figure 3 gives an impression of this phenomenon without going too much into details. The average assessment of the IC factors in terms of systematic management is clearly lower than assessment of quality and quantity of the same factors. This indicates a strong demand for additional IC management in SMEs.

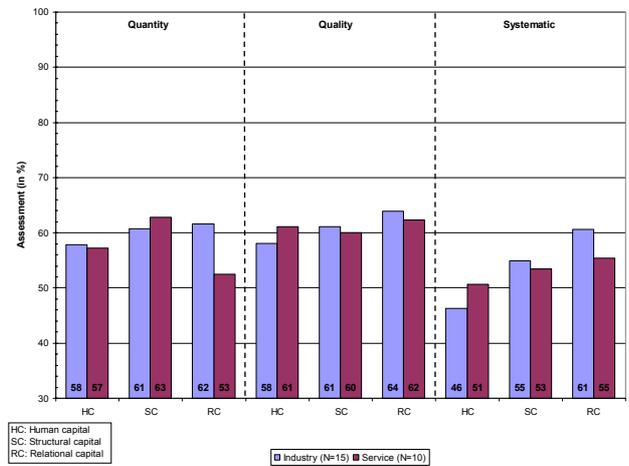


Figure 3: Assessment of IC factors (branches/sectors) (Fraunhofer IPK 2008)

Intellectual Capital is highly differentiated. The traditional segmentation into Human Capital, Structural Capital and Relational Capital is used to dig into more detailed factors. Figure 4 reveals substantial perceived differences among SMEs regarding the relative importance of these factors to achieve the strategic objectives. Not surprising are the large gaps in the perceived importance of industry and service organizations in the relational capital. They indicate clearly different business models of these sectors and support the hypothesis that a benchmark of IC management must take into account more than only an aggregated IC index.

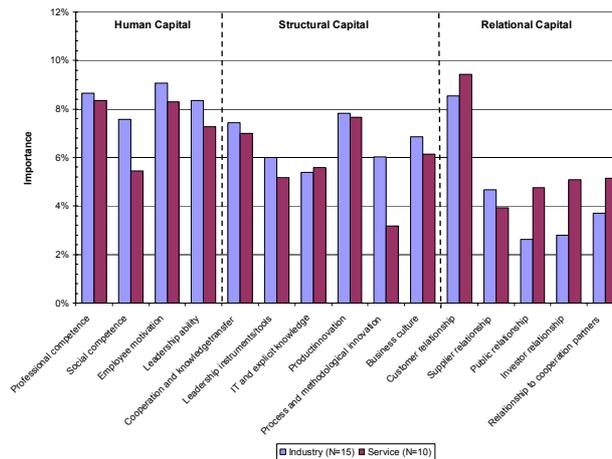


Figure 4: Importance of IC factors (branches/sectors) (Fraunhofer IPK 2008)

3.2. IC Benchmarking concept

The InCaS standards as suggested in the InCaS guideline combined with a broad consensus (Capital Market Community, standardisation bodies) on minimal reporting requirements has the potential to support comparability of IC on the European level. However, there is still more research needed, in order to identify relevant benchmarking issues. Only substantially larger databases and in dept case analysis will allow customized recommendations.

3.2 Integrated instruments versus focus

Many SMEs are reluctant to apply diverse management instruments. They have a preference to integrated approaches with several modules that can be used on demand without the need of a full commitment upfront. As a consequence, the InCaS method was adapted after the first year and currently covers seven additional modules which are of particular demand within the SMEs.

- M1 Enhanced Business Model
- M2 Vision
- M3 Business Processes
- M4 External Environment
- M5 Learning Cycle
- M6 Follow-up ICS
- M7 ICS Quality Requirements

In the next stage, these modules might be combined with existing instruments for organizational development and learning in order to support the SME competitiveness and innovation capacity. There is particular need for a better connection of measures for improvement derived from the ICS into regular managerial activities and monitor progress of implementation as well as achieving the desired strategic results. However, there is a danger of trying to over engineer InCaS. It should not mutate into a new general management system but focus on its mission to improve transparency on Intellectual Capital and identify management priorities. Clear interfaces to other management concepts such as strategy formulations or process optimizations as related but independent topics are needed and should not be integrated.

Even though the process of implementing InCaS is supported by certified trainers, it is still challenging for some organizations. There is demand to further simplify the approach and reduce cost and effort to get an ICS. This will be subject of further research.

References

- Alwert, K.; Bornemann, M.; Kivikas, M. (2004) "Intellectual Capital Statement – Made in Germany. Guideline" Published by the Federal Ministry for Economics and Technology, Berlin, [online], <http://www.bmwi.de/BMWi/Redaktion/PDF/W/wissensbilanz-made-in-germany-leitfaden,property=pdf,bereich=bmwi,sprache=de,rwb=true.pdf>
- European Commission: Intellectual Capital Statement – Made in Europe, Brussels, 2008.,
- Mertins, K.; Alwert, K.; Will, M. (2006) "Measuring Intellectual Capital in European SME", Proceedings of I-KNOW '06, 6th International Conference on Knowledge Management, published by Tochtermann, K.; Maurer, H., Graz, Austria, pp 21-25
- Mertins, K.; Will, M. (2007) "A consistent assessment of Intellectual Capital in SMEs", Paper read at the 8th European Conference on Knowledge Management, Barcelona, Spain.
- Will, M.; Wuscher, S.; Bodderas, M. (2006): „Wissensbilanz – Made in Germany – Nutzung und Bewertung der Wissensbilanz durch die Pilotunternehmen“, Recent study by Fraunhofer IPK, Berlin. [online] [http://www.akwissensbilanz.org/Projekte/KMU_Wirkungstest Teil 2.pdf](http://www.akwissensbilanz.org/Projekte/KMU_Wirkungstest_Teil_2.pdf)

ⁱ As figure 1 serves as an example, the factors are not decoded. For further details, please check the InCaS guideline.

ⁱⁱ www.akwissensbilanz.org and <http://www.bmwi.de/BMWi/Navigation/root,did=147174.html>