## Initiatives and Tools to Support Benchmarking Benchmarking tools/methods to support innovation

### **GBN's Benchmarking Workshop** Abu Dhabi December, 09<sup>th</sup> 2018

## Prof. Dr.-Ing. Holger Kohl

Vice Director Director Corporate Management Fraunhofer IPK Berlin – Germany



Global Benchmarking Network



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### Agenda

1	The Information Centre Benchmarking
2	Diagnostic Benchmarking
3	Process-Benchmarking
4	Benchmarking of Intangible Assets





## **The Fraunhofer-Gesellschaft**



Fraunhofer is the largest organization for applied research in Europe.

Our Customers:

- Industry
- Service sector
- Public administration









## **Drivers of Innovation for Business Excellence**

Tools and Practices for implementing successful innovation



#### Corporate Management

- Management of Intellectual Capital
- Management of Innovation Systems
- Information Centre Benchmarking
- Balanced Scorecard
- Corporate Planning and Logistics
- Knowledge Management
- Process Management

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## **Development of Economy - Innovation System**

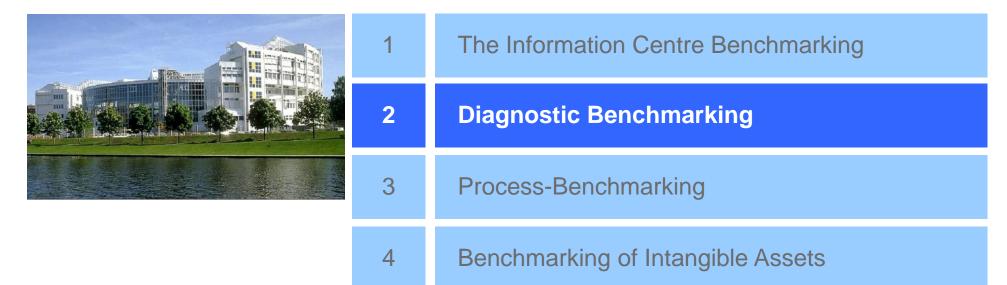
National Wealth					
Innovation					
World standard products	Competitive production processes	Intellectual Capital Human Capital Use technology Structural Capital Manage technology Relational Capital Communicate technology			
Benchmarking		Intellectual Capital Statements			

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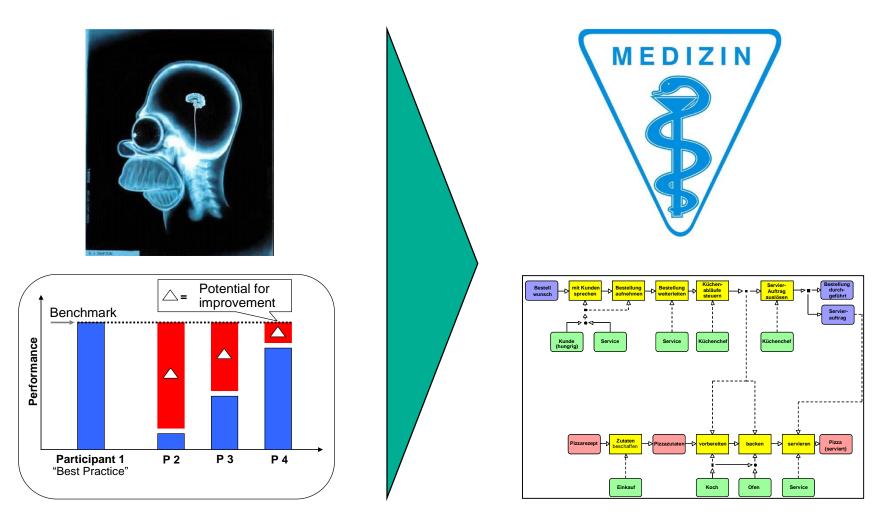
#### Agenda







#### **Benchmarking: Diagnoses vs. Medicine**





## 1. Is the company making enough money?



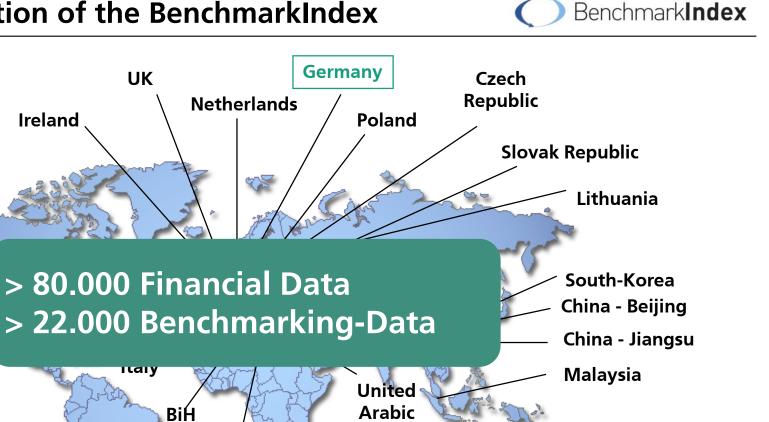
Financial Perspective		Ratios	Pela	ive tour act	jai Ne	Hest Neat	Median	strong	strongest
	1	Net Profit Margin (%)	28	3.22	-14.92	3.02	7.00	12.70	31.42
Customer Perspective	2	Return on Capital Employed (ROCE) (%)	17	7.74	-261.82	15.81	33.62	67.41	199.04
	3	Return on Net Assets (RONA) (%)	17	7.74	-110.86	14.05	34.48	69.79	223.53
	4	Return on Total Assets (ROTA) (%)	33	7.60	-49.00	6.60	14.94	27.92	61.14
Learning & Growth Perspective	5	Fixed Costs as a Percentage of Sales (%)	98	28.39	99.76	83.24	67.49	55.57	27.00
	6	Staff Costs as a Percentage of Sales (%)	11	64.38	76.49	61.60	ı 50.56	38.86	29.03
Process Perspective	7	Value Added as a Percentage of Sales (%)	90	96.46	36.46	63.90	76.92	87.53	98.56

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## **Current Distribution of the BenchmarkIndex**



- Philippines
- Brazil

- Russia

- Saudi Arabia

**Current Candidates :** 

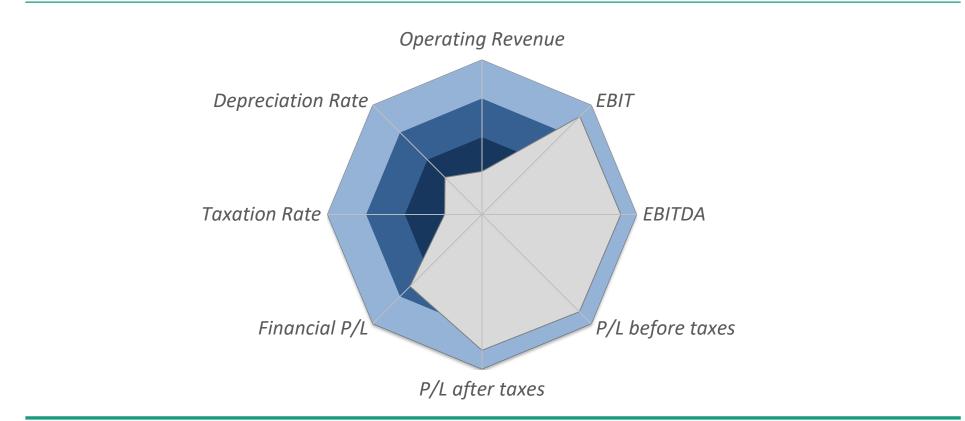
USA

**Emirates** South-Africa Greece Australia

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# Fraunhofer Financial Benchmarking (FFB)

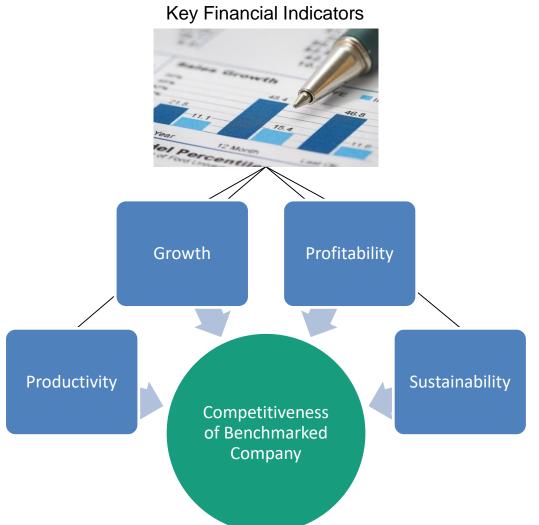








### Introduction



- Benchmarking analysis of the financial competitiveness and structures of European organizations
- Comprehensive database of 18.5 million companies based on
  - Annual reports
  - Key financial figures of balance sheets
    & profit and loss statement
- Support European SMEs by indicating their competitive position in terms of
  - Productivity
  - Growth
  - Profitability
  - Sustainability
- Identification of improvement potentials on company and national level as a basis for action planning







#### **Fraunhofer Financial Benchmarking Report - Overview**



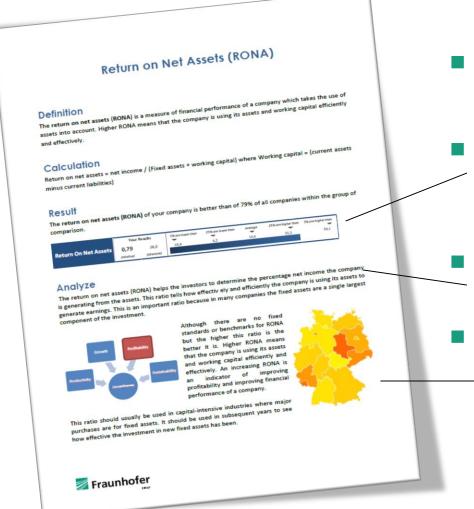
- The <u>Fraunhofer Financial Benchmarking Report</u> includes
  - > a detailed overview of the benchmarked peer group,
  - a comparison of 42 key financial indicators from the annual report and the profit and loss statement with the benchmarked peer group,
  - a detailed performance-analysis of the key financial indicators on a company and national level,
  - profound information for each benchmarked indicator to facilitate the understanding and the interpretation of the results,
  - a summary highlighting strengths and weaknesses in terms of competitiveness and financial structure and
  - the need for action (improvement potentials).







#### Fraunhofer Financial Benchmarking Report - Main Benefits



- Access to financial data from up to 18.5 million companies in Europe
- Evaluation of selected key financial indicators
  in comparison to companies of the same size
  and industry
- Detailed definition, analysis and interpretation for **42 key financial indicators**
- Visual Analytics: Detailed location analysis of results across Europe
  (radar charts, heat maps etc.)







□    Albania    □    Luxembourg    EU      □    Austria    □    Macedonia    EU2      □    Austria    □    Malta    EURO      □    Belarus    □    Moldova, Republic    G8      □    Bosnia and Herzegovina    □    Monaco    EFTA      □    Bulgaria    □    Montenegro    EFTA      □    Bulgaria    □    Nortway    ✓      □    Croatia    □    Norway    ✓      ☑    Czech Republic    □    Poland    ✓      □    Denmark    □    Portugal    ✓      □    Estonia    □    Romania    ✓      □    France    □    Serbia    ✓      ☑    Germany    □    Slovakia    ✓      □    Greece    □    Slovakia    ✓      □    Iceland    □    Sweden    ✓
Ireland  Sweden    Ireland  Switzerland    Italy  Turkey    Latvia  Ukraine    Liechtenstein  United Kingdom

- Normalized and latest data for all EU-countries, <u>e.g.</u>:
  - France: > 3,6 Million companies
  - ➢ UK: > 2,6 Million companies
  - Germany: > 1,5 Million companies
  - Overall 42 key financial indicators per company including
    - 25 values from Balance Sheets, <u>e.g.</u>
      - Assets
      - Shareholder funds & liabilities
      - Number of employees
    - 17 values from Profit/Loss-Accounts, e.g.
      - Revenues and profits
      - Expenses and costs
      - Taxations and Depreciations







#### **Defining the Benchmarking Peer Group**

- Industry-Classification with NACE 2:
  - > 89 main-industry-descriptions
  - 273 sub-industry-descriptions
  - 616 different activities
- Company-related Benchmarking criteria:
  - Number of Employees
  - Operating Revenue
  - Profit / Loss

NACE-CODE	
2612: Manufacture of loaded electronic boards	

CRITERIA		
📝 Nr. of Employees	30	 50
🧭 Operating Revenue	6.500.000	 11.500.000



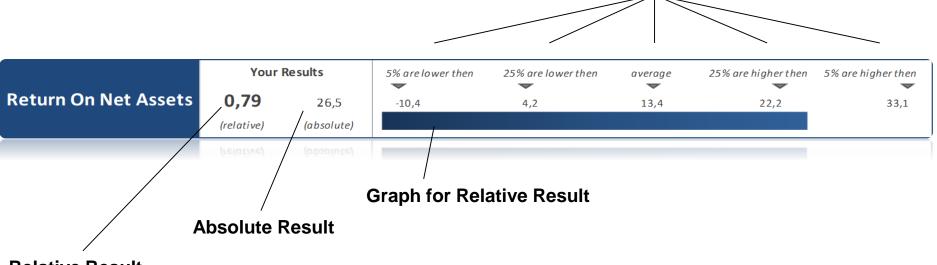




#### **Result Visualization & Analysis (1/2)**

- The Fraunhofer Financial Benchmarking Report will be generated automatically
- All 42 key financial indicators will be compared to the benchmarked peer group

#### Individual Results are presented as show below:



**Quartile Values** 

#### **Relative Result**

(79% of all companies within the peer group have a smaller RONA than the benchmarked company)

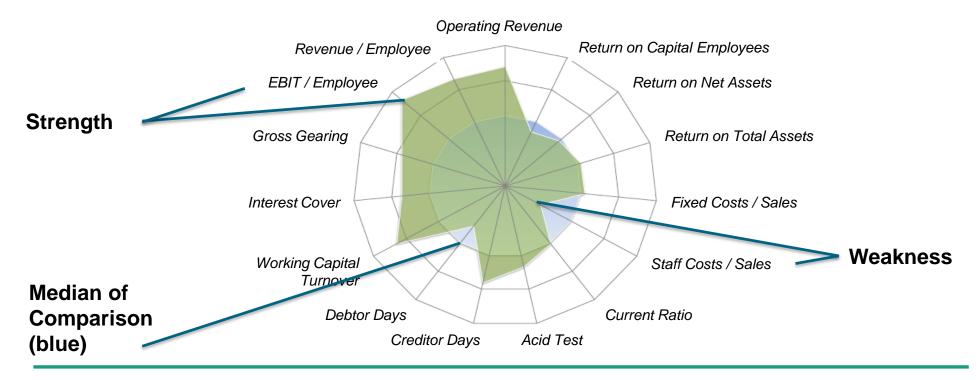






### **Result Visualization & Analysis (2/2)**

- Additionally, the results of the Fraunhofer Financial Benchmarking Report are displayed as "Radar Chart"
  - Strengths and Weaknesses in a standardized overview
    → Size of green area as an overall indicator for the financial competitiveness
  - Profile of the company's financial structure









# Fraunhofer Financial Benchmarking Outlook



- Fraunhofer Financial Benchmarking will be available from early 2019 by using a IZB-APP.
- A dynamic online-tool is also planned for end of 2019. Therefore the range of functions will be extended by
  - direct access to a library of financial benchmark-ratios,
  - the possibility of defining own benchmark-criteria and "userdefined-ratios",
  - the possibility of using secondary NACE-Codes for even more detailed analyzes.
- Additional analysis to evaluate partners and competitors on the European level will be included.







# **SME Sustainability Benchmarking Tool** Winning Moves Ltd., Fraunhofer IPK

#### **Current Status of Completion**

- Research and pre-selection of sustainability indicators for the economical, ecological and social perspective based on international standards (GRI, IÖW, VDI 4070, Susex, DIN 14000, EMAS, etc.).
- Design the tool structure and measures with software development input.
- Program the system structure, database and benchmarking engine to receive, process and store data, and generate and feedback the results.
- Develop the portal interface for users to input data and generate reports.
- Design and set the questionnaire and PDF output report (Final Testing Stage).

#### **Next Steps**

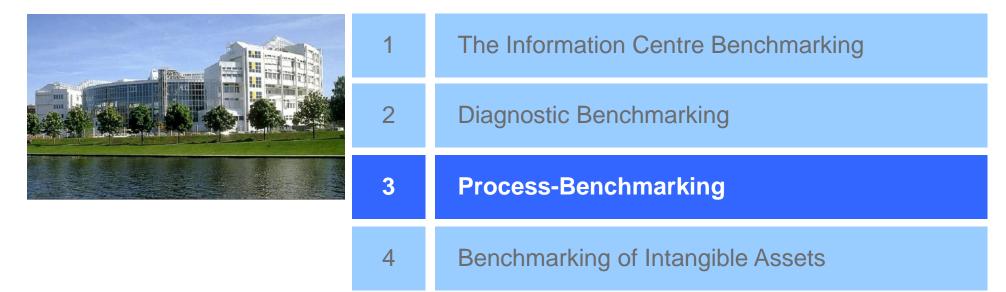
- Involving all GBN members in a Doodle-vote to identify the most usable and reasonable selection of indicators for the benefit of the GBN.
- Integrating the sustainability indicators in the online solution and set up online training session
- Testing & finalizing the SME Sustainability Benchmarking Tool.
- Roll-out: Start of 2 year free license  $\rightarrow$  Self managed tool by GBN country representatives.







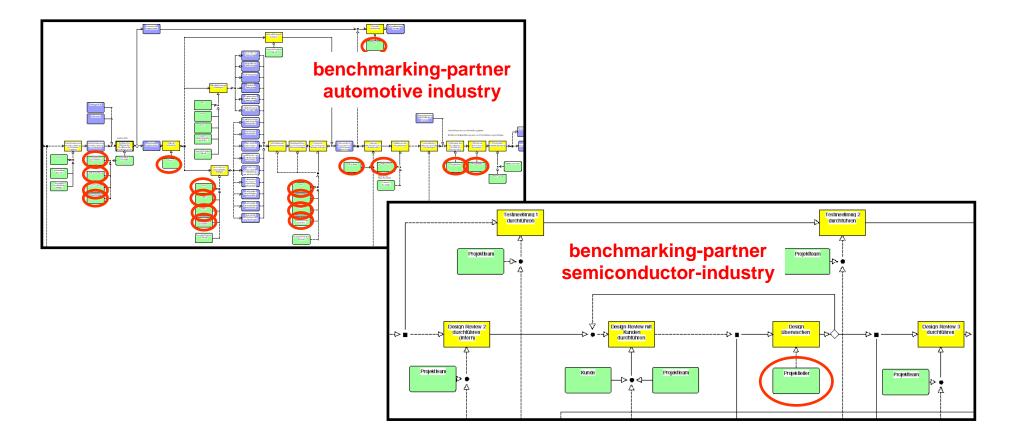
#### Agenda





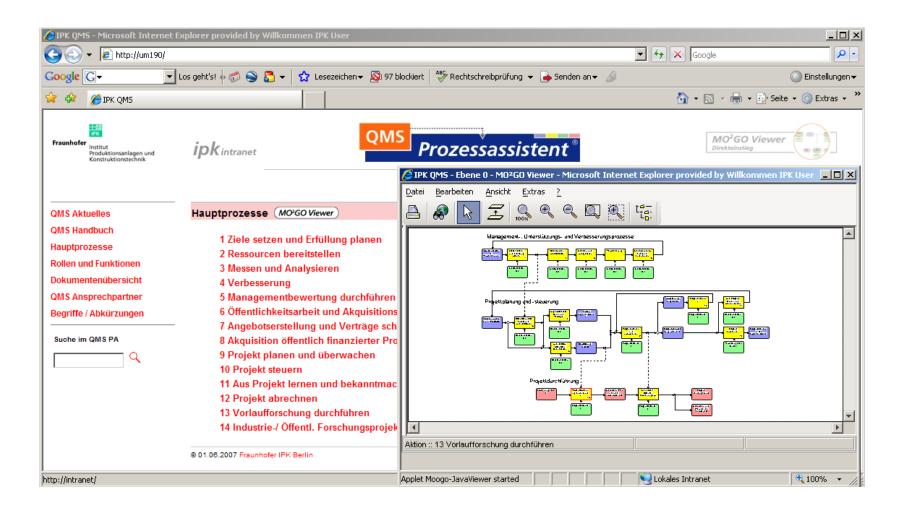
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## **Comparison of Business Process**





#### Intranet-based implementation of Best Practices Example: via Benchmarking – Process Assistant





DESIGN TECHNOLOGY

#### Agenda

	4	Benchmarking of Intangible Assets
	3	Process-Benchmarking
	2	Diagnostic Benchmarking
	1	The Information Centre Benchmarking



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#### **Standard IC Factors**







#### **Human Capital**

- Professional Competence
- Social Competence
- Employee Motivation
- Leadership Ability

#### **Structural Capital**

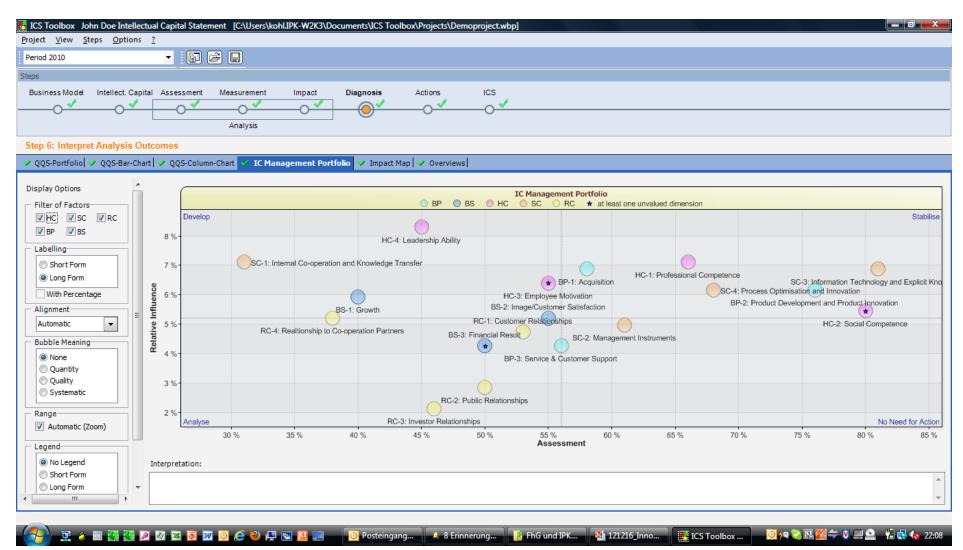
- Internal Co-operation and Knowledge Transfer
- Management Instruments
- IT and Explicit Knowledge
- Product Innovation
- Process Optimisation and Innovation
- Corporate Culture

#### **Relational Capital**

- Customer Relationships
- Supplier Relationships
- Public Relationships
- Investor Relationships
- Relationships to Co-operation Partners



#### **Intellectual Capital Statements (ICS) - Toolbox**



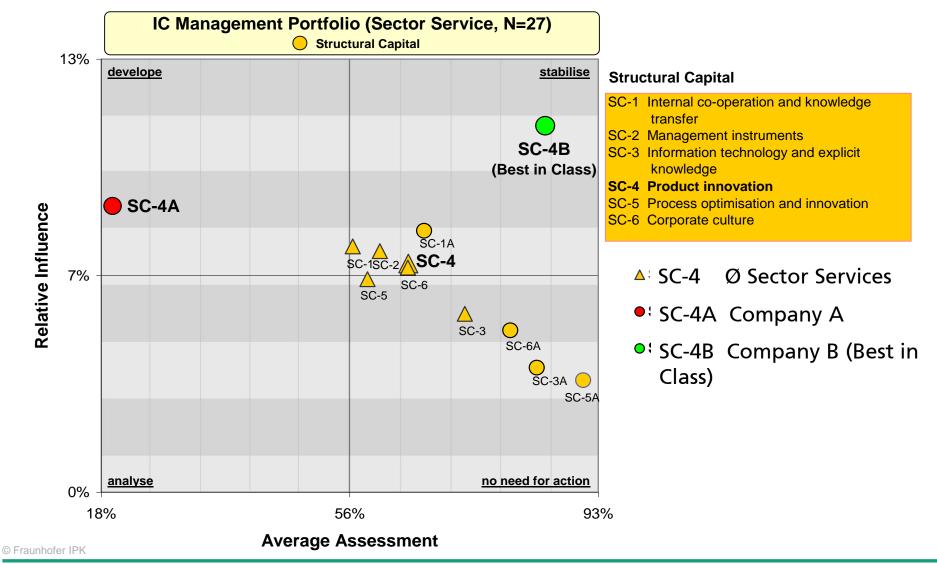
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## **Intellectual Capital Benchmarking**

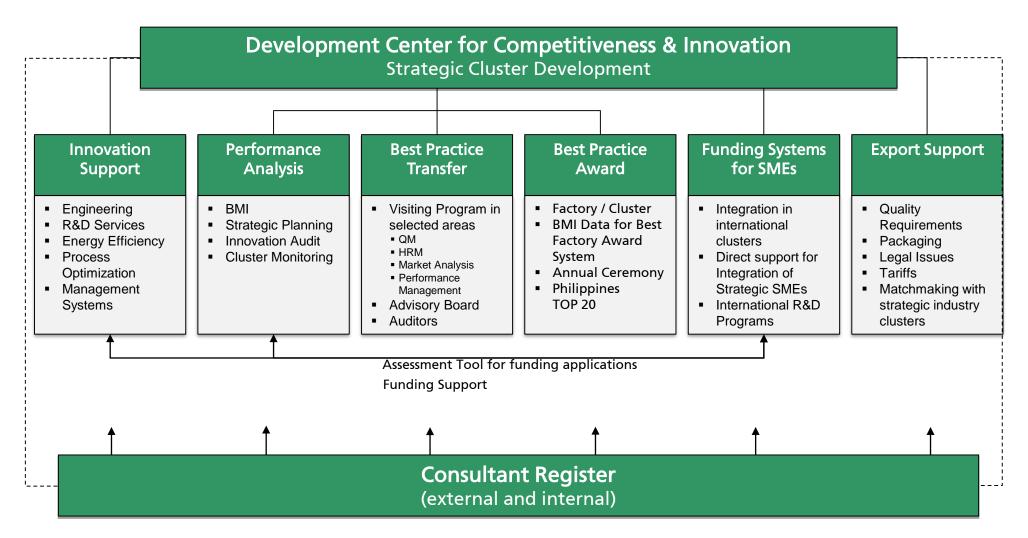
Finding Best in Class Performers





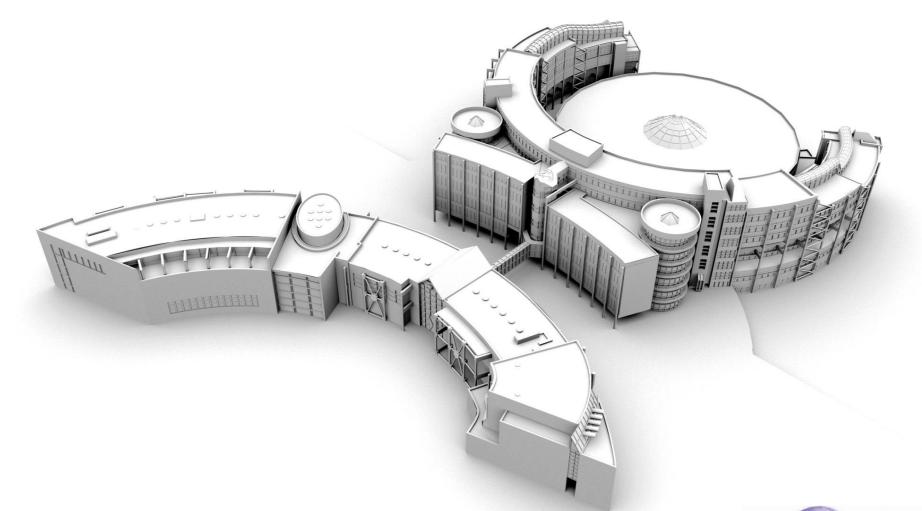


#### **Concept for an Enterprise Support Center**









# Thank you for your kind attention.



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