

CHALLENGES FOR THE MANAGEMENT OF GLOBAL INNOVATION TEAMS

**By M. Shaffu and Prof. Dr. R. Gleich, European Business
School (Germany)**

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INTRODUCTION

We see a growing trend towards globalization – in establishing alliances, managing and hiring employees and entering new markets (Doney et al. 1998, p.601)

Though, the traditional understanding of globalization as the shift of production sites to low cost countries or the penetration of these countries with western products has been superseded

Conditions have changed dramatically: in the Eastern countries, such as China or India, highly qualified engineers and scientists work for 20 per cent of the salaries of their colleagues in the US or Europe

Moenart et al. (2000) consequently state, that "recently we have witnessed a strong growth in the internationalization of many firms' product development activities

"As economic borders come down, cultural barriers go up, presenting new challenges and opportunities in business", Doug Ivestor (former CEO of Coca Cola Corporation)

INTERNATIONALIZATION OF PRODUCT DEVELOPMENT HAS IMPLICATIONS FOR...

I

...the management of organization:

...the real challenge for management is to integrate new R&D units so that they become productive partners in the company's global R&D network (Gassmann/von Zedwitz 2003, p.243)

...virtual organization means relying on a diverse project membership conducting much of its work across time and space boundaries and mostly through horizontal communication enabled by distributed information technologies (O'Sullivan 2003, p.94)

II

...the management of knowledge and resources:

...leveraging knowledge around the world is a key success factor (Golder 2000, p.329)

...firms must leverage and coordinate broad creative capabilities and resources, which are often diffused across geographical and cultural boundaries (De Brentani/Kleinschmidt 2004, p.309)

III

...management of networks:

...companies find themselves overseeing distributed R&D networks with complicated management and control structures (Gassmann/von Zedwitz 2003, p.243)

...a striking phenomenon in this business environment is the growing prevalence of global teams (Kahn/McDonough 1997, p.51)

IV

...management of culture:

...the fact that the business world is becoming increasingly global does not mean that cultural differences are disappearing or diminishing (Javidan/House 2002, p.1)

Teamwork is becoming increasingly cross-cultural in multinational companies and even within local organizations... teams of diverse composition are expected to confront a great deal of conflict... (Tjosvold/Wong 2004, p.294)

IDENTIFIED GAP IN RESEARCH

Author(s)	Claim(s)
Moerart et al. 2000, p.360	... lack of attention devoted by scientific research to the management of international innovation
Bond/Houston 2003, p. 134	... little formal academic attention has been devoted to understanding and addressing impact of a culturally diverse workgroup ... Future studies could develop a conceptual framework for understanding the impact of cultural diversity
Lee/Lee/Souder 2000, p.497	... successful NPD management practices could be different for each country since each has a different national culture, but the scope of most previous studies on NPD management practices is limited to one nation and we are still lacking in cross-cultural knowledge
Tjosvold/Wong 2004, p.295	... there is a dearth of research on how people of diverse cultures are able to overcome barriers
Cramton/Webber 2005, p.758	...understanding of virtual teams is undeveloped... More research is needed in this important area...



Expert interviews (with Head of R&D, CEO etc.) were conducted in 20 German companies⁽¹⁾ that have distributed R&D activities. Results supported need for research

- **High response rate of over 50 per cent underpins actuality of topic**
- **Interviews revealed poor performance of international R&D projects and lack of management attention for cultural aspects**

(1) Mainly listed companies from DAX, MDAX and TECHDAX with high R&D ratio – Industries: Software, High-tech, Industrial, Pharma/Chemical

DERIVED RESEARCH QUESTIONS

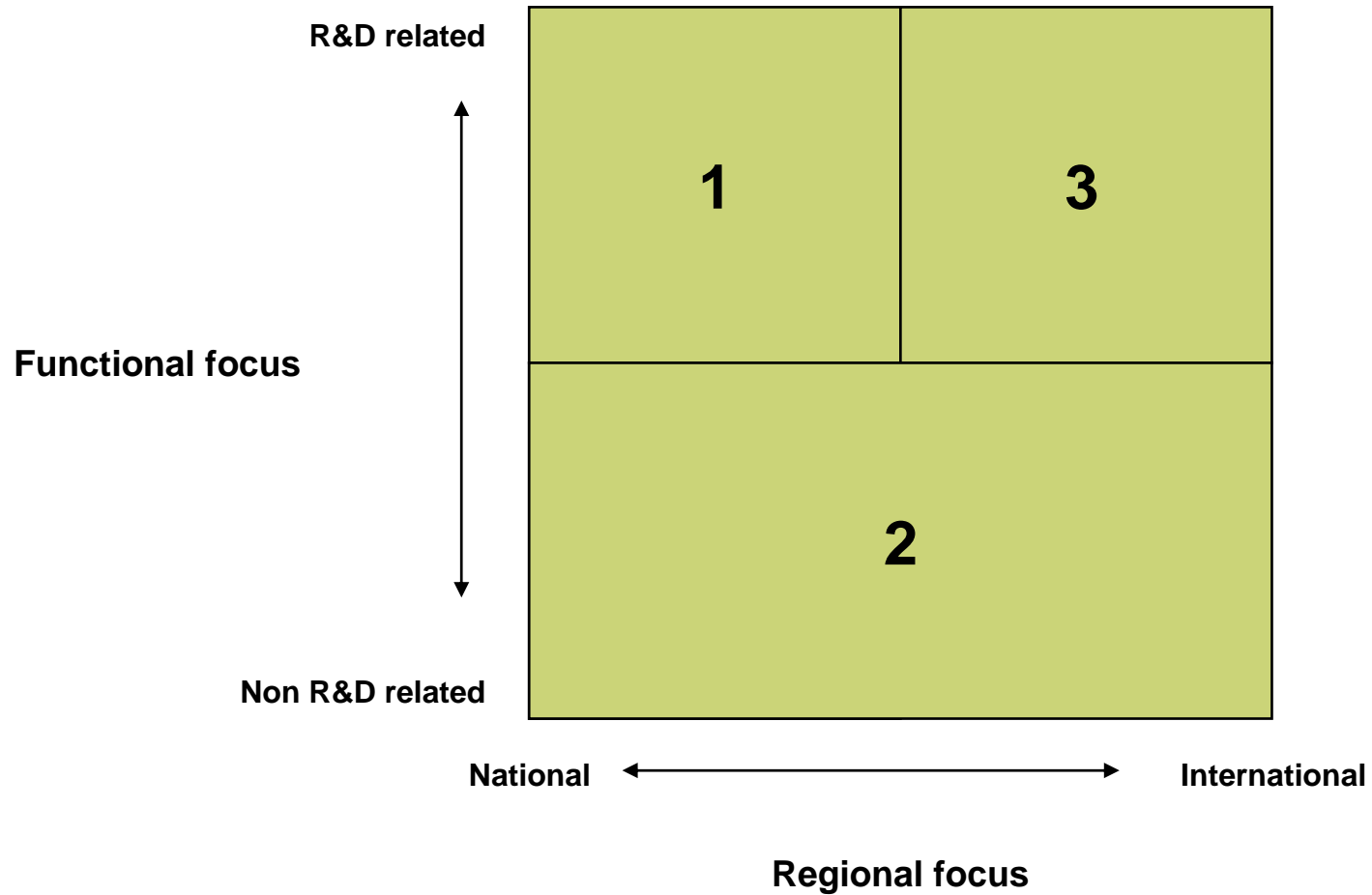
Research question #1

What could be a conceptual framework that addresses the challenges for the management of New Product Development in an international setting?

Research question #2

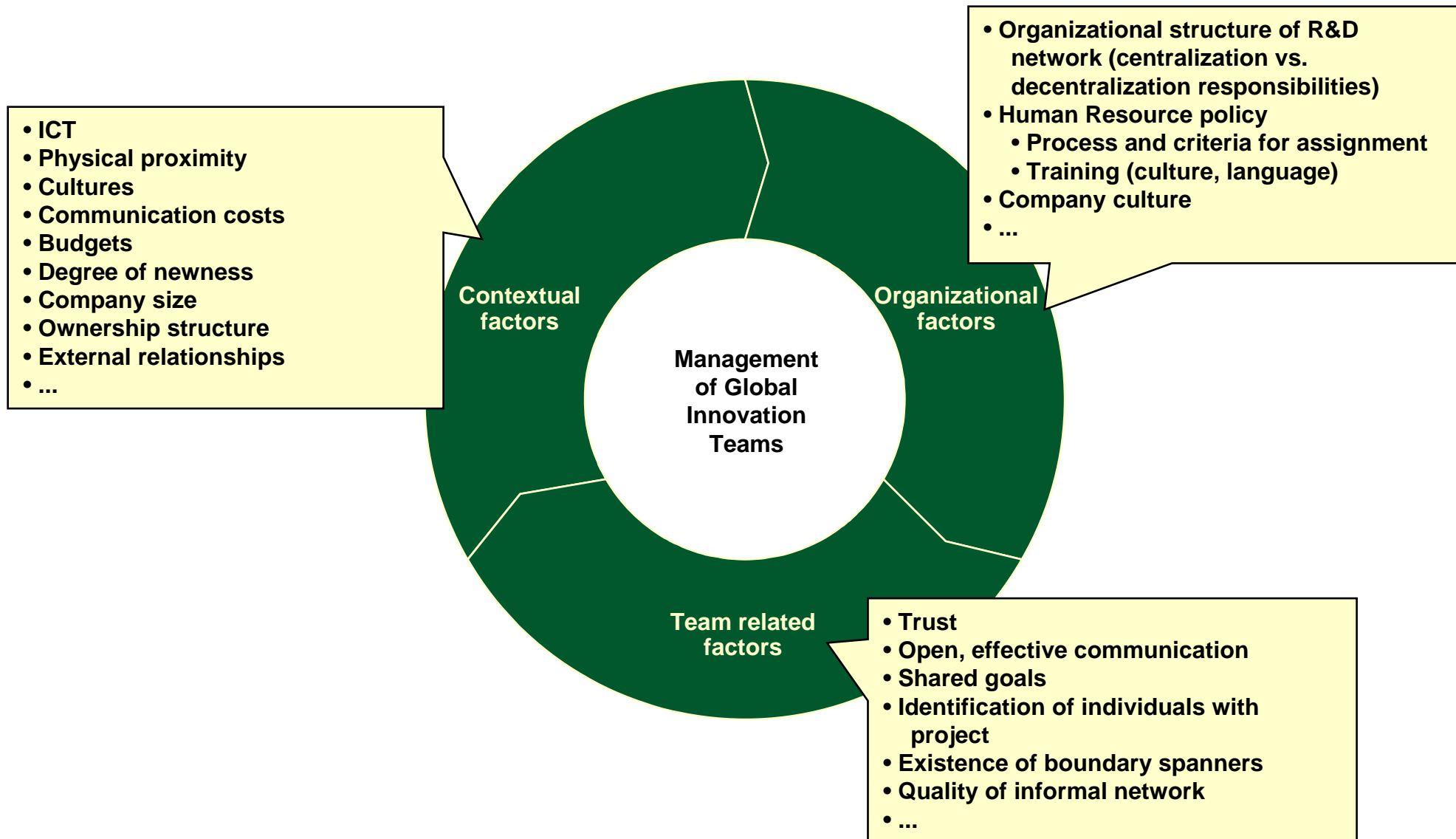
Can the results of the New Product Development studies be applied regardless of regional differences? And does cultural diversity matter in New Product Development?

GUIDELINE FOR REVIEW OF EXISTING LITERATURE



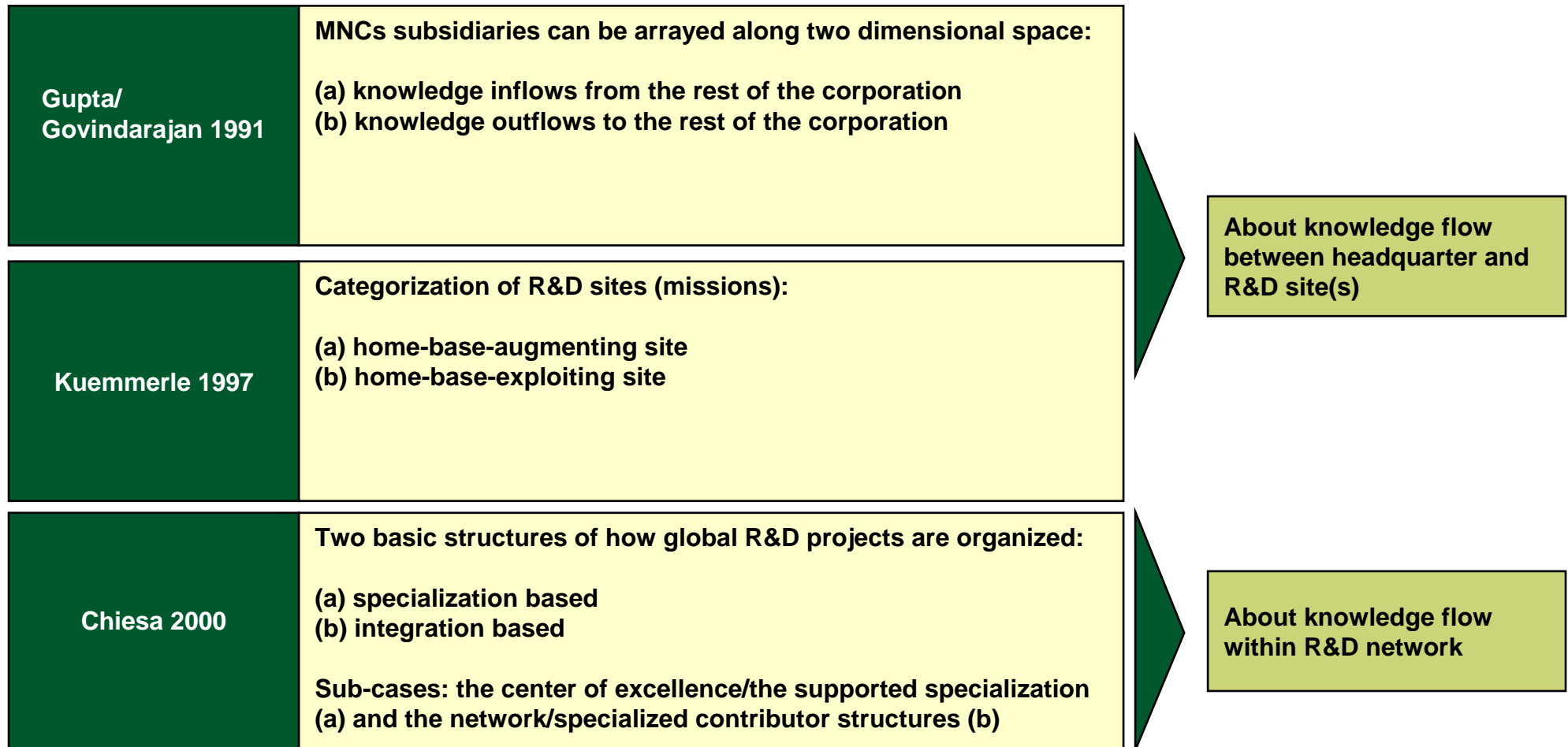
#1,2,.. order of discussion

RESEARCH QUESTION #1: SUGGESTED FRAMEWORK

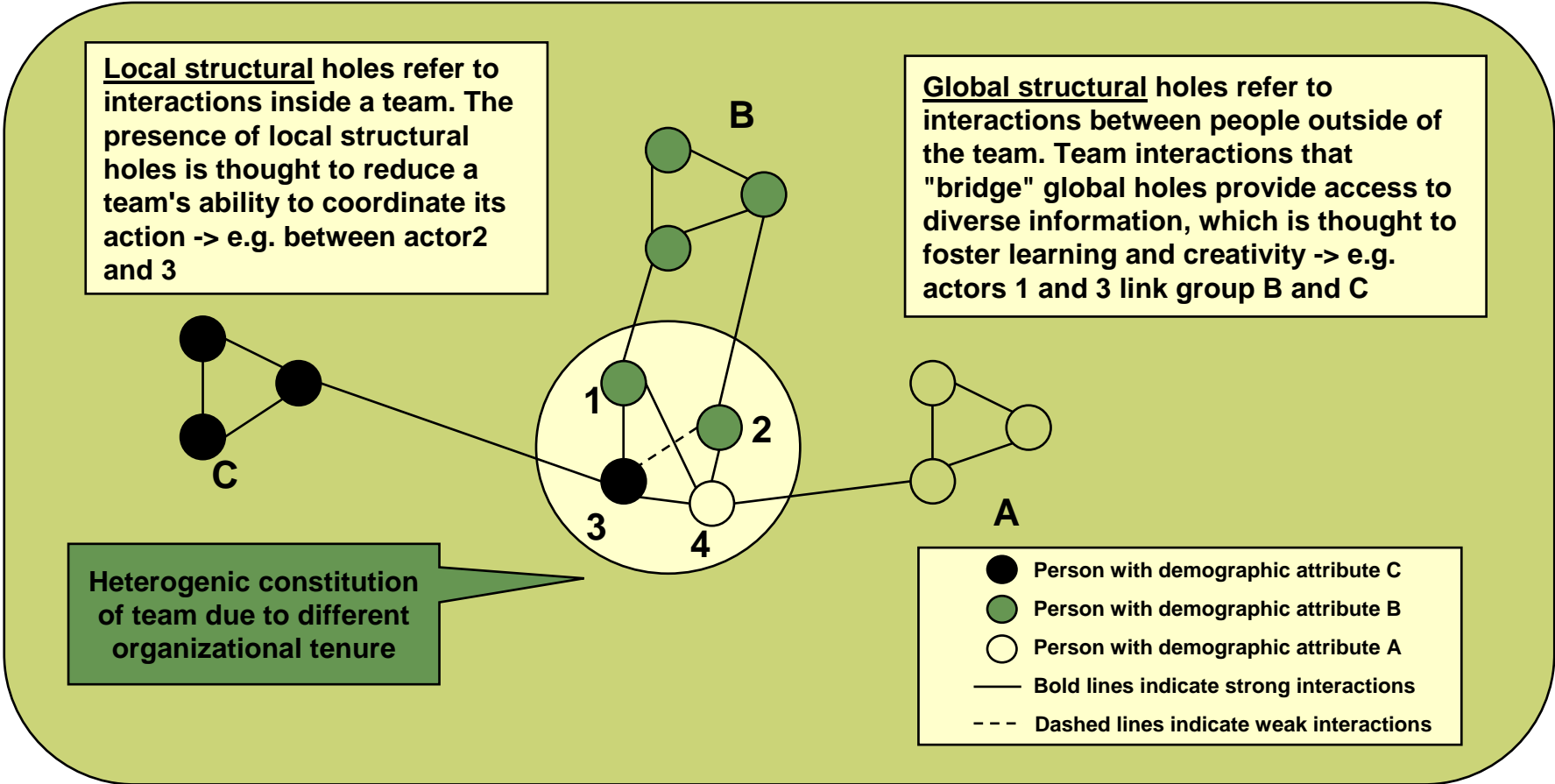


RESEARCH QUESTION #2: EVOLUTION OF ORGANIZATIONAL STRUCTURE TOWARDS R&D NETWORK

Organizational characteristics



RESEARCH QUESTION #2: CHANGE OF ORGANIZATIONAL STRUCTURE DOES AFFECT TEAM WORK



Informal (social) networks between team members are important in establishing a network between different groups in the company

Source(s): Reagans/Zuckerman (2001): Networks, Diversity, and Productivity: The Social Capital of Corporate R&D Teams. In Organization Science, p.505
EUROPEAN BUSINESS SCHOOL (ebs), Germany – Endowed Chair of Industrial Management, Prof. Dr. R. Gleich

RESEARCH METHOD AND CASE BACKGROUND

Research method

- Pre-study through expert interviews with VP HR, VP R&D or CEO of German MNCs
- Companies⁽¹⁾ were selected by deliberate sampling and differed according to the following dimensions (Eisenhardt 1998):
 - industry,
 - company size,
 - ownership structure and
 - sales growth rate
- 4 case studies conducted⁽²⁾
- Use of semi-structured checklist⁽³⁾ (Atteslander 1984)
- The interviews were not recorded for secrecy reasons.
- The notes of the interviewer were summarized and sent to the interviewee who had the opportunity to make further comments and to validate the content (Bortz/Döring 2002)
- For the purpose of this article, it will be sufficient to focus on the findings of one case study (Dyer/Wilkins 1991)

Case background: Global Chemical Corp.

- Listed on the Frankfurt stock exchange and has its headquarters in Germany
- Leading specialty chemical company with total sales of approximately 1 billion Euros and employs about 5.000 people
- More than 60 sales and production sites all over the world
- Products are often developed in close cooperation with customers and partners and play a vital role in customers' value-chains
- Different business units of Global Chemical Corp. share the R&D capacity of their labs which are located in Germany, the US, Japan, India and Italy
- In general team members stay in their home country even if colleagues from different countries are involved
- Depending on the task, members from the different labs (countries) work together on a project within a clearly defined time frame. The business unit is responsible for the project

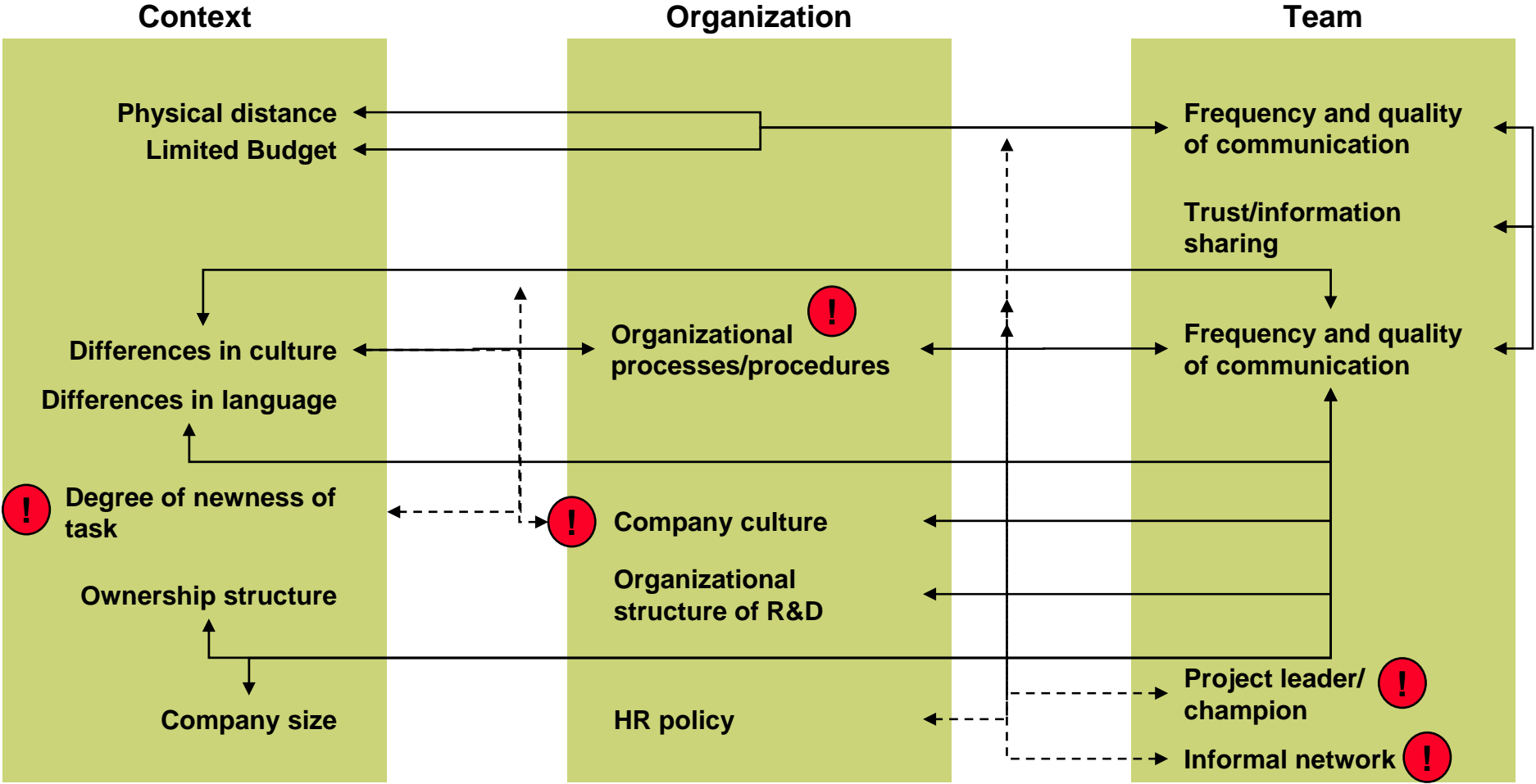
(1) The business models of the identified companies had to rely heavily on globally dispersed research and development activities

(2) The data was collected by means of desk research (e.g. reports, brochure etc.) and by the field research interviews at the companies (Perry 2001; Yin 2003)

(3) Checklist for the interviews was based on an extensive literature study (Yin, 2003)

Note: Real company name undisclosed

RESEARCH QUESTION #2: INTERDEPENDENCIES IN FRAMEWORK IDENTIFIED



! Cultural diversity seems to matter in New Product Development

SUMMARY OF KEY FINDINGS

Research question #1:

- Framework that addresses the challenges for the management of New Product Development in an international setting does exceed challenges of "traditional" Product Development
- Framework which was derived from theory and supported through case study research suggests three major types of challenge: contextual, organizational and team related

Research question #2:

- Various interdependencies within the framework were identified...
- ... which suggest that the results of the New Product Development studies can not be applied regardless of regional differences
- Evidence was found for the impact of cultural diversity in New Product Development due to increasing appearance of R&D networks

In summary, we observe that the complications of working at a distance in culturally diverse environments tend to be underestimated in research and practice

LIMITATIONS AND IMPLICATIONS

Limitations

- Results can not be generalized due to single case study
- Only one team/project was analyzed – multiple case study within the company desirable
- Interviewees were only Germans – view of Japanese company member was not assessed
- Bias in case description through ex post analysis possible – better approach to follow a project over time and participate team meetings etc.

Implications for future research and management

- Some of the context and organizational factors may be helpful in interpreting the findings of studies that examine the performance of global innovation teams
- Further research is needed to provide empirical evidence
 - for the suggested framework
 - for the nature, weight and direction of the described interrelationships
- Case study results limited – broader and more quantitative approaches are needed
- To benefit from global presence and diversity, managers have to be sensitive to a variety of factors and especially to the facets of culture