

# THE INTELLECTUAL CAPITAL OF REGIONS

## Strategies TO ADJUST TO A TECHNOLOGICAL REVOLUTION

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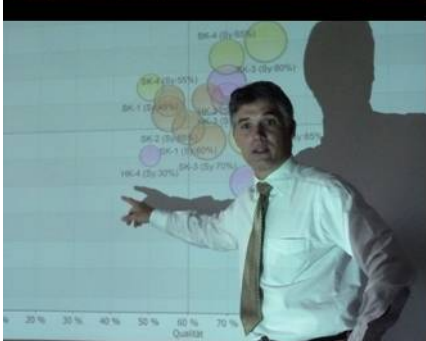
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November 2015

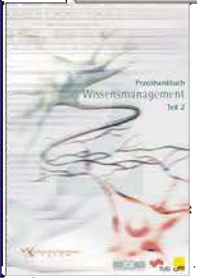
**IAC**

Intangible Assets  
Consulting

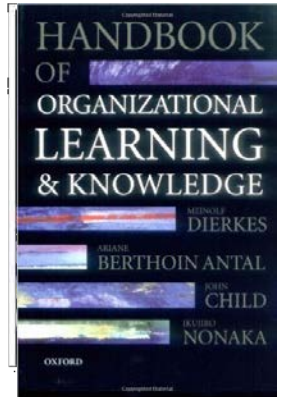
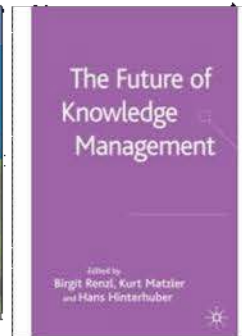
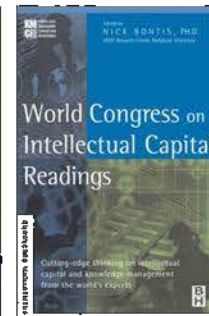
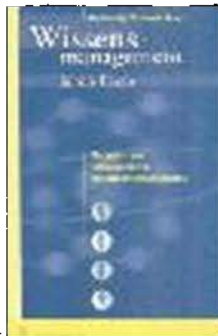
# Intangible Assets Consulting GmbH



- Intangible Assets Consulting GmbH is a **consulting firm for strategic and organizational development** with special focus on intellectual capital and knowledge-intensive business processes.
- We are since 1998 among the pioneers in the development of methods and instruments for the **assessment of Intellectual Capital**.
- After 15 years and more than 200 individual projects, we have the **largest relevant implementation experience** in the field of intellectual capital reporting in German-speaking countries.
- Our **clients** are leading industrial companies, small and medium enterprises, educational institutions and public organizations.



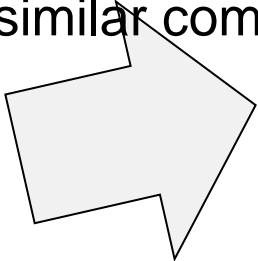
# Selected Publications



# Regions as a specific type of IC system

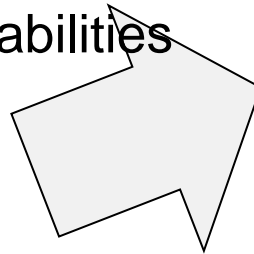
## Geography

- An area with similar topographic structure
- A political construct limited by an artificial boundary
- An economic „cluster“ of similar companies



## Knowledge Domain

- Discipline or functional areas
- A field of science or technology
- A set of process capabilities



## Community

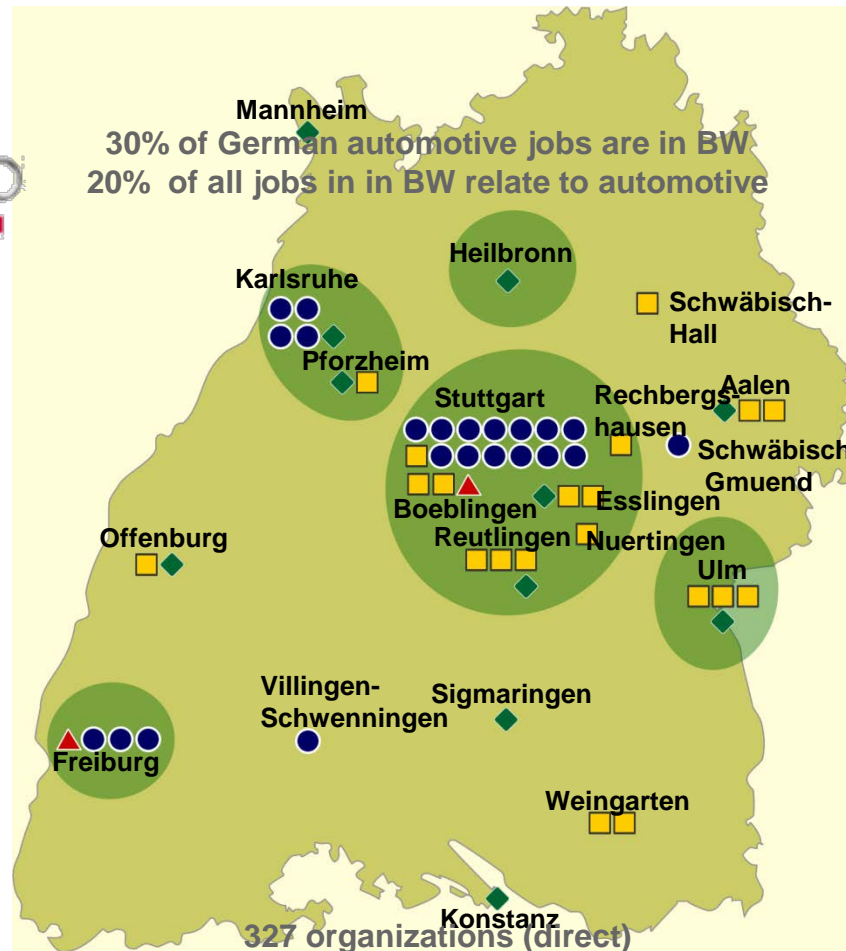
- A population or people of an area
- An interest group – based on shared threats or ambitions or language
- Digital – based on the tools they use to communicate

The system definition – or system boundaries – make a big difference.  
Can we identify different „speeds of change“?

# What kind of Revolution?

- A different technology: e-mobility partially replacing combustion?
- A new technology: Industry 4.0 integration of production, focus on digital processes
- New resources: Big Data
- Differentiated markets and “sharing culture” replacing ownership?

# Automotive Cluster – OEM, suppliers, universities and science



- Forschungsinstitute
- ▲ Universitäten
- Technologietransferzentren (Steinbeis-Stiftung)
- ◆ Fachhochschulen





„We have to  
reinvent cars“

Dr. Dieter Zetsche, 2009

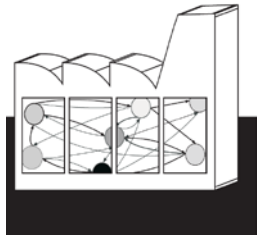
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# Intellectual Capital as driver for change and adaptation?

- What is the **status quo** of Intellectual Capital in the automotive industry in Baden Württemberg?
- **How important** are these drivers of IC for innovation and change (i.e. becoming a global player in e-mobility)?
- Which options are available for innovation policy measures?

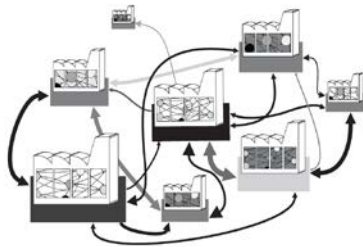


# 3 Levels of Intellectual Capital analysis



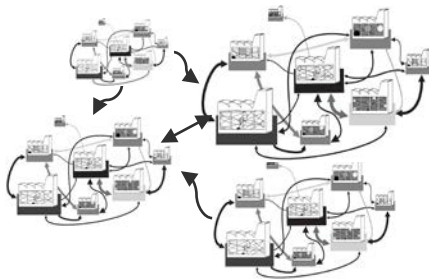
## 1. SME Level

Assessment of the status quo of Intellectual Capital from the perspective of SMEs in order to provide them support for achieving their strategic priorities - Online survey „wissensstandort bw“



## 2. Regional Cluster Level


Support of the regional cluster management based on measuring the status quo of IC and identification of priorities for the cluster.




## 3. Cluster Automotive bw

Support of technological change in order to become the global champion in e-mobility by means of regional innovation policy and definition of programs to develop drivers for innovation on SME level as well as cluster management level.


# Drivers of Intellectual Capital – the SME perspective




Gefördert durch:

 Bundesministerium für Wirtschaft und Technologie

aufgrund eines Beschlusses des Deutschen Bundestages





Wissen im Automobilcluster Baden-Württemberg

Schritt 1 2 3 4 5

Frage 1:  
Wie stark beeinflussen die folgenden Faktoren den Geschäftserfolg in Ihrem Unternehmen?

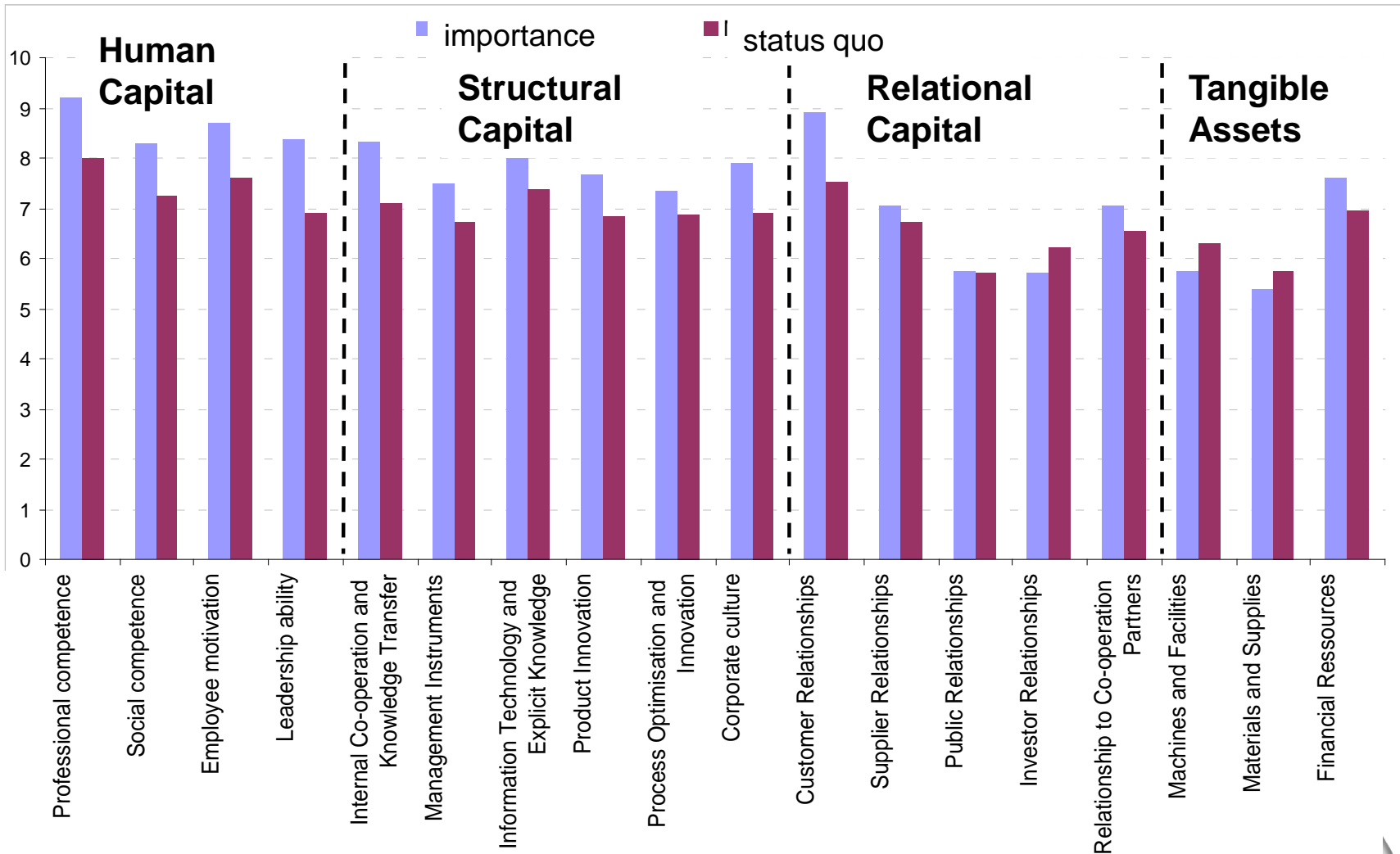
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Website:

<http://www.wissensbilanz-schnelltest.de/automotive-bw>

- What is the status quo of Intellectual Capital in the automotive industry?
- How important are these drivers of IC for innovation and change?
- Demographic data

# SME perspective on Intellectual Capital



Status quo is perceived lower than importance.  
**We need to improve!**

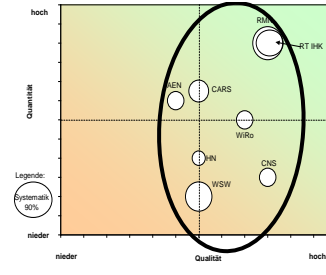
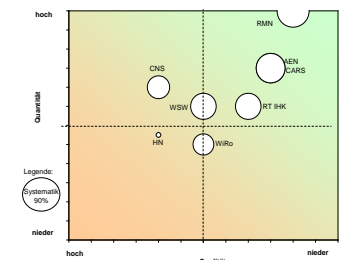
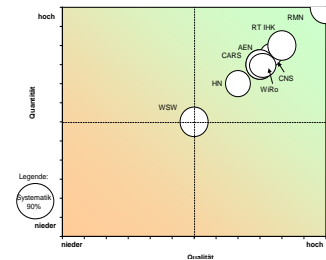
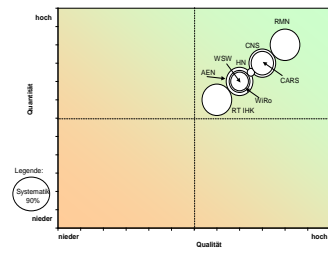
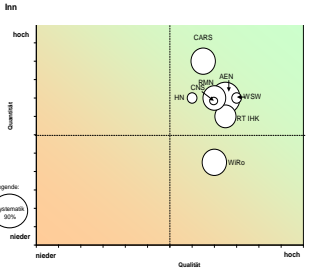
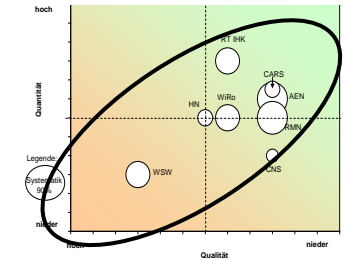
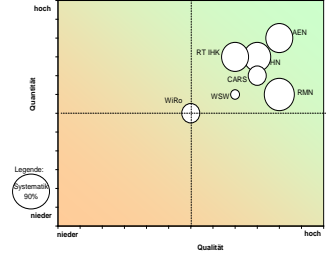
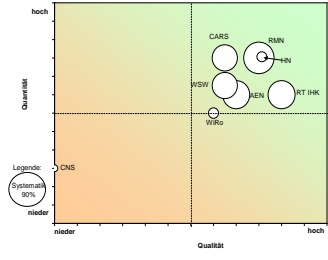
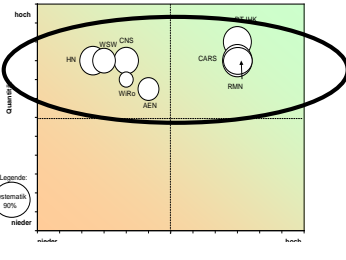
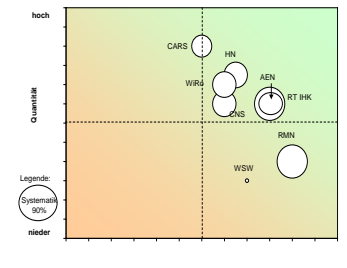
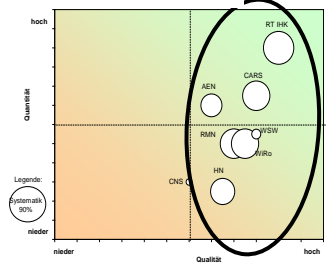
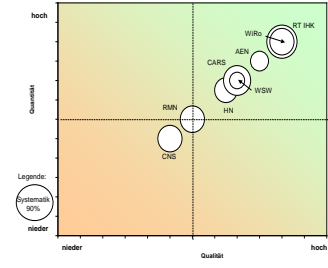
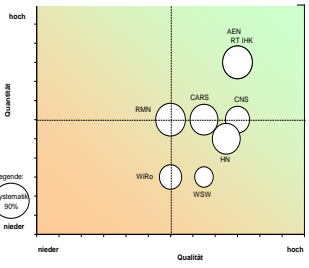
Challenge of SME:

**STATUS QUO IS PERCEIVED  
LOWER THAN IMPORTANCE**



# Diverse stati of IC within Regions

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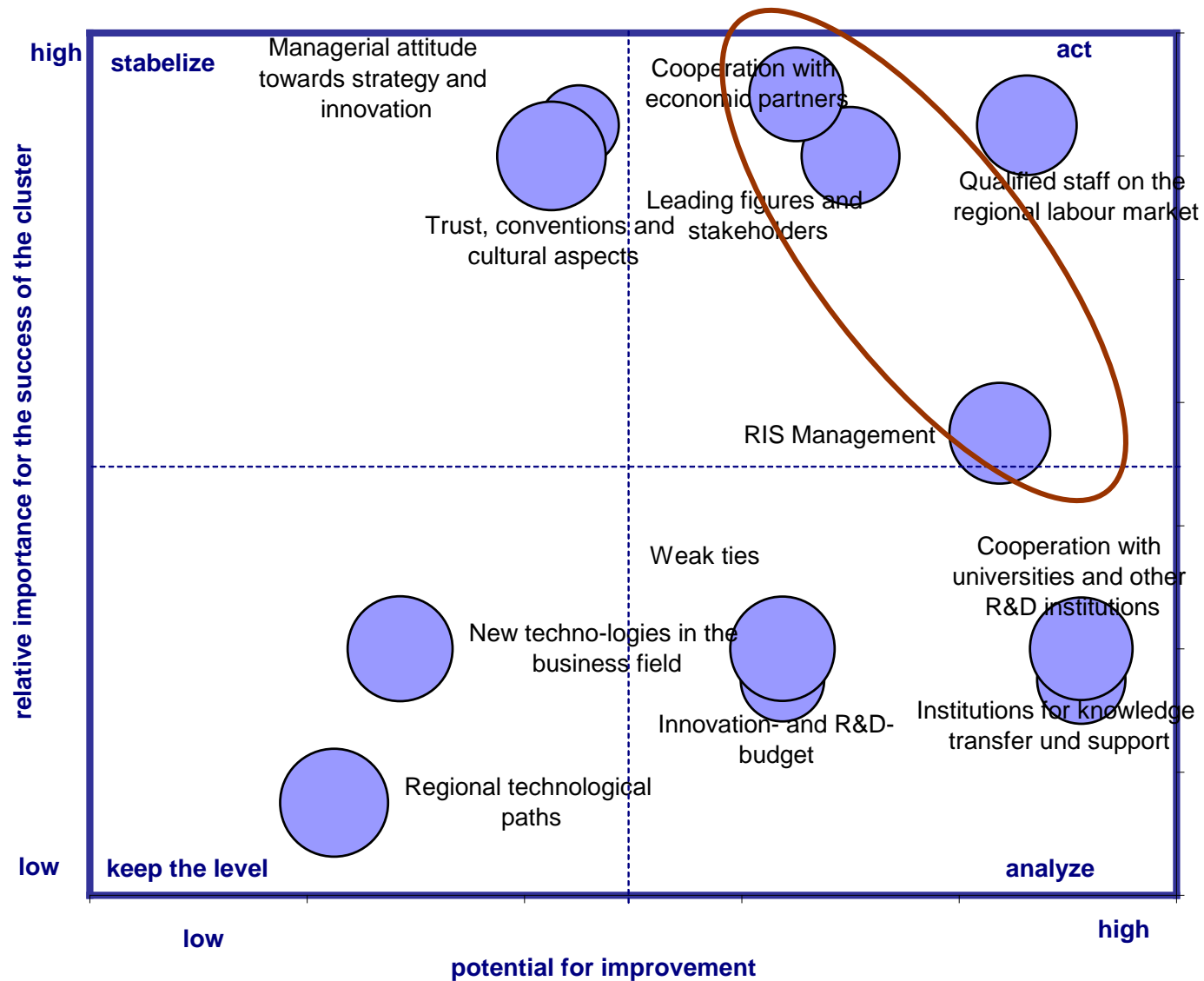
Challenge of Regions:

**QQS IS DIVERSE**

**„ONE FITS ALL“ - INAPPROPRIATE**



# Cluster manager's perspective on IC



## Cluster managers, shape up first !!!

Not all regional Clusters do have sufficient **leading figures** and stakeholders for technological change and technological leadership in their human capital.

Regional Cluster Managers do have quantitative resources, but lack **specific qualities and competencies** in order to stimulate change and innovation. A series of knowledge transfer workshops was initiated.

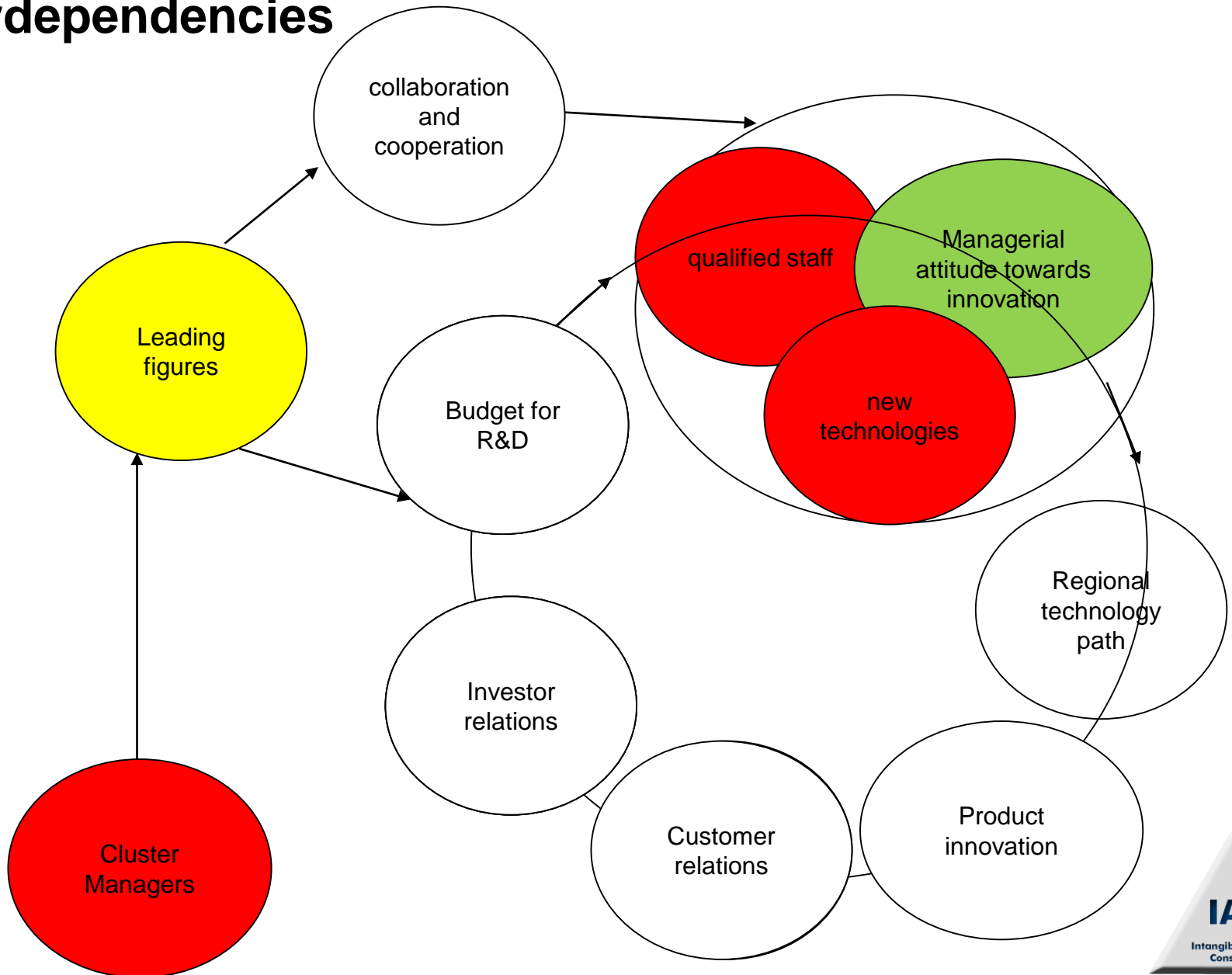
Not all regions do have excellent institutions for **knowledge transfer** from academic research to application (But they are not seen as important either).

Challenge of Cluster Managers:

**LIVE WITH RESTRICTIONS  
LEADERS NEED SUPPORT**



# Interdependencies



# Leading figures: *TecNetGroups*

Support from **industry experts and scientists**.

They act as **mentors**.

They provide orientation in finding the proper **topics**.

On demand, they contribute **knowledge and contacts**.

*TecNetGroup* „Electro Mobility“



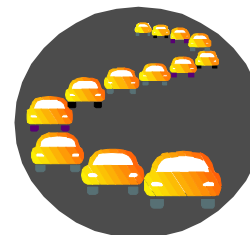
*TecNetGroup* „Effizient Technologies“



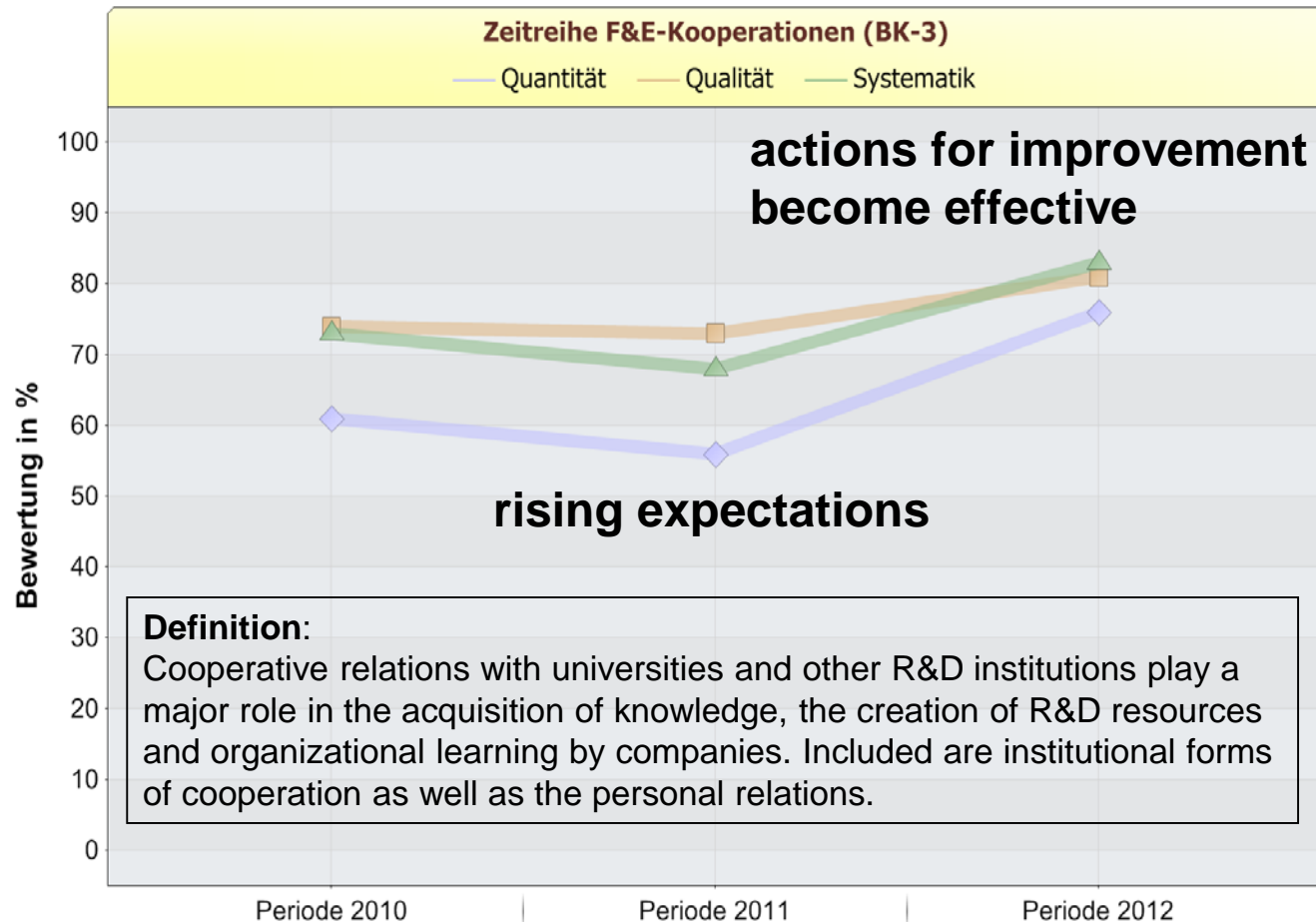
*TecNetGroup* „Light Weight“



*TecNetGroup* „Production Technologies“



# Timeline: Cooperation of R&D institutions within the automotive cluster



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## Lessons Learned

- A complex system needs **differentiated analysis**.
- We can **identify and assess** Intellectual Capital as a framework.
- We agree on **interdependencies** and develop shared understanding.
- That helps to **develop strategies** with similar complexity as our challenges.
- IC-based activities need systematic management and make **visible differences over time**.

**Thank you for your attention**

