



WORLD INTELLECTUAL
PROPERTY ORGANIZATION



CONSIGLIO NAZIONALE
DELL'ECONOMIA
E DEL LAVORO (CNEL)



GOVERNMENT OF ITALY



UNITES STATES PATENT
AND TRADEMARK OFFICE

IPR, Intangibles & Valuation: Visualising Information for Finance Access

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“The substantial foundation of the industrial corporation is its immaterial assets”

“There may be peculiar difficulties in the way of reducing this goodwill to the form of a fund, expressing it in terms of a standard unit”

Thorstein Veblen, 1904

AGENDA

- 1) Intangibles, Intellectual Capital and the new economic environment
- 2) The traditional accounting approach to intangibles (“the problem”)
- 3) A new approach to the management and reporting of Intellectual Capital
- 4) International initiatives
- 5) The way forward and concluding remarks



1. INTANGIBLES, INTELLECTUAL CAPITAL AND THE NEW ECONOMIC ENVIRONMENT

The New Value Creation Process and Its Implications

- Change in company production processes
- Strategic aspects are research and innovation, marketing and know-how, customer relationship, entrepreneurial and managerial skills and not so much manufacturing →
- All phases and activities where intangibles are key → Patents & IPR are crucial intangibles
- Today, intangibles are considered the main drivers of sustainable value creation over time

Towards the “Conceptual Company” (Greenspan/Lev)

- Negligible physical assets (low PP&E, inventories)
- Intangibles-intensive: R&D, brands, alliances, human resources, organization capital
- Strong patent/trademark protection
- Extensive outsourcing of manufacturing, distribution and other low-knowledge functions
- Extensive trade in intellectual property (IP): patent sale and licensing, know-how sale
- Flexible business model



Intangibles and Risks

- However, investment in intangibles is associated with high levels of uncertainty in terms of outcomes and timing
- Hence, intangibles have also a negative side → recent history has shown that intangibles may “evaporate” very fastly, giving rise to large losses → intangibles are also a potential liability
- Fundamental lack of methodologies for measuring and assessing intangibles-related risks



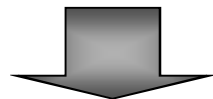
Definitions of Intangibles

Intangible assets can be defined as a source of future benefits that is without a physical embodiment:

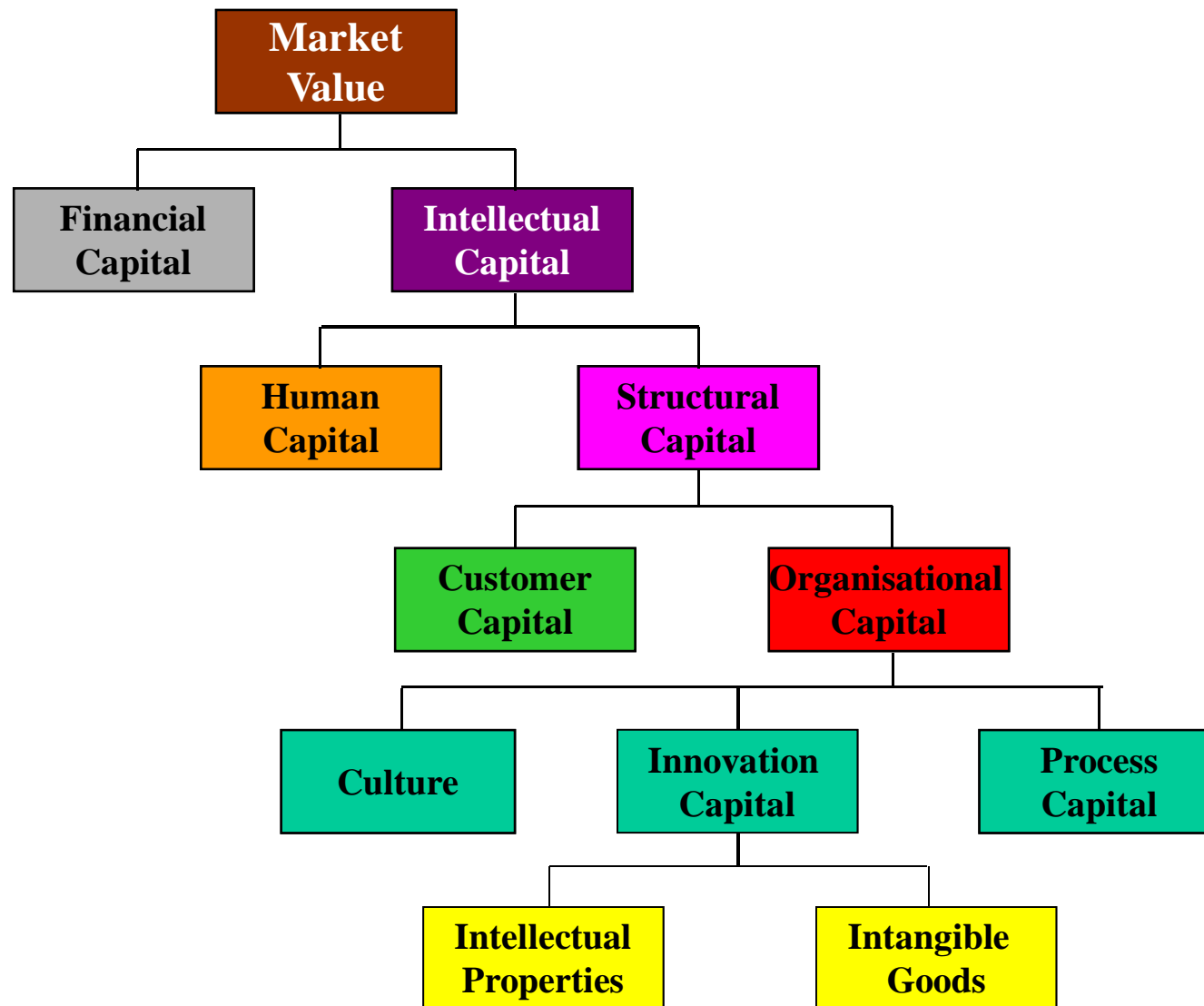
- Intellectual property is an intangible asset with legal rights
- Includes innovation-related intangibles (*R&D, patents*), but also market-related (*brands*), human resource (*competencies & skills, training*), and organizational intangibles (*internal structures, systems, procedures, routines, and processes*)
- “Hard” intangibles (tradable) vs. “Soft” intangibles

Intellectual Capital

Intellectual Capital – IC – is the internal (*competencies, skills, leadership, procedures, know-how, etc.*) and external (*image, brands, alliances, customer satisfaction, etc.*) stock of intangibles “available” to an organisation, which allows the latter to transform a set of tangible, financial and human resources into a system capable of creating stakeholder value through the pursuit of sustainable competitive advantages (Zambon, 2000)



Intangibles become IC only when they are durably and effectively internalised or appropriated by an organisation₁₀



Source: *Intellectual Capital Report*, Skandia, 1998

Intellectual Capital as Disaggregation of the Market Value

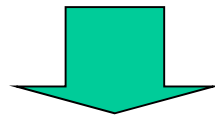
Re-focussing Managerial Attention on Intellectual Capital

- Need for regaining control by managers on the performance and knowledge generation processes
à understanding long-term value creation drivers
- According to Mr. Sam J. Palmisano, Chief Executive Officer (CEO) of IBM (April 2006):
“The economy is re-aggregating itself around the Intellectual Capital, the capacity of making technology and information live together as innovation”

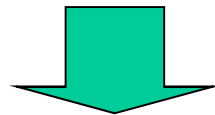
2. THE TRADITIONAL ACCOUNTING APPROACH TO INTANGIBLES (“THE PROBLEM”)

THE BASIC PROBLEM

Companies need to manage their intangibles in order to manage in a conscious way value creation processes



Information is necessary to manage



There is a lack of structured, systematic, reliable, and comparable information on company intangibles

Traditional Accounting for Intangibles

(e.g. International Accounting Standard no. 38)

- General suspicion of accountants towards intangibles
- Stress on reliability and not on relevance → no reliability = no accounting recognition
- No recognition possible for internally generated intangibles (e.g. R&D, Brands, Training)
- Conservative measurement criteria → general principle: immediately expensed as a cost
- Goodwill is a too synthetic representation of intangibles
- In general, rather poor information on long term growth drivers (key performance indicators – KPIs)
- Backward-looking information

Economic Consequences

This situation of lack of information on intangibles induces many adverse economic consequences:

- It easily produces short-termism, behavioral myopia, ill-informed allocation decisions, market volatility, information asymmetry, insider information, credit crunch for companies, etc.
- Risk is seen only in monetary/financial terms

“Information Cascade” Effect

- In this situation of information and valuation deficit on Intangibles, there is a serious risk that an information cascade phenomenon could take place (Zambon, 2003)
- In behavioural finance, this effect occurs when one agent looks at the behaviour of other agents for making a decision → spreading of partial ignorances
- “The blind that leads the blind” effect → increase in price volatility in the financial markets and in company cost of capital

Costs of Mismeasurement

- Firm level: risk of wrong strategies
- Industry level: misallocation of resources within and between industries; skill bias
- Capital market level: under- or over-valuation of companies; misallocation of resources; volatility
- Country and Supra-National level: policy making based on imperfect set of indicators may result in inappropriate policies





3. A NEW APPROACH TO THE MANAGEMENT AND REPORTING OF INTELLECTUAL CAPITAL

The Future: A New Management and Reporting Tool

Intellectual Capital (IC) Statements or Report on Intangibles **à** based on indicators **à** most of them of a non-financial nature

The partitioning of IC into three interrelated sections is today quite widely accepted: Human Capital, Organizational Capital (including Innovation Capital), Relational Capital are visualised/measured through indicators and parameters, and accompanied by a Narrative that links these parameters with company Strategy

IC Report Composition

Relational Capital

- Clients
- Suppliers
- Business Partners
- Image/Reputation on the market
- Communication

Organisational Capital

- Know-How / IPR
- Innovation
- Organisation
- Management Control Systems
- R&D

Human Capital

- Skills & Competencies
- Staff Turnover
- Education level
- Management Leadership
- Employee Satisfaction / Engagement



Benefits and Features of IC Visualisation



Internally

- Creation of a measurement and codification culture
- Knowledge management and sharing within org'on
- Identification of intangibles-linked value drivers & risks
- Support to the investment/divestment decisions
- Definition of new executive compensation and incentive systems
- Improvement of the internal corporate image
- Aid to the recruiting of the best talents
- Help to get R&D/IPR Depart out of a sort of “ghetto”



Externally

- Better visualisation of company value creation processes for investors & financial analysts
- Easier – and possibly cheaper – access to funding sources from banks (Basel 2 ratings)
- Increased transparency on financial markets
- Support to merger and acquisition operations and stock exchange listings (initial public offering – IPO)
- Positive impact on external co. image & reputation
- More solid and documented disclosure on sustainable competitive advantages

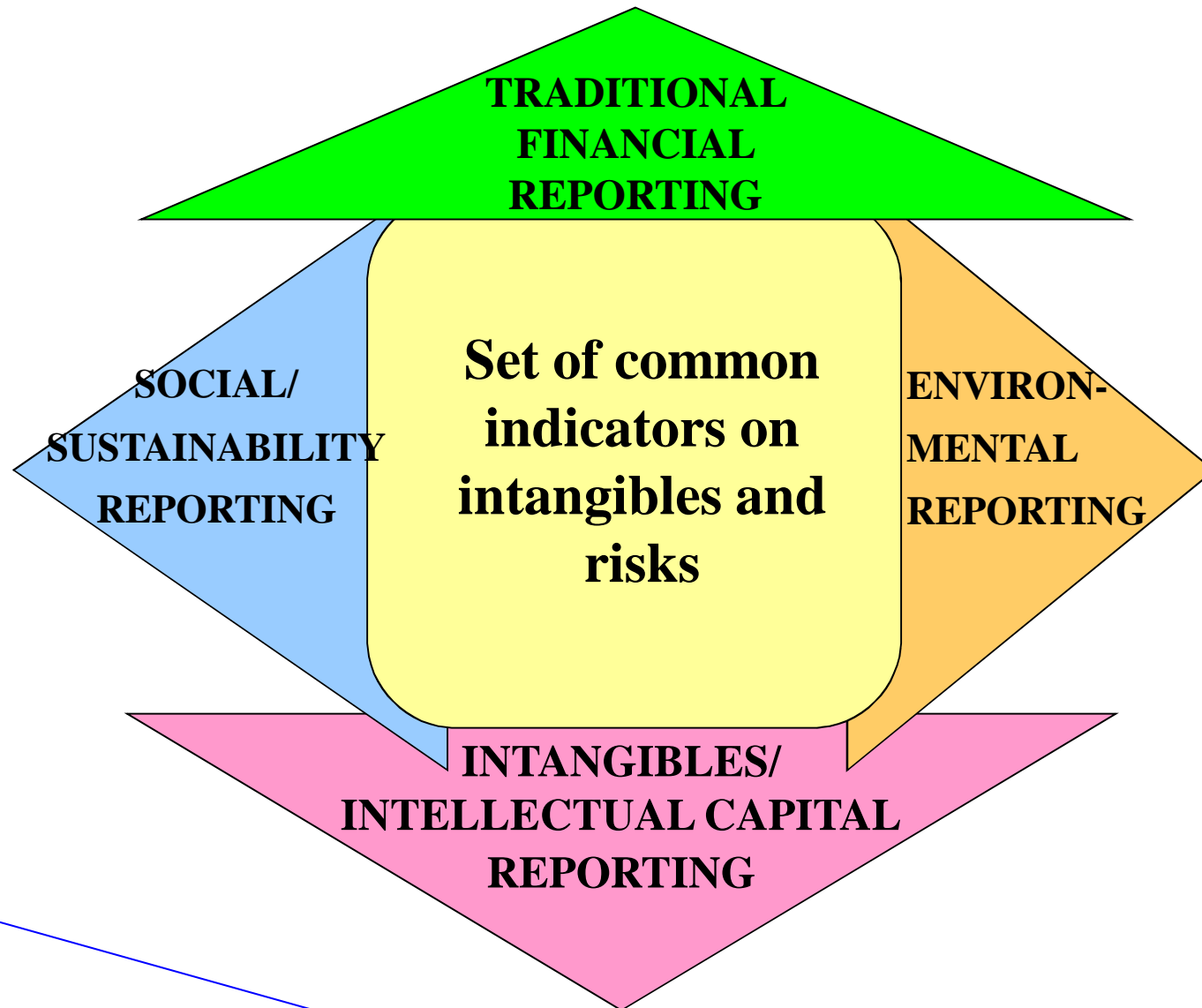
The Future: Intellectual Capital and Corporate Social Responsibility (CSR)

Social and Environmental Issues can be seen as part of the management of Intellectual Capital (image/reputation/risk management)

Therefore, social and environmental capital can be considered as particular intangibles to be managed by companies for achieving long-term sustainability and preserving income generation capacity **à** convergence towards “One Report”

The Integrated Reporting System

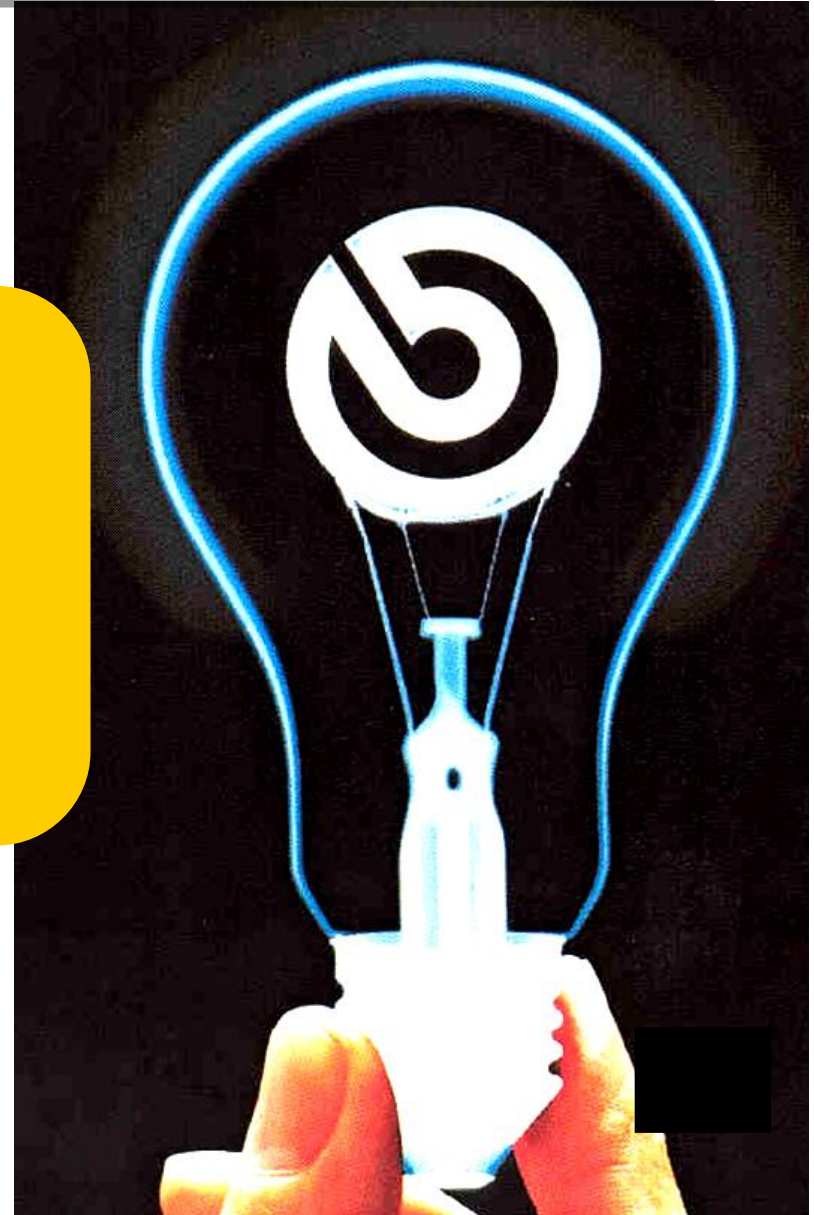
(Zambon, 2003)





a simple business idea

**Produce the most
performing brakes
in the world**



Relational Capital

Performance

- Revenues acquisition Index (existing customers)
- Revenues acquisition Index (new customers)
- % revenues from products developed in the last 5 years
- Market share
- Customer satisfaction Index

Sustainability

- Corporate image (external)
- Revenues concentration index
- Most relevant Customer penetration index
- % revenues invested in Marketing & Ext. Communication

Human Capital



Performance

- **% position coverage with internal growth**
- **Index of multi-competence**
- **Average level of leadership management**
- **Level of trust**
- **Management average age**
- **People Education/School Index**

Sustainability

- **% revenues invested in training**
- **People satisfaction index**
- **Multi-valence index**
- **% female representation within management**
- **Turnover (management)**
- **Turnover (employees)**
- **Turnover (blue collars)**
- **Average seniority (management)**
- **Average seniority (employees)**

Structural Capital



Performance

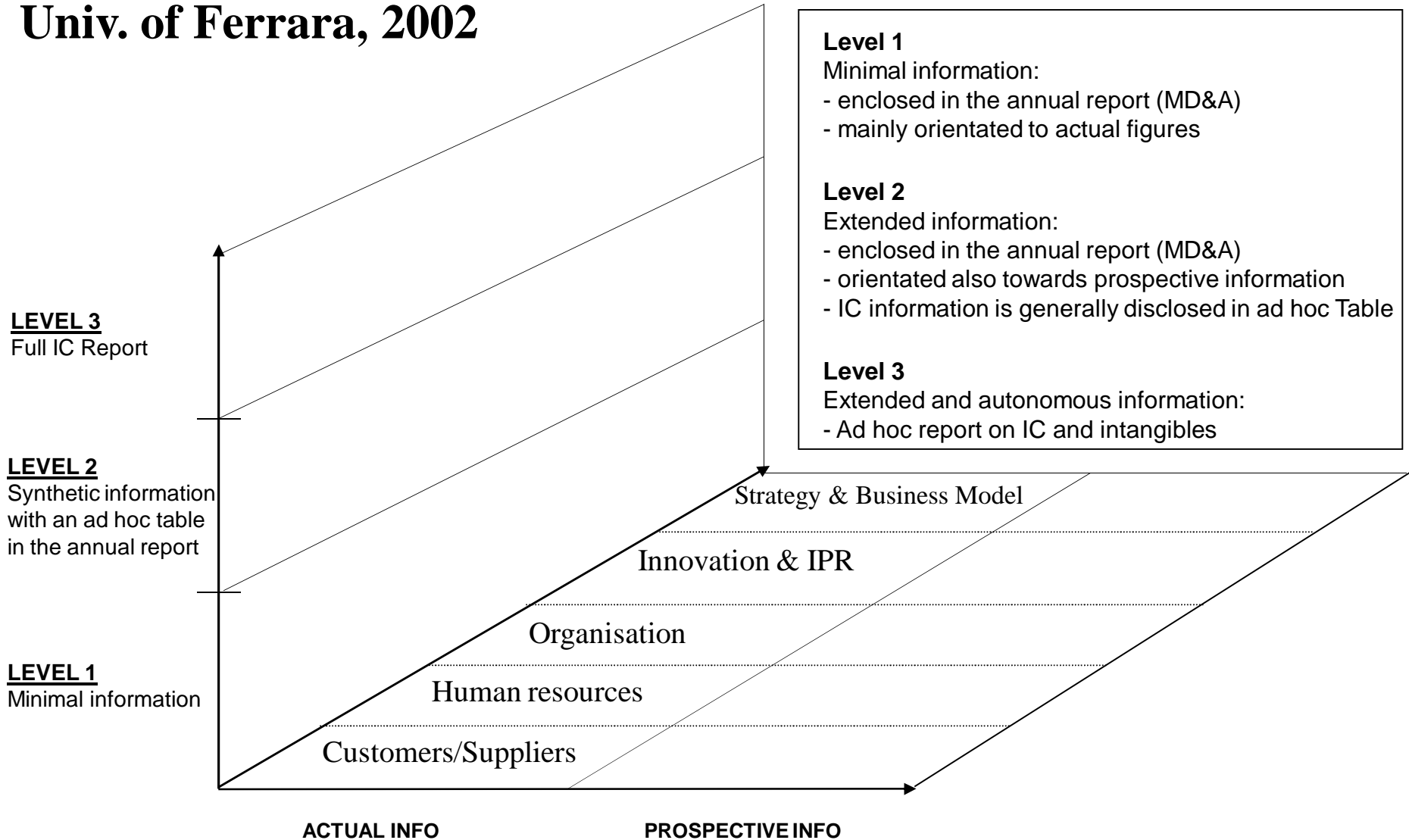
- **N° patents (licensed/active)**
- **Projects (Gate 7ok) / Technical Workforce**
- **Global Productivity**
- **Global TRS**
- **Grievances severity index**
- **PPM customers at km 0**
- **Internal scrap**
- **% non-conformance costs/revenues**

Sustainability

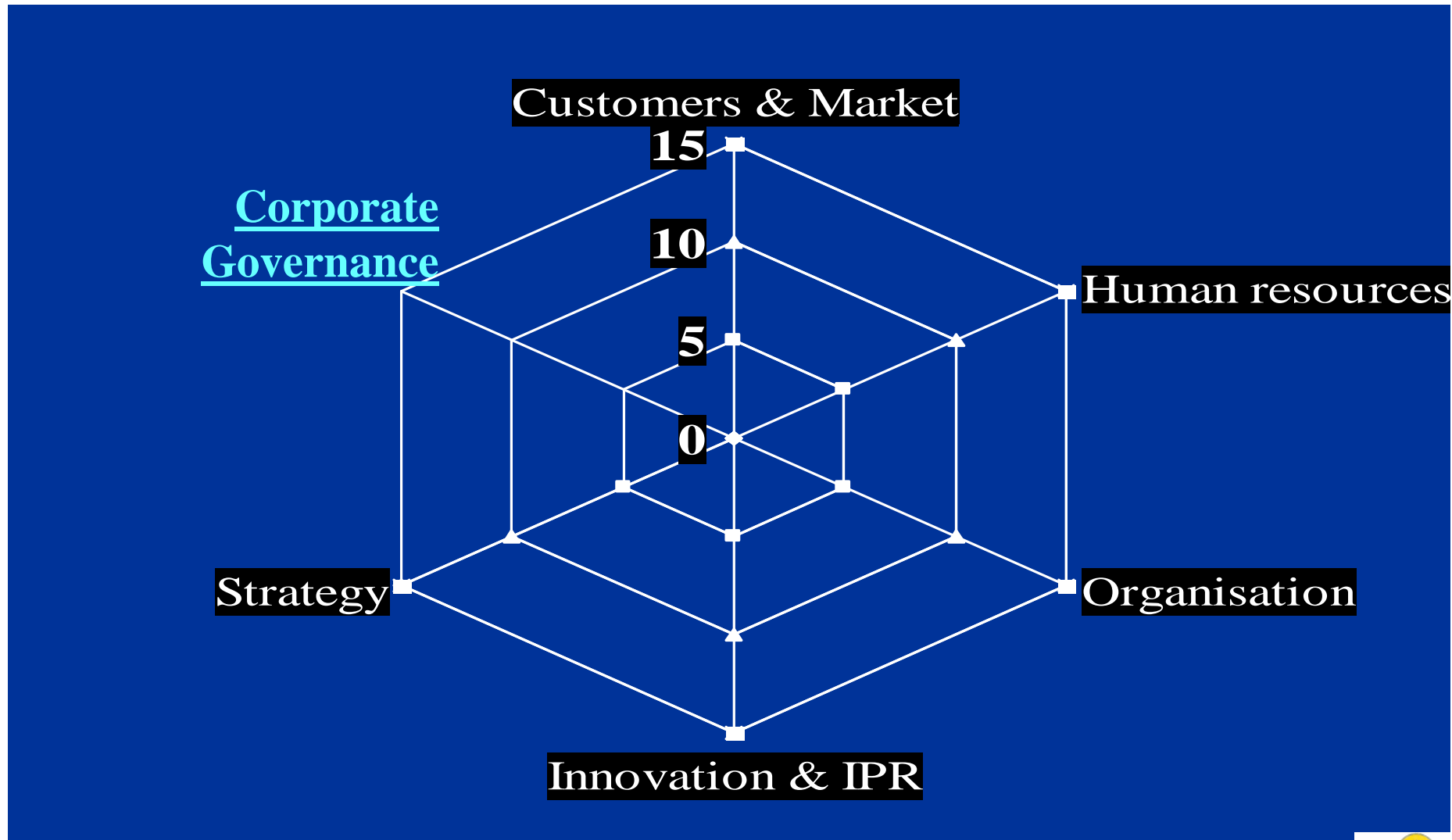
- **% revenues invested in R& D**
- **Change proposals//active projects**
- **Customer satisfaction (technical area)**
- **% conformity (internal audits)**
- **Corporate Image (internal)**
- **Value Alignment**
- **% revenues invested in internal communication**

THE MODEL FOR RANKING IC & INTANGIBLES

DISCLOSURE by Italian Association of Financial Analysts & Univ. of Ferrara, 2002



Development of the Radar Diagram for evaluating the level of disclosure on Intangibles (B & Z, 2003)



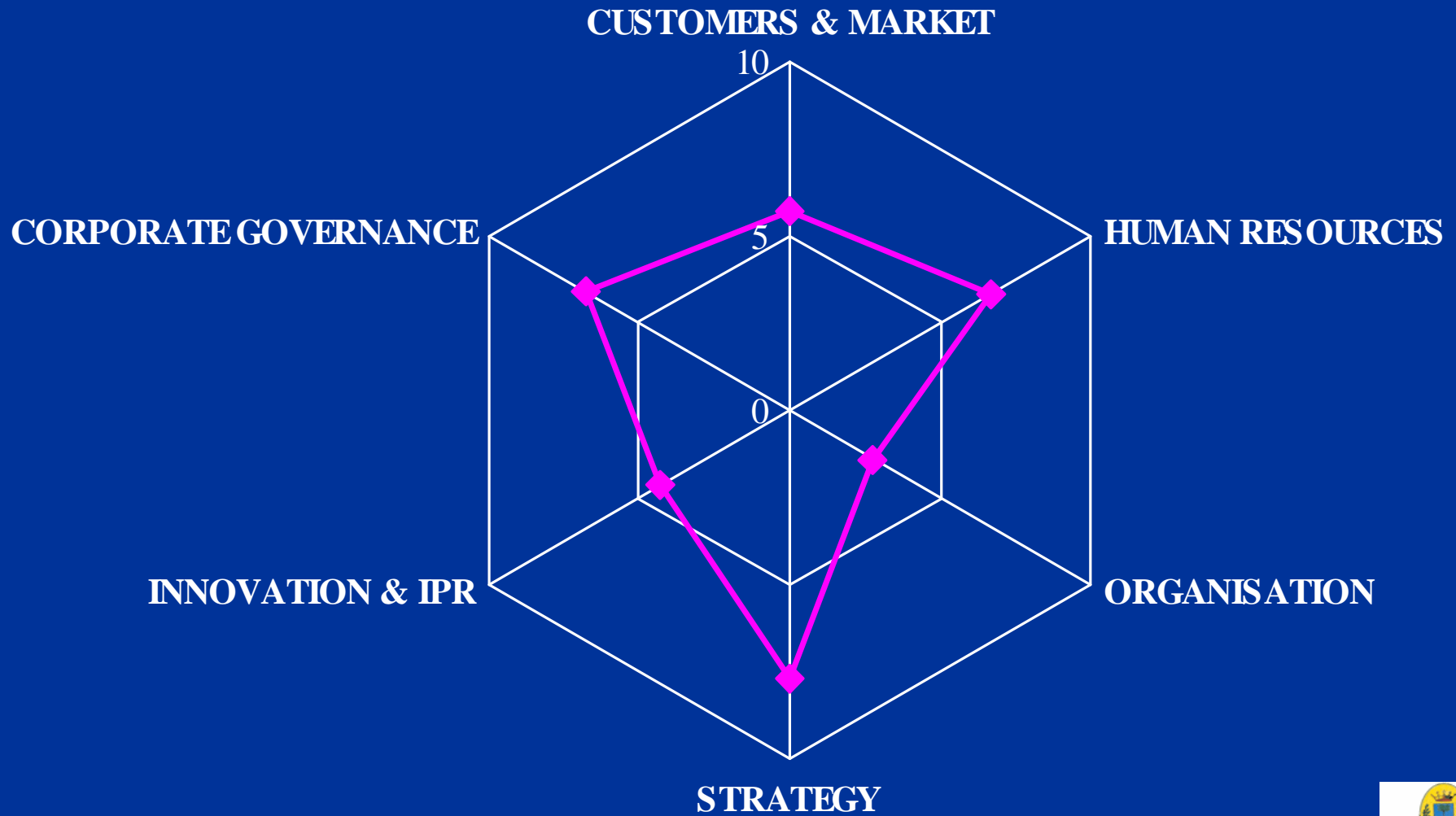
0-5 = Insufficient ; 5-10 = Sufficient ; 10-15 = Excellent

Sample and data collection: an example

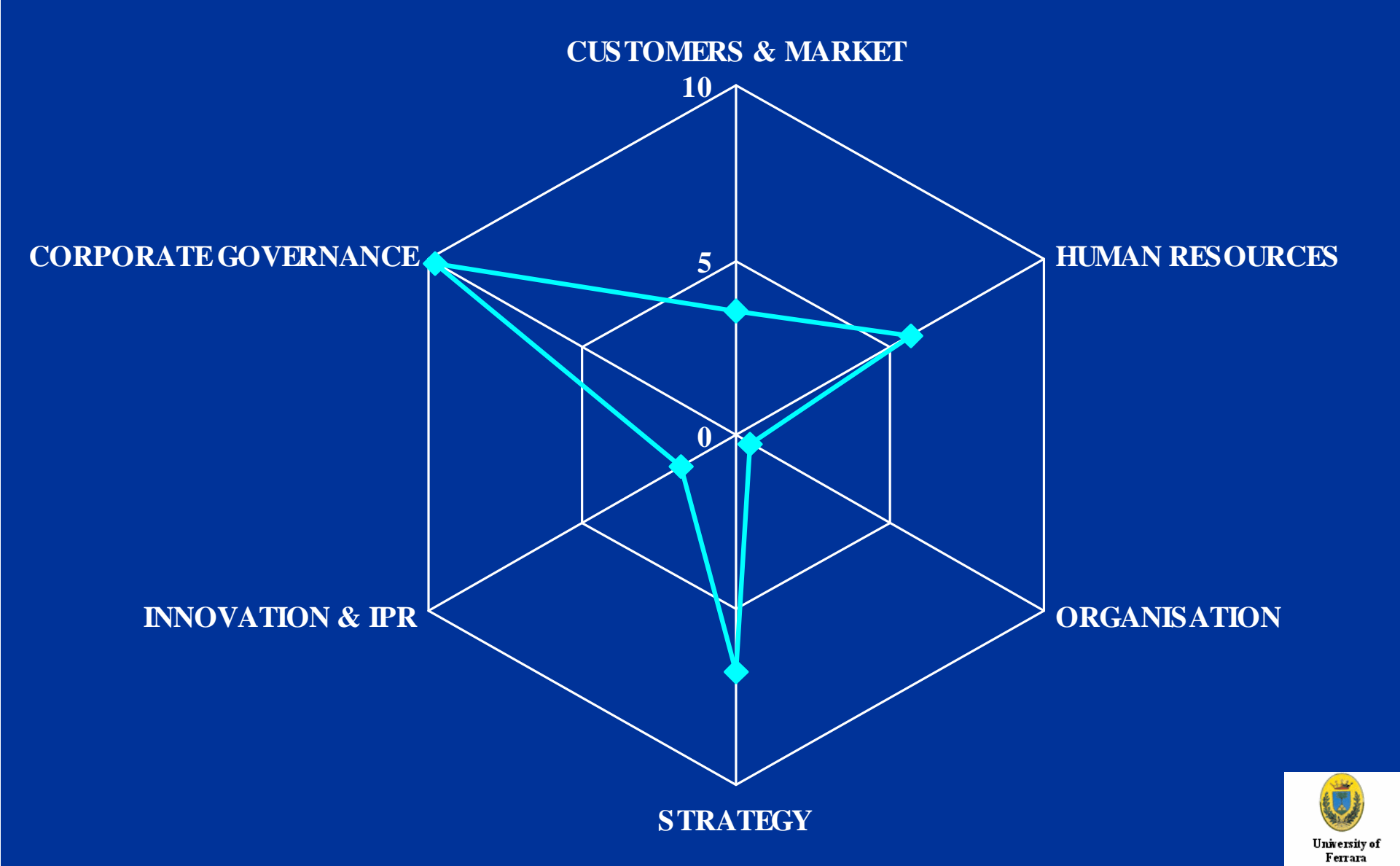
- ü Sample: French, German, Italian and UK companies composing the main indices of each national Stock Market (CAC40, DAX30, MIB30 +Midex, FTSE100)
- ü Exclusions: Companies from financial and insurance sectors as well as non-national companies have been excluded
- ü Total sample: 27 companies in France, 19 in Germany, 28 in Italy, 65 in UK
- ü Document considered: 2001 annual report



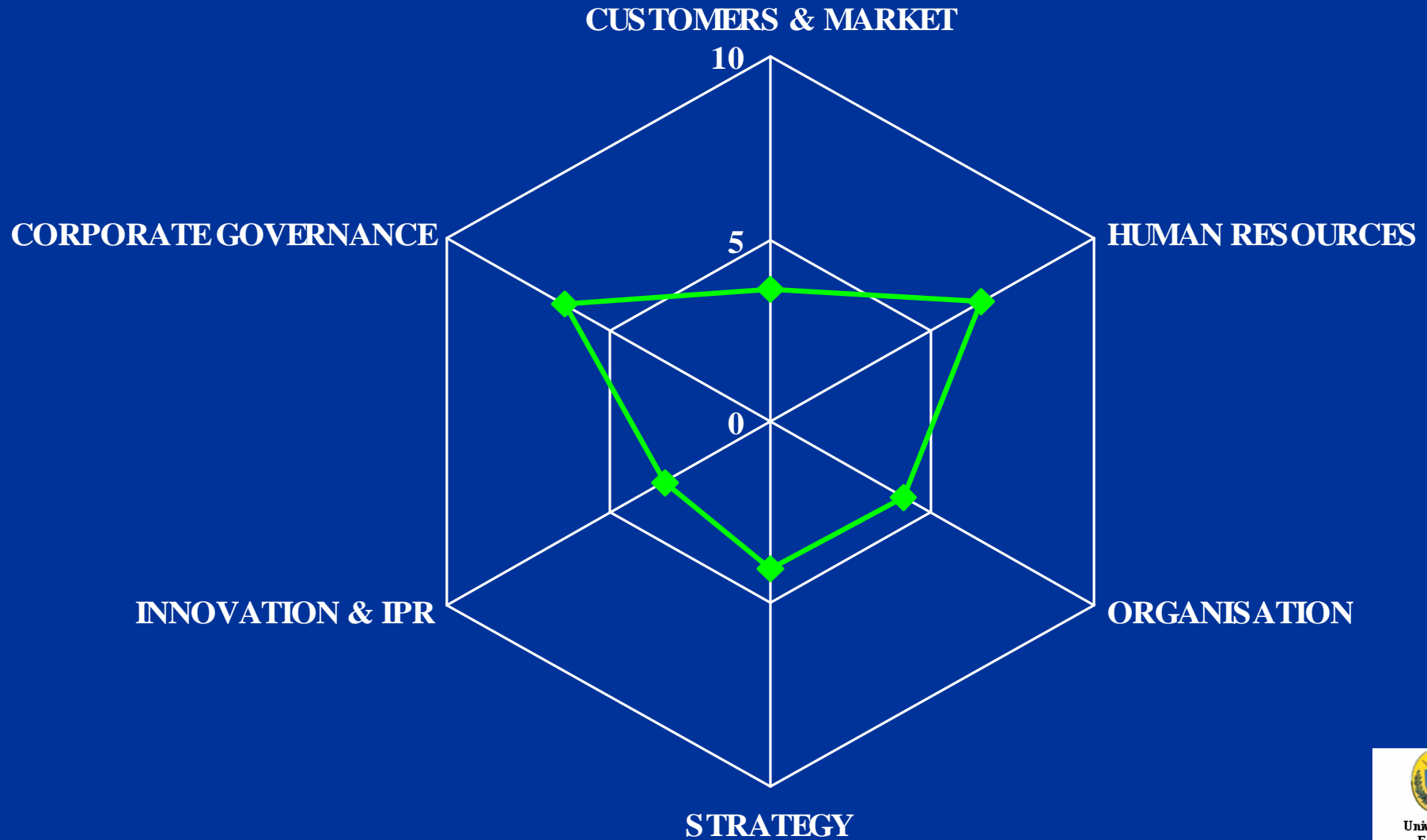
Results - France



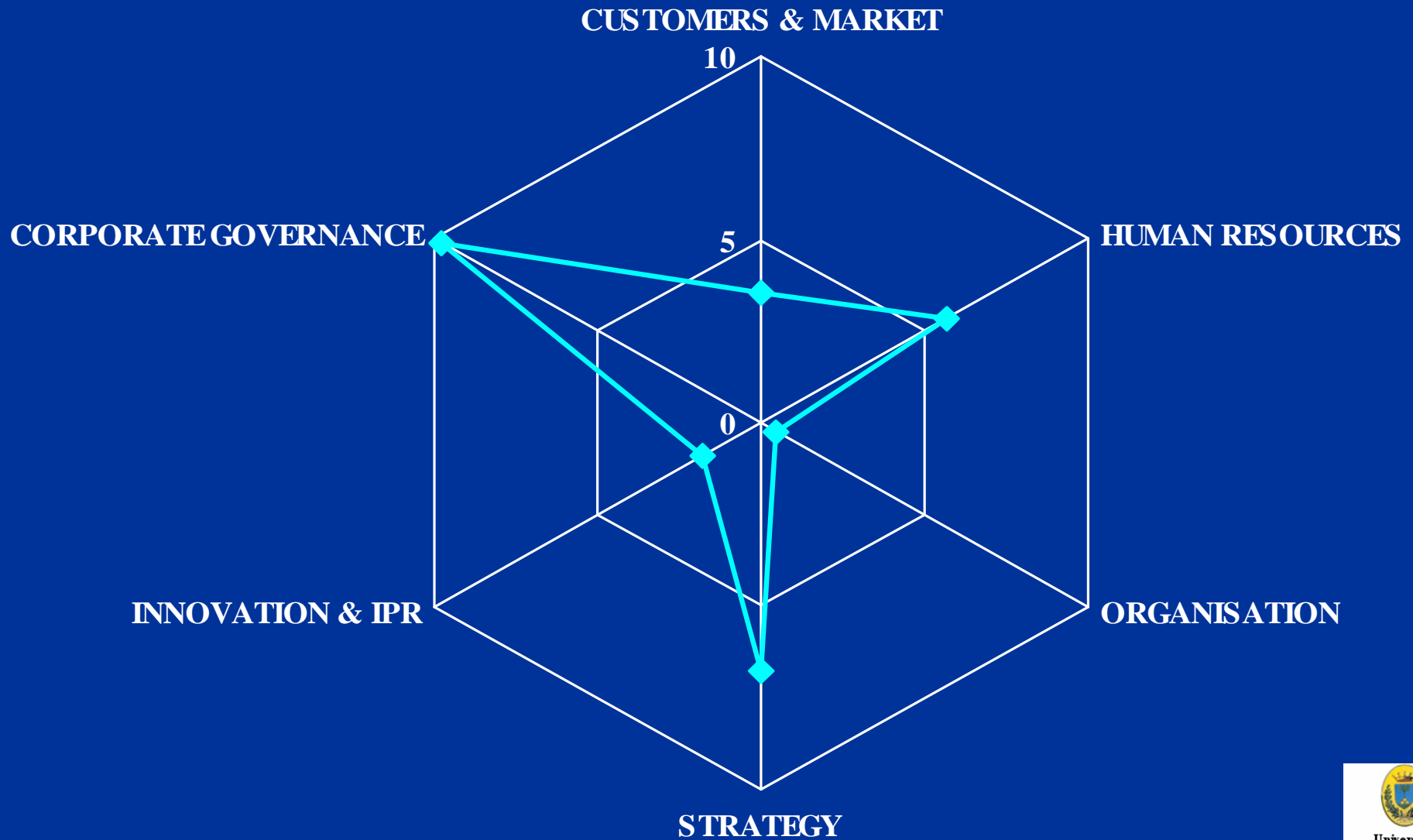
Results - Germany



Results - Italy



Results – United Kingdom

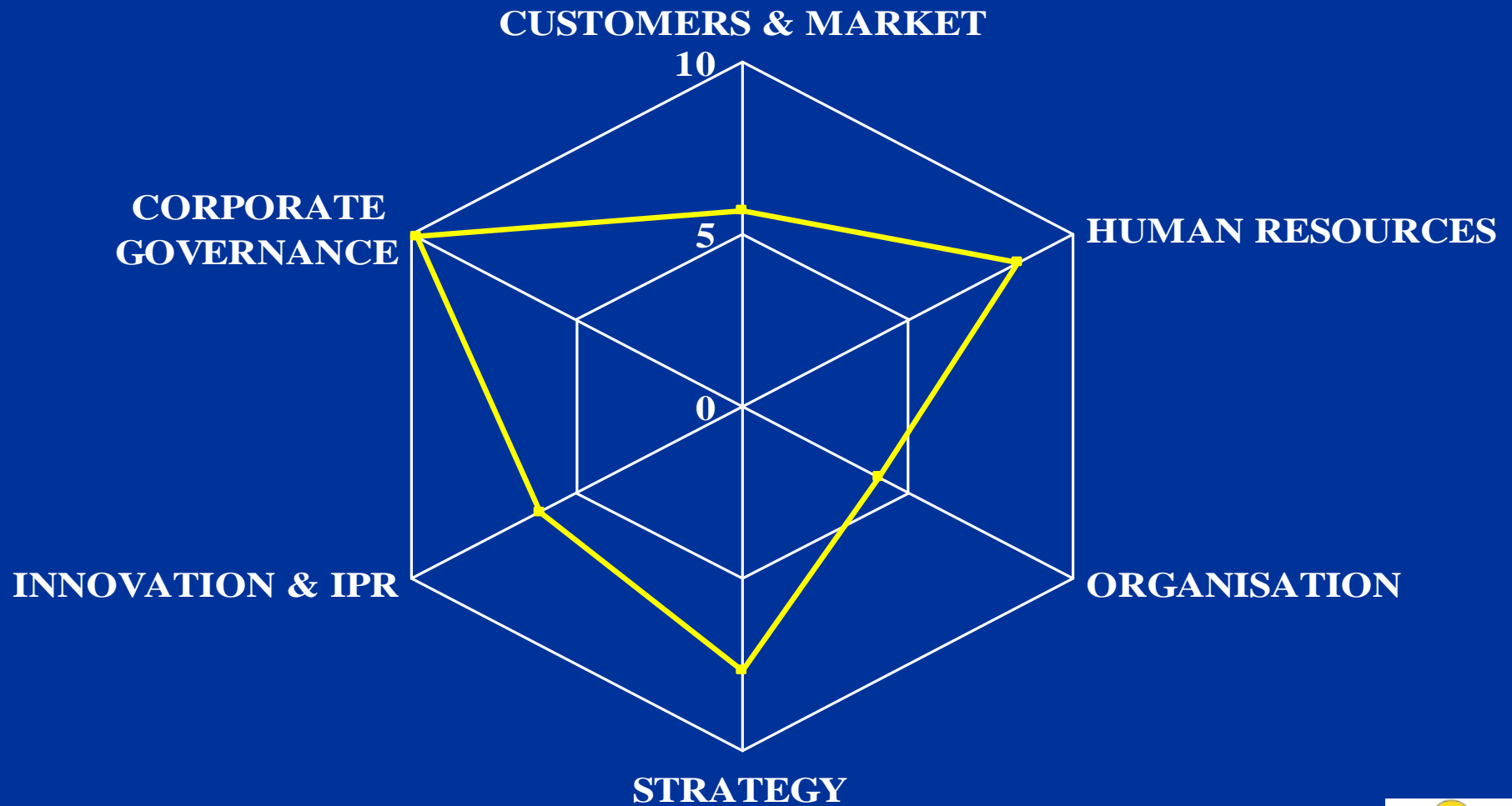


Results – Areas of Hexagons

COUNTRY	AREA (Units)
France	77.04
Germany	72.57
Italy	53.93
UK	39.17



Disclosure on Intangibles: The simulated European best practices



Area of simulated hexagon = 119.48 units



Some critical issues of these new measures

Despite their value and innovativeness, these measures face some *critical issues* concerning their:

- consistency / comparability → some form of international standard is needed
- reliability (auditability)
- thoroughness / completeness
- meaningfulness:
 - a) subjectivity in the choice of the “useful” indicators
 - b) indicators do not possess additive properties
 - c) high company specificity of indicators



4. INTERNATIONAL INITIATIVES

A series of European initiatives at an institutional level

- 2002-2003: Official Study for the European Commission (DG Enterprise) on “The Measurement of Intangible Assets and Associated Reporting Practices”

Partners:

- University of Ferrara (lead partner)
- New York University (Prof. Baruch Lev)
- Melbourne University (Prof. Margaret Abernethy)

http://ec.europa.eu/enterprise/services/business_related_services/policy_papers_brs/intangiblesstudy.pdf

A series of European initiatives at an institutional level (cont'd)

2005-06: European Commission's (DG Research) study on IC reporting to increase R&D in SMEs and help these companies to access bank credit (RICARDIS) à published in June 2006

“Reporting Intellectual Capital to Augment Research, Development and Innovation in SMEs (RICARDIS)”, (cf. http://ec.europa.eu/invest-in-research/pdf/download_en/2006-2977_web1.pdf)



Some recent international developments in IC Reporting

The Intellectual Assets-based Management (IAbM) initiative by the Japanese Government and business community is expanding

Interest by World Bank continues (Regional/Cities/Communities IC) à Paris Conferences

Research in this area by the Organisation for Economic Cooperation and Development (OECD) is also progressing

Also the World Intellectual Property Organisation (WIPO) is addressing the “IC Readiness” issue



Some recent international developments in IC Reporting

(cont'd)

1st International OECD Policy Conference in collaboration with the University of Ferrara & WIPO (Ferrara, 20-22 October 2005) à cf. www.ferraraonintangibles.net

2nd International OECD Policy Conference in collaboration with the METI of the Japanese Government (Tokyo, 7-8 December 2006)

Some recent international developments in IC Reporting (cont'd)

Increase in the interest of statistical agencies at national and international level → e.g. U.S. Federal Reserve, UK Statistical Office, Eurostat → “Growth Accounting” approach

The United Nations International Conference in New York, 23-24 June 2008 on “Information Gaps at Micro- and Macro-Level” → session on IC information and reporting



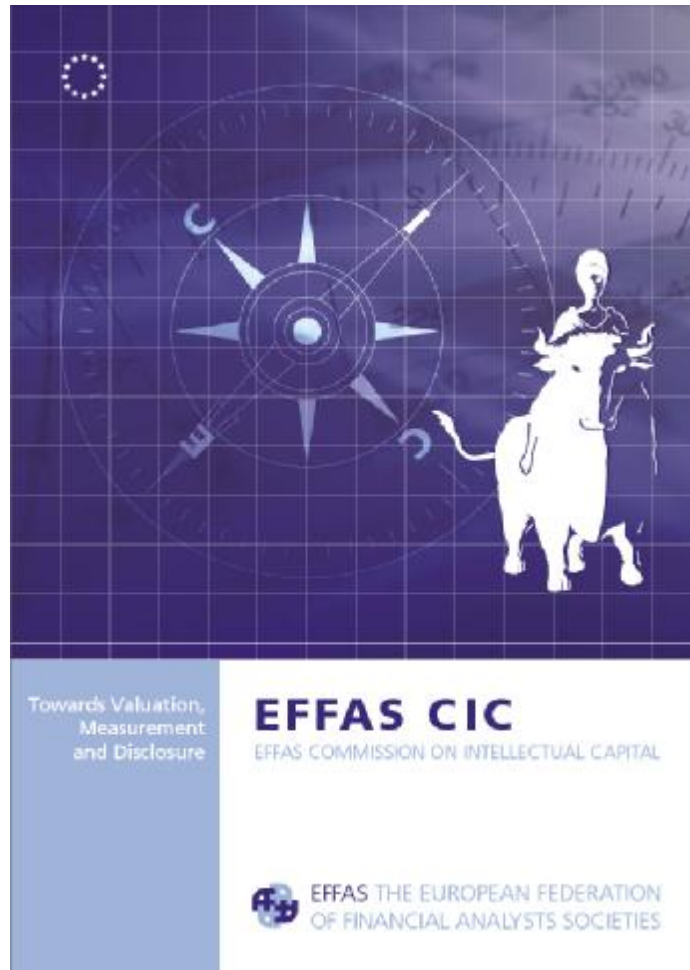
Other relevant initiatives

- “Wissensbilanz phenomenon” in Germany
- Austrian law mandated IC Reports for universities
- The “PIP Project” in Nordic countries
- The “Observatoire sur l’immatériel” in France
- The “Value Reporting” by PwC
- The IC Rating
- Intellectual Assets Centre in Glasgow
- The VALI Project” in Italy for IC Reporting of small-medium enterprises (SMEs)

Principal Guidelines on IC Reporting

- International Federation of Accountants (IFAC) – Study no. 7 (1998)
- Danish Agency for Trade and Industry (DATI) Guidelines (2000; latest edition 2003)
- Nordika Project Guidelines (2001)
- Meritum Project Guidelines (2002)
- German Ministry of Labour (2004)
- Japanese Ministry of Economy (METI) (2005)
- Australian IC Guidelines (2002 e 2005)
- Putting IC into Practice Guidelines (PIP) by Nordic countries (2006)

Ten principles for effective communication of IC



**Why and how
the financial community
should tackle intangibles
– now**



The Future: the IASB's Management Commentary

- In June 2009 IASB has published an Exposure Draft on Management Commentary (MC) due to be a voluntary Guidance and not a Standard
- It sets out principles, qualitative characteristics, and content elements of Management Commentary to provide capital providers with decision-making useful information **à** a context for understanding management's objectives and related strategies
- Management Commentary should especially provide forward-looking (future-oriented) non-financial information **à** especially on intangibles



The Future: the IASB's Management Commentary (2)

- Attention should be given to the commentaries on the nature of the business, management objectives and strategies, main resources-risks-relationships, results of operations and prospects, & critical performance measures and indicators
- Management Commentary includes financial and non-financial information **à** inclusion of key-performance indicators (KPIs) à how non-financial factors have influenced and will be able to influence financial performance

The “World Intellectual Capital/ Assets Initiative” (WICI)

The world's business reporting network - www.worldici.com

Since 2007, the aim is to work towards a new and global framework for business reporting worldwide based on industry-centred KPIs

Members

- Japanese METI (Ministry of Economy, Trade & Industry)
- U.S. Enhanced Business Reporting Consortium (EBRC) [AICPA, PricewaterhouseCoopers, Grant Thornton, Microsoft]
- European Financial Analysts (EFFAS)
- OECD
- Brazilian Development Bank (BNDES) (observer)
- Society for Knowledge Economics in Australia (SKE)
- European Commission (observer)
- Waseda University
- University of Ferrara



Next WICI Deliverables

- Commentaries on relevant international documents (e.g. IASB's Exposure Draft on Management Commentary)
- Development of a more comprehensive business reporting framework (combining generalisability & specificity)
- Development of KPIs per sector/industry:
 - Electronics (WICI Japan)
 - Pharmaceutical (WICI Japan)
 - Automotive (WICI Japan)
 - Telecommunications equipment & services (EFFAS CIC)
 - Software and IT services (EBRC + Gartner)
- XBRL-ization of KPIs information

WICI Framework versione 1.0

(already tagged with XBRL - www.worldici.com)

0 Corporate profile and business attributes

- 0-1 Industry overview
- 0-2 Duration and results per business unit
- 0-3 Business cycle per business unit
- 0-4 Competitive analysis



a. Business landscape

A-1 Business landscape

b. Strategy

- b-1 Corporate strategy summary
- b-2 Vision and mission
- b-3 Strengths
- b-4 Weaknesses
- b-7 Goals and objectives
- b-8 Corporate strategy
- b-9 Business unit strategies
- b-10 Business portfolio

c. Resources & processes

- c-1 Resources and processes summary
- c-2 Resource forms
- c-3 Key processes
- c-4 Value drivers

d Performance

- d-1 Performance summary
- d-2 GAAP-based
- d-3 GAAP-derived
- d-4 Industry-based
- d-5 Company-specific
- d-6 Capital market-based

A. Business landscape

- A-1 Business landscape summary
- A-2 Economic
- A-3 Industry analysis
- A-4 Technological trends
- A-5 Political
- A-6 Legal
- A-7 Environmental
- A-8 Social

C. Resources & processes

- C-1 Resources and processes summary

B. Strategy

- B-1 Corporate strategy summary
- B-2 Vision & mission
- B-5 Opportunities
- B-6 Threats
- B-7 Goals and objectives
- B-8 Corporate strategy
- B-9 Business unit strategies
- B-10 Business portfolio

D. Performance

- D-1 Financial prospects summary

Comparability vs. Specificity: The “Inverted Pyramid” approach

- Non-financial indicators could be articulated in three levels: General, Industry, Company Specific. → the “inverted pyramid concept”

Only the first two levels are to be agreed upon in the future

Enterprise
level

Company-Specific
KPIs
(no limit)

Sector
level

Industry-Specific
KPIs
(10-20 max.)

General
level

Basic KPIs
(3-5 max.)



Reporting on Intangibles: combining comparability & specificity

The Establishment of “WICI Europe”

On 29 May 2009 in Paris WICI Europe has been founded with the task of coordinating the European action and research in the area of non-financial and intangibles reporting

At the moment, there are a number of European countries where the formation process of a national WICI jurisdiction is ongoing:

- France
- Luxembourg
- the UK
- Italy
- Austria

Objectives of the WICI Europe

(from MoU of WICI Europe)



- To promote the management and reporting of intellectual capital/assets at company level throughout the world and primarily in Europe through cooperation among members
- To promote European and international dialogue on the management and reporting of intellectual capital/assets with other organisations & interested parties such as investors, companies and their representative bodies, policy makers, regulatory authorities, stock exchanges, standard setters & universities throughout the European region



5. THE WAY FORWARD & CONCLUDING REMARKS

Concluding Remarks

- The today's economic environment and the Conceptual Company pose new challenges to managers, investors, policy makers
- It is important to learn how to visualise the link between value creation, management and intangibles/IPR through a new information set and reporting system à to become a market standard
- Intangibles are also associated with risk à risk management overlaps with intangibles management
- Financial Analysis à communication of appropriate information on intangibles is necessary to value and price company processes

Main Policy Indication

- Urgent to improve information on intangibles and IPR at micro level initially in a non-mandatory perspective, because good indicators at micro level will also allow to build better indicators at regional, meso and macro level

Company Reporting: policy indications (cont'd)



- Policy aim: identify in a collaborative way (public & private) at an international level a standardised set of intangibles non-financial indicators serving as minimum common information denominator **à** WICI is open to collaborations & join forces
 - Need to develop and promote an innovative, integrated, reliable, and verifiable company reporting system
 - Convergence between various forms of reporting and avoidance of proliferation of guidelines and alike
-

Final consideration

We face a major PARADOX:

- The more the economic system is based on intangible assets, the stronger it is (because they are major drivers of growth & value creation).
- However, at the same time:
The more the economic system is based on intangibles, the more vulnerable it becomes.

The challenge we all face is to learn how to manage, organise, and report on these “invisible” resources