

# ***3<sup>rd</sup> International Cluster Conference***

## **Clusters and Cluster Initiatives: Recent Developments and Current Challenges**

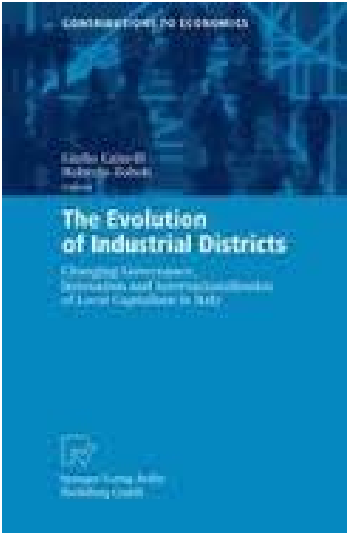
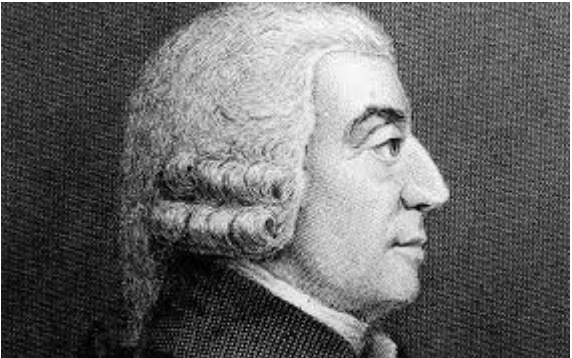
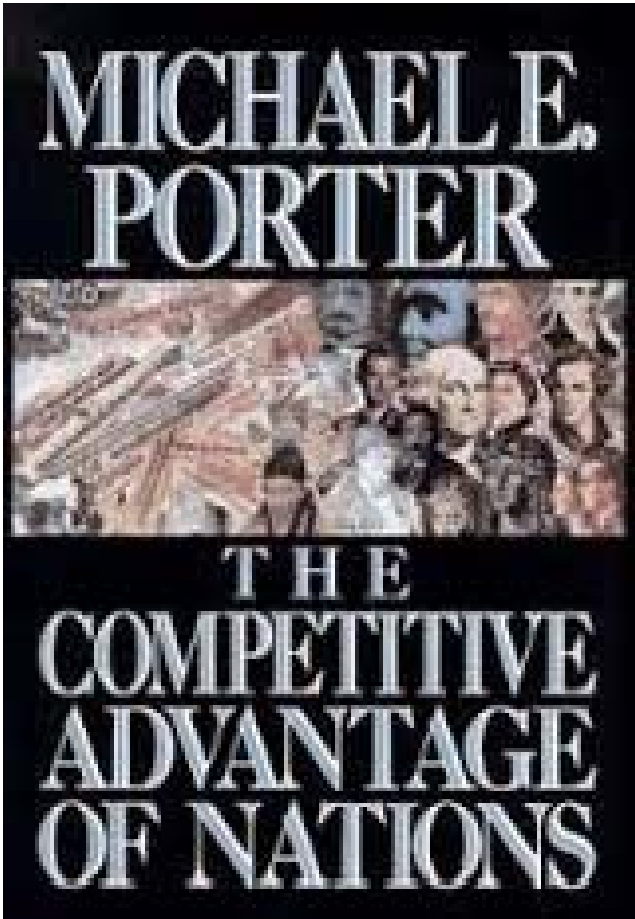
Dr Christian H. M. Ketels

Institute for Strategy and Competitiveness, Harvard Business School  
President, TCI Network

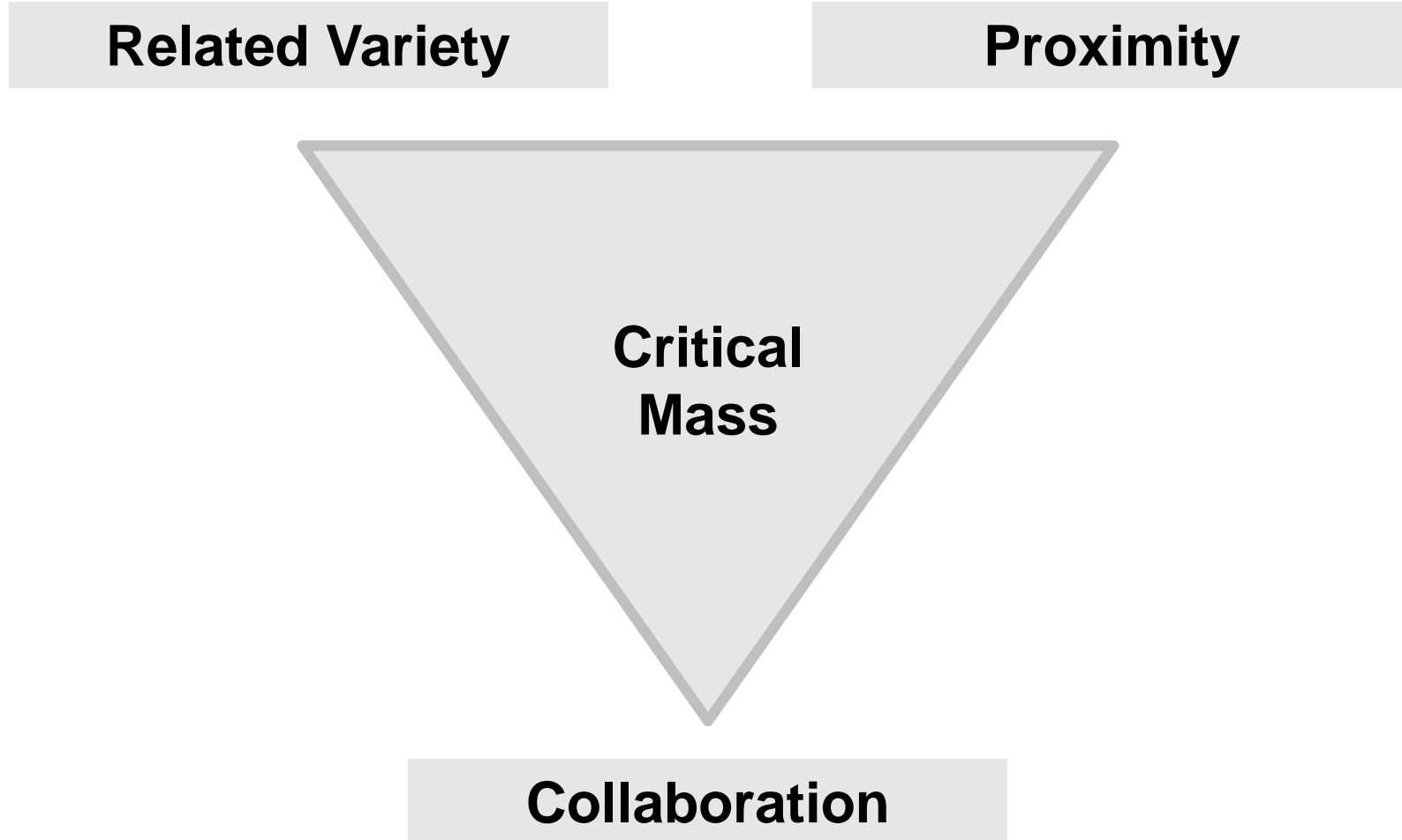


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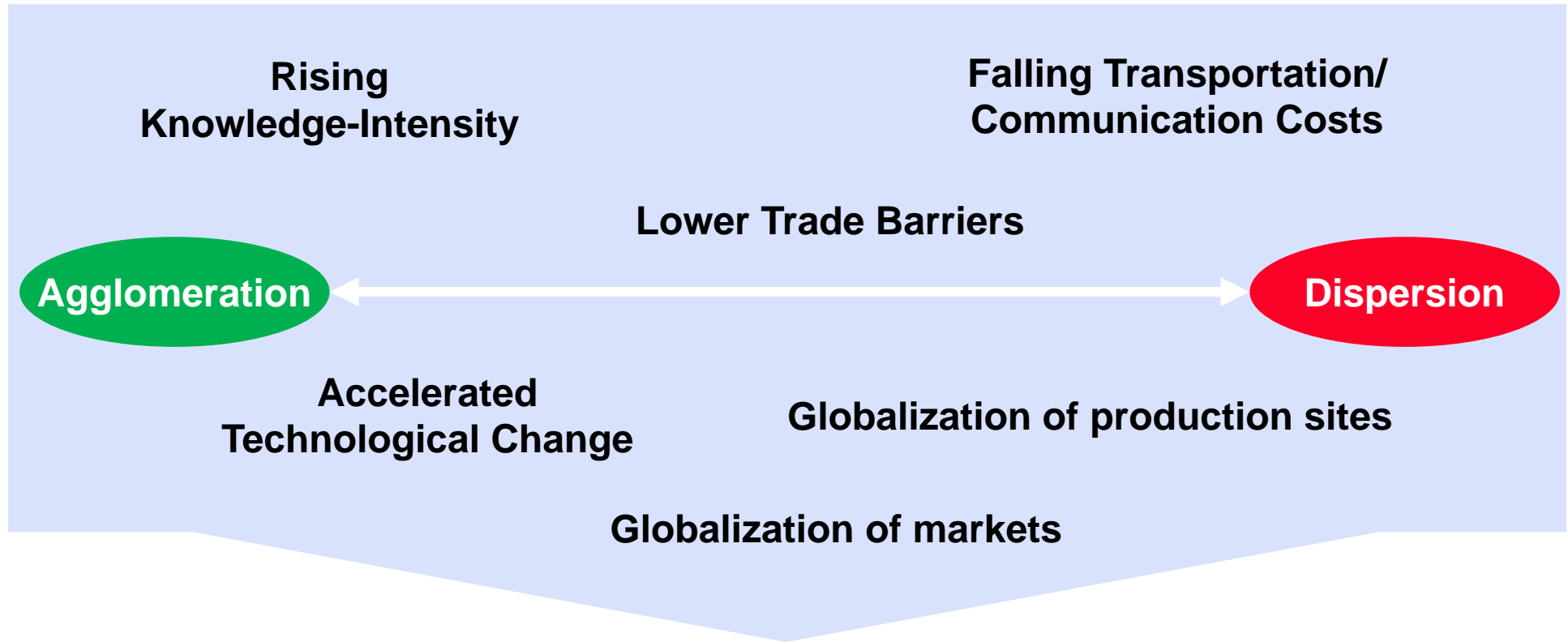
# An Old Concept....



**...with a Stable Set of Core Building Blocks...**



## ...in a New Economic Context



*Clusters are a critical facet of modern economies*

*Clusters are becoming more specialized*

*Clusters are becoming more connected*

# Research About Clusters

## Case Studies

- Show nature of clusters
- Establish types of linkages that exist within clusters
- Identify patterns of cluster dynamics and their drivers
- Develop hypotheses on the impact of clusters on firms and regions

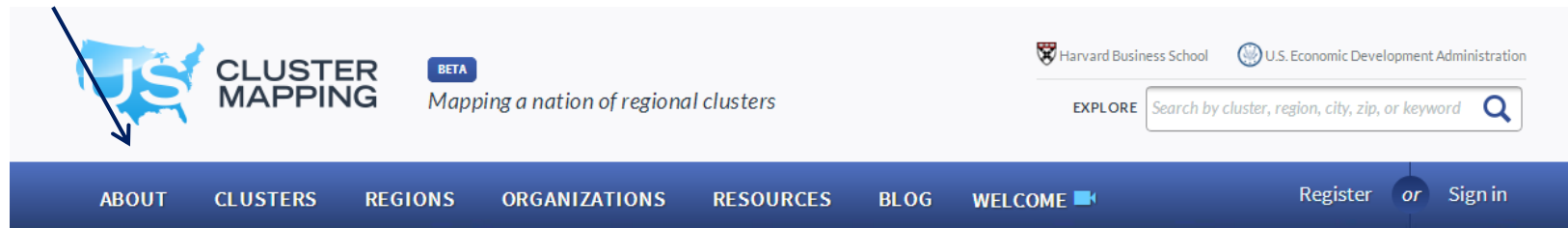
## Cross-sectoral quantitative Studies

- Systematic comparison of clusters across sectors and locations
- Measurement of the overall importance of clusters
- Tracking of cluster evolution
- Empirical tests of the impact of cluster presence on regional and firm-level economic performance

## “Cluster Mapping”

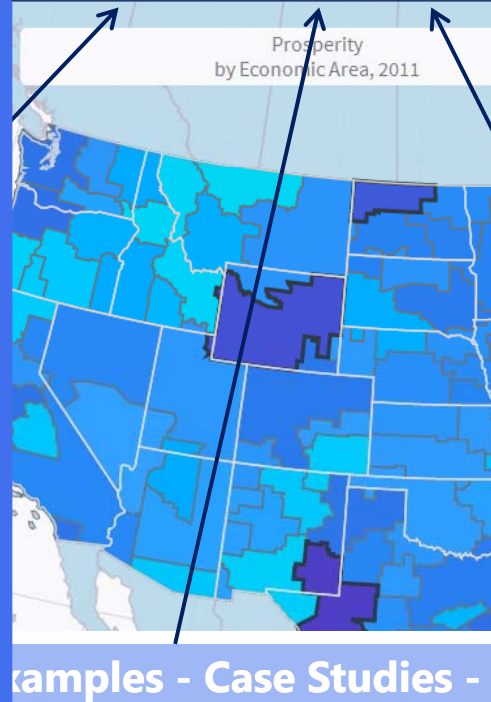
# Clustermapping.US

Project Background - Methodology - Data Sources - Partners



## Other Examples

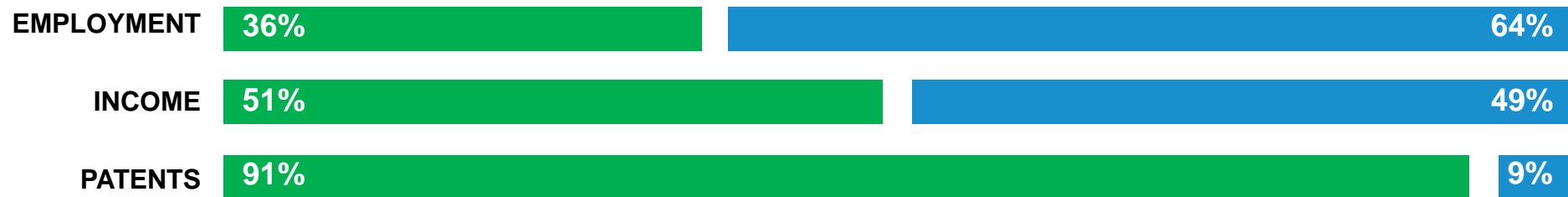
- European Cluster Observatory
- Canadian Cluster Data Portal



- Covers all sectors and regions
- Puts cluster data in the context of regional data
- Allows systematic comparison across locations
- Easy-to-use interface to engage practitioners
- Organizational registry to enable collaboration

# Clusters and the Nature of Competition

## Traded vs. Local Share of the U.S. Economy



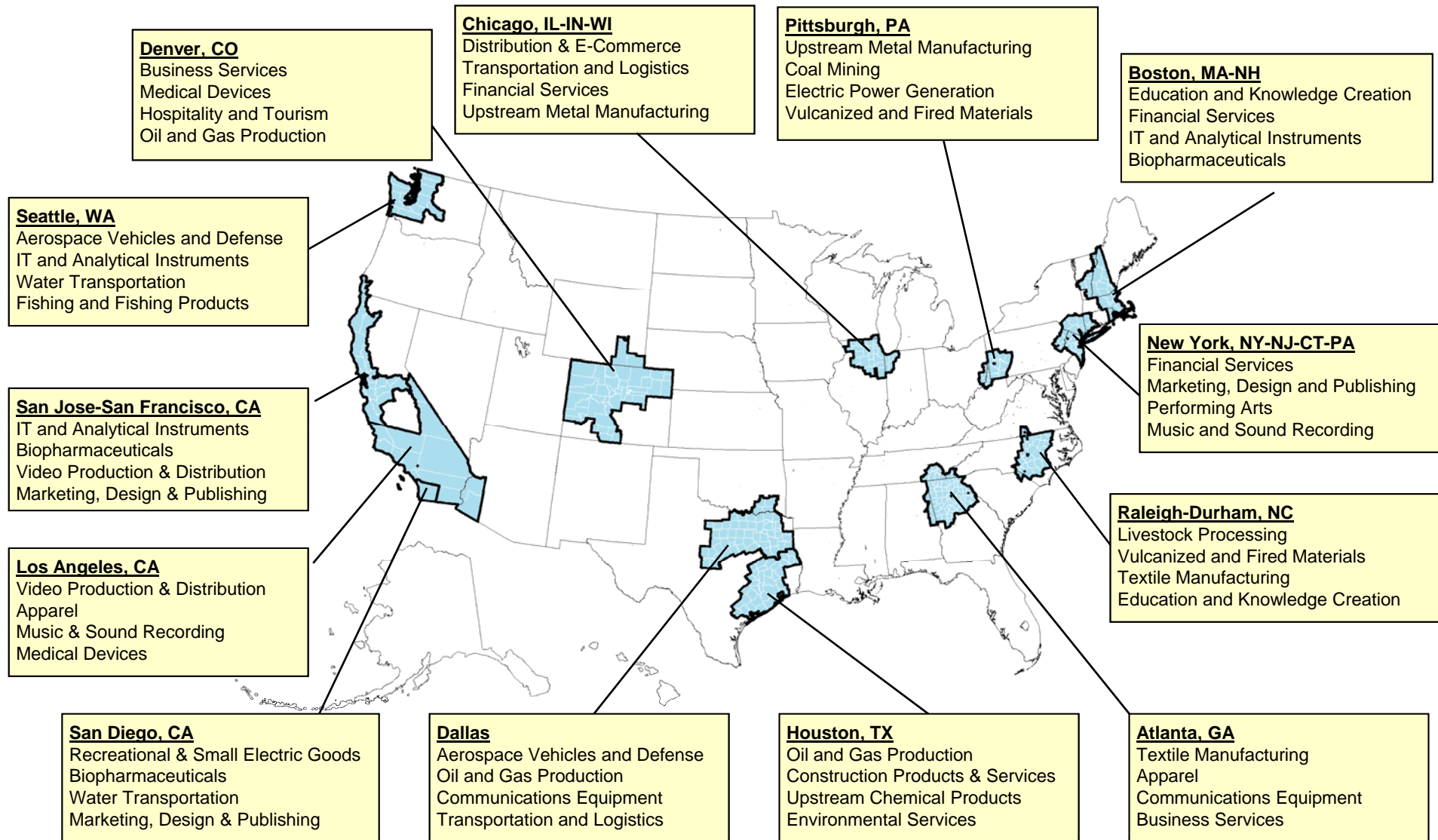
### Traded Industries

- **'Spiky'** across space; 2/3s of all traded industry employment is in strong clusters
- Serve **national and global markets**
- Exposed to **competition** from other regions and nations
- Critical for **prosperity** through higher wages, productivity, and innovation; **growth potential** set by the global market

### Local Industries

- Present **everywhere** at similar levels
- Serve exclusively the **local market**
- **Little exposure** to cross-regional competition
- Important for **jobs**, but lower wages; **growth potential limited** by size of the local market

# Clusters and Regional Specialization



Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Director.



# Clusters and Economic Performance

## Presence of Strong Clusters



### Prosperity

- Wages
- Productivity
- Job growth
- Resilience
- Patenting



### Entrepreneurship

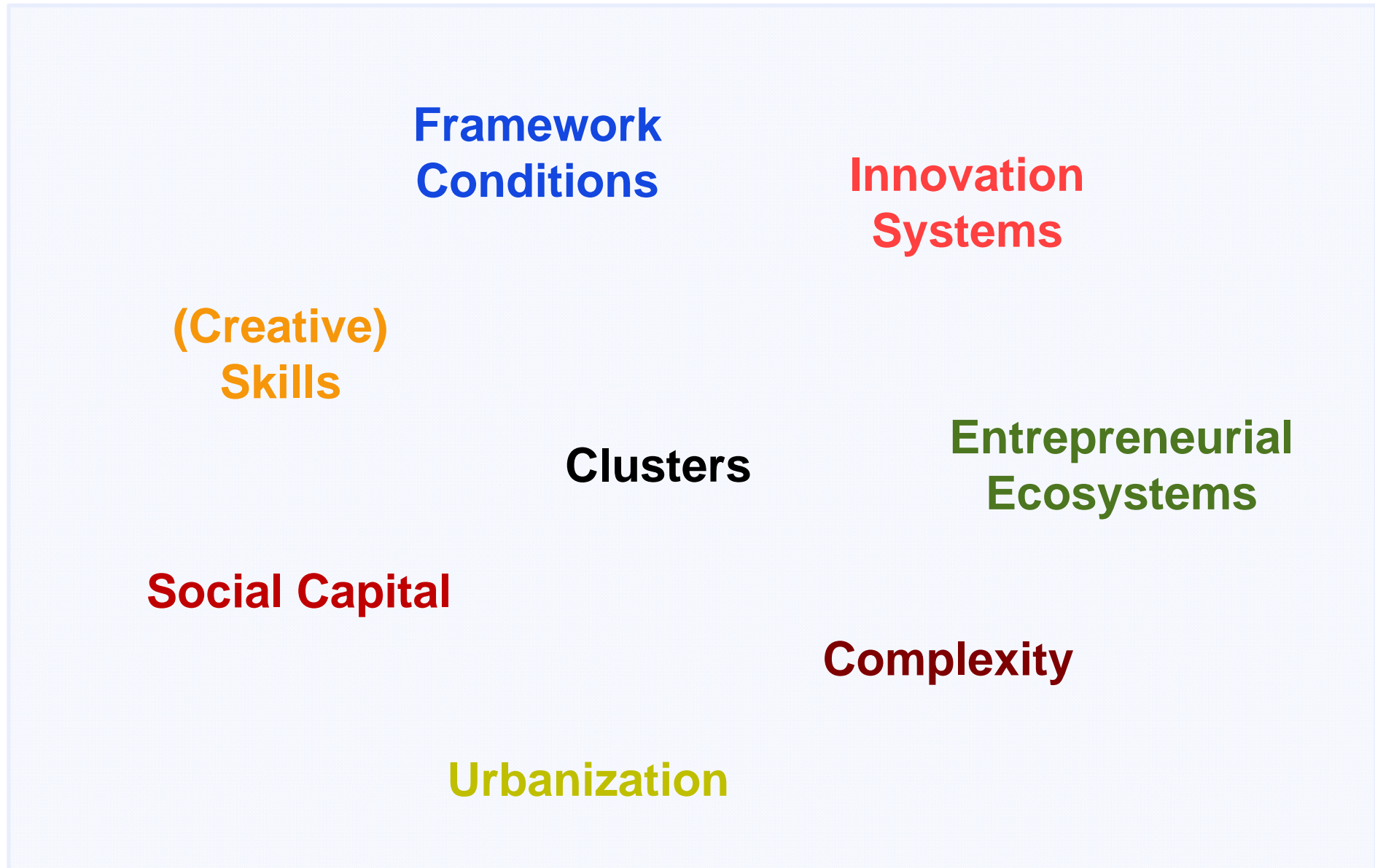
- New business formation
- Survival of new firms
- Job growth in new firms



### Structural Change

- Path of structural change(emergence of new clusters)

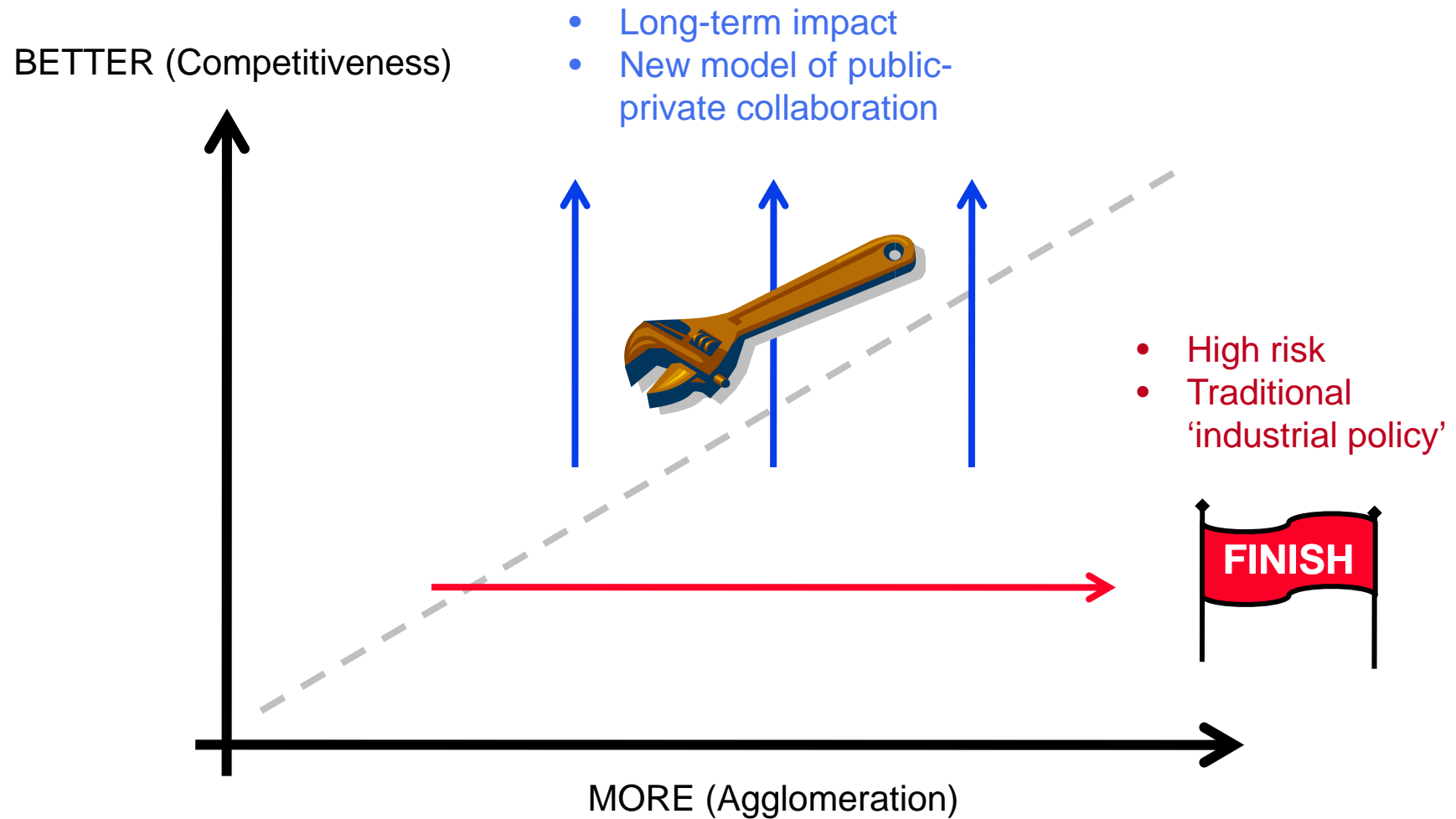
# Putting Clusters into Context



- Clusters **emerge naturally**

**What role for policy?**

# Two Opposing Approaches to Cluster Policy

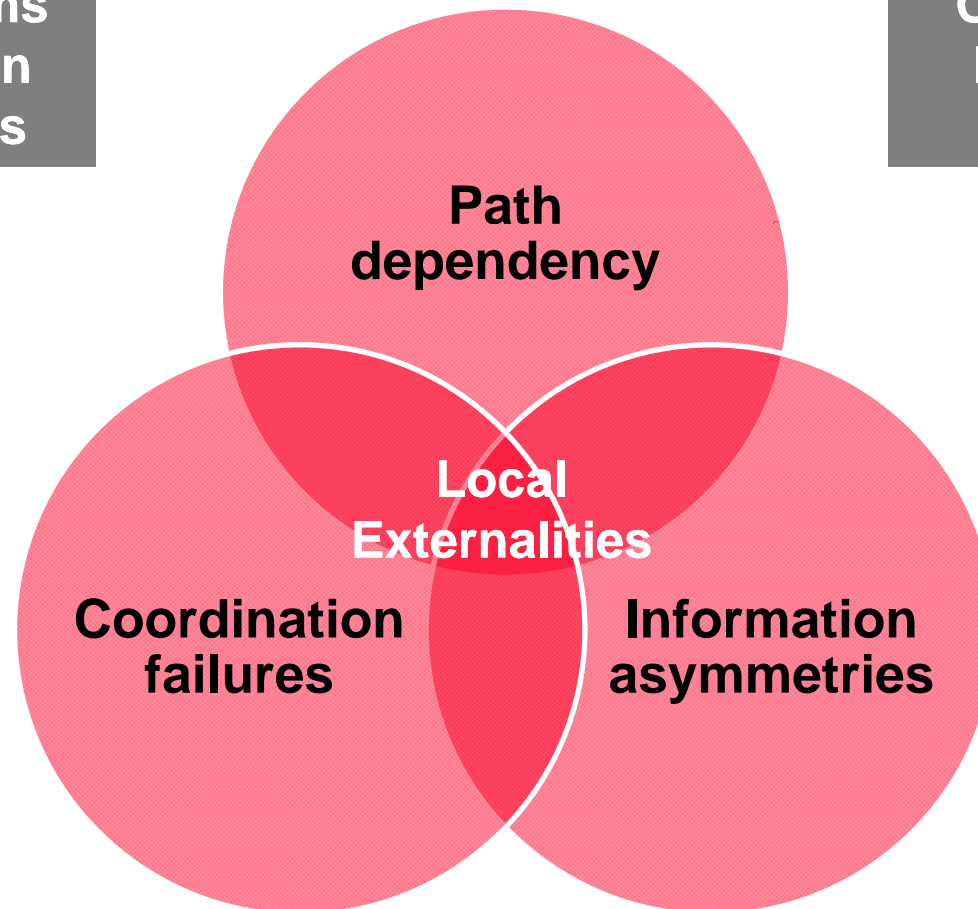


# The Case for Cluster Policy

## Levers

**Create Platforms  
for Joint Action  
within Clusters**

**Organize Public  
Policy around  
Clusters**



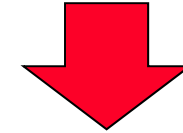
# Current Status of Cluster Policies and Programs

- The European Cluster Observatory lists **more than 2000 cluster initiatives** and related organizations; many other countries and international organizations, too, deploy significant efforts
- The highest number of cluster initiatives (absolute, per employee) is in **information technology** and **biotech**
- Most OECD countries and many regions have **cluster-related policy programs**
- Spending on cluster-related programs is **meaningful, but only a modest percentage of total spending** per policy area

# Cluster Initiatives: The Track Record So Far

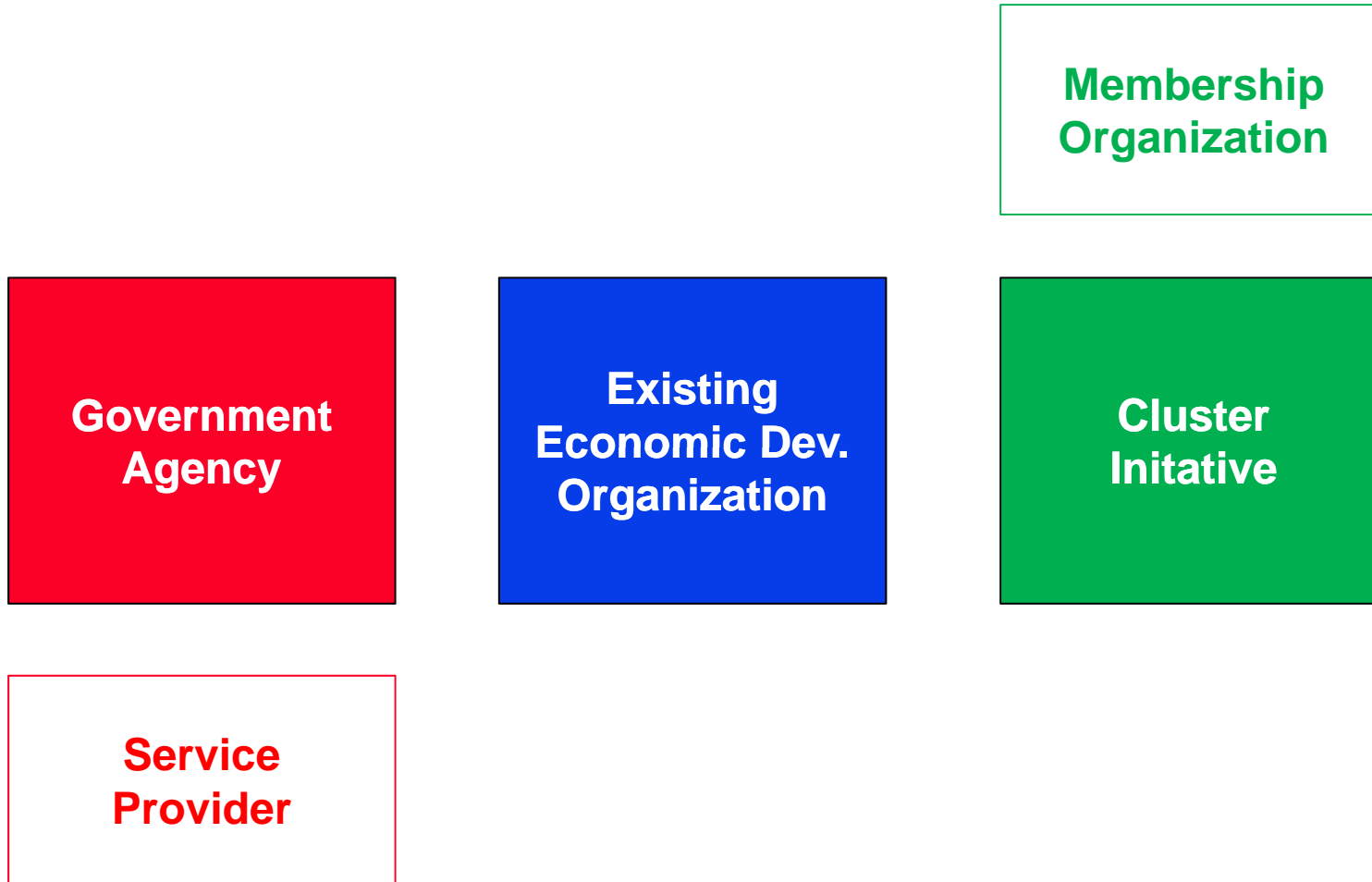


- Large number of initiatives, many have shown **sustainability over time**
- Visible **strengthening of networks** and **local capacity** for collective action
- Significant **engagement of companies**, including private sector investment
- Positive impact on **firm performance** for participants in collaborative projects initiated through cluster initiatives



- Significant **heterogeneity** of impact
- Benefits for **broader regional economic performance** hard to quantify
- **Government remains dominant funder** of the majority of cluster initiatives
- Tendency to **strengthen existing structures**; less successful in enabling structural change

# Cluster Initiatives: Organisational Models





# Critical Success Factors of Cluster Efforts

## Setting

- Cluster with **critical mass** of existing economic activities
- **Broader policy environment** focused on competitiveness upgrading

*External*

## Organization

- Capabilities of the **Cluster Initiative Manager and her/his staff**
- Robust **funding model**
- Governance structure that supports a **private sector logic** driving the organization

*Internal*

## Activities

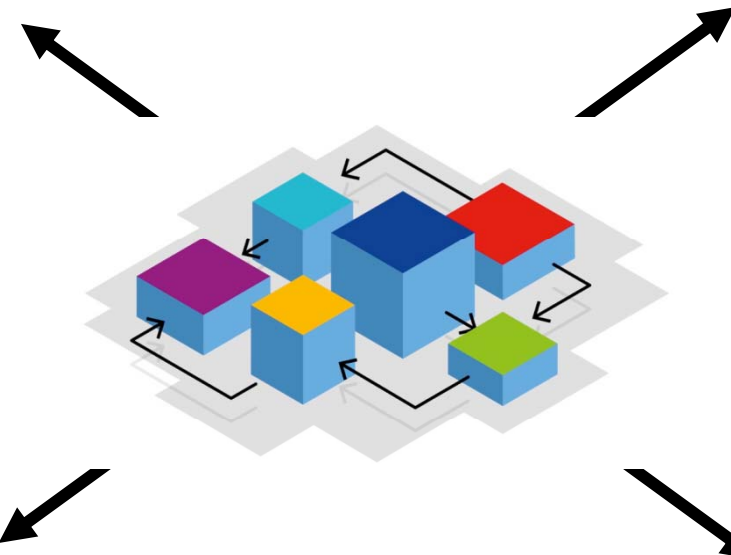
- **Strategic action agenda** grounded in fact-driven analysis of the relevant market and the cluster's competitive position
- **Operational effectiveness** in individual activities

# Current Cluster Policy Priorities in the European Union



**EXCELLENCE**

**CLUSTER DATA**



**EMERGING,  
CROSS-SECTORIAL  
DOMAINS**

**INTERNATIONALIZATION**

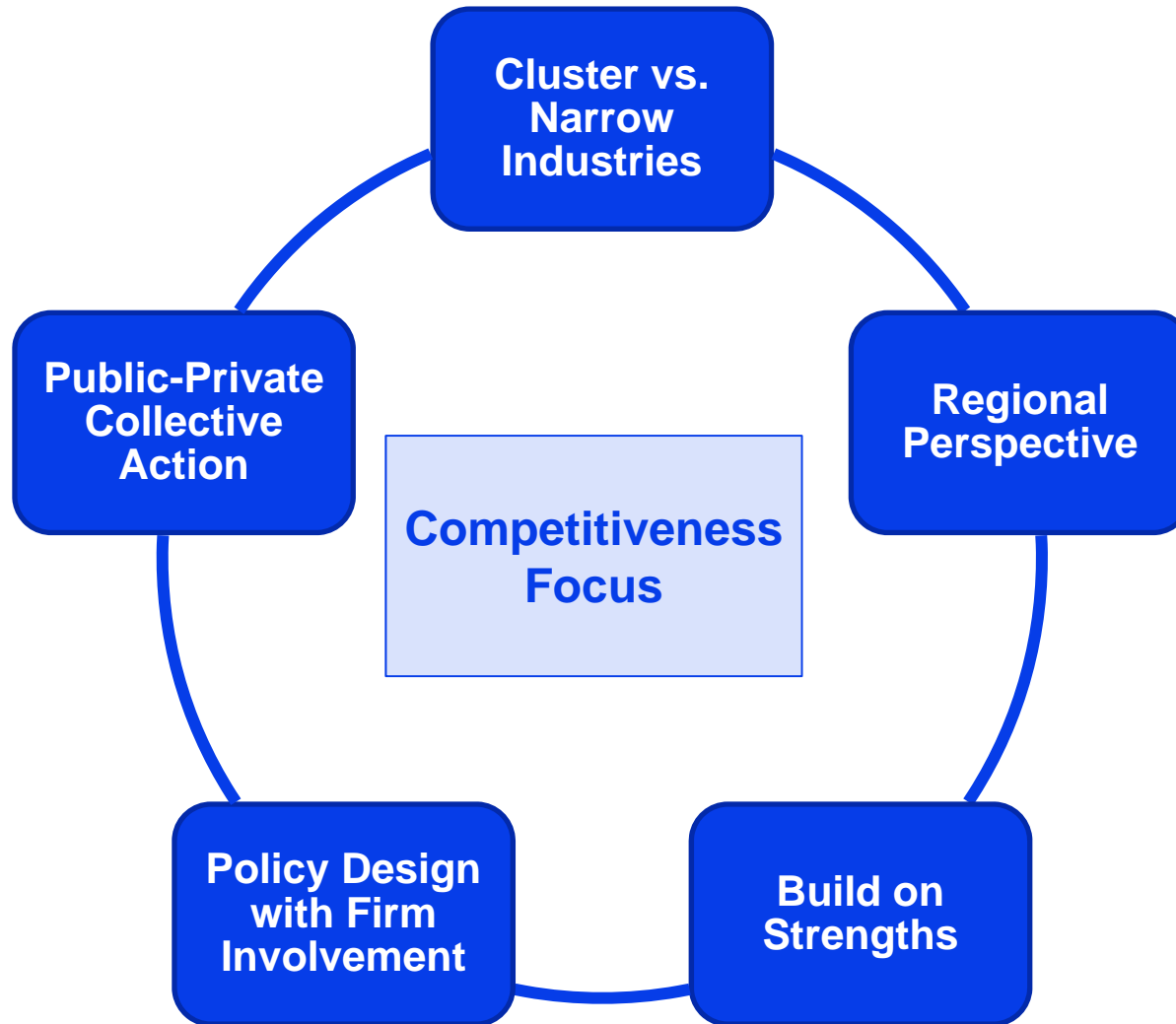
European Cluster Panorama 2014



# The 'Bleeding Edge': Three Issues for Cluster-Based Economic Development

- Emerging clusters
- Impact assessment
- Clusters and competitiveness

# What is Different about Cluster-Based Economic Development?



# The TCI Network: A Global Community of Practice in Cluster-Based Economic Development



the global practitioners network for competitiveness, clusters and innovation

[www.tci-network.org](http://www.tci-network.org)

CLUSTERS IN THE CREATIVE ECONOMY  TCI  
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