

Cluster-Based Economic Development

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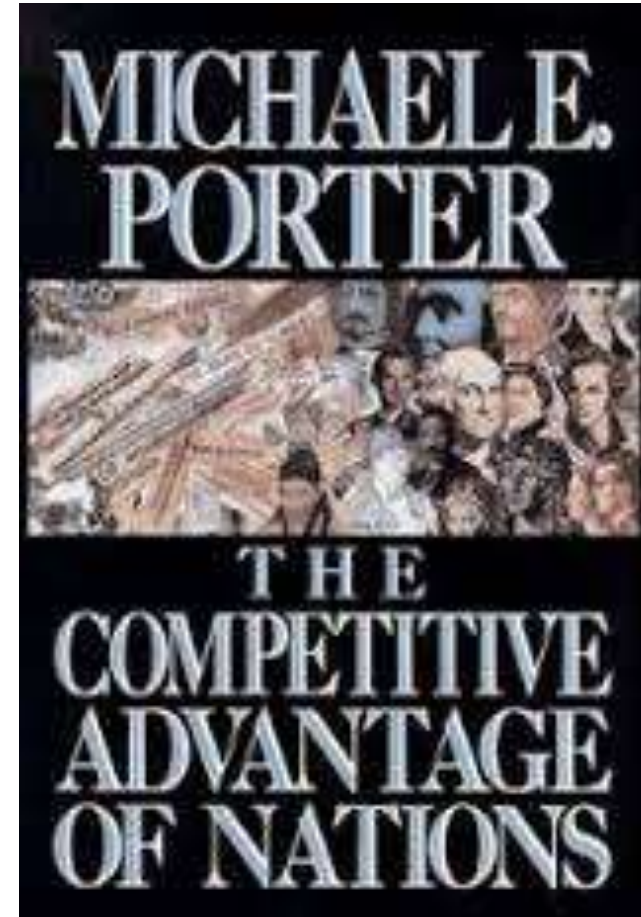
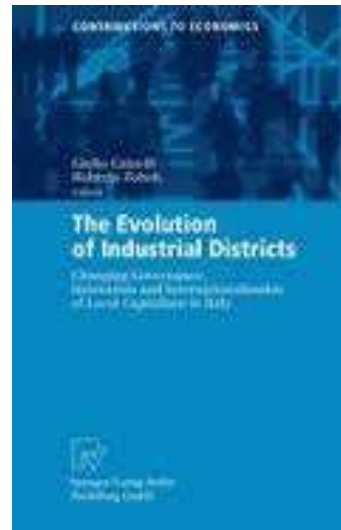
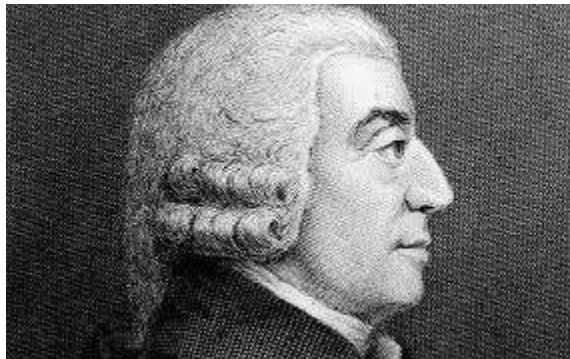
INTER-COMP-INNO Conference
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Clusters

**Cluster-Based
Policies**

**Cluster-Based
Policies
for Competitiveness**

An Established Concept....



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

Related Variety

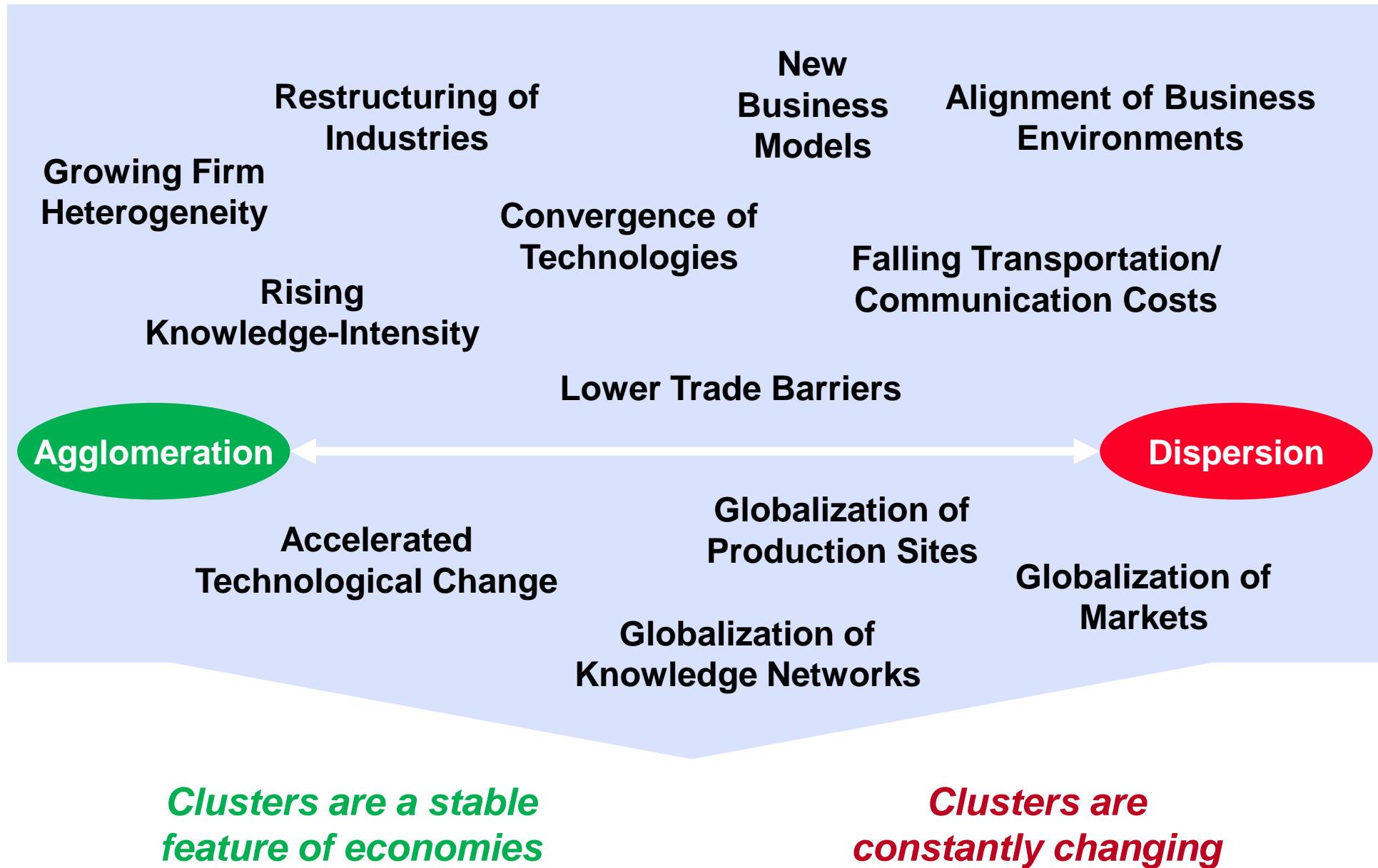
Proximity



**Critical
Mass**

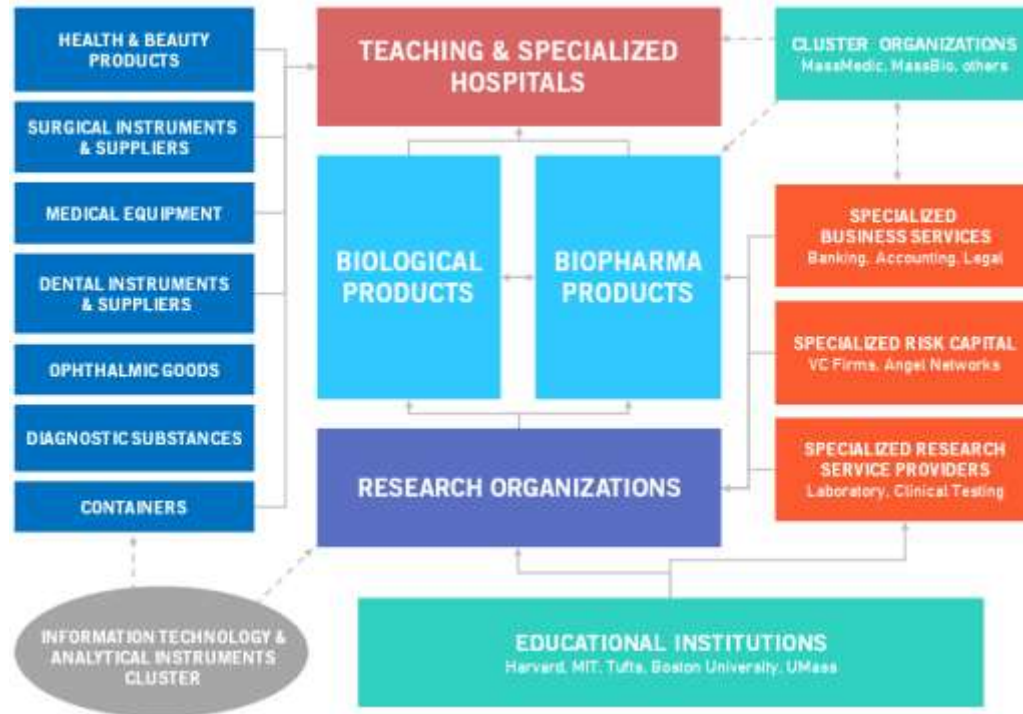
**Collaboration
& Rivalry**

... in a Changing Economic Environment



Local Buzz, Global Pipelines: Growing Focus

The Boston Biopharmaceuticals Cluster



Strong **local buzz** through breadth of activities, quality of firms, research institutions, and business environment conditions, and rich local linkages

Strong **global pipelines** through research networks, global value chains, and companies present in multiple locations



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

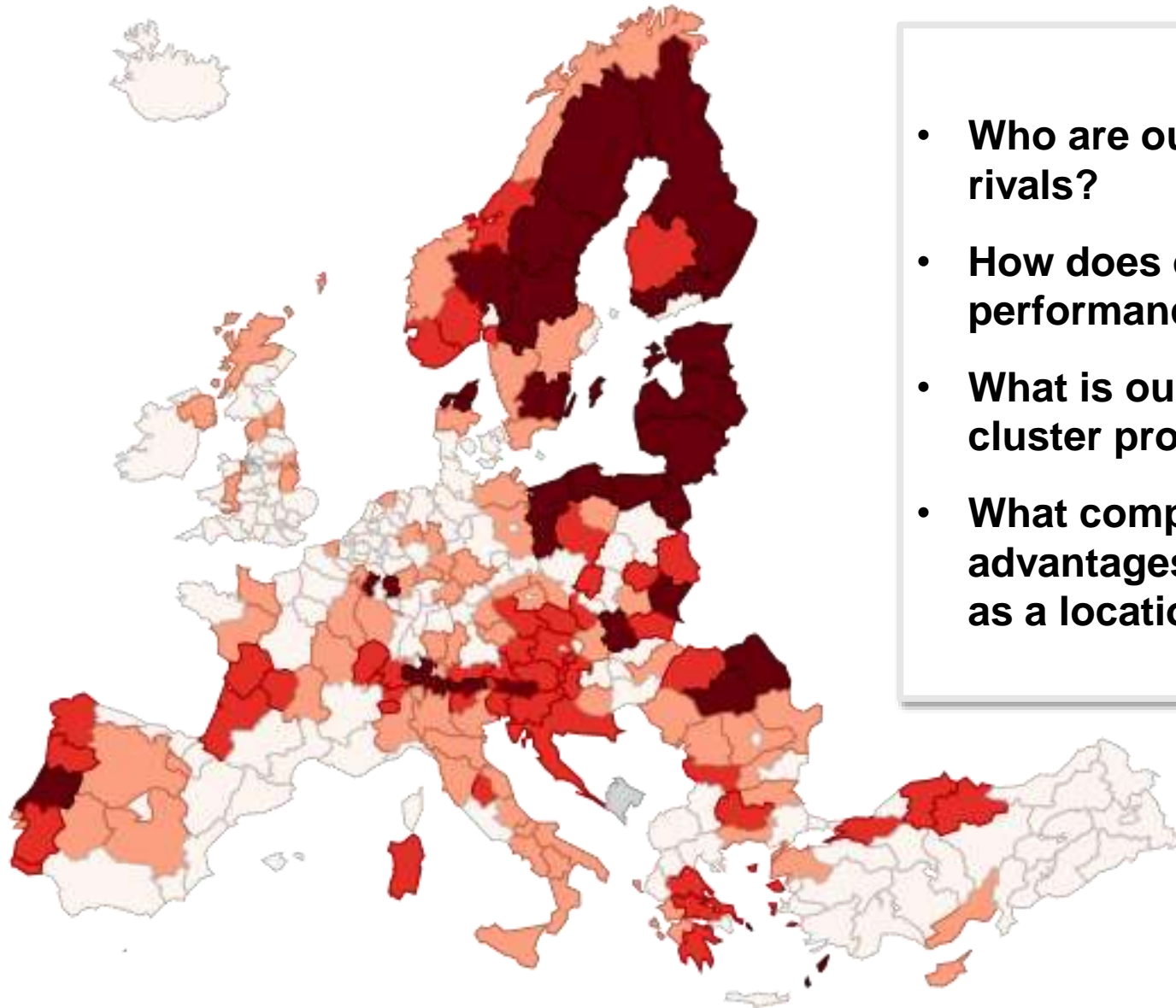
Cross-sectoral quantitative Studies

- 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”

Wood Products Clusters in Europe

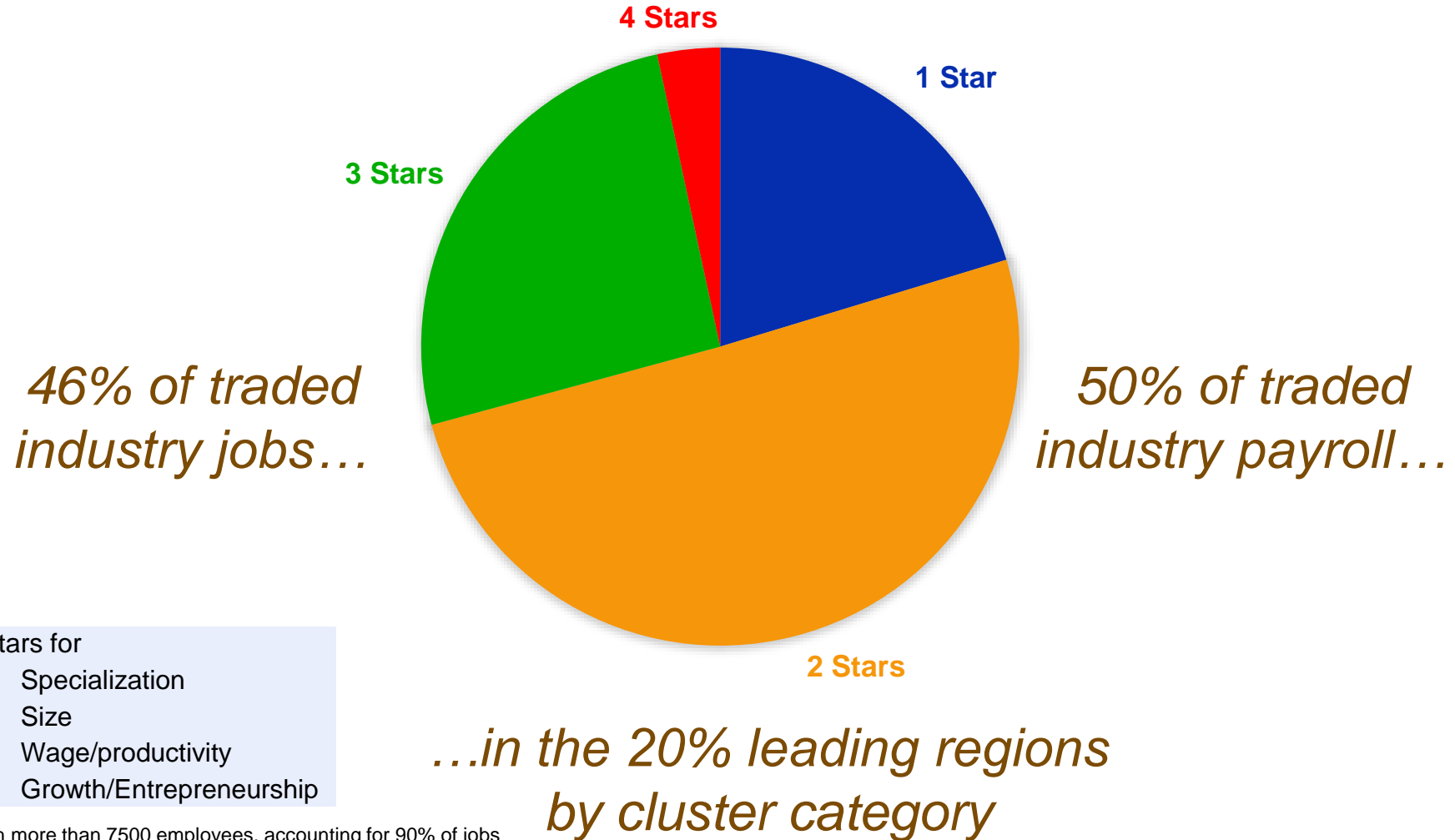
Relative Employment Specialization



- Who are our peers and rivals?
- How does our performance stack up?
- What is our specific cluster profile?
- What competitive advantages do we offer as a location?

3000 Strong Clusters Across Europe

NUMBER OF STRONG CLUSTERS BY PERFORMANCE STARS



- Stars for
- Specialization
 - Size
 - Wage/productivity
 - Growth/Entrepreneurship

1600 with more than 7500 employees, accounting for 90% of jobs
Source: European Cluster Panorama, 2016

Clusters and Economic Performance

- **Cluster are everywhere**
- Close to **40% of advanced economy employment** are in industries that 'cluster'
- Within these, strong clusters account for more than **45% of employment and 50% of wages**

Presence of Strong Clusters



Prosperity

- Wages
- Productivity
- Job growth
- Resilience
- Patenting



Entrepreneurship

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

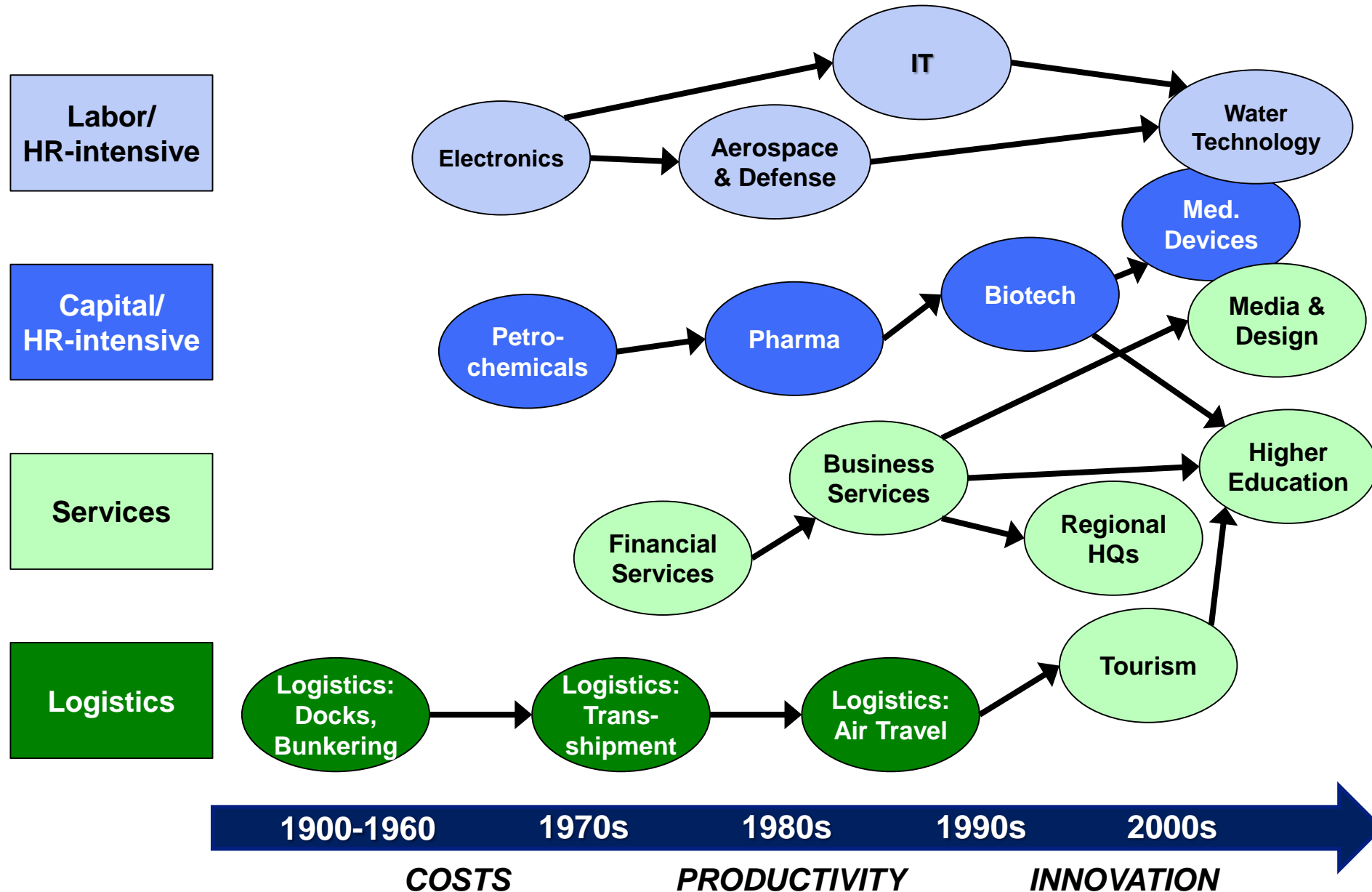


Structural Change

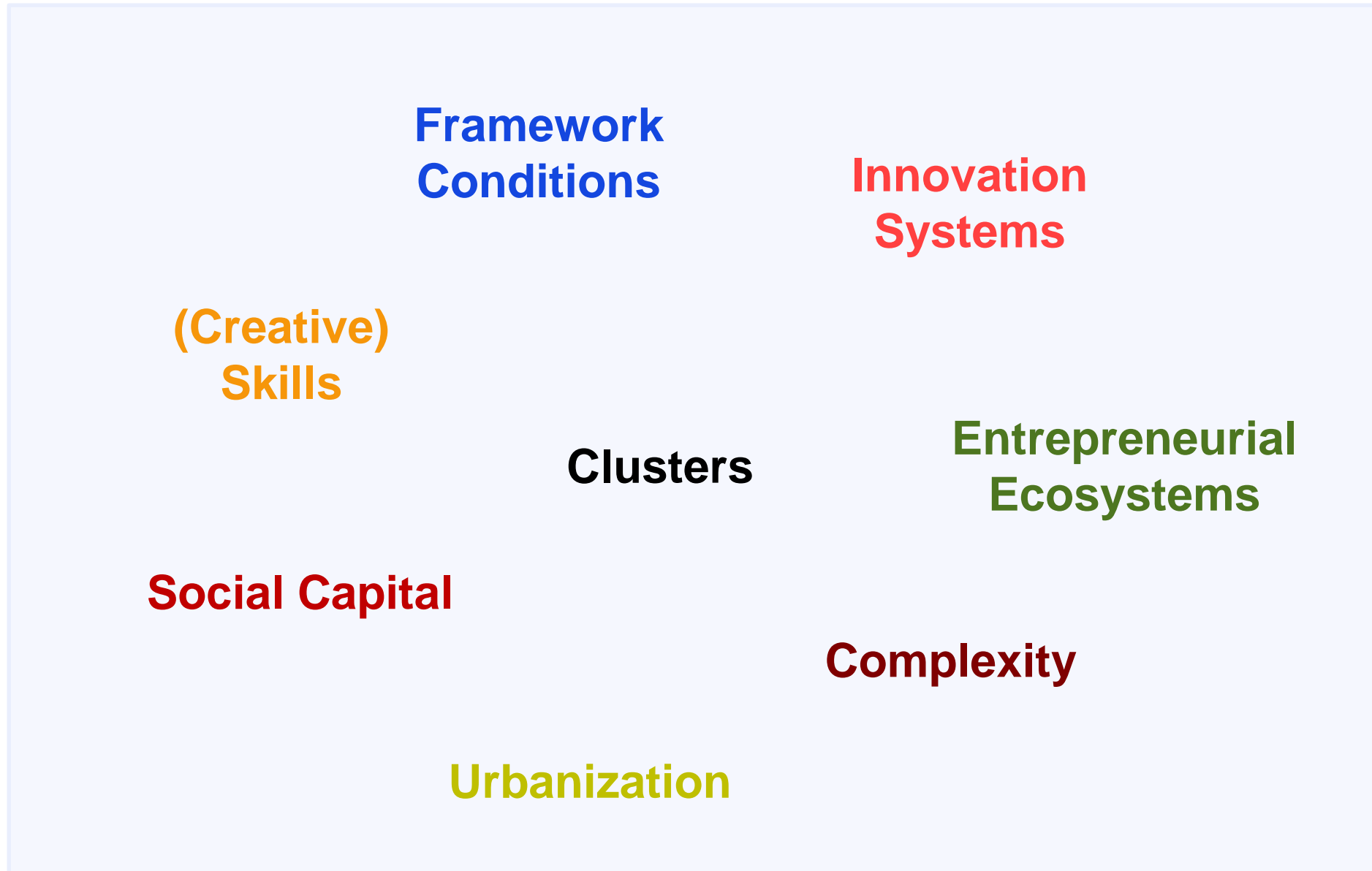
- Path of structural change (emergence of new clusters)

Clusters and the Evolution of Regional Economies

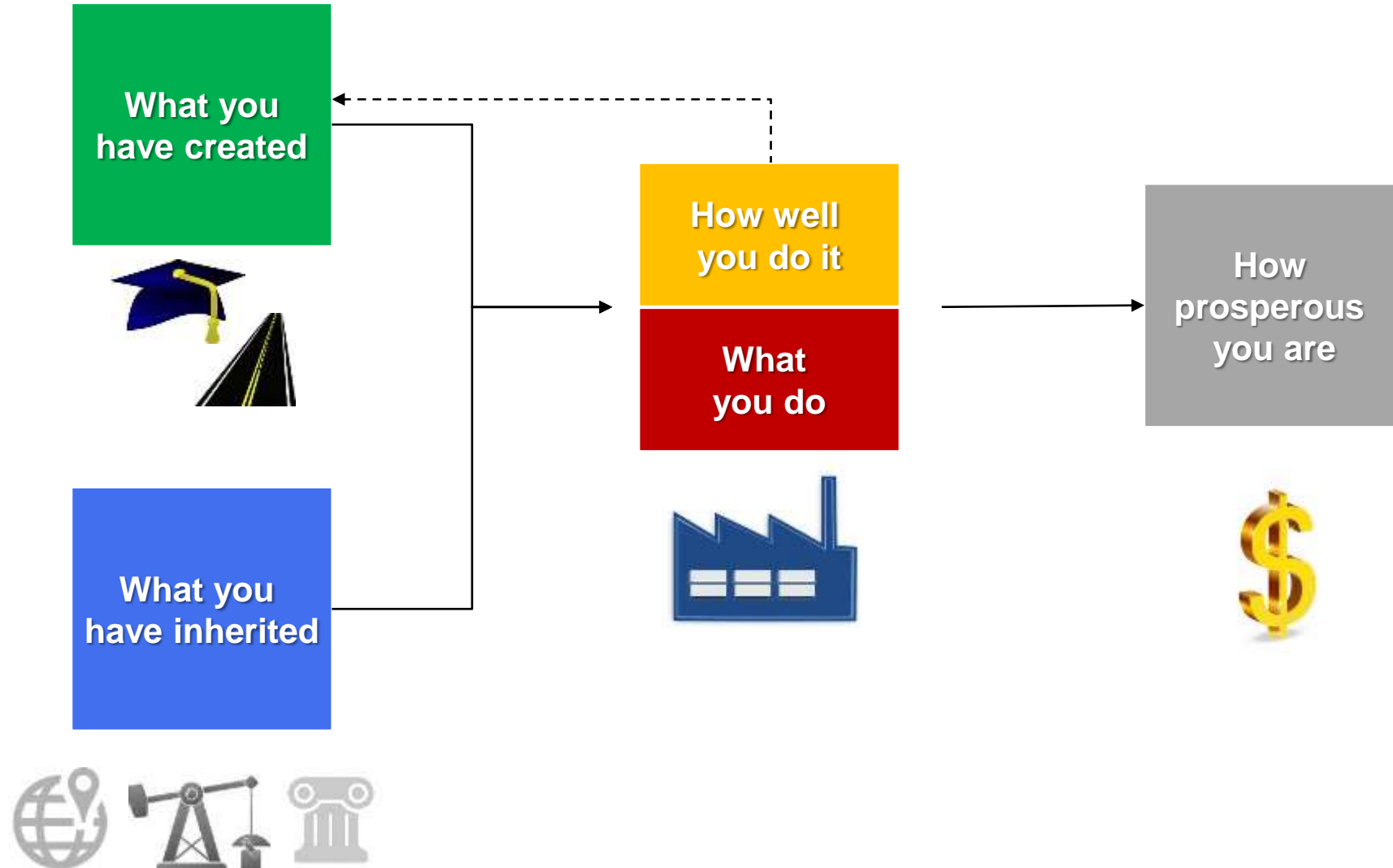
Singapore



Putting Clusters into Context



What Drives Prosperity? An Integrated Perspective



- Clusters **emerge naturally**

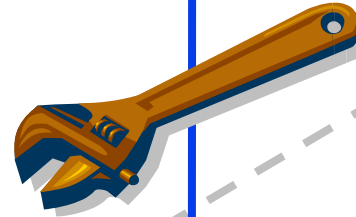
What role for policy?

Two Opposing Views on Cluster Policy

BETTER (Competitiveness)

- *Long-term, systemic impact*
- *Low risk*

LEVERAGING CLUSTERS



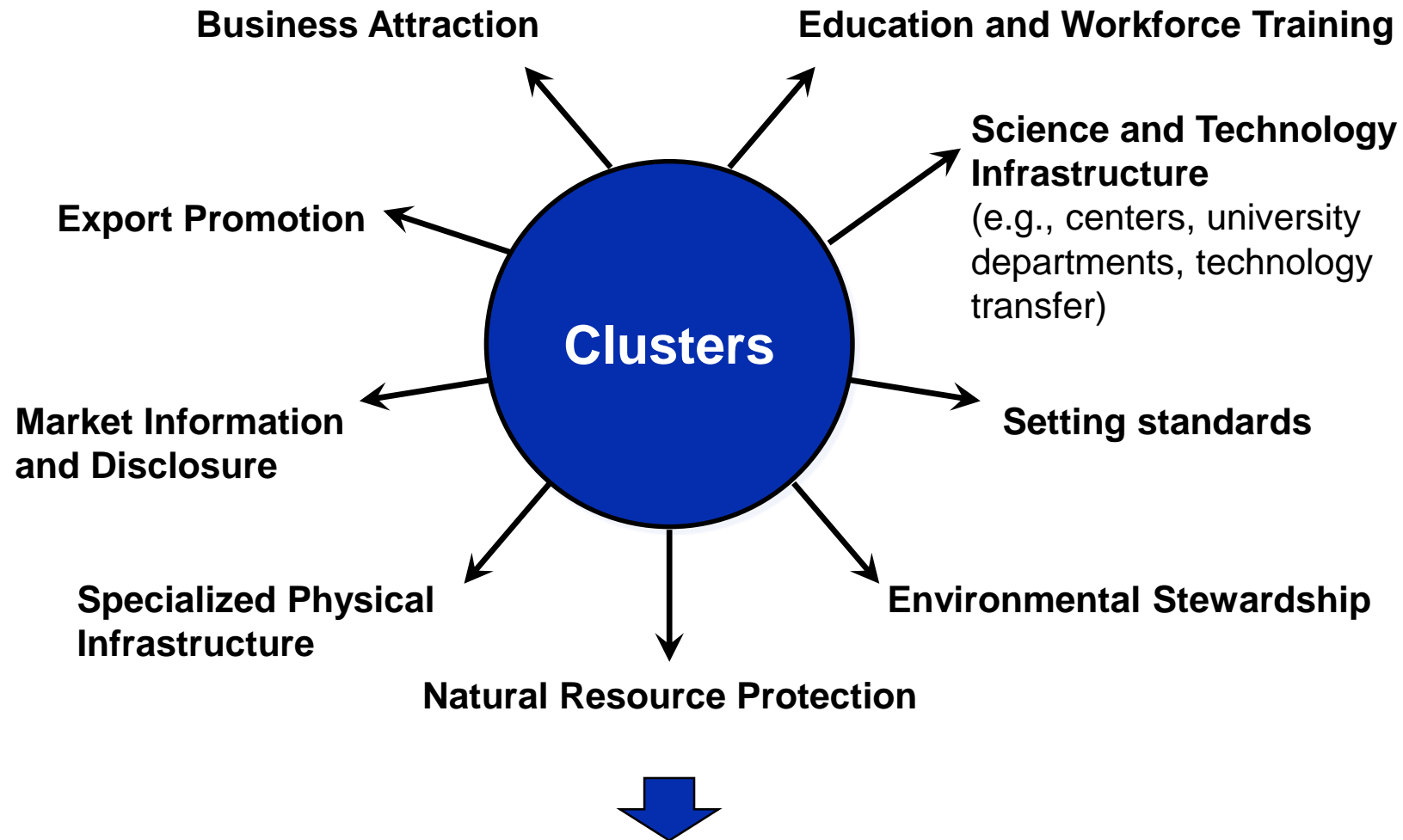
- *Short-term, narrow impact*
- *High risk*

CREATING CLUSTERS



MORE (Agglomeration)

Organize Public Policy around Clusters



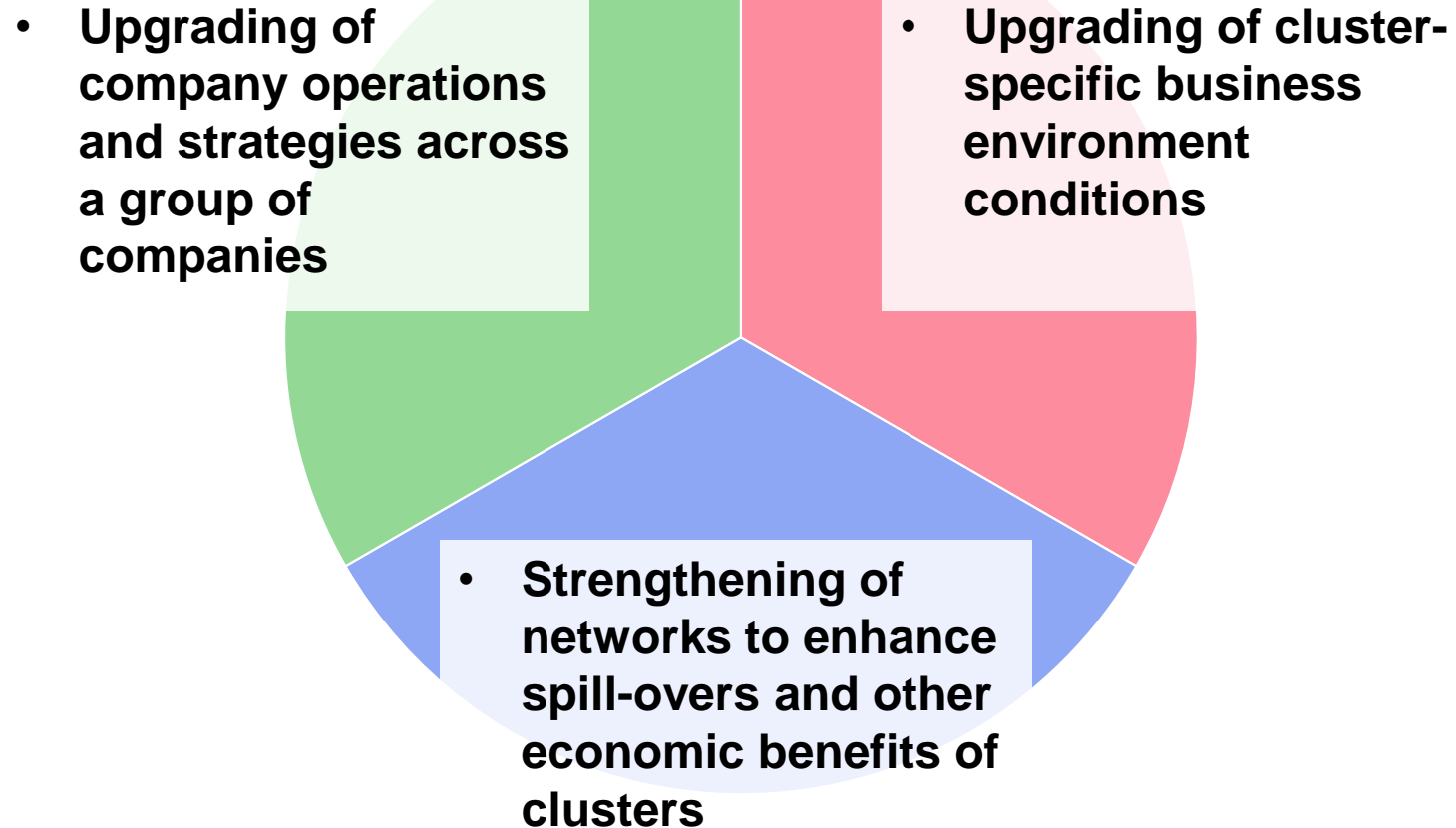
- Clusters provide a framework for **organizing the implementation** of public policy and public investments towards economic development

Current Status of Cluster Policies and Programs

- Many countries and regions, especially within the OECD, have **cluster-related policy programs**
- Spending on cluster-related programs is **meaningful, but only a modest percentage of total spending** per policy area
- Funding is tilted towards **existing strengths**, but many efforts exist without established critical mass
- Cluster programs are often run by **a range of ministries or agencies**; there is limited coordination between programs
- Funding for **strengthening collaboration** is always a part; other elements differ significantly
- **Design principles differ widely** across many dimensions

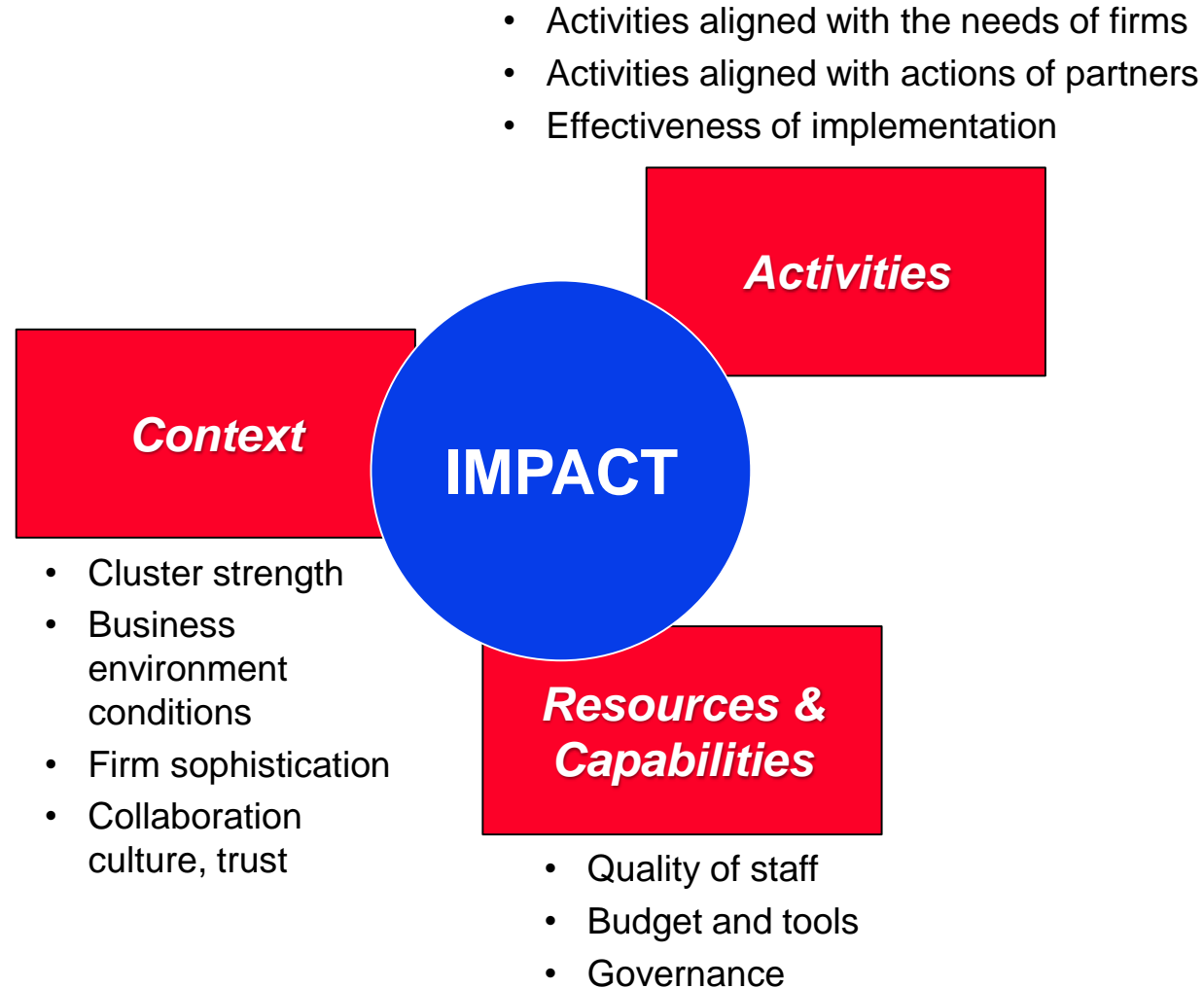
What are Cluster Initiatives?

Cluster initiatives are **collaborative activities** by a **group** of companies, public sector entities, and other related institutions with the objective to improve the competitiveness of a group of **interlinked economic activities in a specific geographic region**



Heterogeneity of Design Principles

Critical Success Factors for Cluster Initiatives



Narrow model

- Focus on networking
- Limited resources
- Limited impact

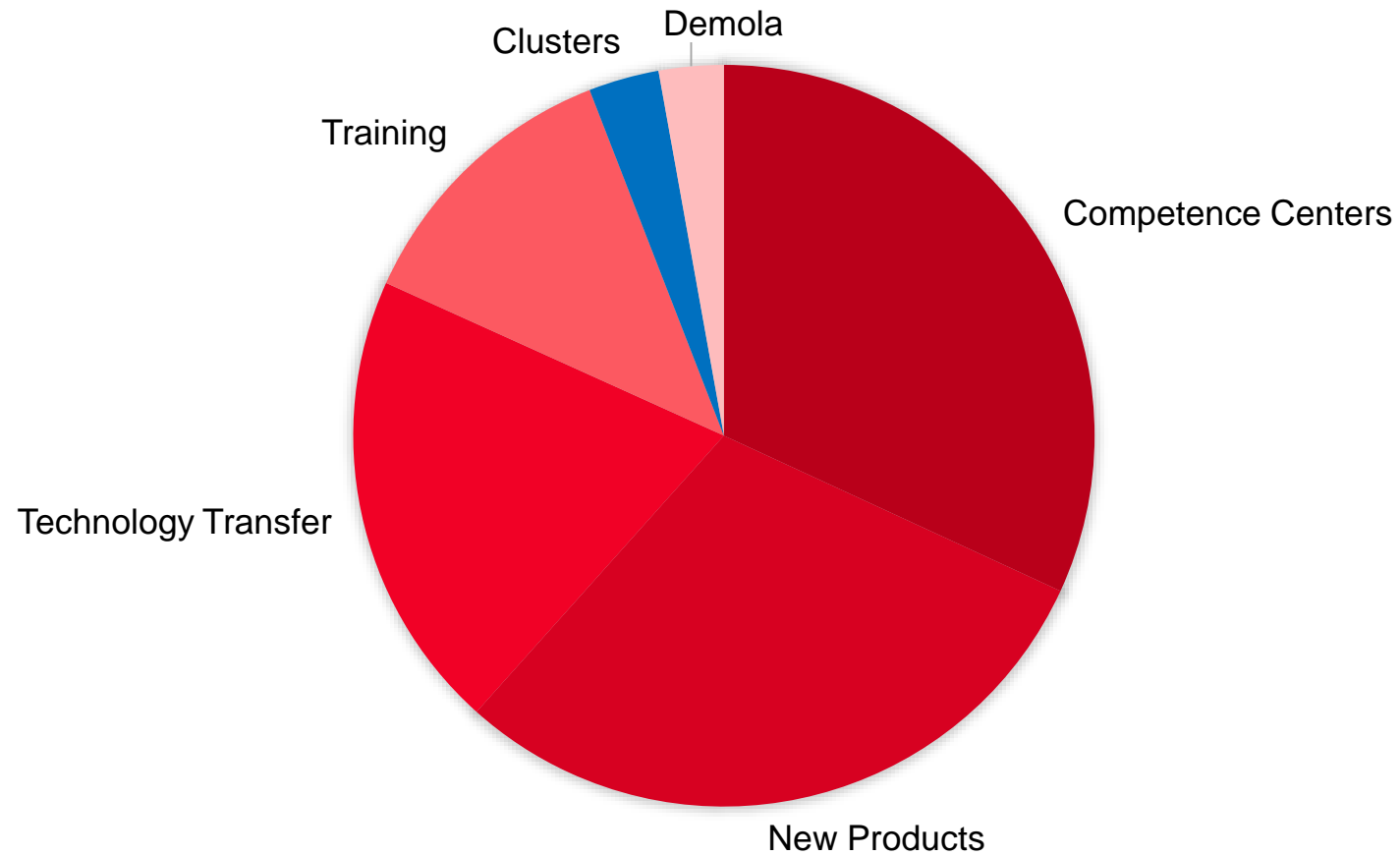


Systemic model

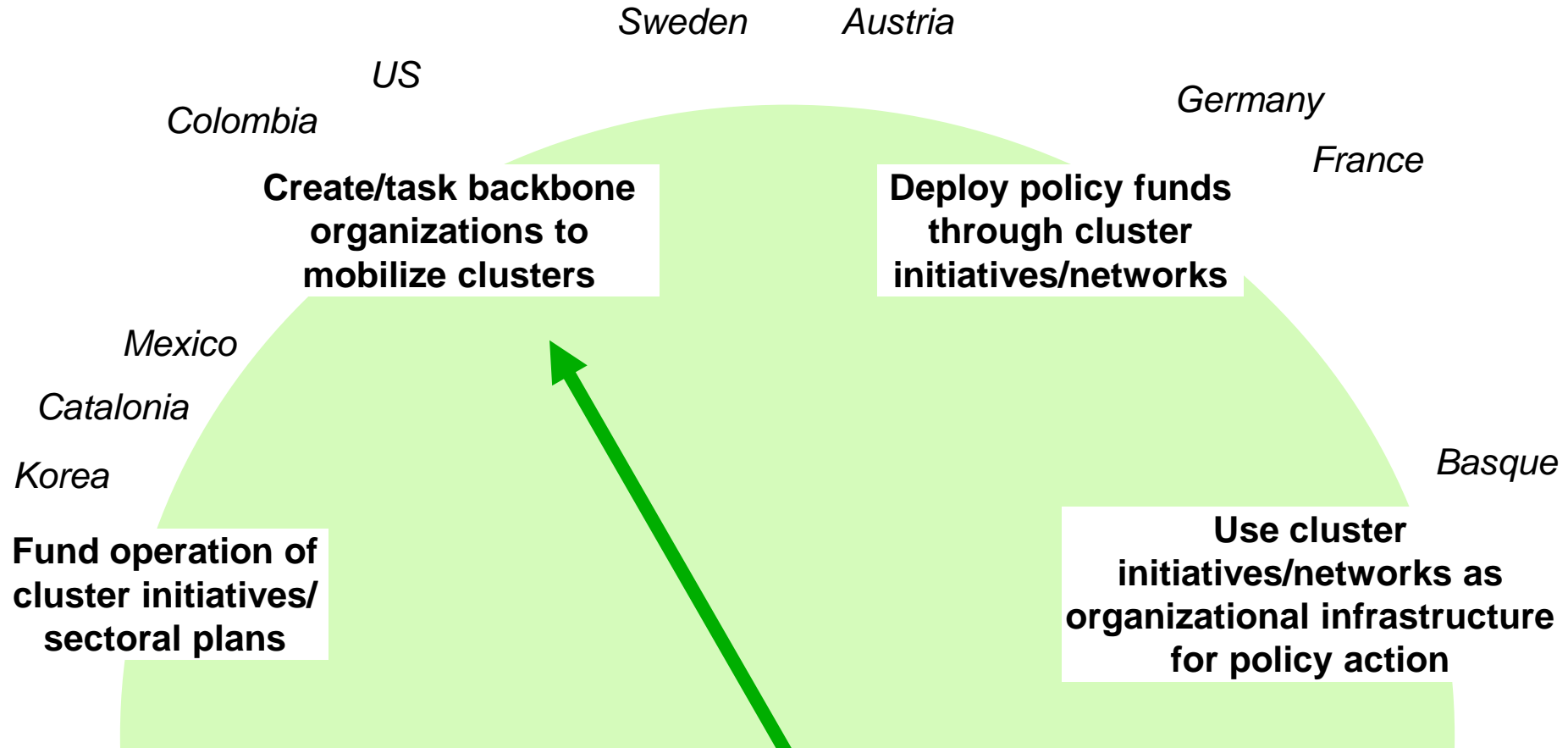
- Cluster initiatives as key channel for delivering policy action
- Moderate operational resources, strong influence on other investment streams
- High impact possible

Core Latvian Support Programs, 2014-2020

BUDGET ALLOCATION BY INSTRUMENT



Modes of Cluster Policy



Fund operation of cluster initiatives/ sectoral plans

Mexico
Catalonia
Korea

Create/task backbone organizations to mobilize clusters

US

Colombia

Sweden

Austria

Deploy policy funds through cluster initiatives/networks

Germany

France

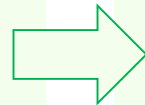
Use cluster initiatives/networks as organizational infrastructure for policy action

Basque

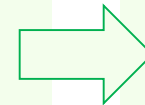
Policy for Clusters

Cluster-based Policy

Sporadic:
Create stronger linkages



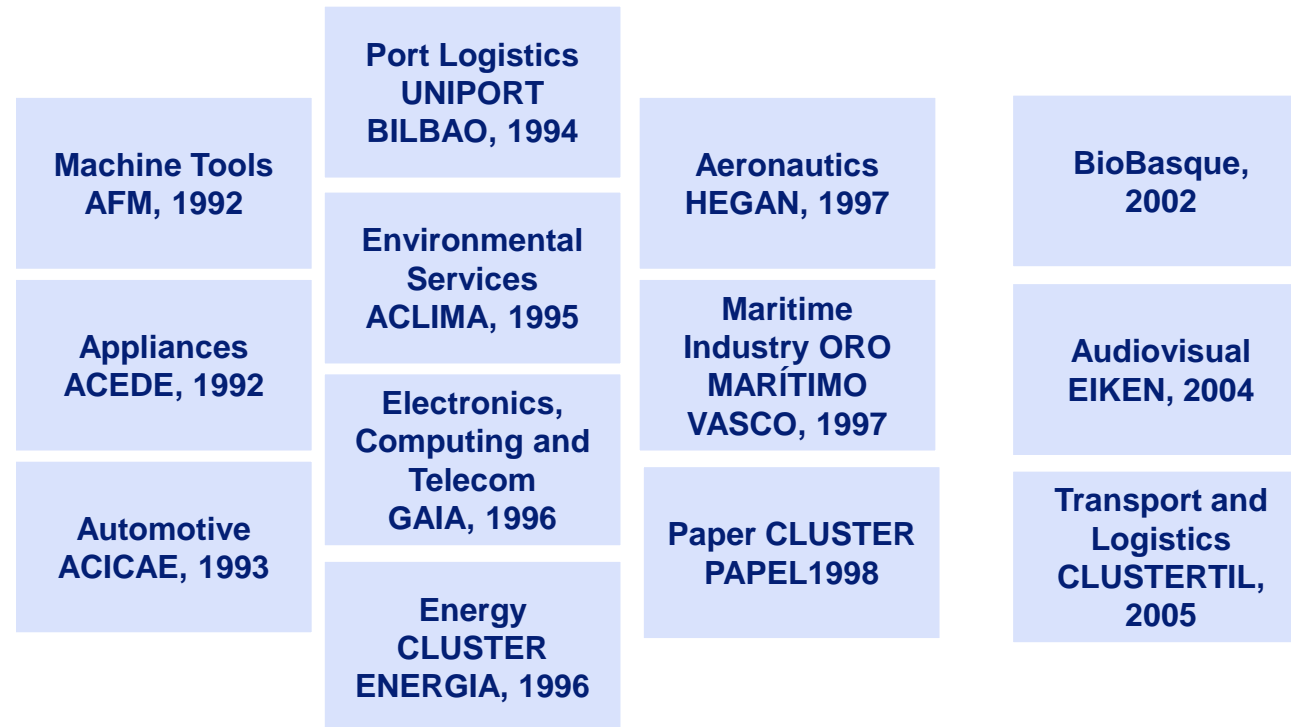
Tactical:
Deliver programs more effectively



Strategic:
Choose & design better policies

Cluster-Based Delivery of Economic Policy

Basque Country, Spain



The Traditional View: Policies for Clusters

- Select clusters



- Focus policy action on them



- Economic impact

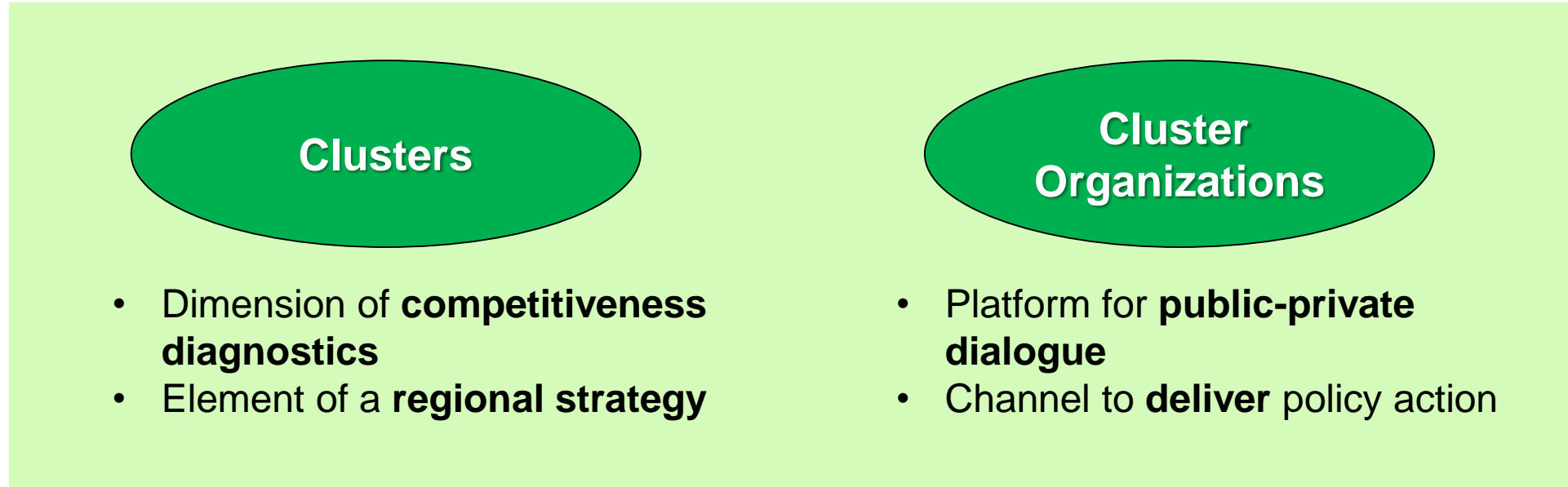
The Traditional View: Policies for Clusters

Challenges

- Select clusters
 - Political zero-sum competition across sectors
 - Cross-cluster opportunities remain unexploited
- Focus policy action on them
 - Cluster efforts as a new policy silo
 - Cross-cutting policy areas easily 'off-the-table'
- Economic impact
 - Limited size of even the strongest clusters limits impact
 - Ultimately strong clusters need a strong region

Economic Development Through Clusters

Key Leverage Points



- From **clusters** to **cluster portfolios**
- From the **selection of clusters** to the **integration of policy instruments**
- From **strengthening of individual clusters** to **enhancing the competitiveness of the region**

Developing a Regional Economic Strategy



Diagnostics

- What is the profile of our performance?
- What business environment conditions do we offer?
- What **clusters** do we have? How are they positioned?



Choice

- What business environment conditions do we want to offer?
- Which type of companies and skills do we aim to attract with these qualities? In what **clusters**?



Action Plan

- What are the priorities for action?
- Who is going to do what?
- How do we deploy our resources?
- What **channels and platforms** can we use?

Elements of a Regional Economic Strategy

Outcome Ambitions

Positioning

- The specific value the location provides as a place to do business in the national and global economy

Business Environment

- Activities to upgrade cross-cutting business environment conditions that are most critical for the location's value proposition

Cluster Portfolio

- Activities focused on existing and emerging clusters that draw most benefits from and emphasize the location's value proposition

Implementation Architecture

- Responsibilities, resources, capabilities, and coordination

Regional Competitiveness Through Clusters – and Vice Versa

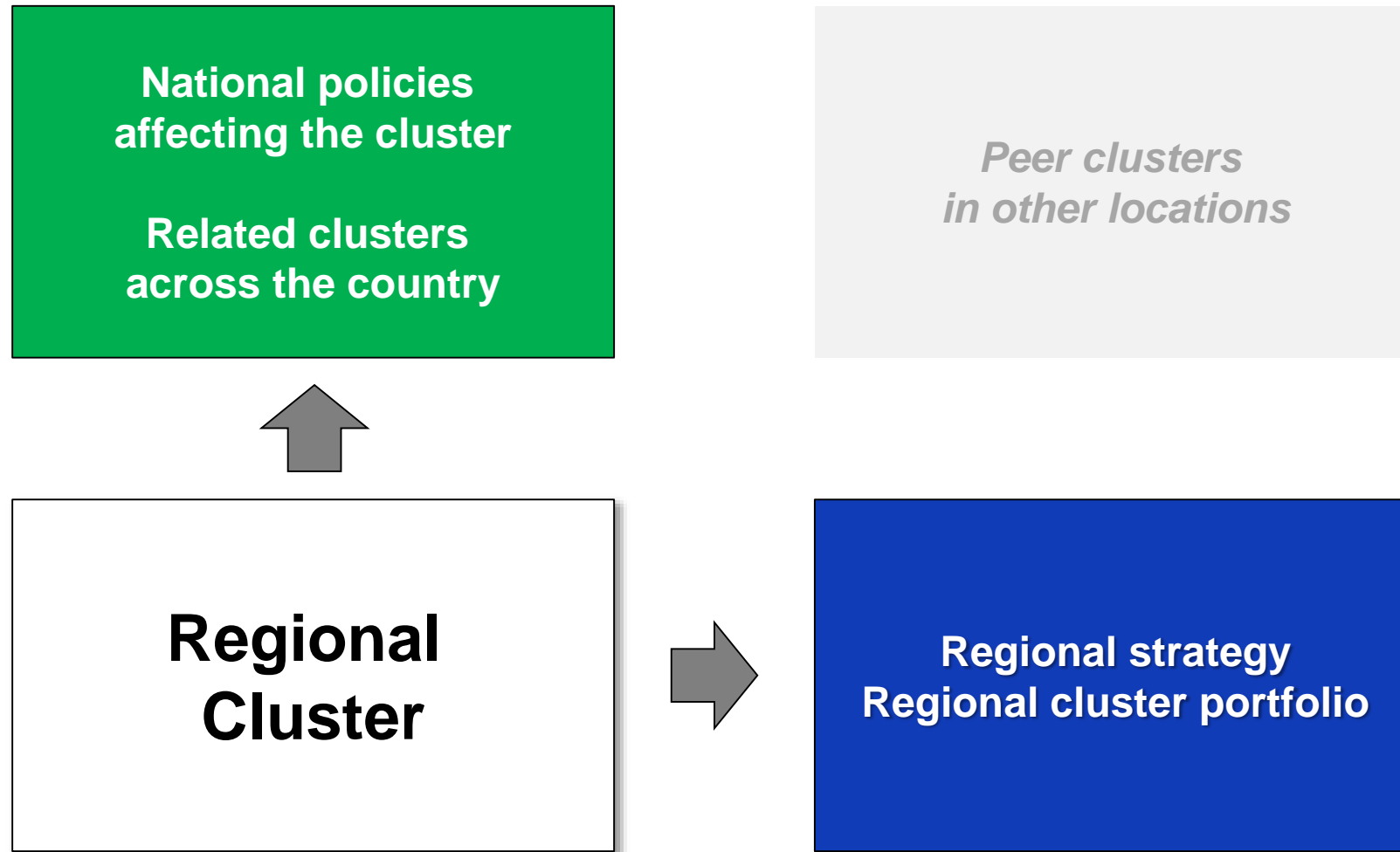


The Technology-Network:
Intelligent Technical Systems
OstWestfalenLippe, Germany

it's owl



Playing A Role Beyond your Cluster



Clusters, Regions, and Structural Change

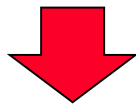
The Challenge:

- How to achieve structural change towards higher value-added activities?



The Old Answer:

- Identify **growing markets** and try to enter them (bio, nano, eco, ...)



- Failure to succeed in intensely competitive markets without unique assets

The New Answer:

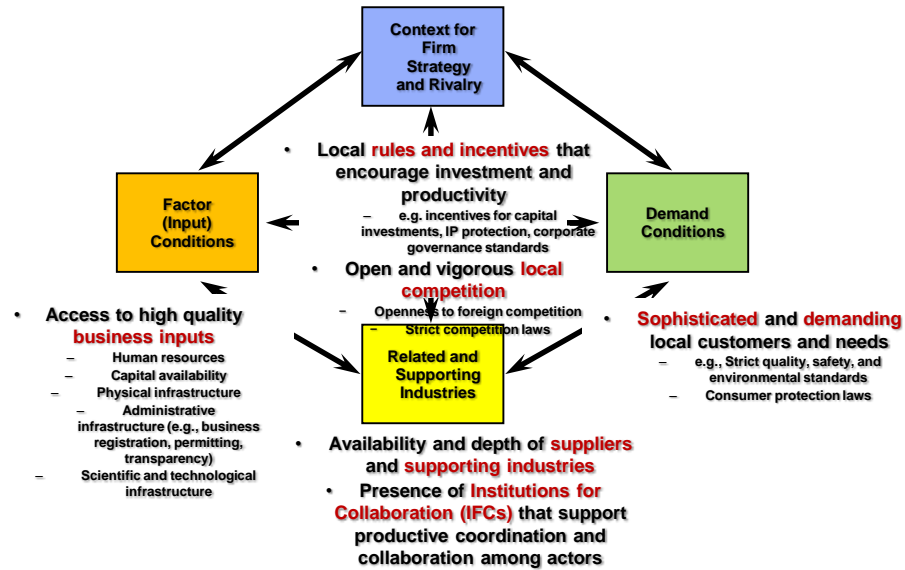
- Identify your assets, including your existing **cluster base**
- Actively pursue opportunities in areas **adjacent to current strengths** and leading towards higher value added



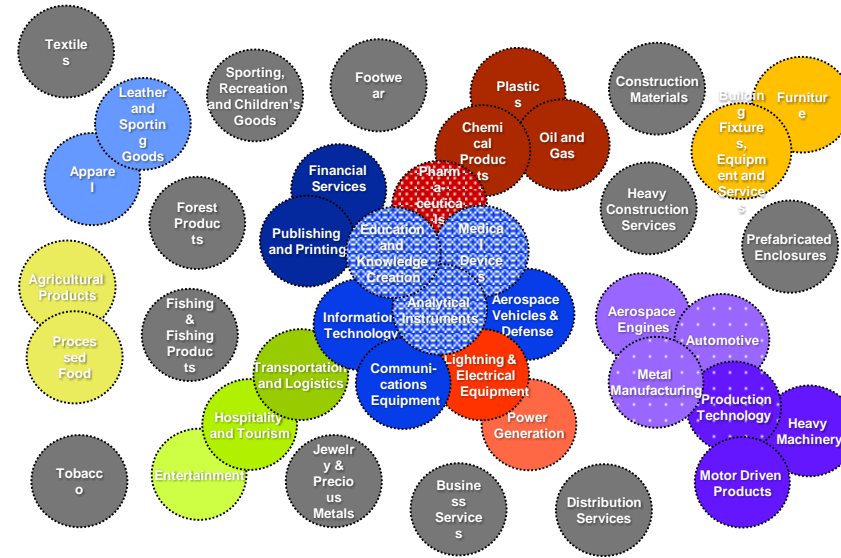
- Longer-term development of sustainable competitive advantages

Cluster-Based Structural Transformation: Identification

Business Environment Strengths



Existing Cluster Portfolio



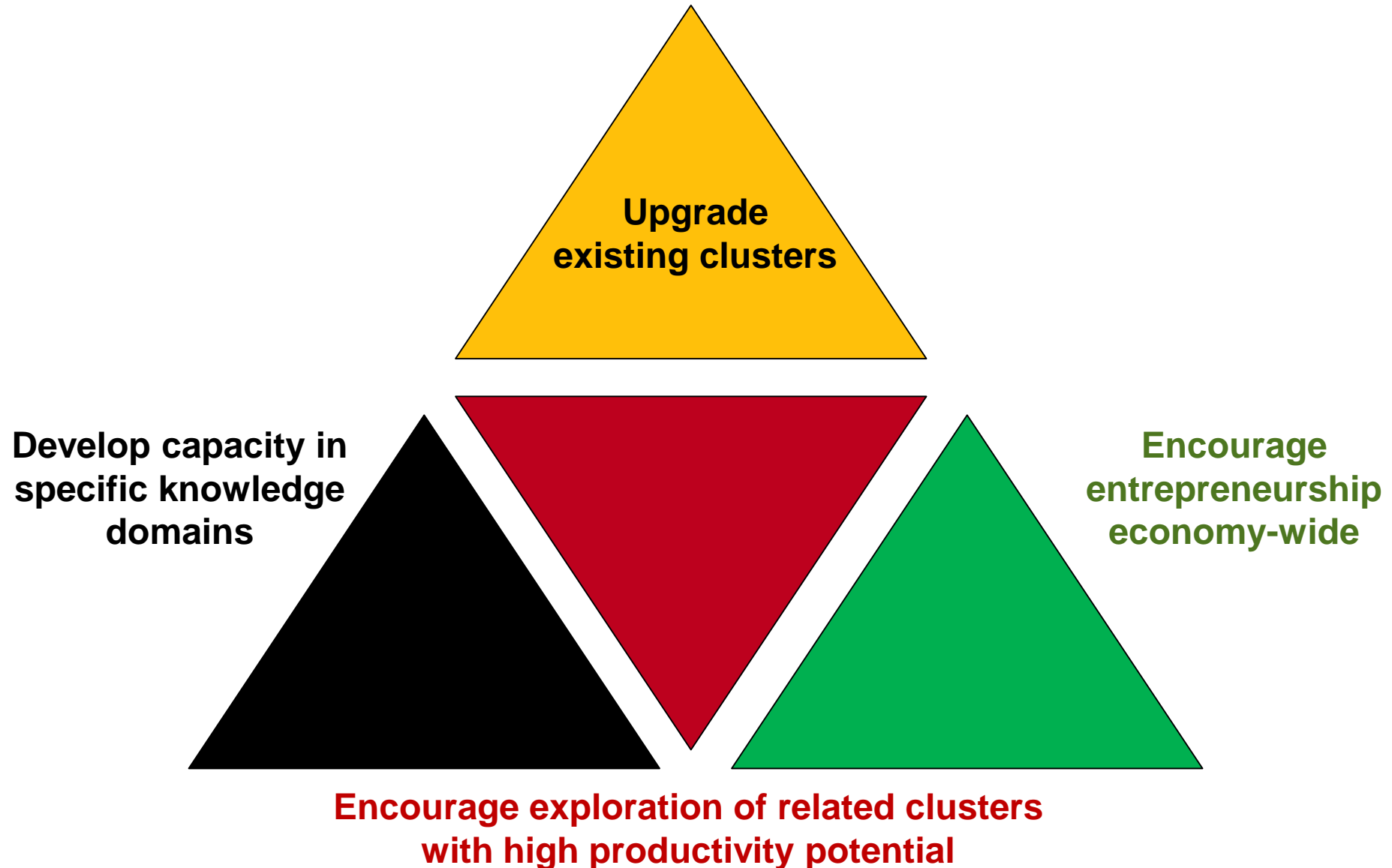
- Existing capabilities
- External intelligence (technology, market needs) is critical

Assessment criteria

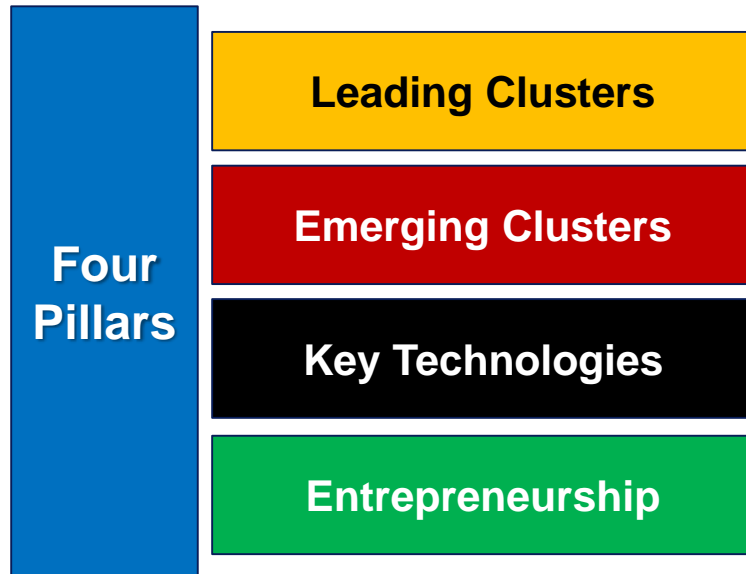
- Existing bridgeheads, market opportunity, leadership

Elements of a Regional Economic Strategy

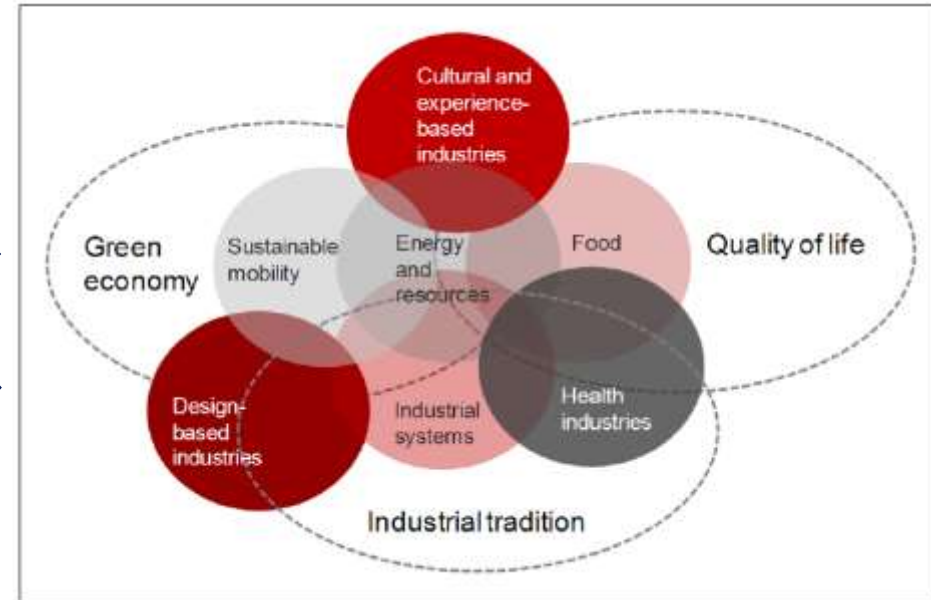
Levers to Drive Structural Transformation



An Example: Catalonia's Smart Specialization Strategy



- Integration of national and regional policy instruments



- Existing cluster organizations and support mechanisms put into a broader context

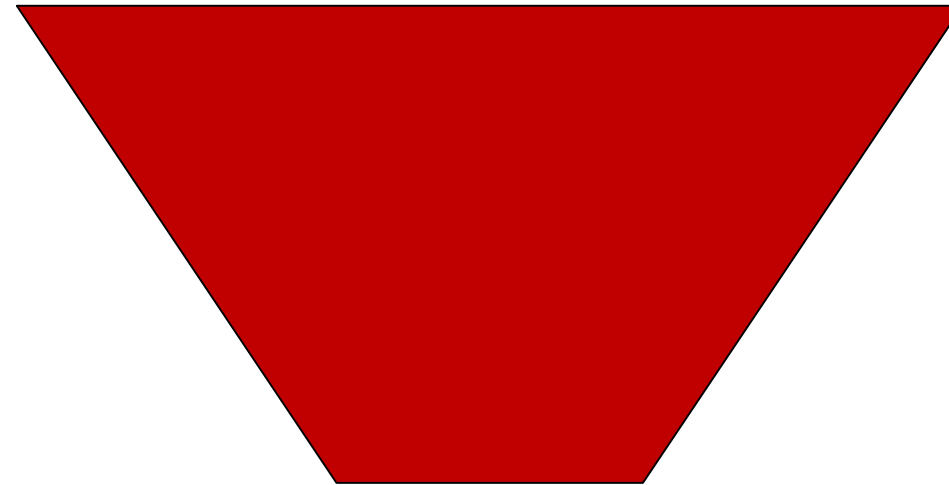
Regional Strategy (RIS3) and Clusters: The Opportunity

What RIS3 can offer:

- From individual cluster efforts to a **regional agenda**
- From strengthening strengths to **enabling change**

What cluster efforts can offer:

- From what to do to **how to do it and by whom**
- From government driven to **public private collaboration**



An effective regional strategy

New Partnerships to Drive Economic Development

