



Training in the Frame of the Erasmus+ CBHE Project

Role of Universities in the Regional Development (RURD)
609741-EPP-1-2019-1-GE-EPPKA2-CBHE-SP

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Co-funded by the
Erasmus+ Programme
of the European Union





Role of Universities in Regional Development

Prof. Dr. Vito Bobek

FH Joanneum

vito.bobek@fh-joanneum.at

Graz, March 29, 2021

Lecturer

- Vito Bobek has a long history in academia, consulting and entrepreneurship:
- In 2020/21 he serves as an adviser to the Government Office for Development and European Cohesion Policy.
- He is also a member of strategic board of the Minister of Foreign Affairs of Slovenia.
- In 2008 he founded a consulting company Palemid where he managed 14 big projects, such as Cooperation Programme Interreg V-A Slovenia-Austria (2014 – 2020) and Capacity Building for the Serbian Chamber of Enforcement Agents.
- He has also participated in many international projects in Italy, Germany, the UK, the U.S., Spain, Turkey, France, Romania, Croatia, Montenegro, Malaysia, and China.
- He is also a co-founder of Academy of Regional Management in Slovenia.
- During the last 17 years, he was also a member of supervisory board at KBM Infond Management Company Ltd. which is a part of the Nova KBM, Plc. banking group. Nova KBM is the second largest Slovenian bank. Currently KBM Infond Ltd. manages Umbrella Fund with 22 sub-funds with assets in excess of 300+ million Euros.
- He works as professor of international management at the University of applied sciences FH Joanneum (Graz, Austria). In his academic career he published more than 400 units and visited 22 universities worldwide as visiting professor.
- He is a member of editorial board in six international journals and open access publishing company. Among his previous functions, he was a member of Team Europe Slovenia, member of the Academic Expert Group in the Commission of the EU (DG Education) for Socrates/Erasmus project evaluation and adviser to the Minister of Economic Relations and Development of Slovenia for the strategy of International Economic Relations.



- 1. What is a region? Definition and concepts**
- 2. Theoretical background: Competitiveness of cities/regions**
- 3. Managing cities/regions**
 - i. Strategic management of cities/regions
 - ii. Strategic branding and imaging of cities/regions
 - iii. Role of regional policy in strengthening Research and Innovation (R&I) – The Case of the EU
- 4. The Role of Universities in Regional Development and Cluster Formation**
- 5. Vision and strategy model for municipalities – a case**

1. WHAT IS A REGION? DEFINITION AND CONCEPTS

Region (general definition)

- **In geography, regions are areas broadly divided by:**
 - physical characteristics (physical geography),
 - human-impact characteristics (human geography), and
 - the interaction of humanity and the environment (environmental geography).
- **Geographic regions and sub-regions are mostly described by their imprecisely defined, and sometimes transitory boundaries, except in human geography, where jurisdiction areas such as national borders are clearly defined in law.**
- **A region has its own nature that could not be moved:**
 - The first nature is its natural environment (landform, climate, etc.).
 - The second nature is its physical elements complex that were built by people in the past.
 - The third nature is its socio-cultural context that could not be replaced by new immigrants.
- <https://www.youtube.com/watch?v=Rwy7kRtH-ek>

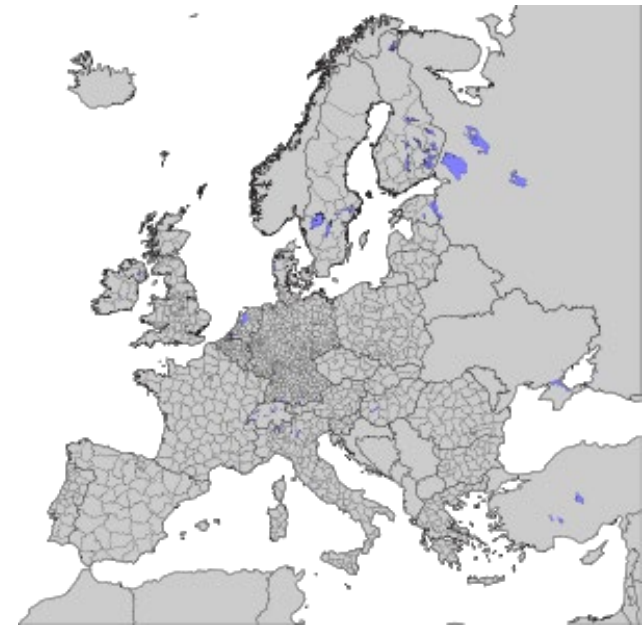
- <https://www.youtube.com/watch?v=a4Y-hCQ-Klo>
- **geocode standard for referencing the sub-divisions of countries for statistical purposes.**
- **The NUTS (Nomenclature of Units for Territorial Statistics) classification is a hierarchical system for dividing up the economic territory of the EU for the purpose of:**
 - The collection, development and harmonisation of EU regional statistics.
 - Socio-economic analyses of the regions.
 - NUTS 1: major socio-economic regions
 - NUTS 2: basic regions for the application of regional policies
 - NUTS 3: small regions for specific diagnoses
 - Framing of EU regional policies
 - Regions eligible for aid from the Structural Funds (Objective 1) have been classified at NUTS 2 level.
 - Areas eligible under the other priority objectives have mainly been classified at NUTS 3 level.
 - The Cohesion report has so far mainly been prepared at NUTS 2 level.

NUTS

- The thresholds in the table below are used as guidelines for establishing the regions, but they are not applied rigidly. For example, both Åland, with a population of 27,734 in 2009, and Île de France, with a population of 11,797,021, are NUTS 2 regions.

Level	Minimum	Maximum
NUTS 1	3 million	7 million
NUTS 2	800,000	3 million
NUTS 3	150,000	800,000

Countries		NUTS 1		NUTS 2		NUTS 3	
EU members	28		98		274		1324
Austria	AT	Groups of states	3	States	9	Groups of districts	35



LAUs

- There are three levels of NUTS defined, with two levels of local administrative units (LAUs) below.
- These were called NUTS levels 4 and 5 until July 2003, but were officially abolished by regulation, although they are sometimes still described as such.
- Note that not all countries have every level of division, depending on their size. One of the most extreme cases is Luxembourg, which has only LAUs; the three NUTS divisions each correspond to the entire country itself.

Countries		LAU 1		LAU 2	
EU members	28	8,772		120,968	
Austria	AT	— (same as NUTS 3: Groups of Districts)	35	Municipalities (<i>Gemeinden</i>)	2357

Regions in Georgia (1)



Area: 69,700 km²
Population: 4,012,104



Map ref.	Region	Population
1	Abkhazia	240,705
2	Samegrelo-Zemo Svaneti	331,145
3	Guria	113,000
4	Adjara	480,209
5	Racha-Lechkhumi and Kvemo Svaneti	31,927
6	Imereti	487,000
7	Samtskhe-Javakheti	160,262
8	Shida Kartli	264,633
9	Mtskheta-Mtianeti	94,370
10	Kvemo Kartli	423,986
11	Kakheti	319,144
12	Tbilisi	1,158,700

2. THEORETICAL BACKGROUND: COMPETITIVENESS OF CITIES/REGIONS

- **The present situation implies that some cities are more successful in their economic transformations than others:**
 - there are cities able to develop a more information-based, knowledge-driven environment that promotes economic growth and high innovation rates, attracts human resources and direct investments, and creates high-valuable jobs.
 - other cities have to cope with dramatic economic decline and loss of vital human resources. those cities have not been able to transform their economy towards a more knowledge intensive one yet.
- **Such an alarming performance gap between certain European cities implies that urban areas compete with each other, and that there is a growing need to address questions like the following ones:**
 - What is it that makes cities thriving in a more successful manner than other ones?
 - Why are some cities able to strengthen their knowledge base, and others are not?
 - And what are the most effective policies leaders of cities can follow?

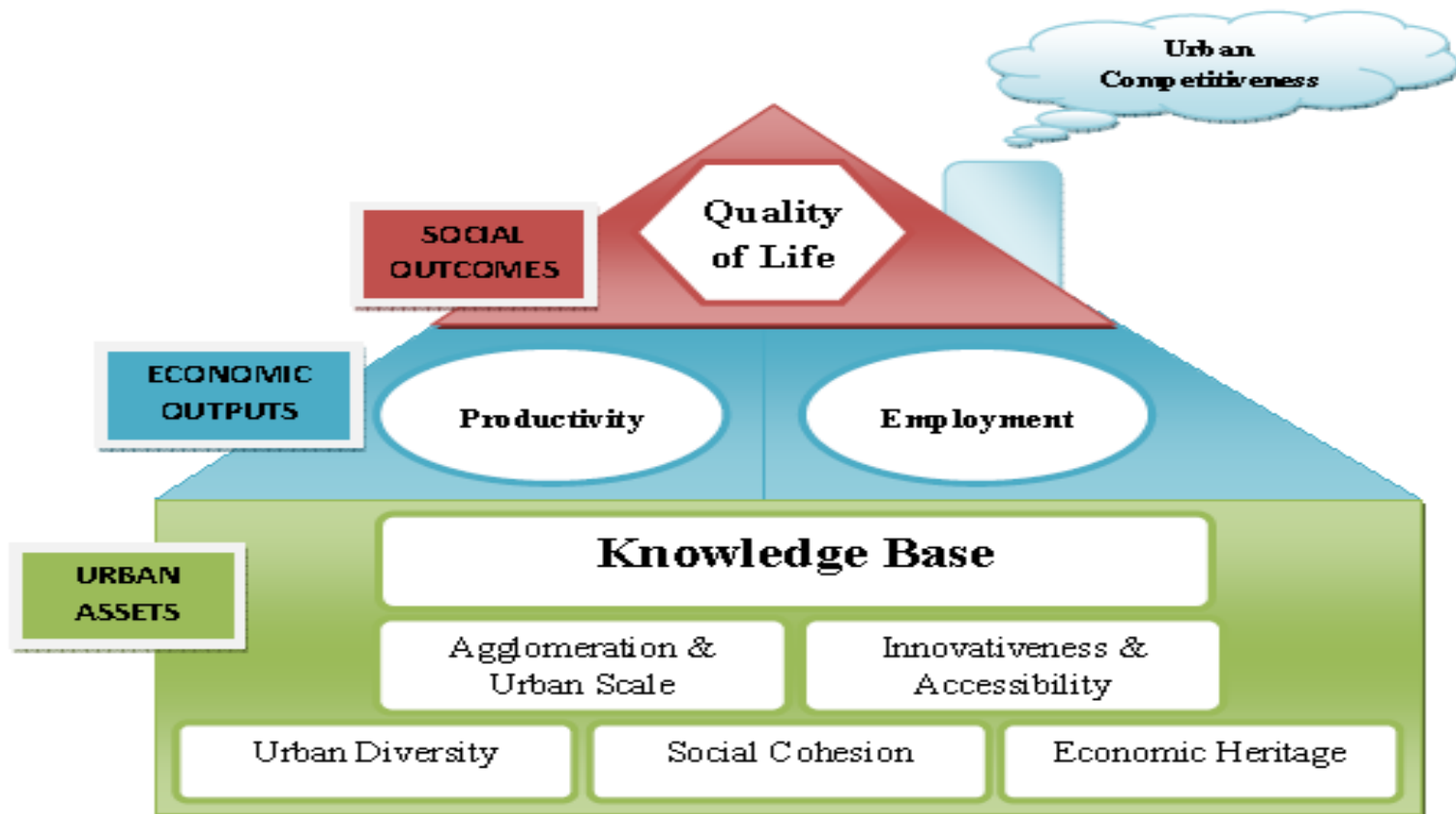
Pyramidal Model of Regional Competitiveness

- Broadly speaking, modern literature identifies two types of determinants:
 - those that are beyond any direct control of individual cities (e.g. currency exchange rates and interest rates), and
 - those that are within a city's touching distance to a greater or lesser extent.



(Source: Adapted from Gardiner et al., 2004)

Competitiveness Measurement Framework



Indices Used for Assessing the Competitiveness Level of a City

Asset 1 – KNOWLEDGE BASE (KB)	
Indicator 1	Number of students in universities and further education establishments per 1,000 resident population
Indicator 2	Proportion of working age population qualified at level 5 or 6 ISCED
Indicator 3	Public expenditure on education as a percentage of GDP (NUTS 0)
Indicator 4	Human resources in science and technology (HRST) as a share of the economically active population in the age group 15-74 (NUTS II)
Indicator 5	Life-long learning (NUTS 0 - % of total population)
Indicator 6	Proportion of residents who are not EU nationals and citizens of a country with a high Human Development Index (HDI)
Indicator 7	Percentage of households with internet access at home (NUTS II)
Asset 2 – URBAN DIVERSITY (UD)	
Indicator 8	Non-Nationals as a proportion of total population
Indicator 9	Nationals born abroad as a proportion of total population
Indicator 10	Migrant Integration Policy Index (MIPEX - 2004 - NUTS 0 - Final Score - 100 points possible)
Asset 3 – INNOVATIVENESS & ACCESSIBILITY (IA)	
Indicator 11	European Regional Innovation Scoreboard (2006 RIS - NUTS I/NUTS II)
Indicator 12	Patent applications to the European Patent Organization (EPO) per 1,000 resident population (from 2002 till 2006 - NUTS II)
Indicator 13	R&D expenditures as a percentage of GDP (NUTS I / II)
Indicator 14	Length of public transport network (km/capita)
Indicator 15	Multimodal accessibility (EU27=100)
Indicator 16	Number of air passengers using nearest airport
Asset 4 – AGGLOMERATION & URBAN SCALE (AU)	
Indicator 17	Total resident population
Indicator 18	Total population of working age
Asset 5 – SOCIAL COHESION (SC)	
Indicator 19	Unemployment rate
Indicator 20	Number of recorded crimes per 1,000 resident population

Indicator 21	Total expenditure on social protection per head of population in € (NUTS 0)
Indicator 22	Inequality of income distribution visualized by income quintile share ratio (NUTS 0)
Indicator 23	At-risk-of-poverty rate (NUTS 0)
Asset 6 – ECONOMIC HERITAGE (EH)	
Indicator 24	Proportion of employment in industries G-P (NACE Rev. 1)
Indicator 25	ICT patent applications percentage of total patent application to the EPO (annual average from 2002 till 2006 - NUTS II)
Economic Output 1 – PRODUCTIVITY (PR)	
Indicator 26	GDP per head in €
Indicator 27	GDP per employed person in €
Economic Output 2 – EMPLOYMENT (EM)	
Indicator 28	Employment rate
Indicator 29	Average disposable annual household income in € (NUTS II)
Social Outcome – QUALITY OF LIFE (QL)	
Indicator 30	Quality of Life Index 2010 (NUTS 0 - Final score - 100 points possible)
Indicator 31	Expected healthy life years at birth (NUTS 0)
Indicator 32	Annual change in population in % (Data used for 2001 & 2004)
Indicator 33	Number of hospital beds per 1,000 residents
Indicator 34	Average price per m ² for a house in €
Indicator 35	Number of cinema seats per 1,000 residents
Indicator 36	Number of tourist overnight stays in registered accommodation per year per resident population

Relative Importance of Determinants Expressed through their Weighting Factor

DETERMINANT	WEIGHTING FACTOR
Knowledge Base	20%
Urban Diversity	10%
Innovativeness and Accessibility	10%
Agglomeration and Urban Scale	5%
Social Cohesion	10%
Economic Heritage	5%
Productivity	10%
Employment	10%
Quality of Life	20%

Results (1)

	KB	UD	IA	AU	SC	EH	PR	EM	QL
Rank & Points	R	R	R	R	R	R	R	R	R
<i>Graz</i>	5	3	4	5	3	4	5	3	2
<i>Aarhus</i>	1	6	3	3	2	2	3	2	4
<i>Bergen</i>	4	7	5	6	1	1	2	1	1
<i>Debrecen</i>	7	8	8	8	5	8	8	9	8
<i>Ghent</i>	3	4	1	7	8	3	4	5	6
<i>Gothenburg</i>	2	1	2	1	4	5	1	4	3
<i>Kosice</i>	9	9	7	4	7	7	9	8	9
<i>Maribor</i>	6	5	9	9	6	9	7	7	7
<i>Thessaloniki</i>	8	2	6	2	9	6	6	6	5

KB – Knowledge Base

UD – Urban Diversity

IA - Innovativeness and Accessibility

AU - Agglomeration and Urban Scale

SC - Social Cohesion

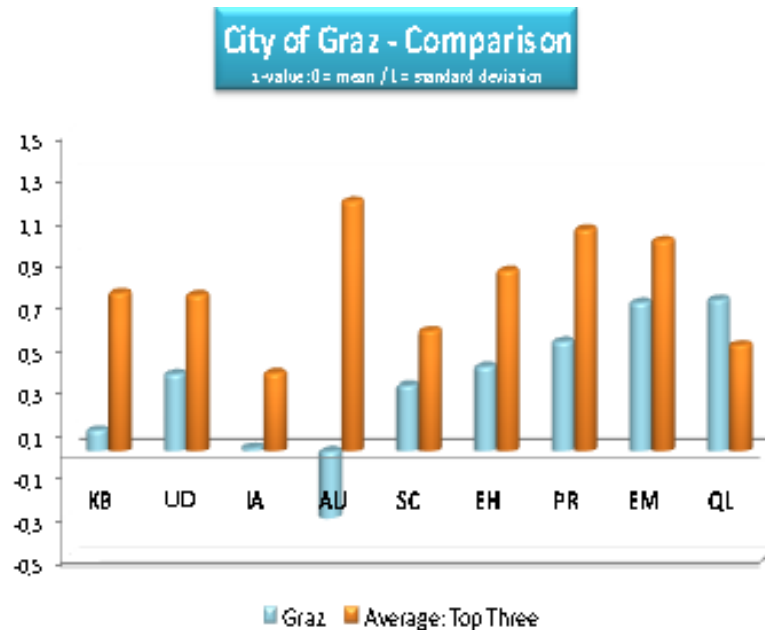
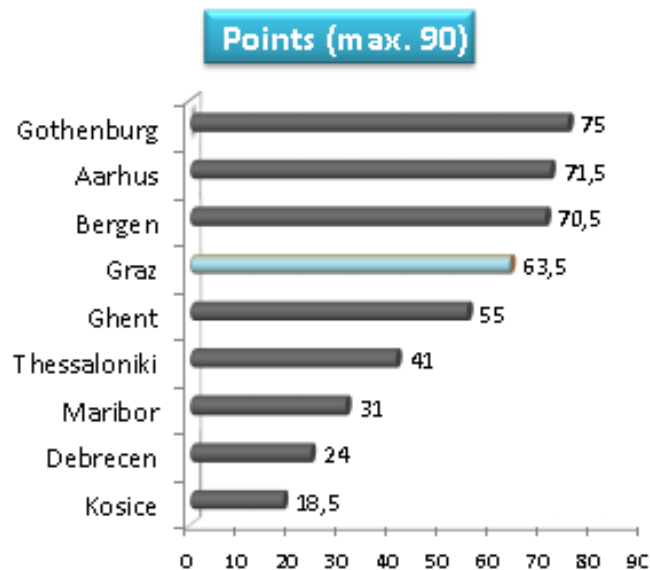
EH - Economic Heritage

PR – Productivity

EM – Employment

QL – Quality of Life

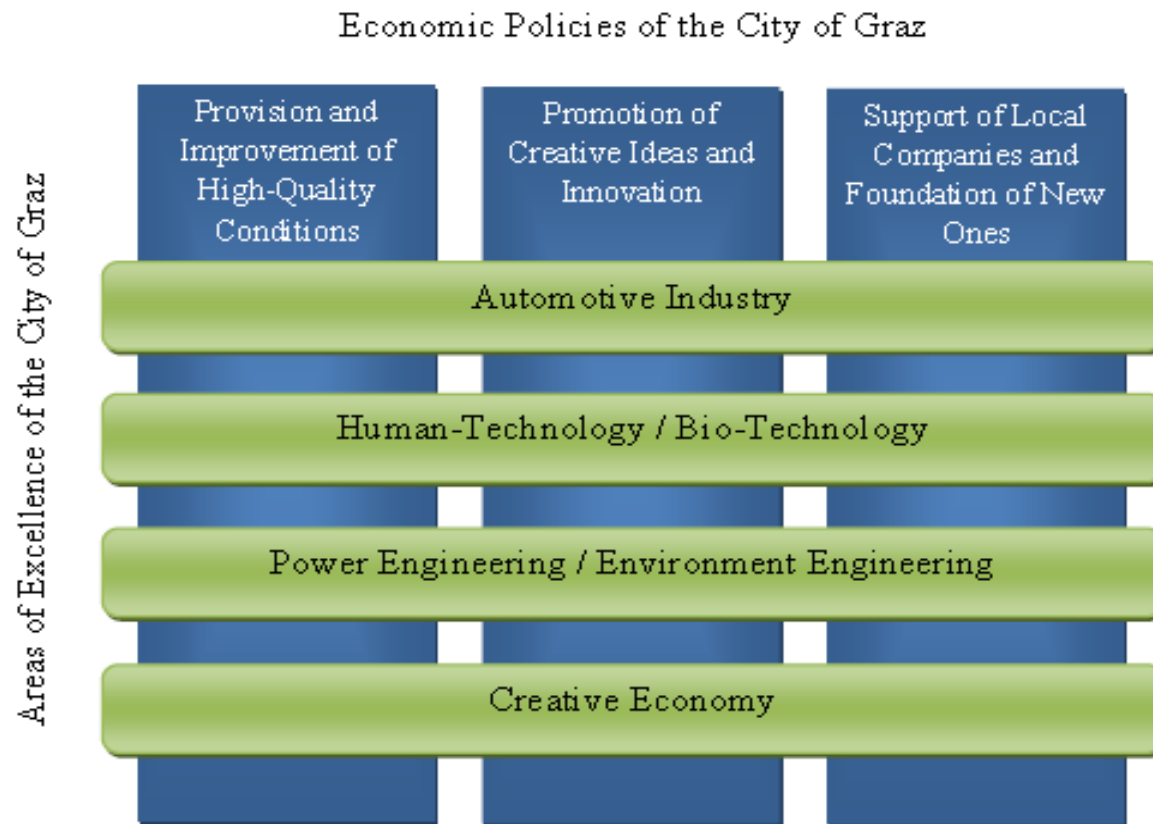
Results (2)



KB – Knowledge Base
 UD – Urban Diversity
 IA - Innovativeness and Accessibility
 AU - Agglomeration and Urban Scale
 SC - Social Cohesion

EH - Economic Heritage
 PR – Productivity
 EM – Employment
 QL – Quality of Life

Current Policy Focus of the City of Graz



SWOT Analysis



Policy Recommendations

- Be Proactive and Plan for the Future
- Practice Leadership and Communicate a Clear Vision
- Develop the City's Human Capital
- Live and Breathe Creativity
- Stay Ahead of Technological Services
- Enhance the Development of Clusters
- Force Public-Private Networks and Partnerships
- Force Regional Collaborations
- Benefit from the City's 'Quality of Life' Advantage.

3. MANAGING CITIES/REGIONS

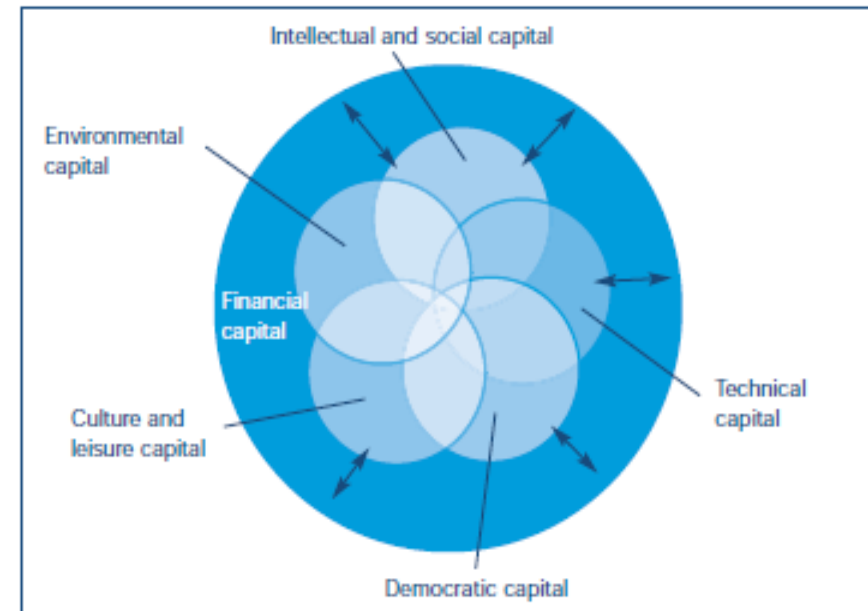
STRATEGIC MANAGEMENT OF C/R

STRATEGIC BRANDING AND IMAGING OF C/R

**ROLE OF REGIONAL POLICY IN STRENGTHENING
RESEARCH AND INNOVATION (R&I) – THE CASE OF THE
EU**

Six types of capital

- There are six different types of capital discussed in this presentation:
 - Intellectual and social capital – people and knowledge;
 - Democratic capital – participation and consultation;
 - Cultural capital – values, behaviours and public expressions;
 - Environmental capital – natural resources;
 - Technical capital – man-made capital and infrastructure; and
 - Financial capital – money and assets.

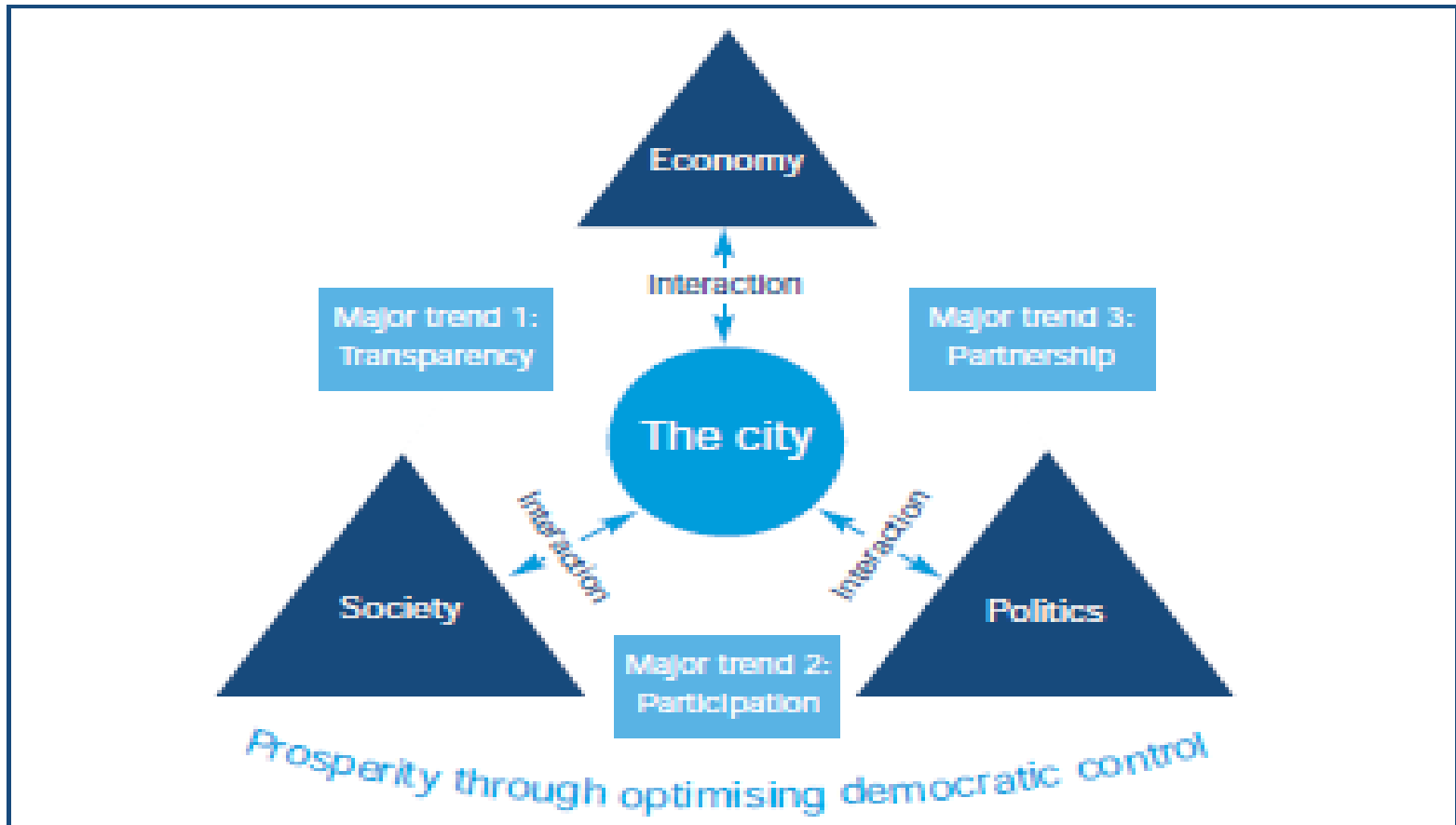


Challenges for capitals

- **Intellectual and social capital**
 - Competing in the international knowledge economy means ensuring that the appropriate people, skills and capabilities are developed, with city leaders demonstrating that they understand how these qualities can be captured
- **Democratic capital**
 - City administrations need to improve their accountability and transparency of their dialogue with citizens in order to achieve the commitment of the whole city on its journey into the future
- **Cultural and leisure capital**
 - The competition among cities is intense, and a strong city brand is a potent weapon to maximise the visibility of a city's qualities and allow it to differentiate itself
- **Environmental capital**
 - As quality of life becomes an important source of competitive advantage, cities have to provide a clean, green and safe environment for their citizens.
- **Technical capital**
 - The demands on a city's infrastructure change and expand constantly. Cities have to ensure that these assets can support the changing needs of their citizens.
- **Financial capital**
 - Growing demands on cities' budgets, combined with diminishing revenue bases mean that cities need to be creative and flexible in their financial strategies.

Strategic management of a C/R (3)

Interactions between politics, society and economy with the three major trends to optimize democratic capital

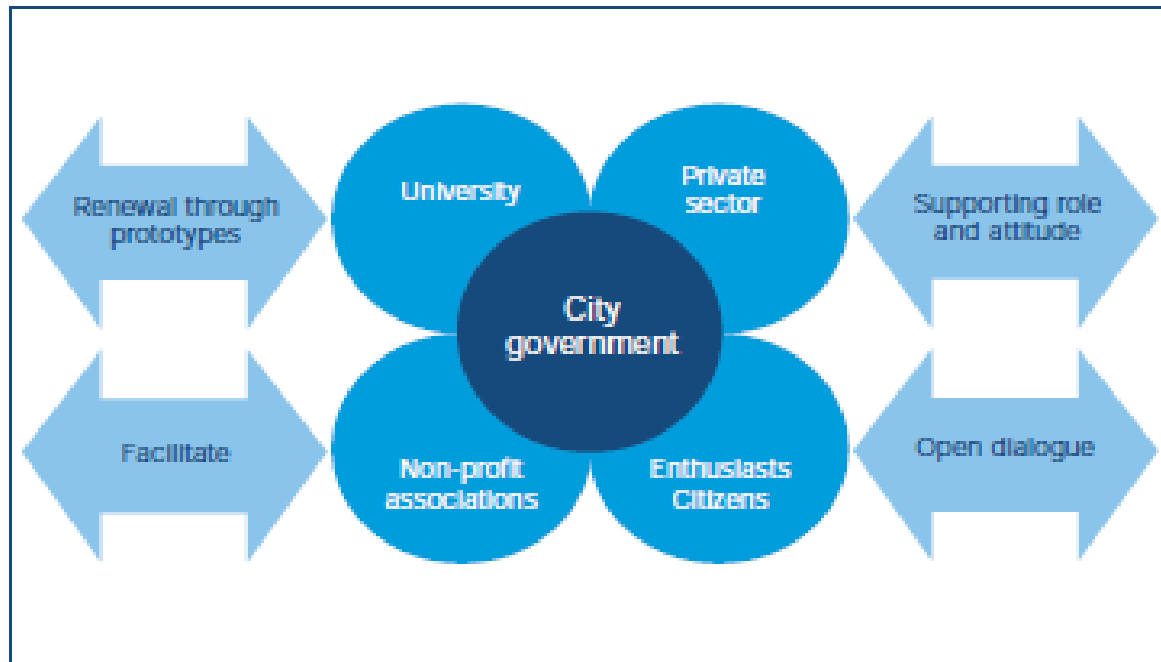
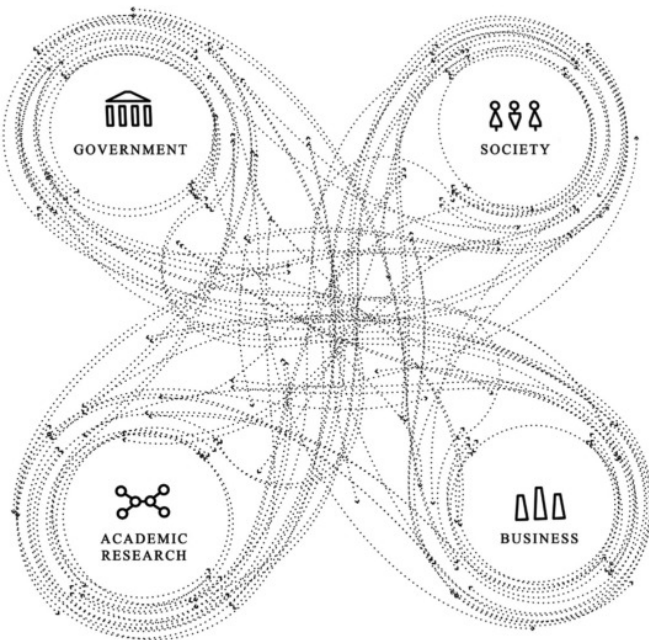


Navigating into the future requires an open mind and leadership

- The navigation process depends on how we consider our position today and what kind of approach we will use to reach our future vision. Below are four different approaches to navigating in relation to the surrounding world:

Inactive	No interpretation of trends
Reactive	Responding to the agenda of others
Proactive	Make detailed plans for the future and set trends
Interactive	Shape and respond to changing trends over time

Values and attitudes underpinning successful relationships



Strategic Questions

- In what areas is your city in a lead position? (closer to the future) than your “competing” cities?;
- Do you and your leadership group have an interactive approach to strategic navigation, which means understanding what’s going on in your environment, and trying to interpret what it will mean for the organisation in the future?;
- Has your city developed a strategic tool for “city intelligence”?; and
- How much of your working time do you spend thinking about the future?

Framework for Performance Management





Strategic management of a C/R (8)

Case: Glasgow – Leader in Strategic Area Regeneration

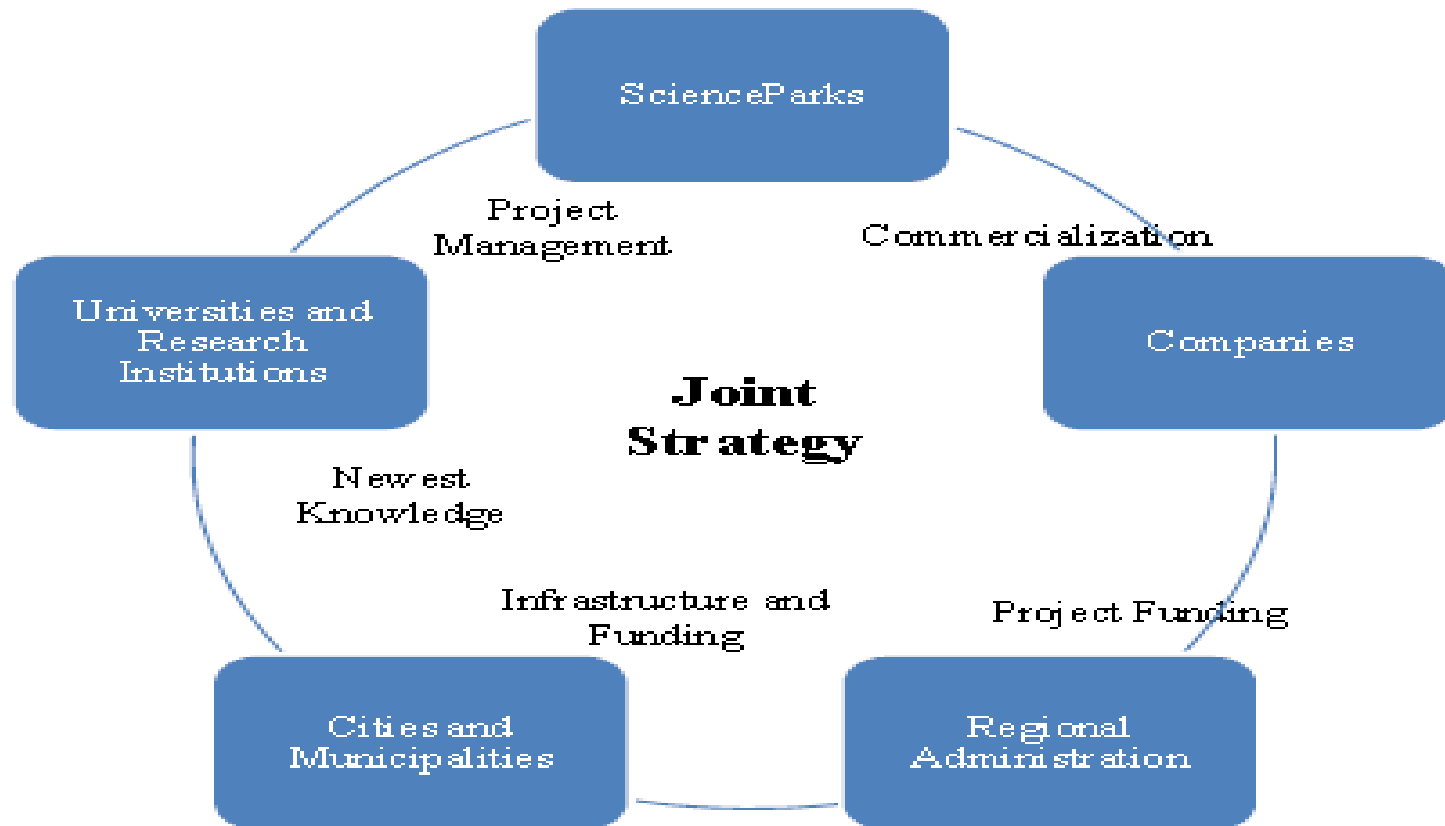


- Strategic Regeneration
 - Clyde Waterfront
 - Clyde Gateway and East End
 - Commonwealth Games: Back the Bid
 - Massive investment in housing and neighbourhoods
- Innovative funding solutions to improve scale, quality and sustainability
- Glasgow must re-establish its position as a leader in strategic area regeneration

Case: Oulu – public-private-partnership

- “The Oulu Model” combining the high level expertise, innovation and industrial capacity – European good practice for Growth and Competitiveness contributing to the Lisbon Agenda.
- **Key elements:**
 - Driven by **entrepreneurship**;
 - **Trust and true collaboration** between **public and private stakeholders**;
 - Widely **common goals**;
 - Strongly **committed partners** – strong political commitment as well.

Helsinki's Public-Private Partnership Program



Eight–Step Process to Develop a Place Brand

Step 1: Define Clear Objectives

Step 2: Understand the Target Audience

Step 3: Identify Current Brand Image

Step 4: Set the Aspirational Brand Identity

Step 5: Develop the Positioning

Step 6: Create Value Propositions

Step 7: Execute the Brand Strategy

Step 8: Measure Success

Step 1: Define clear objectives

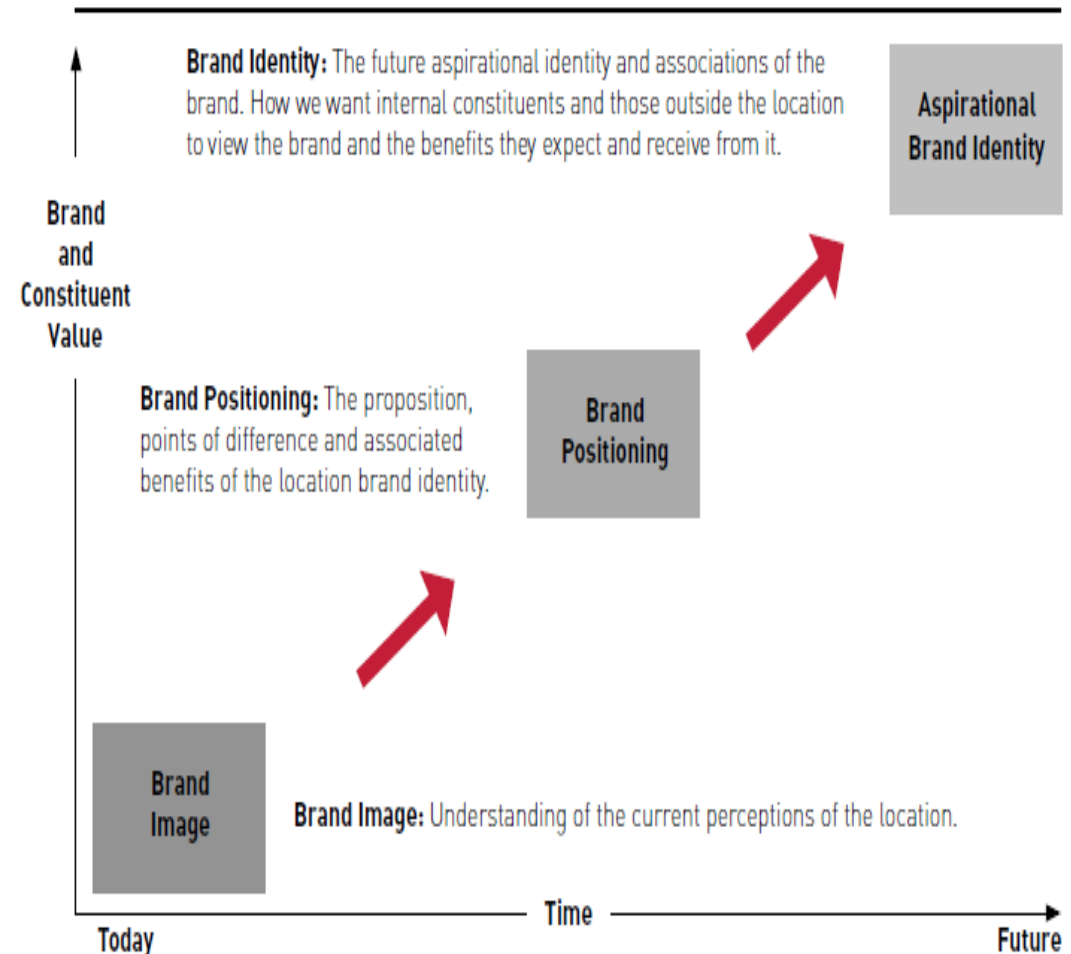
- **What is the project trying to achieve?**
- **What specific results are you seeking from the development of a brand strategy?**
 - These questions should have been asked generally as the brand strategy organization was formed but are to be addressed in greater detail as it launches its work.
 - It is imperative that decision makers understand the goals and objectives of the branding initiative.
 - Is the primary objective to attract and retain residents? Drive commerce? Attract visitors? Change current perceptions?
 - The answers to these questions (and the priorities among them) help define the scope of the project, the appropriate stakeholders with whom to speak and the key activities that form the approach to the initiative.

Step 2: Understand the audiences you are trying to attract

- Who does the audience consist of?
- What are their current perceptions and attitudes of the place?
- What do they need that a city can provide? Can your city meet that need?
- If so, how?

Step 3: Identify current brand image of the place

- What associations are linked to the place?
- Has the image of the place changed over time?
- What is the current personality of the place?
- What visual imagery does the place evoke?

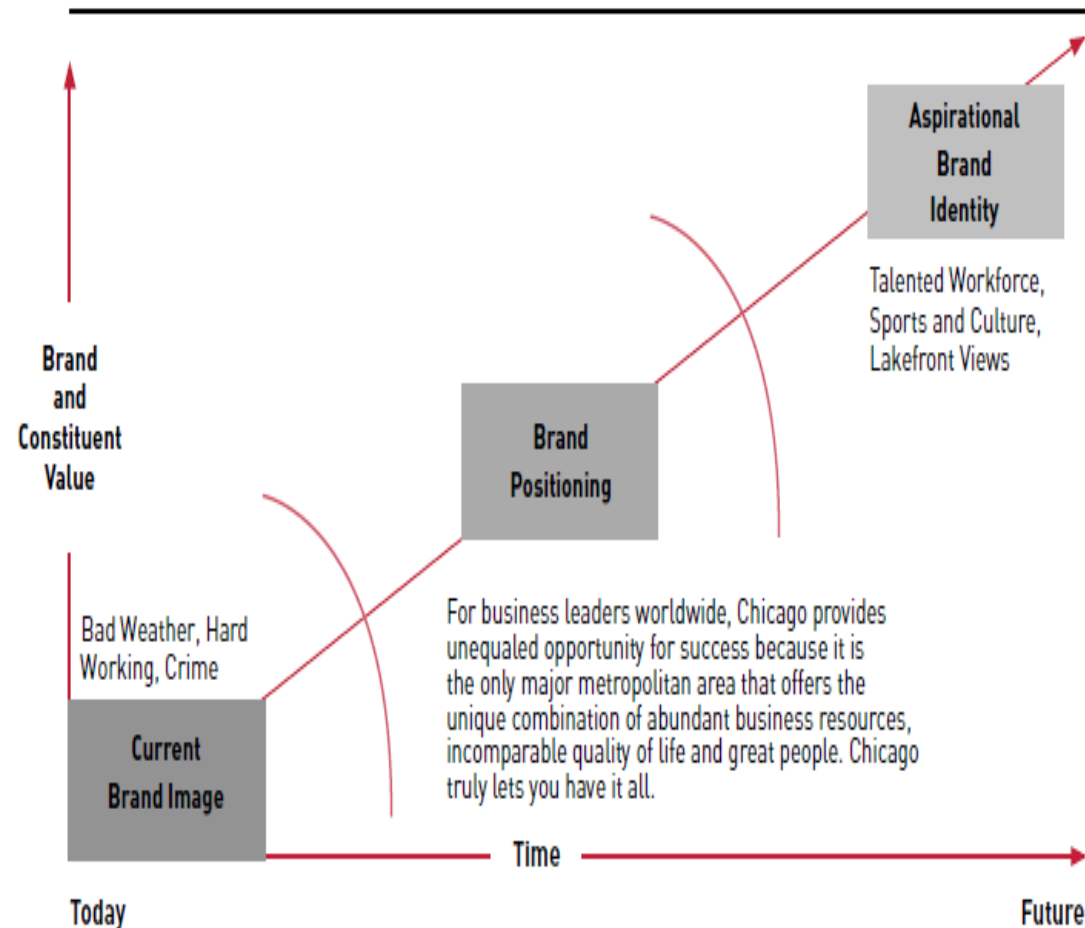


Step 4: Set the aspirational identity for the place

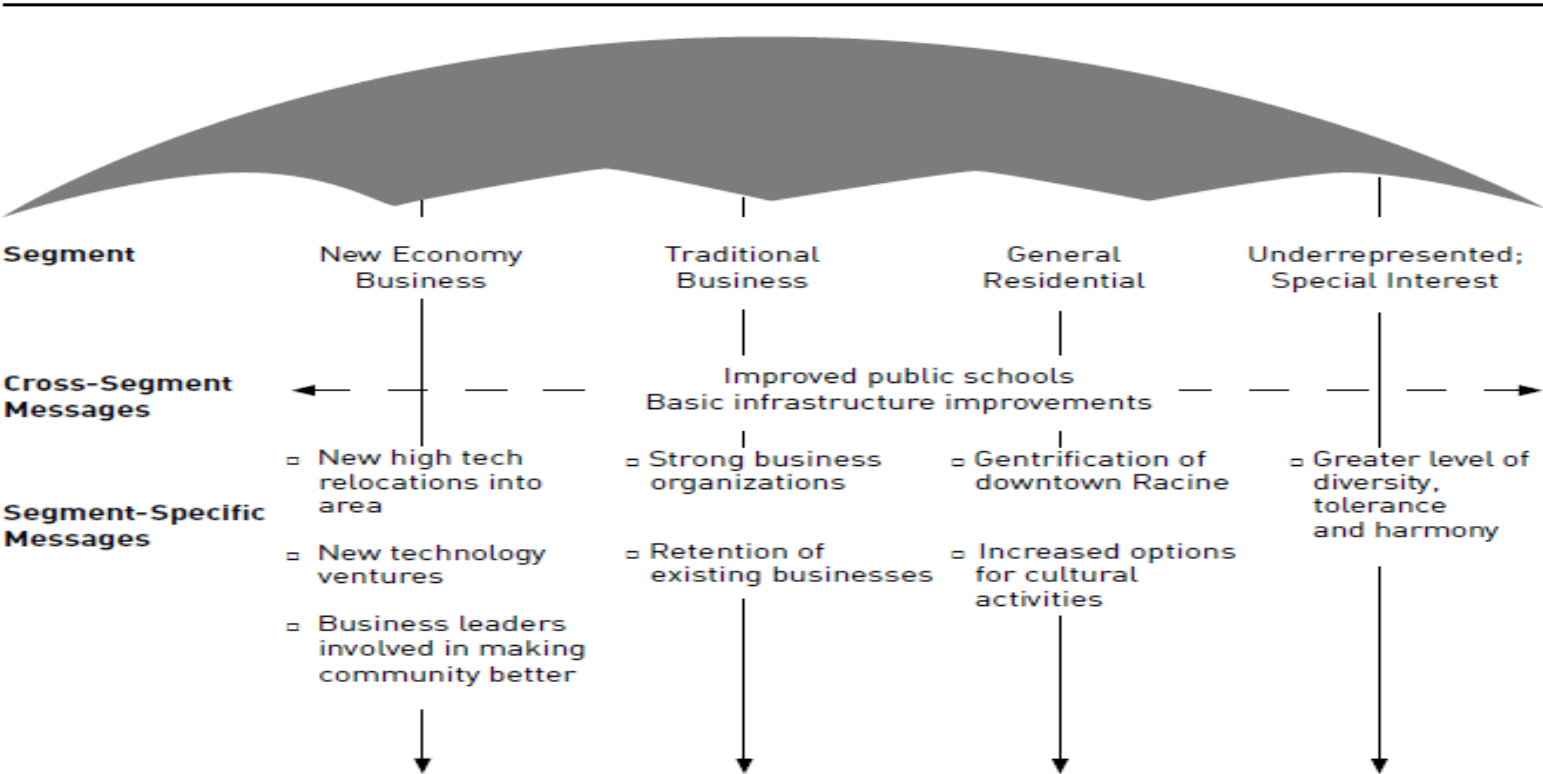
- What do you want the place to stand for?
- What associations do you want people to think of when they think of the place?
- What is the ideal personality or persona for the place?
- What type of experience would you like to have there?

Step 5: Develop the positioning

- What is the primary benefit the place is providing?
- What are the elements of proof to support the benefit?



Step 6: Create value propositions for priority target segments



Step 7: Execute the strategy

- In developing your brand-based marketing plan, it is critical to think about every point at which the target audience may come into contact with your brand.
- Every interaction or point of contact with the target audience is an opportunity either to enhance or denigrate your brand.
- These points of contact, or touchpoints, may include a wide spectrum of elements such as the physical environment, the airport, street signage, advertising, brochures, web site, events, media and even the attitude of residents.

Step 8: Measure success

- The adage, “What is not measured is not managed,” is true for all branding, whether product, service or place.
- The link between business and brand strategy becomes evident as return on investment and the positive economic, social and political impact are measured over time.
- There are generally three principles for measuring success for a place brand strategy:
 - Monitoring the success of branding efforts with key audiences
 - Measuring the effectiveness of branding and marketing activities over time
 - Showing the effect the brand has on the business by measuring the brand metrics in conjunction with the economic and community development metrics.

3.3. ROLE OF REGIONAL POLICY IN STRENGTHENING THE RESEARCH AND INNOVATION (R&I) – THE CASE OF THE EU

Thematic objectives and major policy priorities

- **Although the new CPR is based on the framework of the current CPR, it nevertheless introduces a number of innovations. For instance, from 11 'thematic objectives' in the 2014-2020 period, the new regulation will now focus its resources on five policy objectives:**

1. a smarter Europe, through innovation, digitalisation, economic transformation and support for small and medium-sized businesses;
2. a greener, carbon free Europe, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change;
3. a more connected Europe, with strategic transport and digital networks;
4. a more Social Europe, delivering on the European Pillar of Social Rights and supporting quality employment, education, skills, social inclusion and equal access to healthcare;
5. a Europe closer to citizens, by supporting locally-led development strategies and sustainable urban development across the EU.

→ 65 – 85 %

The landscape of innovation-related policies in the EU (1)

- In 2020, regional innovation policy will be 30 years old but before that anniversary it needs to be fully coordinated with other types of EU innovation-related policies.
- Innovation-related policies are broadly defined policy areas which seek to enhance knowledge generation, absorption and diffusion in the economy (and society) so as to support an innovation-driven economy and to solve major societal problems.
- For our purposes, it is useful to differentiate five main policy areas:
 - Research and development (R&D)-driven innovation policy
 - Industrial policy
 - Cohesion or regional policy
 - Sectoral policies or mission-oriented policies for grand challenges, and
 - Policies supporting knowledge transfer and co-generation via various types of innovation-based value and supply chains.

The landscape of innovation-related policies in the EU (2)

Figure 1: Towards the integration of EU research and industrial innovation policies



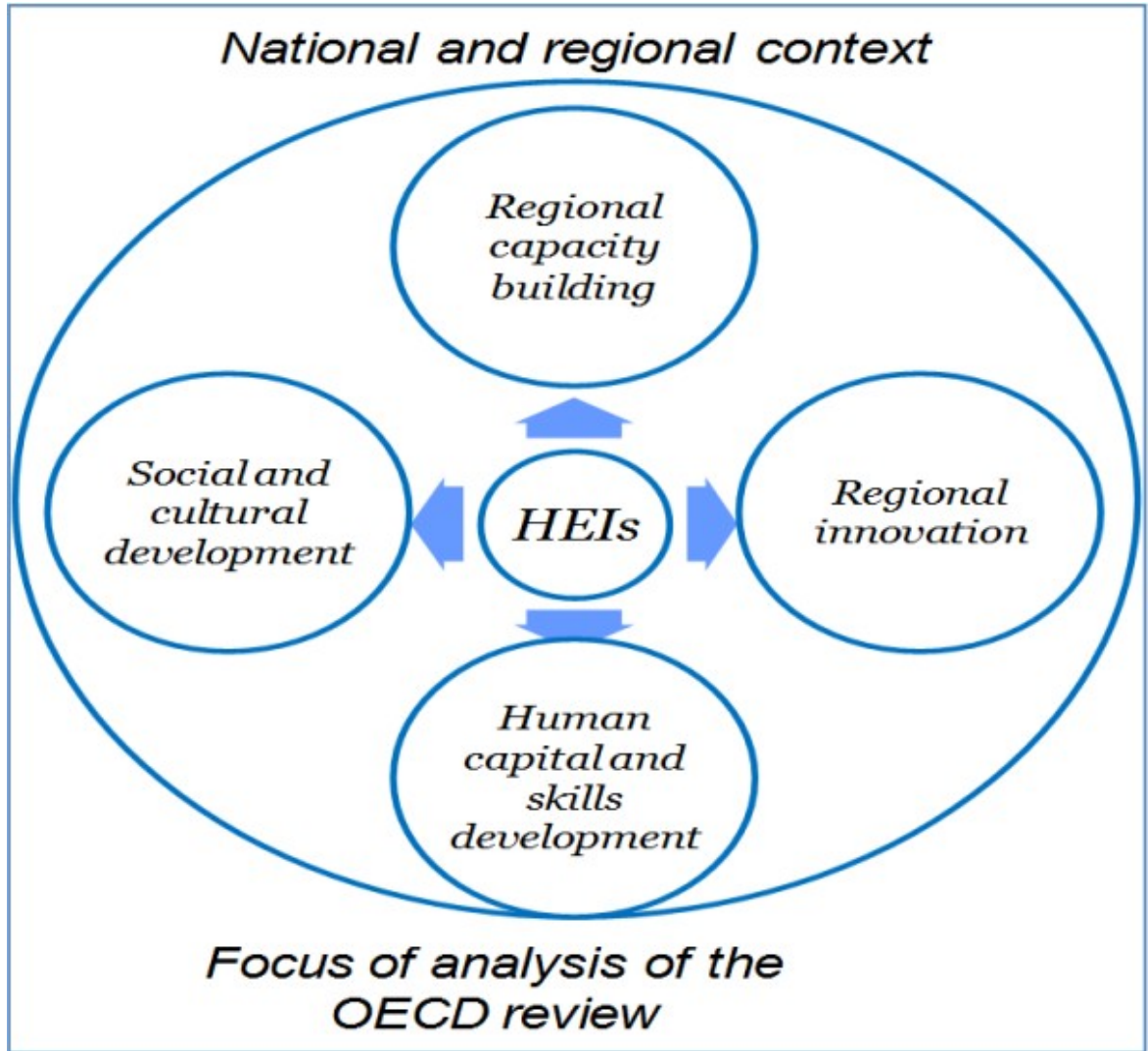
The landscape of innovation-related policies in the EU (3)

- ***R&D-driven innovation policy*** is traditionally focused on the generation of new technology and frontier knowledge with a view to the commercialisation of R&D-based knowledge.
- This is the major policy area for generating technology-based growth, and represents the key focus of most EU countries and regions, be they laggards or technology leaders.
- The EU Framework Programme for R&D (Horizon) also follows this approach.
- In the EU, the specific types of R&D-driven innovation policy focus either on
 - science and collaborative R&D, or
 - on the commercialisation of public R&D, or
 - on business R&D.
- However, they all assume that the R&D is the major source of knowledge for innovation and that science and technology (S&T) opportunities are the main drivers of technological change.

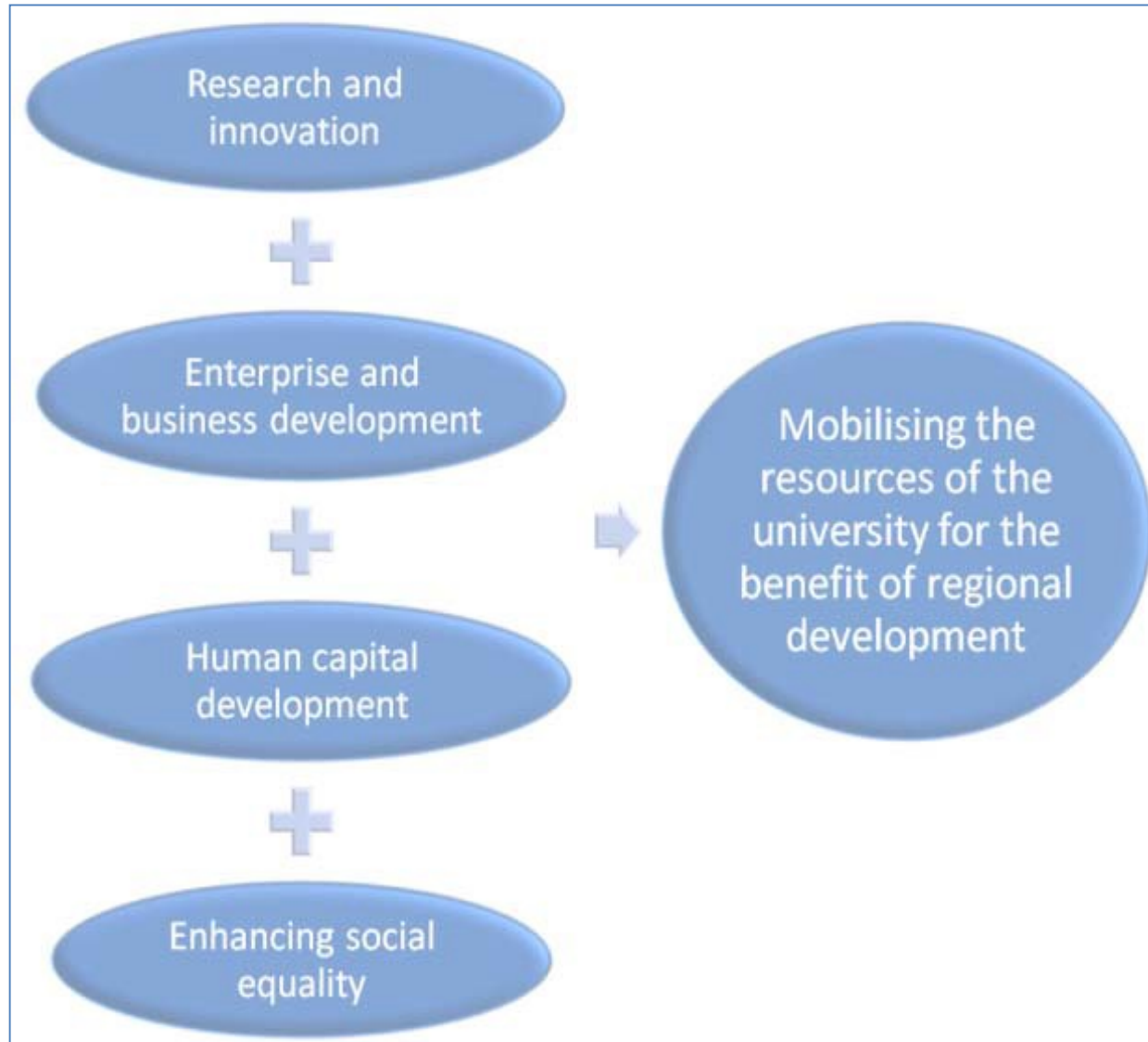
4. THE ROLE OF UNIVERSITIES IN REGIONAL DEVELOPMENT AND CLUSTER FORMATION

Who	What
Public Authorities	What is the role of universities in regional growth?
	What are some of the mechanisms for involving universities in delivering regional growth?
	How can the barriers to mobilising universities be identified and overcome?
	How can effective partnerships and strategies be created to maximise the relationship between universities and regions?
Universities and other research or academic partners	What benefit can universities get from working with regional development partners?
	What specific activities can universities get involved in?
	How can universities improve their ability to engage with regional development actors?
	What can be done to influence policy makers?
Business and other commercial or social partners	What are the benefits of cooperating with universities?
	What specific activities can be used to leverage the resources of universities?
	How can commercial and social partners maximise engagement in regional development and planning?

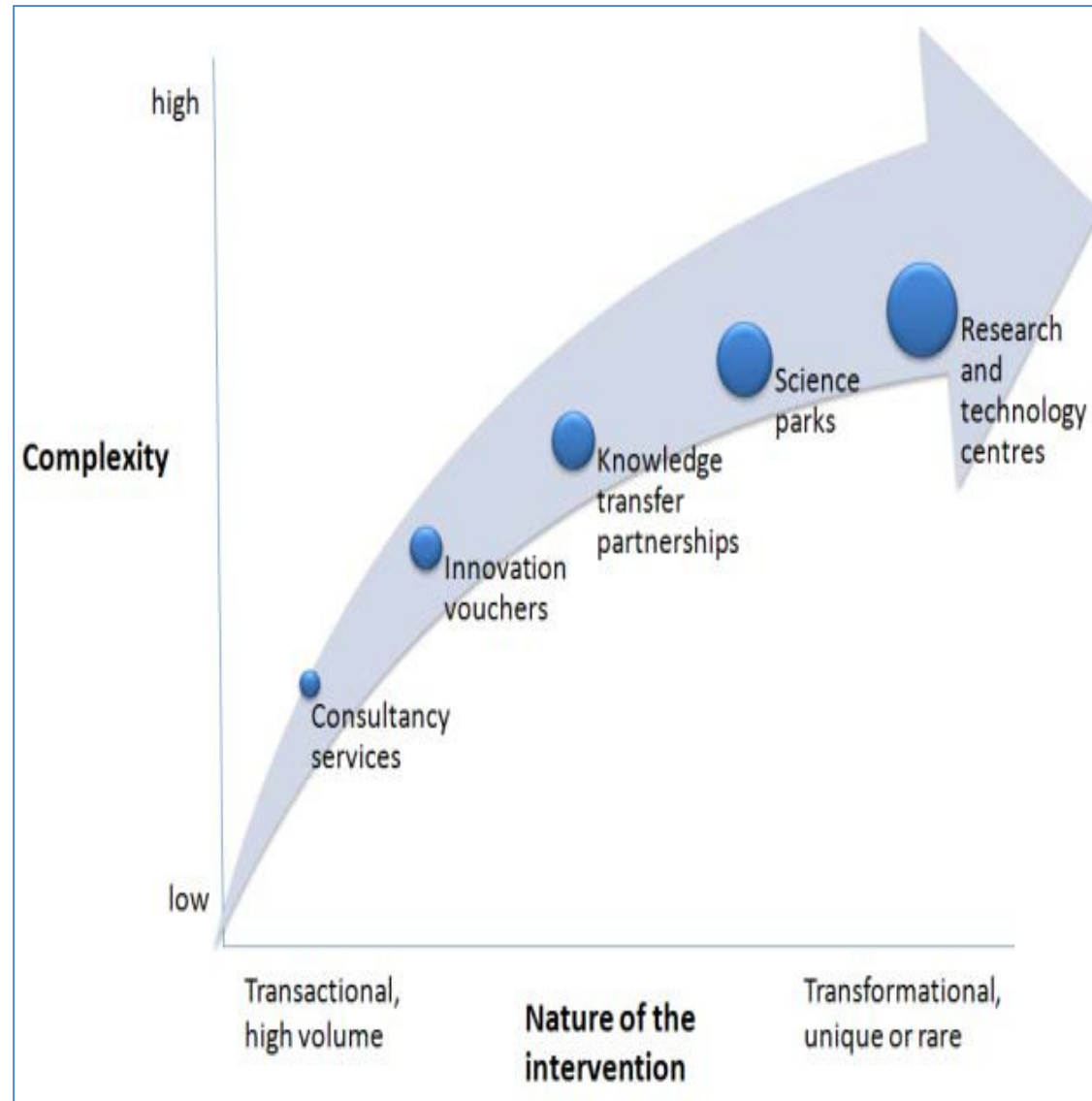
OECD Analysis Framework



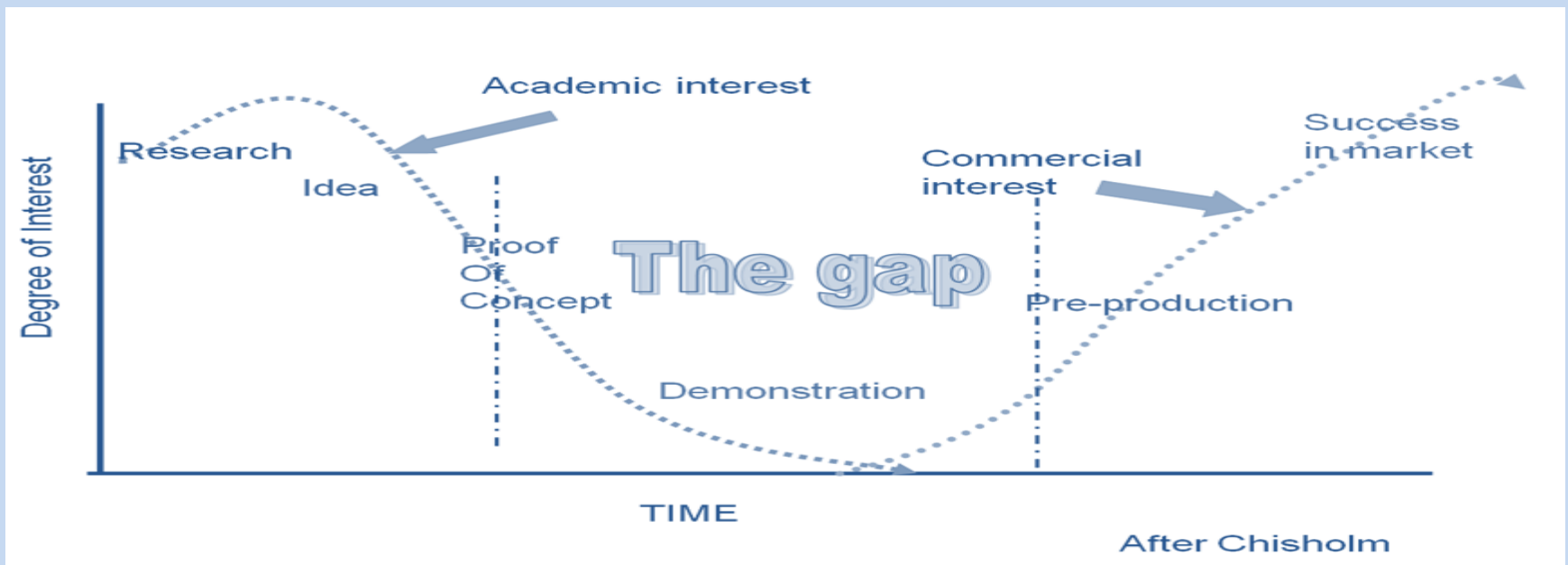
Four key areas for university engagement in regional development



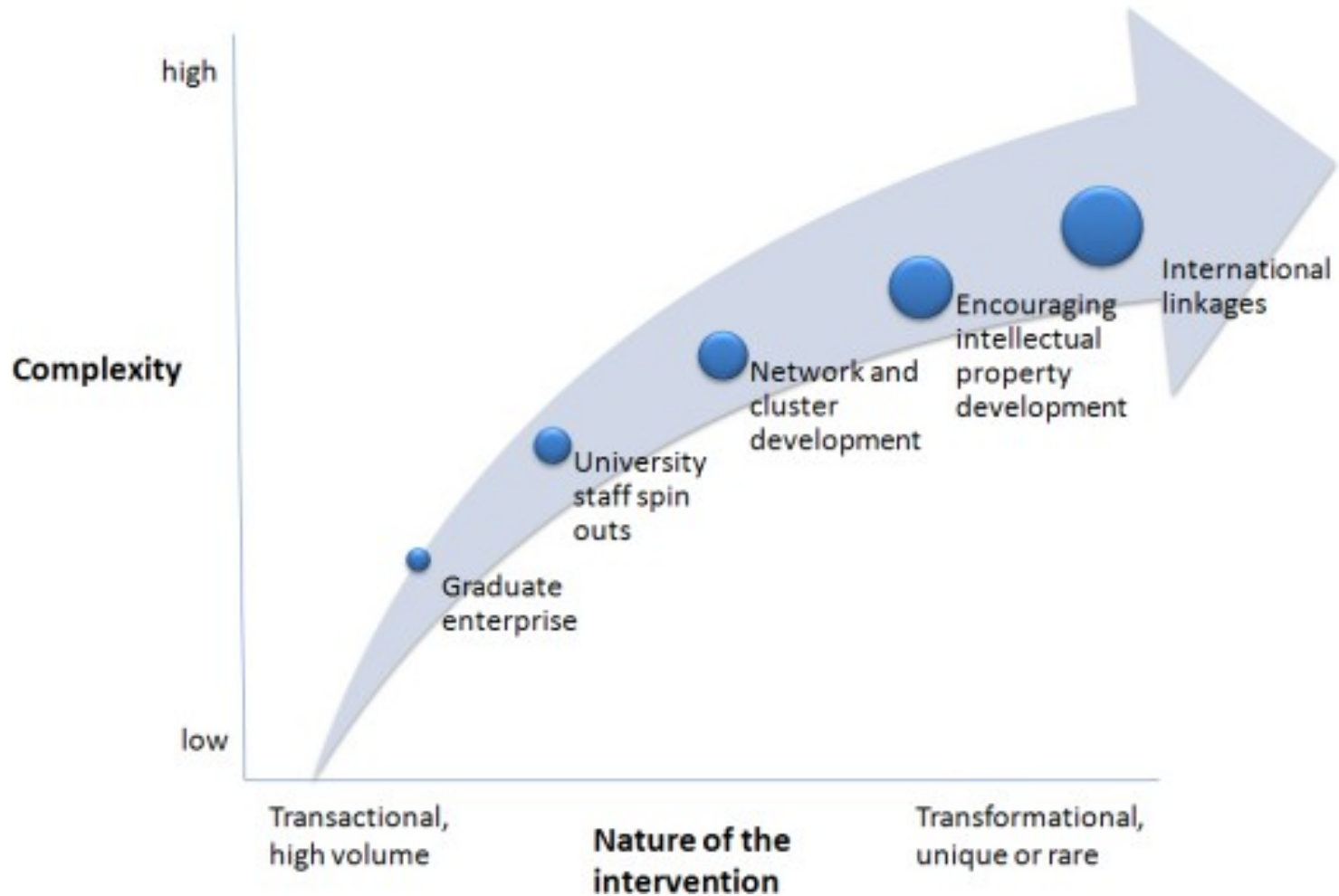
Enhancing regional innovation through research activities



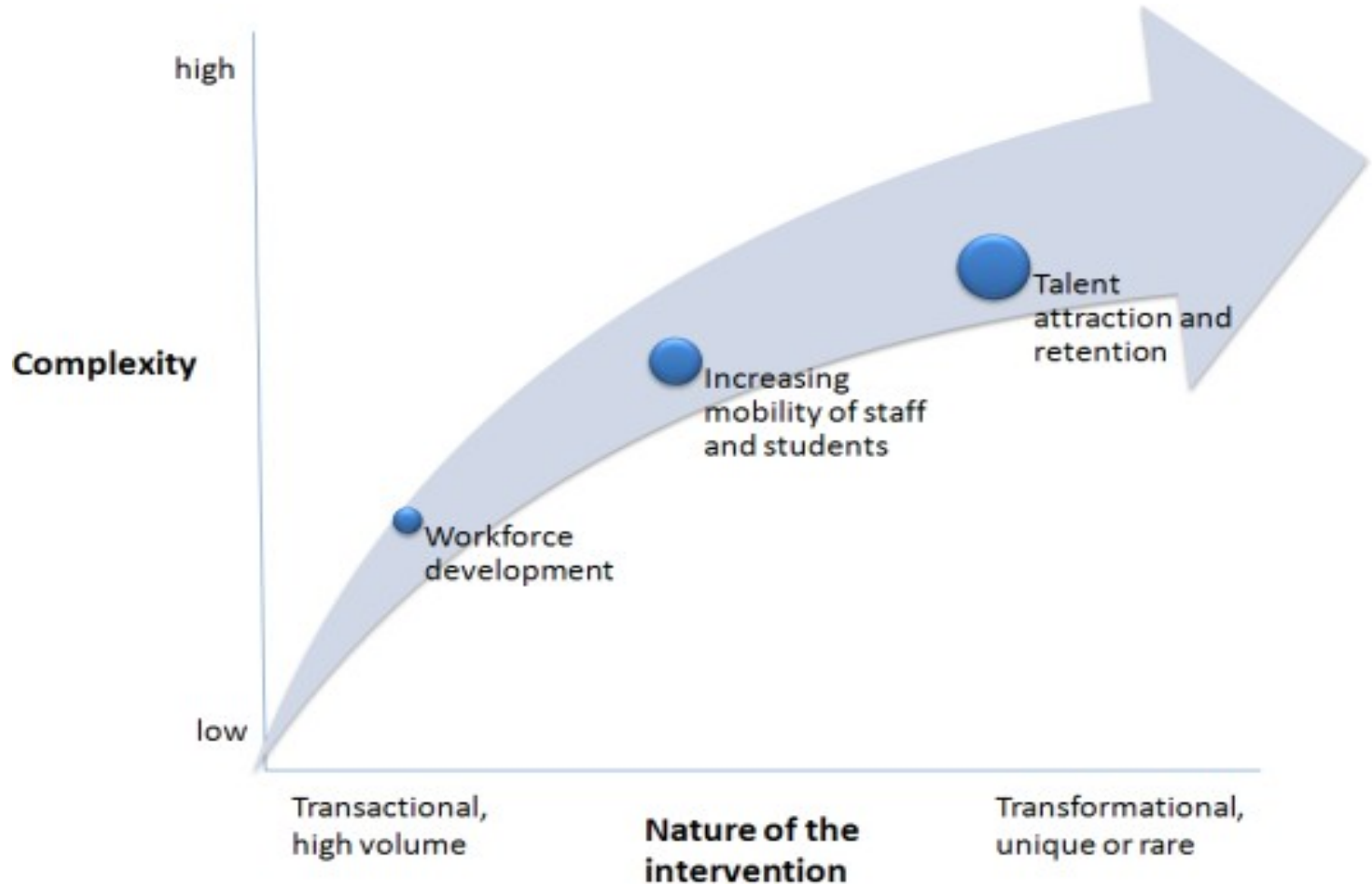
Technology readiness



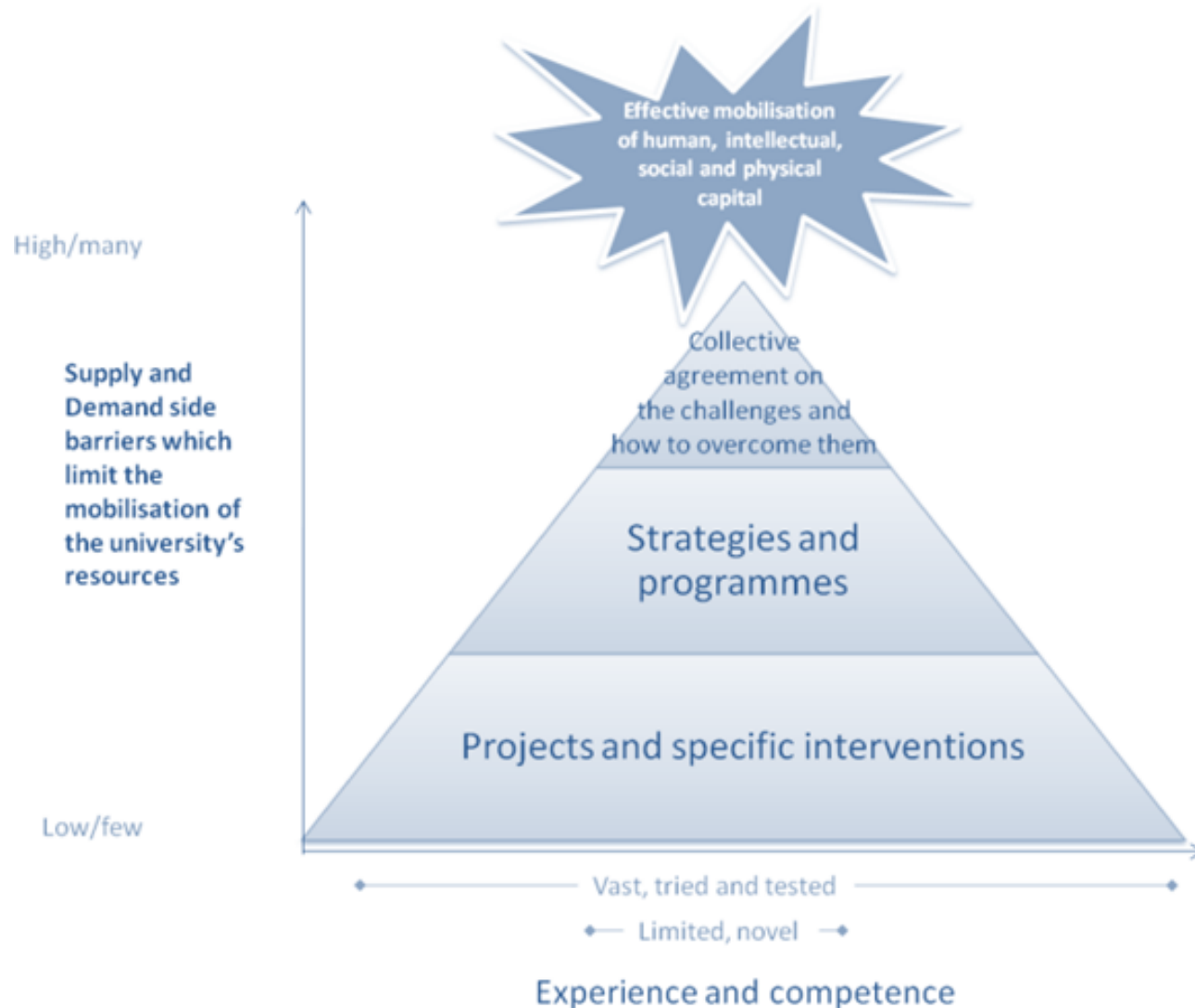
Promoting enterprise, business development and growth



Development of regional human capital



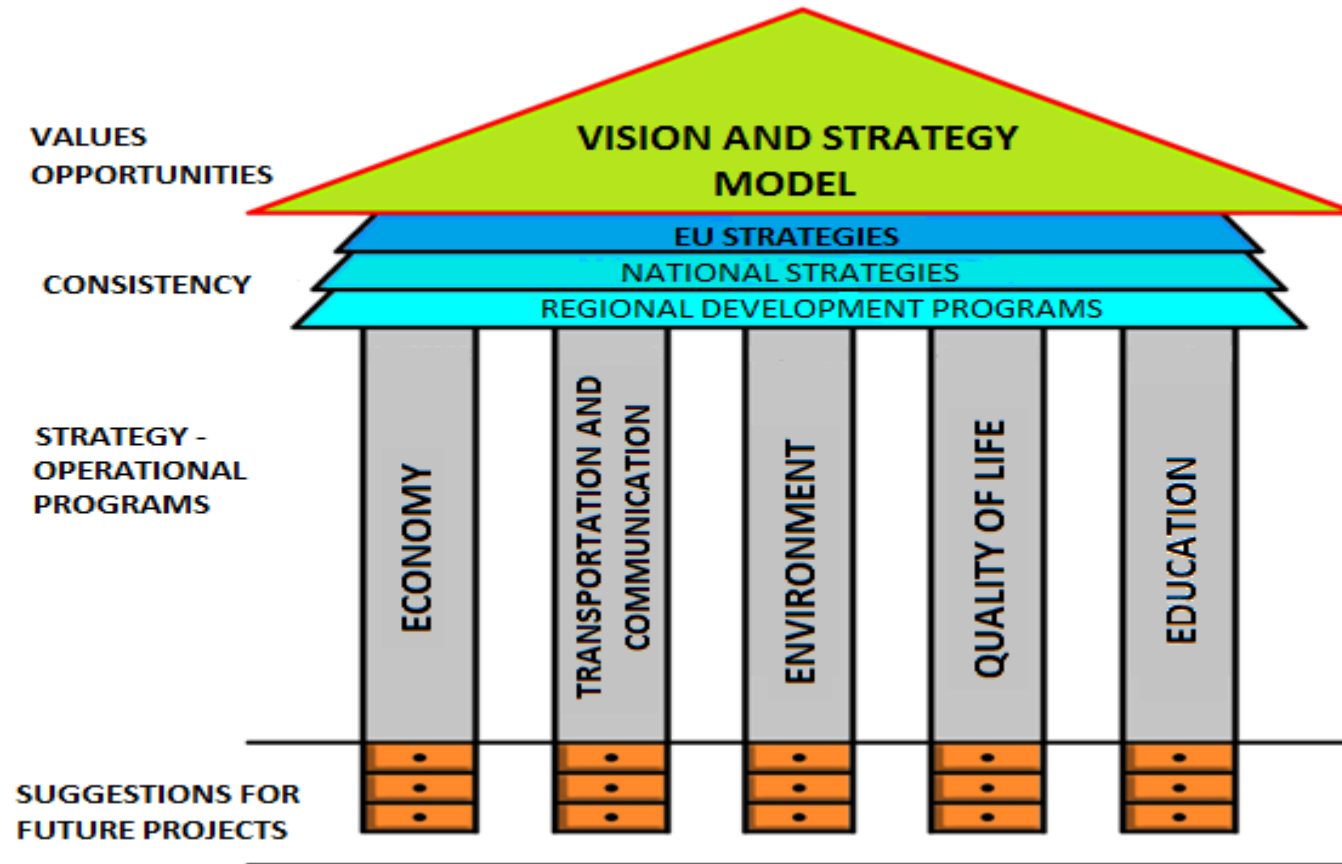
Barriers increase as activities become more transformational



5. VISION AND STRATEGY MODEL FOR MUNICIPALITIES – A CASE

- Exposure to new sources of competition across the world encourages cities to become more competitive and to allocate their resources more effectively and efficiently. Respond to the demands of many different groups and managing the allocation of resources between different claims is nowadays one of the most important challenging tasks for city governments.
- To reaching their desired destination cities must be aware of where they are starting out. First, they should identify their strengths and weaknesses, and after that define the position they want strive for in the future. And by defining the position of the future, they need to be aware of the significant trends and other factors that will influence the direction in which the future unfolds.
- To overcome the challenges mentioned many successful European cities designed a model which simplifies the monitoring of long-term goals. The important thing is that these goals are consistent with the city's development vision and strategy, and both must be based on values, wishes and priorities of the local residents.

The Model



- The “vision and strategy” (VIS) model for municipalities consists of the following activities:
 - semi-structured in-depth interviews with city representatives and engaged citizens
 - public opinion surveys
 - analyzing strategic development documents (national strategies, regional development programs, strategic technology program)
 - defining framework for vision and strategy models,
 - introducing five pillar model for strategic economic planning,
 - introducing systems of indicators.

The process for the creation of City Vision and Strategy model

