



Survey of ERP Systems for SME's in Switzerland

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Outline

- **My background and the methodologies I use for my research**
- **Discussion on three salient questions on ERP in SMEs**
- **ERP – the road ahead**



Methodology

eXperience: Learning from practice (real-world cases)

Netreport: Surveying the current state of IT use in SMEs

ERP Future Lab: Testing and predicting future needs



ERP Future Lab Koblenz

- Prototypes for ERP software
- Focus: Interoperability
- Test environment for ERP vendors
- Test environment for ERP users
(support for evaluation process)
- Environment for student works
(e.g. online support for ERP evaluation)
- Study on network effects for business
collaboration (Crossgate)





eXperience Methodology*: Case Study Analysis

***The eXperience Methodology was developed by the Competence Center E-Business in Basel**

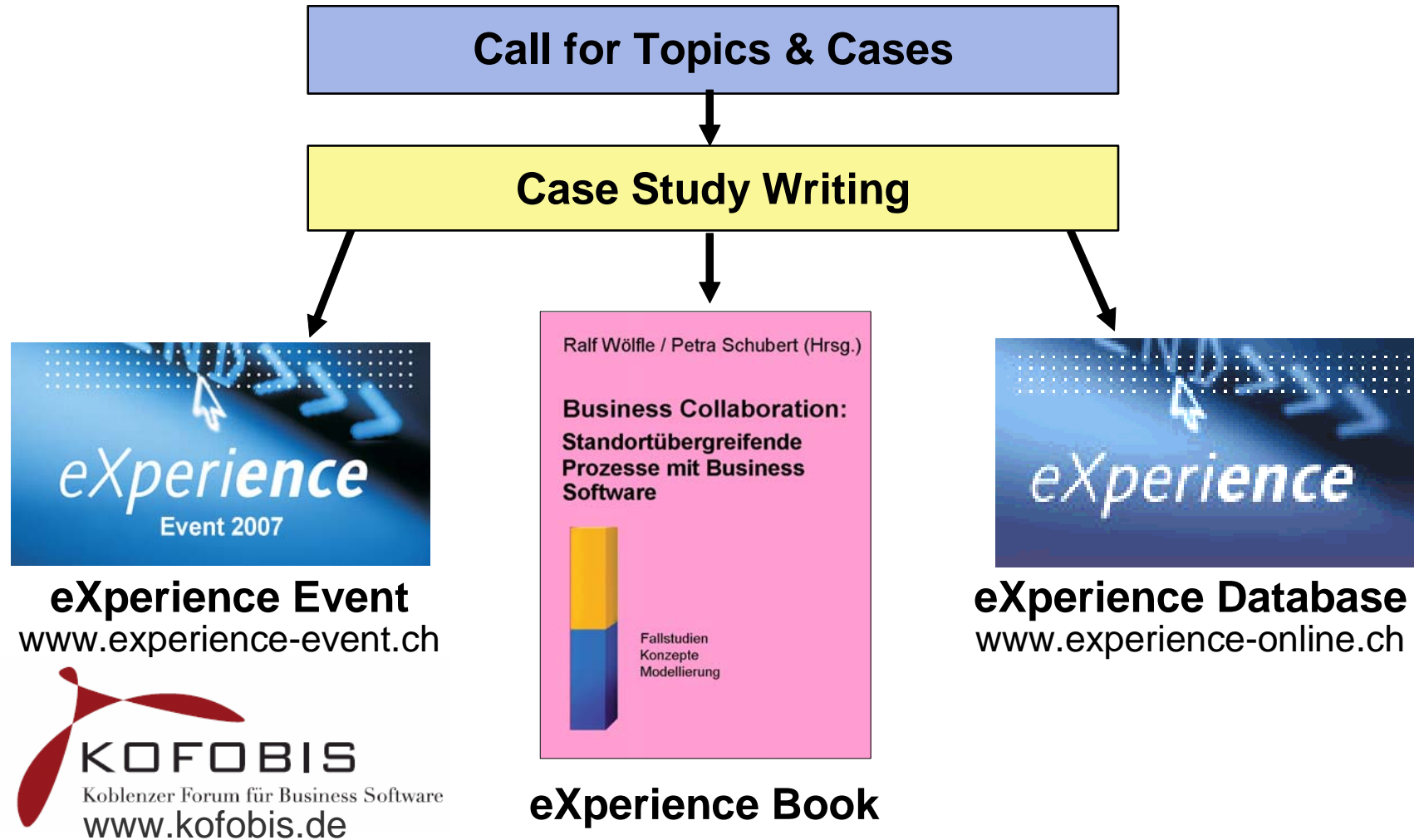
“Learning from Business Practice in the Use of Business Software”

Some results of the year 2007:

Schubert, Petra (2007): Business Software as a Facilitator for Business Process Excellence: Experiences from Case Studies, in: Electronic Markets, Vol. 17, No. 3, 2007.

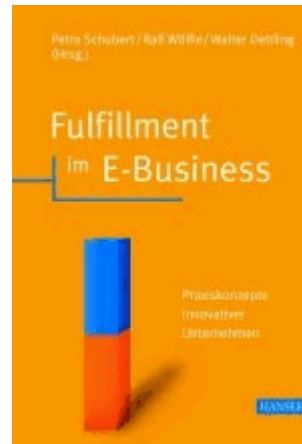


eXperience: Yearly Process






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The eXperience initiative is sponsored by the [Ecademy](#). Ecademy is the National Network of Excellence of the Swiss Universities of Applied Sciences for E-Business and E-Government. eXperience online was originally initiated by the the [SME Task Force](#), a program of the Swiss State Secretariat for Economic Affairs (seco) in the year 2002. The concept for eXperience was developed by the [Competence Center E-Business Basel \(CCEB\)](#), [University of Applied Sciences Northwestern Switzerland \(FHNW\)](#). The CCEB is responsible for the editorial process, content management, and the operation of the platform.

There is a total of **393** case studies in eXperience

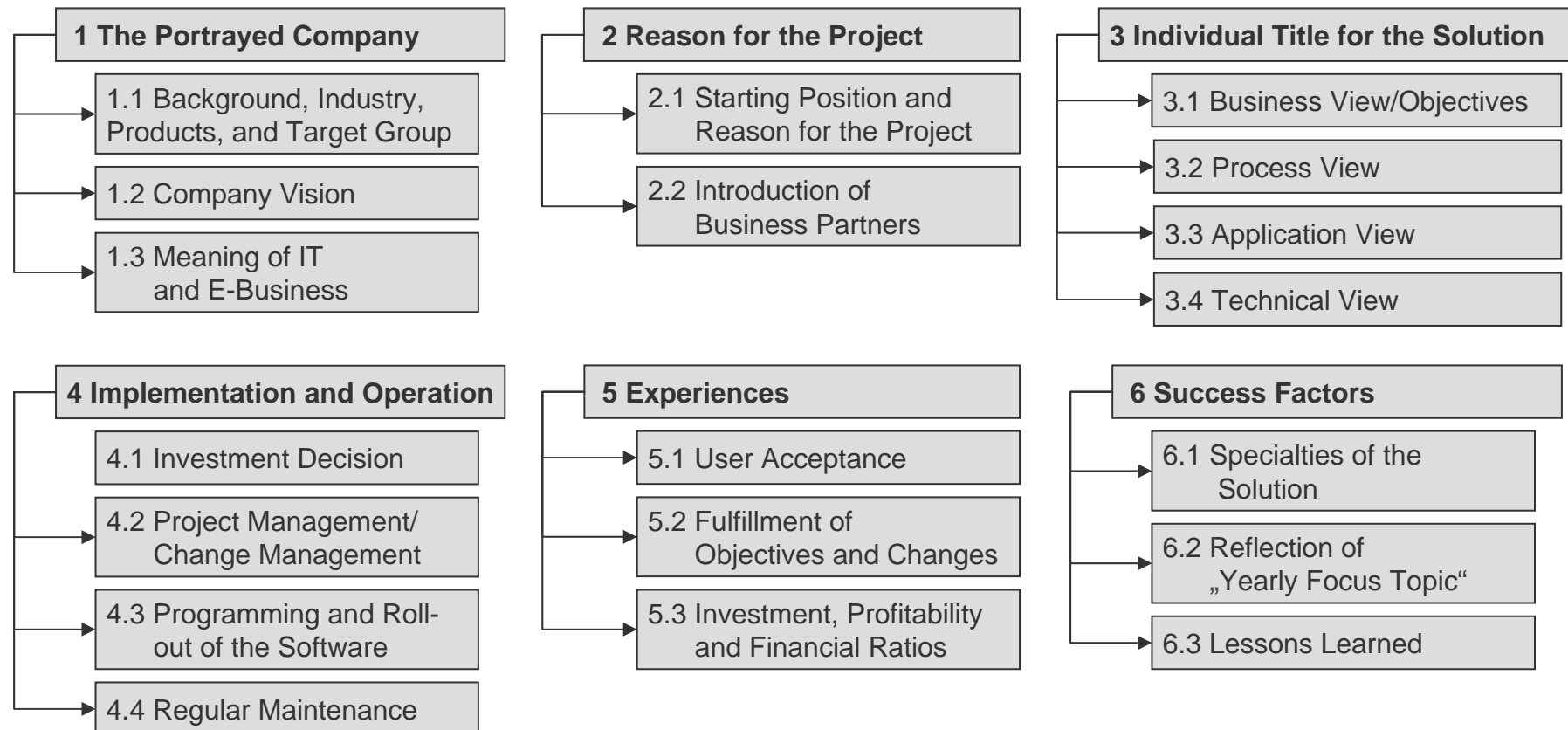
 **316** case studies

 **64** case studies

 **13** case studies



Uniform Grid for all Authors





The Netreport* Series: Empirical SME Surveys

***The Netreport Series is a collaboration of the Swiss ICT Magazine Netzwoche and the Competence Center E-Business in Basel**

05: Business Software Integration

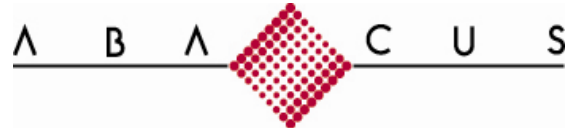
06: Importance and Use of ICT

07: Outsourcing of ICT

08: Processes and Innovation

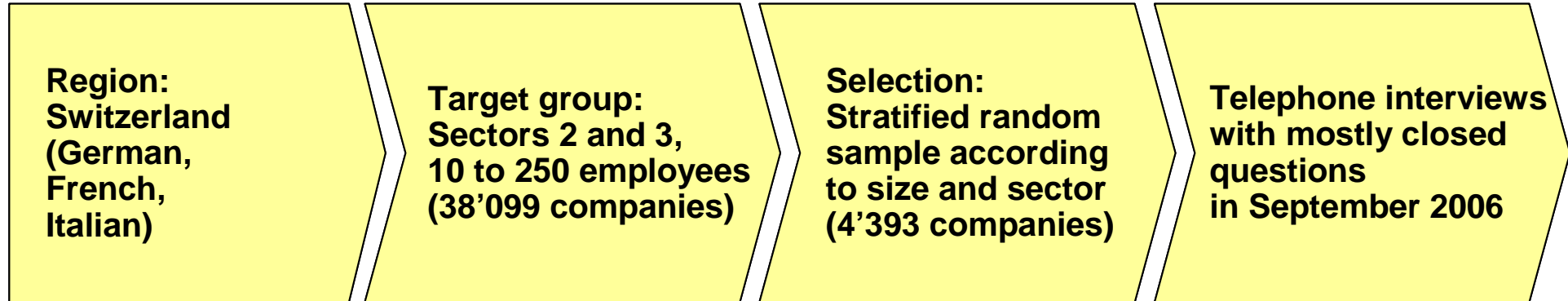


Research Partners Netreport Initiative





Yearly Netreport: Study Design



■ Company size:

- 10 – 49 employees
- 50 – 99 employees
- 100 – 250 employees

■ Standardized questionnaire

■ Questionnaires and telephone interviews (CATI)

■ Industry sectors:

- Two (Industry) and
- Three (Services)
- = 94 % of Swiss
companies with more
than 10 employees



Survey and Return Rate

- Yearly in autumn
- Target group: senior management
- Sample size
 - 05: 5'032 companies
 - 06: 5'796 companies
 - 07: 4'393 companies
- Return rate:
 - 05: 463 questionnaires
 - 06: 989 questionnaires
 - 07: 901 questionnaires
- Weighting according to industry sector and company size



Three questions that I would like to discuss with you...

- **Is it possible to standardize (commoditize) business processes (Davenport 2005)?**
- **Why is business software so far behind regarding standardized interfaces for business collaboration?**
- **Are SMEs so different from large companies when it comes to business software?**
 - **IT know-how?**
 - **Who should operate the software?**



Question 1: Is it possible to standardize (commoditize) business processes?

Davenport, Thomas (2005): The Coming Commoditization of Processes, in: Harvard Business Review, June, 2005.



Why Look at Processes?

- **Davenport 2005**
 - Standardization is necessary if you want to outsource processes (need to measure and define performance indicators)
 - *“Given the lack of comparability across companies, it’s almost surprising that anyone outsources”.*
 - SCOR, CMM (Capability Maturity Model)
 - *“The external market for capabilities will force companies to ask themselves, What processes are truly core to our organization?”*
 - Kagermann/Österle 2006: ERP-enabled business models
- **Netreport 2006: IT Outsourcing**
- **Netreport 2007: Processes and Innovation**
 - Topic is the result of multiple workshops and discussions with ERP partner companies



Question 2:

Why is business software so far behind regarding standardized interfaces for business collaboration?



eXperience 2006: Business Process Excellence

■ B2B integration

- Electronic document exchange (especially: invoices)
- Network providers play important role
- Business automation: cross-border integration of ERP systems

■ Customer retention

- Additional customer benefits from IT support

■ Logistics processes are key

■ Individualized (customized) ERP system is seen as key aspect of successful business

■ No “of the shelf” solutions (utility concept)



eXperience 2007: Collaborative Business

- **Companies re-invent the wheel regarding integration solutions**
 - No standard interfaces
 - Existing standards (EDIFACT, EANCOM, GS1) rarely used
- **Intermediaries rarely used**
 - Network effects could be gained
 - Interesting move: SAP invests in Crossgate
 - Example of AbaNet in Switzerland
- **Missing infrastructure for business collaboration**
 - Telephone/postal system
 - Unique addresses (directory), authentication, network of intermediaries



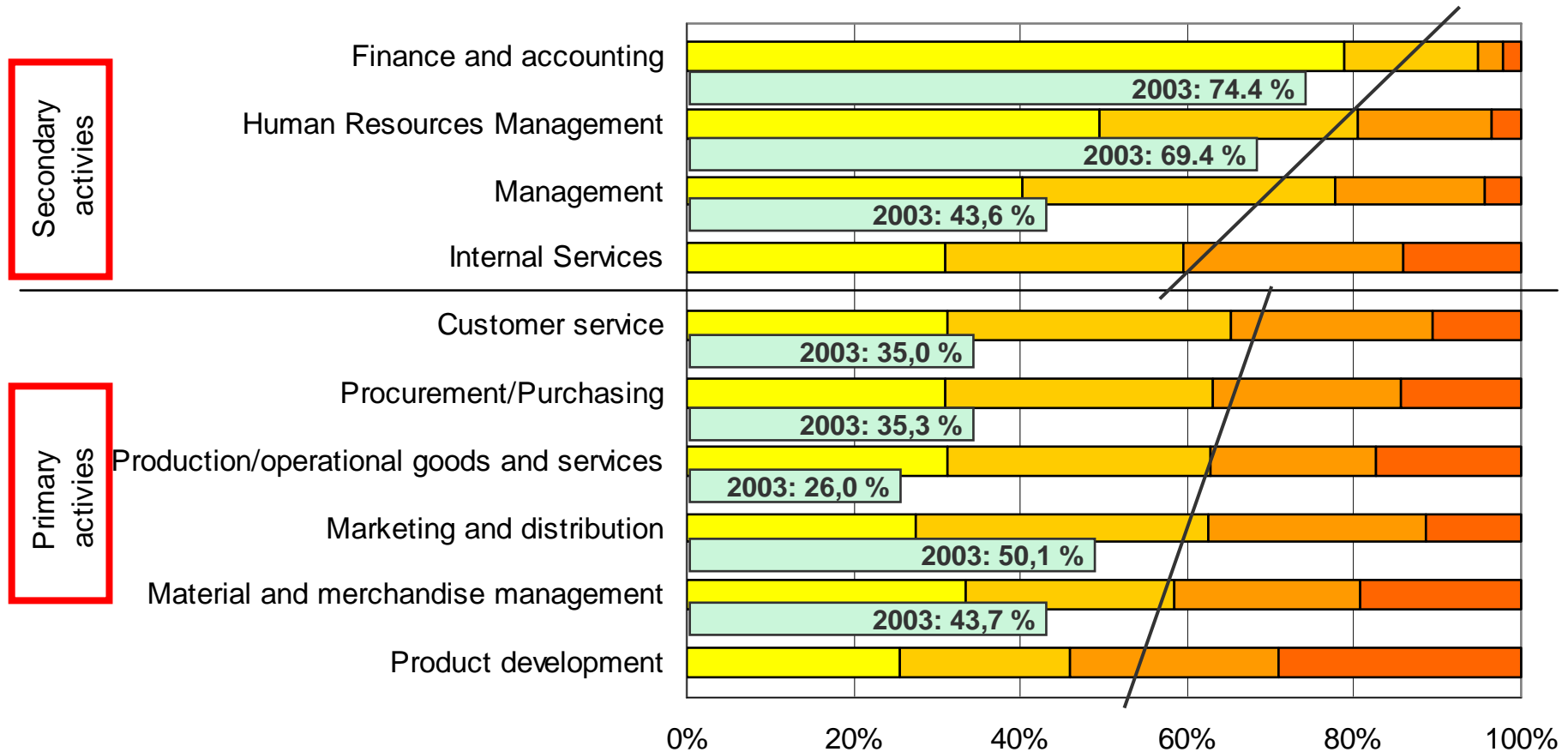
Question 3:
**Are SMEs so different
from large companies when it comes
to business software?**



NR06: Intensity of use year 2005 (compared to 2003)

Functional ICT support

N=975, weighted according to company size and sector

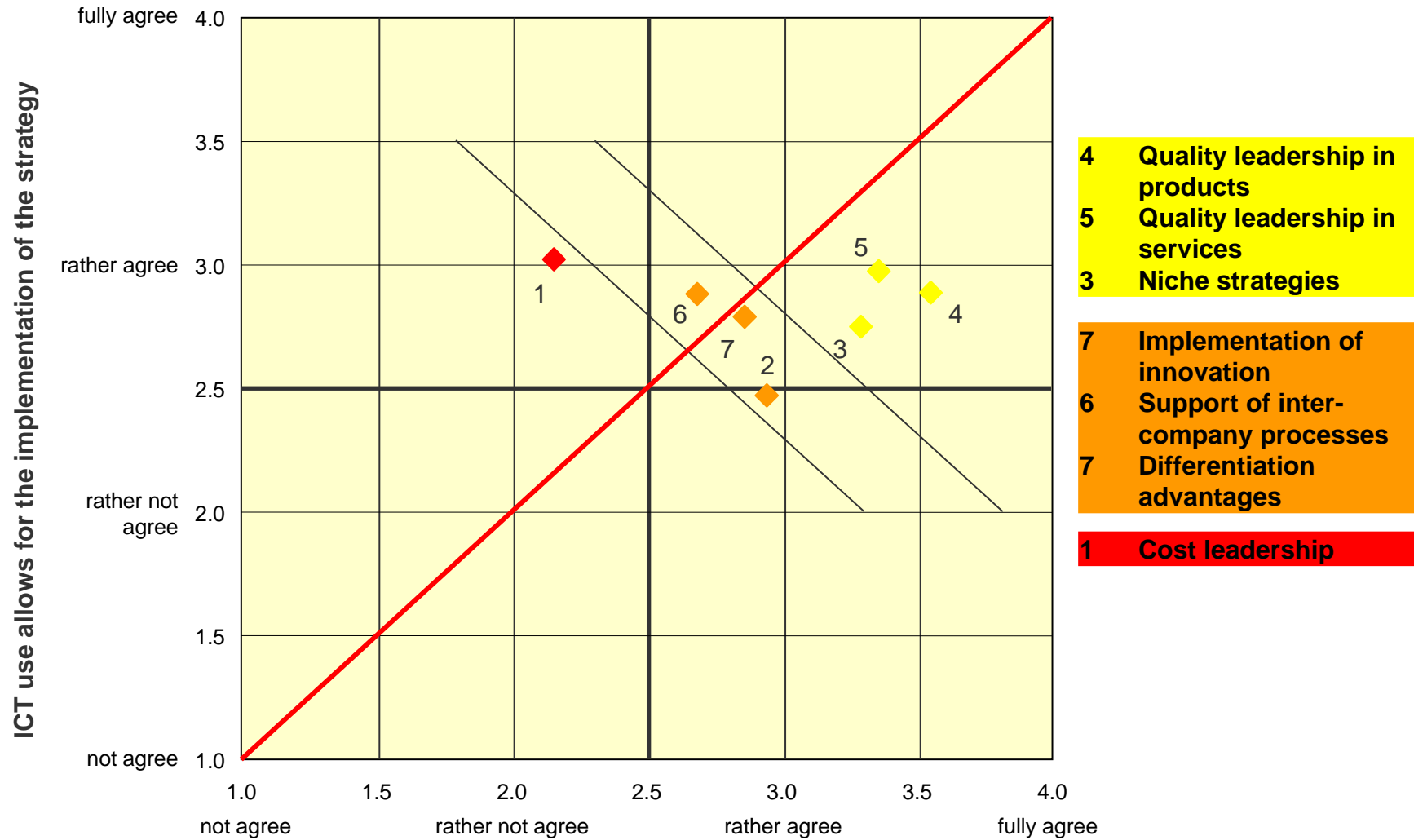


■ intensively supported
 ■ rather intensively supported
 ■ rather not supported
 ■ not supported

2003: already implemented



NR06: Business Strategy and ICT Support



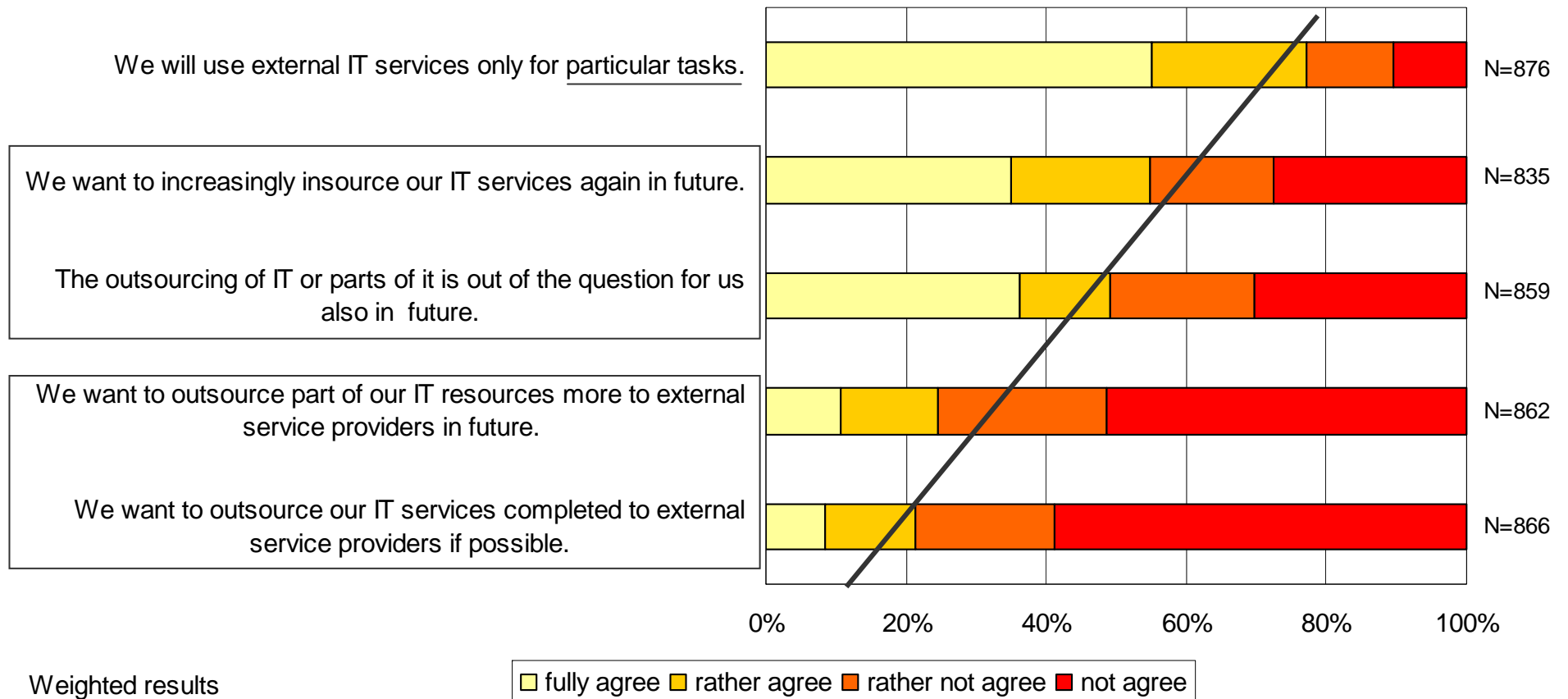
Strategy is highly significant in the achievement of competitive advantage



NR07: Future ICT Outsourcing

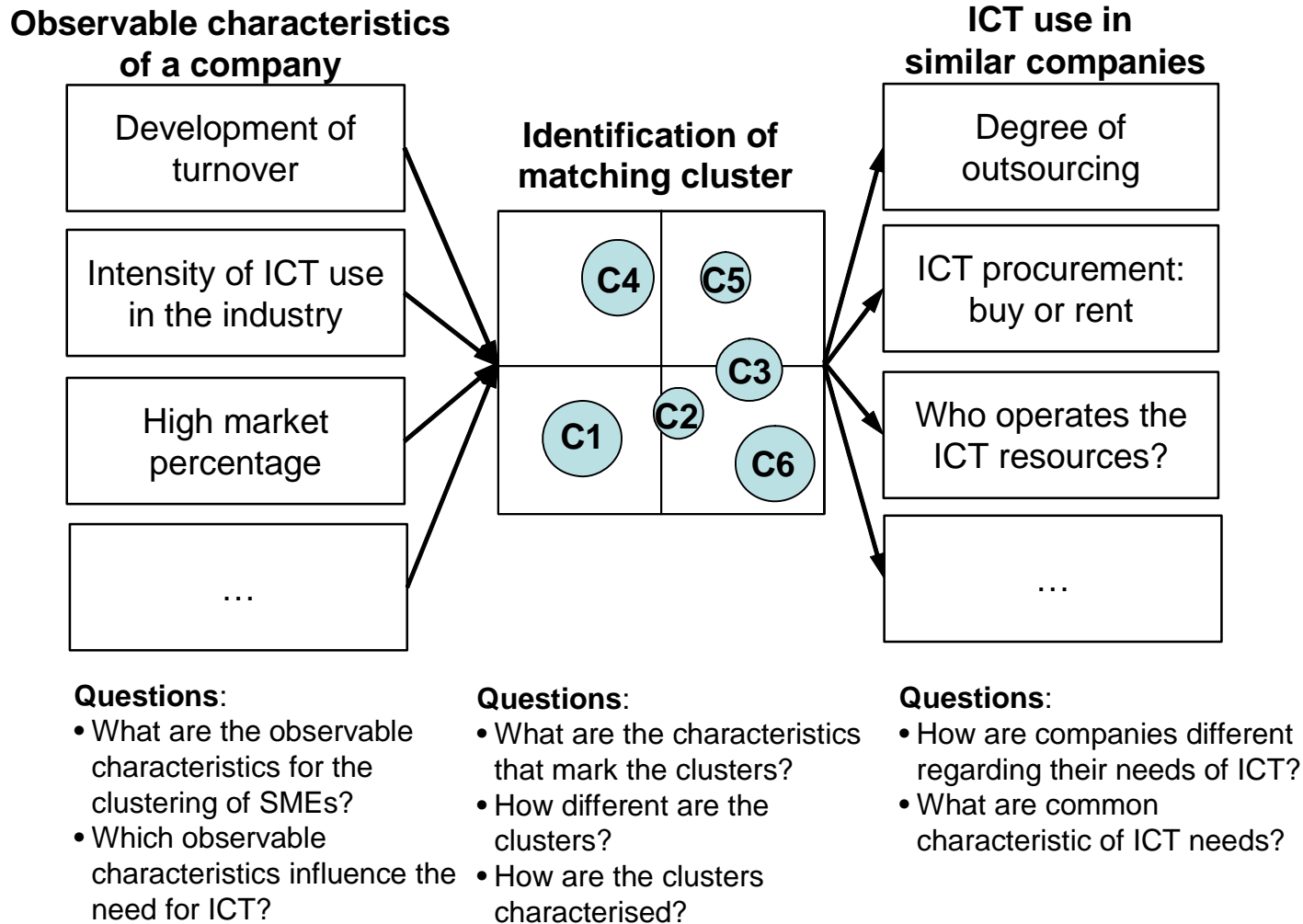
- Only particular tasks
- 50%: No outsourcing
- 20%: Future outsourcing

Future ICT Procurement Strategies (Upcoming Five Years 2007-2011)





NR06/07: Search for typical ICT company clusters





The Road Ahead: The Future of ERP Systems in SMEs

Changeability of ERP systems regarding flexible business processes



ERP User Requirements

- **Users not driven by technology**
- **Evaluation (=finding the right solution for their business processes) is very difficult for users**
- **Search for the all-embracing solution**
 - **Advantage for integrated software packages**
- **Licence-based use is still guiding principle**
 - **Buy and use**
 - **ASP has potential**



Challenges to be Tackled by ERP Software Providers

- **Software-as-a-Service (pay-per-use) is overhyped**
 - Exception: CRM
- **Application Service Providing (licence-based) is promising**
 - Useful for SMEs
- **ERP software is a customizing business**
 - Effectively support business processes to support innovative business models
- **How to find balance between need for individualisation and the need for standardization (software releases)**



Challenges to be Tackled by Universities

- **Show how Business Software can support value generating business models**
 - Driver for innovation
- **Educate future...**
 - ... software developers
 - ... software consultants
 - ... software users
- **Aids for evaluation support**



Thank you for your attention.

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Literature

- **Davenport, Thomas (2005): The Coming Commoditization of Processes, in: Harvard Business Review, June, 2005.**
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