WHAT CAN CLUSTER INITIATIVES DO?  
Evolving strategies for regional success

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Overview

> **My Background**: Cluster research in biotechnology
> **Dimensions of Cluster Initiatives**: The iceberg metaphor
> **Challenges for Local Cluster Initiatives**: Dare having a global outlook
> **Global Trend vs. Local Path-Dependent Development**
  — Path dependency and the danger of technological ‘lock-ins’
  — Winning strategy: Map and compare your tech-path
> **Global Partners vs. Local Players & Institutions**
  — The institutional barriers
  — Winning strategy: Bridge institutional gaps
> **Conclusion**: What can cluster initiatives do?
My Background: Cluster Research in Biotechnology

> Current research: **Dynamics** of Clusters
  - VW Foundation: BioValley: A case of evolutionary institutional change
  - BioRegions in Europe – a pan-European comparison of cluster-dynamics

> Past research: PhD thesis on **Dimensions** of biotech clusters
  — Twofold Comparison
    - 1. Pan-European
    - 2. Transatlantic
Dimensions of Cluster Initiatives
The Iceberg Metaphor

> **Active**: 'Regional' Level
Agent Networking Level

> **Semi-active**: National Level
Technological Resources
Level (basic research funding)

> **Difficult**: Global Level
Commercial Level
Challenges for Local Cluster Initiatives
Dare Having a Global Outlook

- Know your strengths
- Create local synergies
- Lobby nationally for your tech
- Evaluate your tech’s global trends
- Connect your local network to the global scene
Global Trends vs. Local Path
Path-dependency and the danger of ’Lock-Ins’

> Notion of **path-dependency** (Walker 2000)
  — Industrial history is literally embodied in the present. That is, choices made in the past—technologies embodied in machinery and product design, firm assets gained as patents or specific competencies, or labor skills acquired through learning—influence subsequent choices of method, designs, and practices. This is usually called ‘path dependence’. (p 126)

> **Positive side**: Self-reinforcing positive effects (high local growth, high firm efficiency, high innovation, high start-up rate)

> **Negative side**: Self reinforcing negative effects = technological Lock-Ins (local growth decline, low firm efficiency, low innovative activity, low start-up rate)

> **Problem**: Firms are prone to lock ins. Cluster initiatives can create awareness of global trends and local paths.
Global Trends vs. Local Path
Winning Strategy: Map and compare your tech-path

> **Passive**
  
  — Discourage 'locked-in' technology start-ups through innovation oriented funding mechanisms

> **Active**
  
  — Evaluate your clusters' technology path
  — Hold trend seminars with similar cluster initiatives
  — Have technology-trend scouts reporting to you
  — Blend information of first three activities and share it with your companies on few, but high-quality workshops

> **Reflexive**
  
  — Be self-aware and critical: If 'your' cluster withers (c.f. importance of monitoring) do not artificially maintain it. (Schumpetrian 'creative destruction')
Global Partners vs. Local Players & Institutions
The Institutional Barriers

> Notion of **institutions** (Thelen / Streeck 2004):
  — Institutions are building blocks of social order and encompass the **nation-specific configuration** of corporate finance, corporate governance, industrial relations, vocational training, research and development, relations between firms and role of associations.

> **Positive side**: Local Scene is 'automatically' familiar with local institutions

> **Negative side**: Global Potential Partners are not familiar with local institutional setup

> Problem: Potential international partners shy the adaptation to unknown institutional setups (c.f. Amgen). **Cluster initiatives can bridge institutional gaps**
Global Partners vs. Local Players & Institutions
Winning Strategy: Bridge institutional gaps

> Active

— Chart local (national) institutional setup including the following elements:
  - corporate finance, corporate governance, industrial relations, vocational training, research and development, relations between firms and role of associations

— Determine institutional setup of guest company and bridge institutional gap offering tailored facilitator services.
  - E.g. outline difference of industrial relations Europe – U.S.
  - E.g. outline difference in training schemes Switzerland – Japan
Conclusion
What can cluster initiatives do?

- Measures geared at improving global reach of local cluster initiative:
  - Create awareness of global trends and local paths:
    - Scout international technology trends
    - Critically evaluate local technology path
    - Engage in self critical cluster (validity) monitoring
  - Bridge institutional gaps
    - Offer tailored facilitator services for international companies

- Evolving strategy with stronger focus on globally inspired / oriented activities
References


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