



# Intellectual Capital for Communities in the Knowledge Economy Nations, Regions, Cities and Emerging Communities



WORLD BANK INSTITUTE  
*Promoting knowledge and learning for a better world*

World Conference on Intellectual Capital for Communities  
- Fourth Edition -



# The anatomy of European knowledge regions

## A comparative Analysis

by  
**Klaus North** [\[1\]](#)

Wiesbaden University of Applied Sciences, Germany

[\[1\]](#)

The comparative analysis has been prepared by the students of the Master Program of International Business Administration, Wiesbaden University of Applied Sciences as the semester project in the knowledge management course. My thanks go to Jan-Hendrik Boerse, Jana von Ciriacy-Wantrup, Matthias Dietz, Kathrin Dotzert, Olga Emling, Agnès Idzkowski, Donika Lilova, Evgenia Todua, Danielle Werner and Marion Wild

# Background and objective of the study

- Metropolitan regions increasingly experiment with visions, strategies and actions to become knowledge regions
- **Objective: To provide guidance to the initiative « knowledge region Frankfurt Rhein/Main**
- A comparative analysis of 14 European metropolitan regions that have developed knowledge region initiatives
  - Berlin
  - Frankfurt
  - Halle-Leipzig
  - Hannover
  - Munich
  - Rhein-Neckar
  - Stuttgart
  - Twente-Osnabrück
  - Graz (Austria)
  - Vienna (Vienna)
  - Lyon (France)
  - Manchester (UK)
  - Milan (Italy)
  - Barcelona (Spain)
  - Tampere (Finland)

## Criteria of comparative analysis

Concepts	Governance	Instruments and Activities	Results
<ul style="list-style-type: none"> <li>✓ Vision</li> <li>✓ Strategy, Objectives</li> <li>✓ Geographical Extension,</li> <li>✓ Working Definition of Knowledge Region</li> </ul>	<ul style="list-style-type: none"> <li>✓ Initiators, Key Actors</li> <li>✓ Membership, Partners</li> <li>✓ Decision Bodies, Processes</li> <li>✓ Budget, Funding Resources</li> </ul>	<ul style="list-style-type: none"> <li>✓ Networks and, Clusters</li> <li>✓ Co-operative Projects and Innovation Initiatives</li> <li>✓ Shared Services</li> <li>✓ ICT-Infrastructure</li> <li>✓ Communication and Documentation</li> <li>✓ Venture Capital</li> </ul>	<ul style="list-style-type: none"> <li>✓ Indicators</li> <li>✓ IC-reporting</li> <li>✓ outreach</li> <li>✓ Maturity of Initiative</li> </ul>

# To create and implement knowledge regions we seek answers to the following questions:

- **What makes a knowledge region?**
- **How to formulate an appropriate vision, strategy, and objectives?**
- **Which governance model should we choose?**
- **How to ensure funding?**
- **What are instruments and activities that make a knowledge region work?**
- **How to measure and monitor results?**

# What is a knowledge region?

**None of the studied regions has an explicitly formulated model of a knowledge region.**

**Judging from the strategies, instruments and activities a knowledge region:**

- has a well established **(higher) education and research** system and thus
- ensures the availability of **skilled people**,
- **links knowledge production and application** using a network or cluster approach,
- **promotes innovation and value generation** in knowledge intensive sectors or value chains and
- is a **culturally rich and attractive** place to live.

# How to formulate an appropriate vision, strategy, and objectives?

- Most regions describe a strategy and objectives
- e.g. *Manchester “to create an internationally acclaimed knowledge capital within the Greater Manchester conurbation...significantly contributing to the economic growth of the nation and the Northwest region...”* ,

The following **three objectives** can be found in most of the regions:

- 
- *To strengthen the international profile, competitiveness and attractiveness of the region*
- *To increase knowledge creation and innovation of science and industry through better linkages and networking within the region.*
- *To raise awareness and communicate the strengths, particularly the intellectual capital of the region*

# Which governance model should we choose?

- **The challenge:** How to reconcile a long term professionally led regional development process with a more short term and locally oriented political legitimation and governance.
- **Three governance models:**
  - *Metropolitan region initiatives governed by city and regional councils (Munich, Hannover, Lyon)*
  - *Networks of major stakeholders (Manchester, Frankfurt)*
  - *Project status (Vienna)*



# Manchester :Effective implementation of decision bodies cooperating with the private and public sector:

- **Knowledge Capital Board** consisting of key representatives from HEIs, public agencies, other regional bodies and target private sector industries such as biotech, chemicals, aerospace, cultural/media industries, financial/ professional services. This high level, predominantly private sector group meets once a quarter to steer ongoing strategy, review Business Plans but it is not functioning as a direct delivery vehicle
- **Executive Team** responsible for managing the development, co-ordination and impact of the initiative. This team oversees the interface between all partners across and beyond the region and ensures that linkages with relevant regional and national initiatives and activities are created and maintained. Implementation of KC projects together with project sponsors.

# How to ensure funding?

**Knowledge region initiatives lack funding!**

**mixed funding base:**

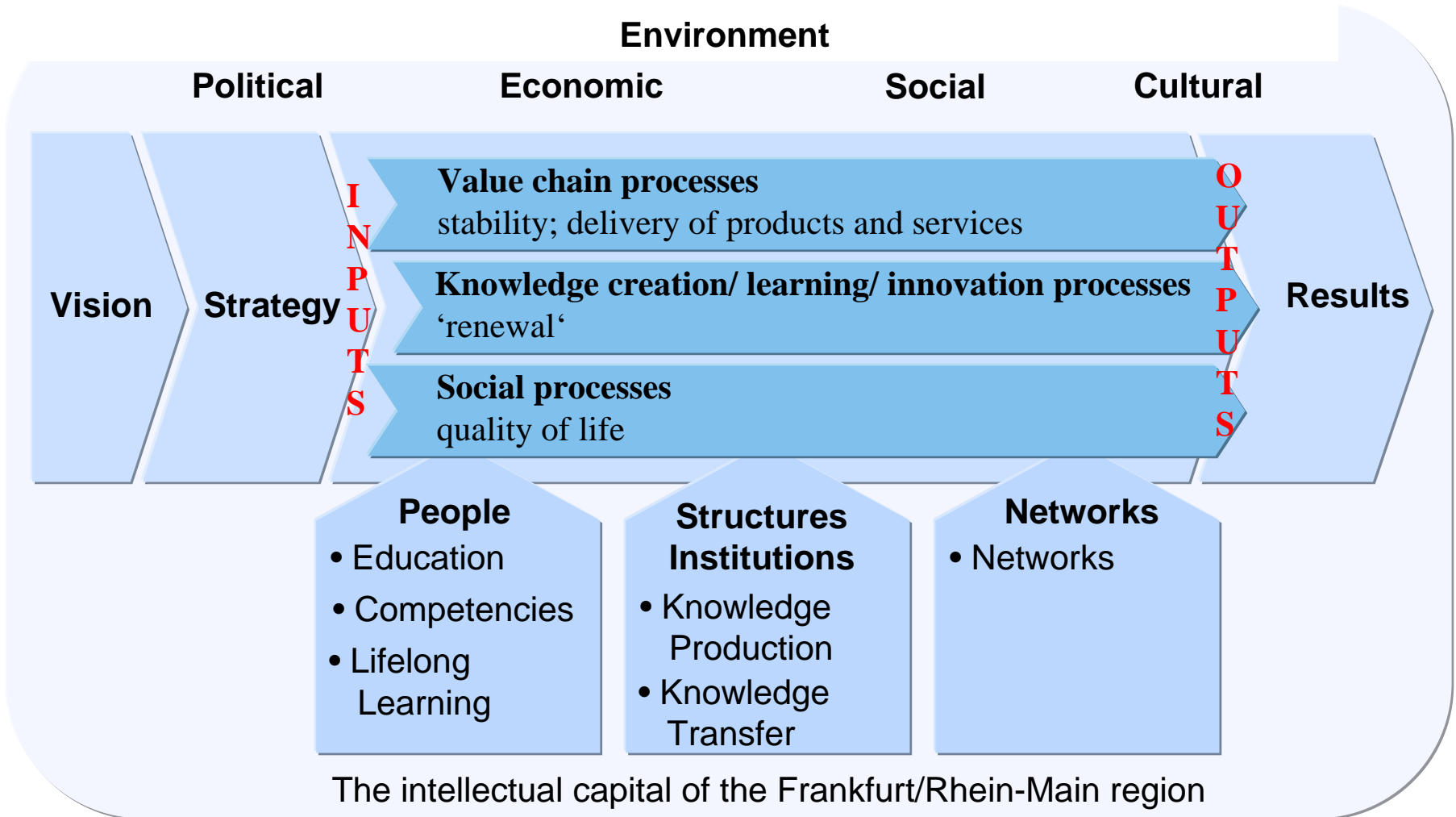
- **Cities / Communities**
- **Federal state(s)**
- **Contributions by members ( public & private)**

# What are instruments and activities that make a knowledge region work?

	Be rli n	F r a n k f u r t	H a l l e - L e i p z i g	H a n n o v e r	Mu nic h	Rh ein - Ne cka r	Stu ttg art	Twent e- Münst er- Oсна brück	St eie rm ar k- Gr az	V i e n n a	L y o n	Ma nc he ste r	M i l a n	T a m p e r e
<b>Instruments and activities</b>														
<b>clusters and networks</b>	x	x	x	x		x	x	x			x	x	x	x
<b>Cooperative projects, conferences and innovation initiatives</b>	x	x	x	x	x	x	x			x	x	x	x	x
<b>Shared services</b>					x		x	x		x	x	x	x	
<b>Websites ,ICT platforms</b>		x				x			x		x	x		x
<b>Venture capital</b>		x			x	x						x		
<b>Intellectual Capital reporting</b>														

# How to measure and monitor results?

## Intellectual Capital Statement – basic model



# Indicators recommended by the Montreal Knowledge City Advisory Committee(2003)

There are four main indicators of knowledge cities' performance, ranging from purely economic criteria to assessment of cultural factors.

## Economic performance

*Sample indicators:*

- Growth of high-technology and high-knowledge sectors
- Employment/unemployment growth rates
- Per capita GDP
- Percentage of labour force employed in high-technology and high-knowledge sectors

## Quality of the innovation process

- Patents per capita
- High-tech start-ups per capita
- Access to venture capital

## Availability and skill level of human capital

- Rate of increase in number of university graduates
- Demographic growth
- Degree of qualifications of immigrants

## Richness of cultural and social assets

- Multi-ethnic character of the city
- Degree of openness to cultural diversity
- Proportion of artists

# Conclusions

- We need a **reliable database** on knowledge regions
- 
- Up to know “knowledge region” is still a rather **elitist concept** which is not well understood by local politicians and citizens.
- **Outreach and sustainability** are limited
- Only few initiatives have clear **governance structures and funding**
- There is **insufficient monitoring** (no IC reporting)