Intellectual Capital Reporting (ICR) („Wissensbilanz“) - Made in Austria

The Austrian approach, experience made & a look into the future

Contribution in the framework of the seminar

Intellectual Capital for Communities

June 20th, 2005,
F-75016 Paris, World Bank Office, 66, Avenue d‘Iéna

by

Prof. Günter Koch
What is Knowledge? What is Know How?

THINKING

PERCEPTION

EXPERIMENT

EXPERIENCE

„Knowledge“ versus „Know-How“

objective

subjective

Performance-Knowledge

Educational Knowledge

Integrative Knowledge

Managing own & social life by Know How

e.g. application oriented research à la ARC (→Technology)

Education
Universities
Written Doc’s (Encyclopedia)
Libraries & Museums

Philosophy
Literature
Arts

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Vortragsversion
2003 - an anniversary: 5 years of ICR at ARC= in A

1999
2000
2001
2002
2003
...

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The history towards the Austrian ICR method

Quality Mgmt in Software Engineering

- CMM (SEI)
- SPICE (ISO 15504) (in its 1st version made @ ESI !!)
- ISO 9000
- BOOTSTRAP (TU Graz, BOSCH, ETNOTEAM et al.)
- EFQM / AFQM

U. Schneider, Univ. Graz (+ Pulic and Bornemann): First attempts in defining IC

K.H. Leitner, Seibersdorf research building up expertise in knowledge mg’t

Initial publication: „The BOOTSTRAP Method“ (Günter Koch, Stuttgart, 1992)

„IT Balanced Scorecard“ (1st Study made @ ESI)

ISO 15504 /SPICE
- „SynSpace“
- SynQuest (HM&S)

„IT Balanced Scorecard“ (1st Study made @ ESI)

- New strategy
- Strategy days / Visioning
- Balanced Scorecard
- Intellectual Capital- Reporting Model
- ICRs since 1999ff
- Definition of markets, 1st time: product catalogue
- Customer satisf. analysis

Key publication on ARC ICR: OECD, Berlin 2000: Koch, Leitner & Bornemann


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The Austrian Model for Intellectual Capital Reporting

Visions

Potential for creating values

Core Processes

Results

Human Capital

Core Process 1

Financial Results

Knowledge Goals

Structural Capital

...

Immaterial Results

Corporate Goals

Relational Capital

Core Process n
An example for value creating processes at the Austrian Research Centers (ARC)

Results
- New industrial R&D-Cooperations
- Patent for a new technology
- Certificate for a mgt. system
- New customer contract

Legend:
- LP = „Lead Project“ independent research
- KF = Project in cooperation with industry
- KU = Research contract from customer

Knowledge Element / Engineering / know how production

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Consolidated Financial Results (1998-2003 (+2) Austrian Research Centers-Group)

In MEUR

- 1998: 72,74
- 1999: 79,14
- 2000: 92,47
- 2001: 91,82
- 2002: 94,37
- 2003: 102,19
- MFP 2004: 119,98
- MFP 2005: 129,49

Summe betrieblicher Erträge inkl. Investitionszuschüsse 1998: 1.60  1999: 2.05  2000: 1.09

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The basic differences in the structuring of categories of intangible capital in major models

<table>
<thead>
<tr>
<th>ARC (Koch, Schneider, Leitner)</th>
<th>Human Capital</th>
<th>Relational Capital</th>
<th>Structural Capital</th>
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</thead>
<tbody>
<tr>
<td>Skandia Navigator (Edvinsson, Malone)</td>
<td>Human Capital</td>
<td>Customer Capital</td>
<td>Structural Capital</td>
</tr>
<tr>
<td>Intangible Asset Monitor (Sveiby)</td>
<td>Human Capital</td>
<td>External Structure</td>
<td>Internal Structure</td>
</tr>
<tr>
<td>Calculated Intangible Value (Stewart)</td>
<td>Human Capital</td>
<td>Customer Capital</td>
<td>Structural Capital</td>
</tr>
<tr>
<td>Intellectual Capital Audit (Brooking)</td>
<td>Human Capital</td>
<td>Market Assets</td>
<td>Infrastructure Assets</td>
</tr>
<tr>
<td>German Wissensbilanz-Model (←ARC)</td>
<td>Human Capital</td>
<td>Relational Capital</td>
<td>Structural Capital</td>
</tr>
<tr>
<td>German Draft Accounting Model</td>
<td>Human Capital</td>
<td>Customer Capital</td>
<td>Supplier Capital</td>
</tr>
</tbody>
</table>

- Human Capital
- Relational Capital
- Structural Capital
- Customer Capital
- Supplier Capital
- Process Capital
- Innovation Capital
- Location Capital
- Investor Capital
Generalisation of the Koch-Schneider ICR Model

Wussensbilanz – Made in Austria

Strategies
- Vision
- Mission

Potentials / Capital
- Human Capital
- Structural Capital
- Relational Capital

Key Processes
- R & D
- Bus. Dv’t
- Marketing

Results / Effects
- Financial Results:
  - Balance
  - Profit & Loss
  - Analytics
  - ... R & D
- Non-Financial Results:
  - Human...
  - Structural...
  - Relational Capital Incr.

Feeding back „non financial capital profits“
Today’s approach to look onto enterprises
IC Reporting supports the re-integration of several approaches governing today‘s companies‘ mgt.

- Corporate Governance
- Enterprise as a producing or service supply actor in the market
- New Financial Reporting after IFRS or GAAP
- Strategic by Balanced Scorecard
- BASLE II
- Risk Management
- Quality Management Using e.g. ISO or EFQM standards
- Control & check information imposed by law on Organisations such as environmental reports etc.
Integration of methods through ICR

Wussensbilanz – Made in Austria

Law & Regulation

Taxes

Image

Results / Effects

Innovation

Strategies Potential

Key Processes Results / Effects

Capital

Innovation

Mngt.

Models;

Creativity Methodologies;

R&D specific mgt. methods

Financial Results:

• Balance

• Profit & Loss

• Analytics

• ... R & D

Bus. Dv't

Marketing

Law & Regulation

Taxes

Image

Available Talents

Capital Market

Feeding back „non financial capital profits“

IFRS / IASB: Standard Reporting, in specific § 38

Other non-financial reports:

• Environmental Report

• Social Report

• ...

Non Financial Results:

• Human...

• Structural...

• Relational...

..."Output"

Corporategovernance

Mission

Vision

Human Capital

Structural Capital

Relational Capital

Know-Goals

Balanced Scorecard

Wissensbilanz

ARC – Model

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Strategic

Management

Quality Management Systems;

• Basle II – Ratings

Customer Management;

• Network Analysis

• Alliance Mgmt.

• Value Creation

• Process Mgmt.

• Cause- Effect- Analysis

ICR supports to

create a holistic view

communicate „the uncommunicatable“

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Austria (after Scandinavia, but as the pioneer in the German speaking countries) has run a set of remarkable pilot projects in IC-Reporting

The originals since 1999: ICRs of the Austrian Research Centers (ARC Wissensbilanz)

Compound publication on IC - Reporting by Austrian universities

1st complete ICR of a university: Danube University Krems (2002)

Action: ICR for smallish companies

ICR in large industry (2001)

Austrian National Bank: 1st European Nat. Bank providing an ICR

OeNB – Wissensbilanz 2003

„Knowledge for Stability“
My subjective resume after 5 years of experience with ICR

• **ICR is one method** of analysis amongst several
• **ICR supports a holistic strategic view**, in my concrete case being applied in order to manage the „turn arround“ of a research organisation (ARC)
• **IC reporting** as a process needs an accompanying quality strategy in order that nonsense or even damaging conclusions will not be produced
• The **ICR reference model** provides for an excellent basis for discussions on an organisation’s knowledge economics and competitiveness
• The currently **ICR methods in use** are well suited in order to analyse organisations which, first hand, have non-economic objectives (such as social agents, hospitals, museums, universities, …)
• The rules governing the transformation of **IC values into „monetary values“ need** further intensive academic research
A set of questions to be solved from a „theoretical practitioners“ point of view

• „Statistics“: Is classical statistical analysis sufficient (by method)? Knowledge is not a subject to be acquired by numbers only, rather than by the „right“ interpretations → the right models are needed!
• Can models used at microeconomic level also applied on macroeconomic level? My position is: yes, under certain adaptions. (Some colleagues think, that this is not possible. Evidently those who are publishing „regional knowledge analysis studies“ make implicit assumptions about a „knowledge society & economy model“ without making clear what they mean by „knowledge economy“?
• We are about to step over the doorstep toward a new science theory. The deficiencies identified in methods, practice and „new understanding“ need a new momentum and movement, which is launched today through the MANIFESTO announced in this seminar.
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