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Innovation Zagreb

Zagreb, July 10, 2014

“Vision without action is merely a dream.
Action without vision merely passes the time.
Vision with action can change the world.”
- Joel Barker

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Introduction to Bearing

Bearing Consulting – Innovation focused Management Consultancy

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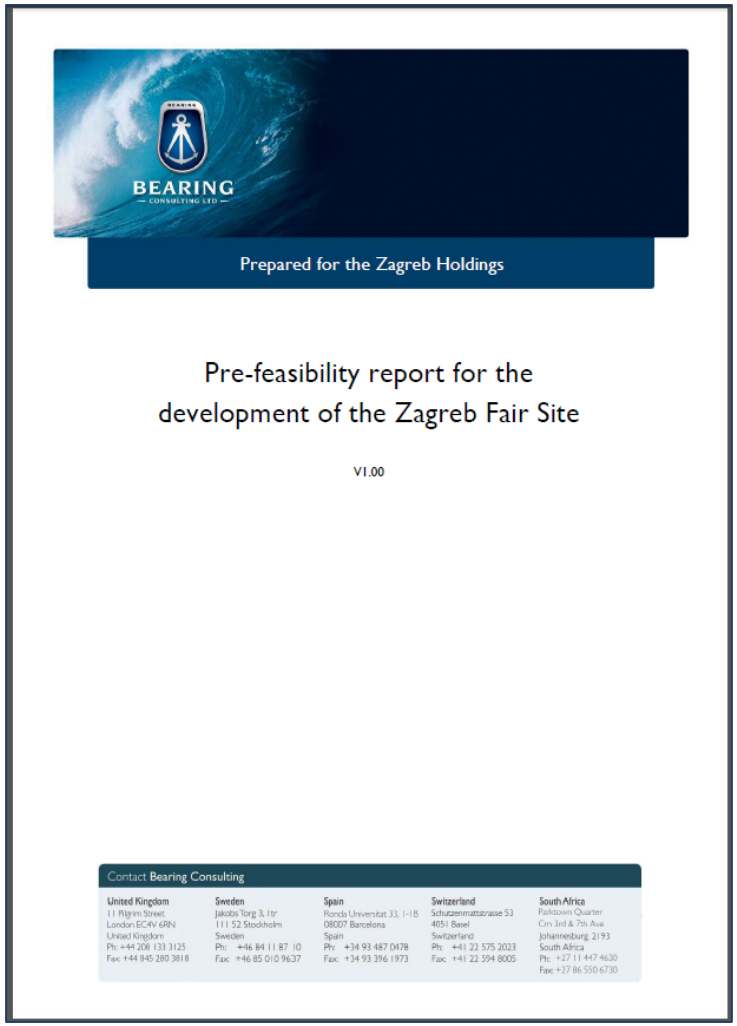
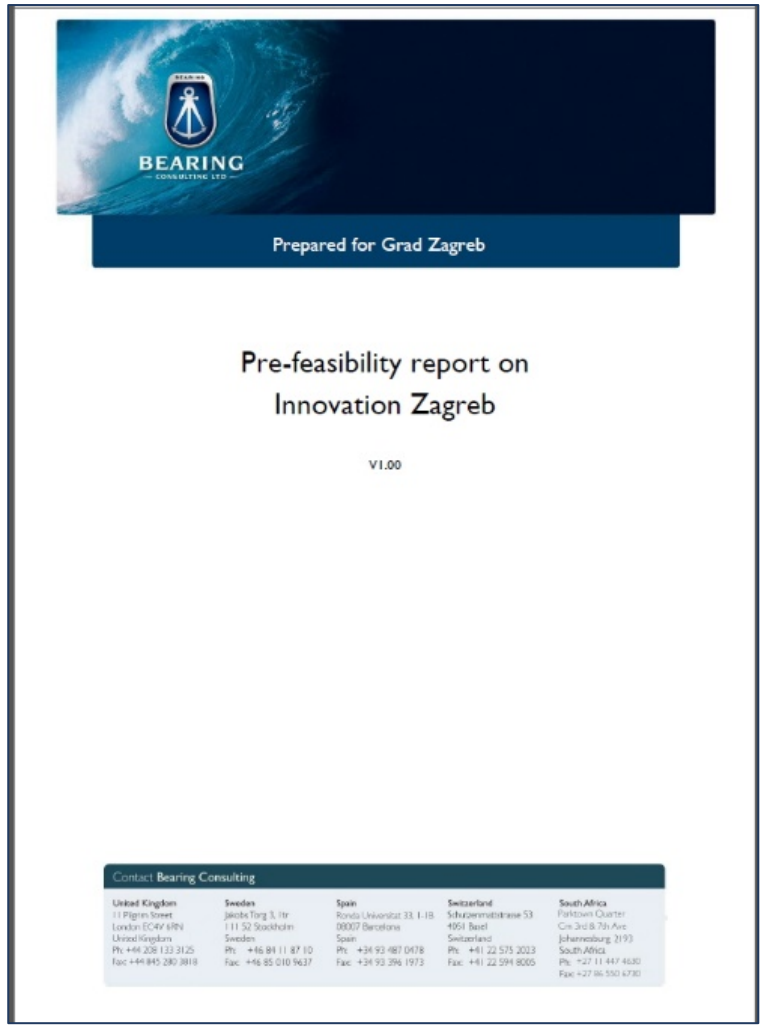
Two Pre-feasibility Studies for Zagreb Fair (Zagreb Network) And Innovation Ecosystem in Zagreb

Two pre-feasibility studies





Project Preparation Steps

Pre-feasibility phase

Pre-study

- Vision – WHAT we are going to do
- WHO – which parties are to be involved
- Major milestones
- Consensus building

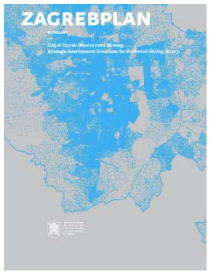
Project preparations and planning

Project planning

- HOW it will be done
- Project plan
- Details on work packages to be included
- Cost-benefit study
- Cost estimates
- Application preparation
- Main plans in order to get permits

Projects

- EU funding available
- Detailed project and work package planning
- Detailed construction planning
- Project execution



The Internal World

The External World

Pre-Feasibility STudy

The Potential

Recommendations

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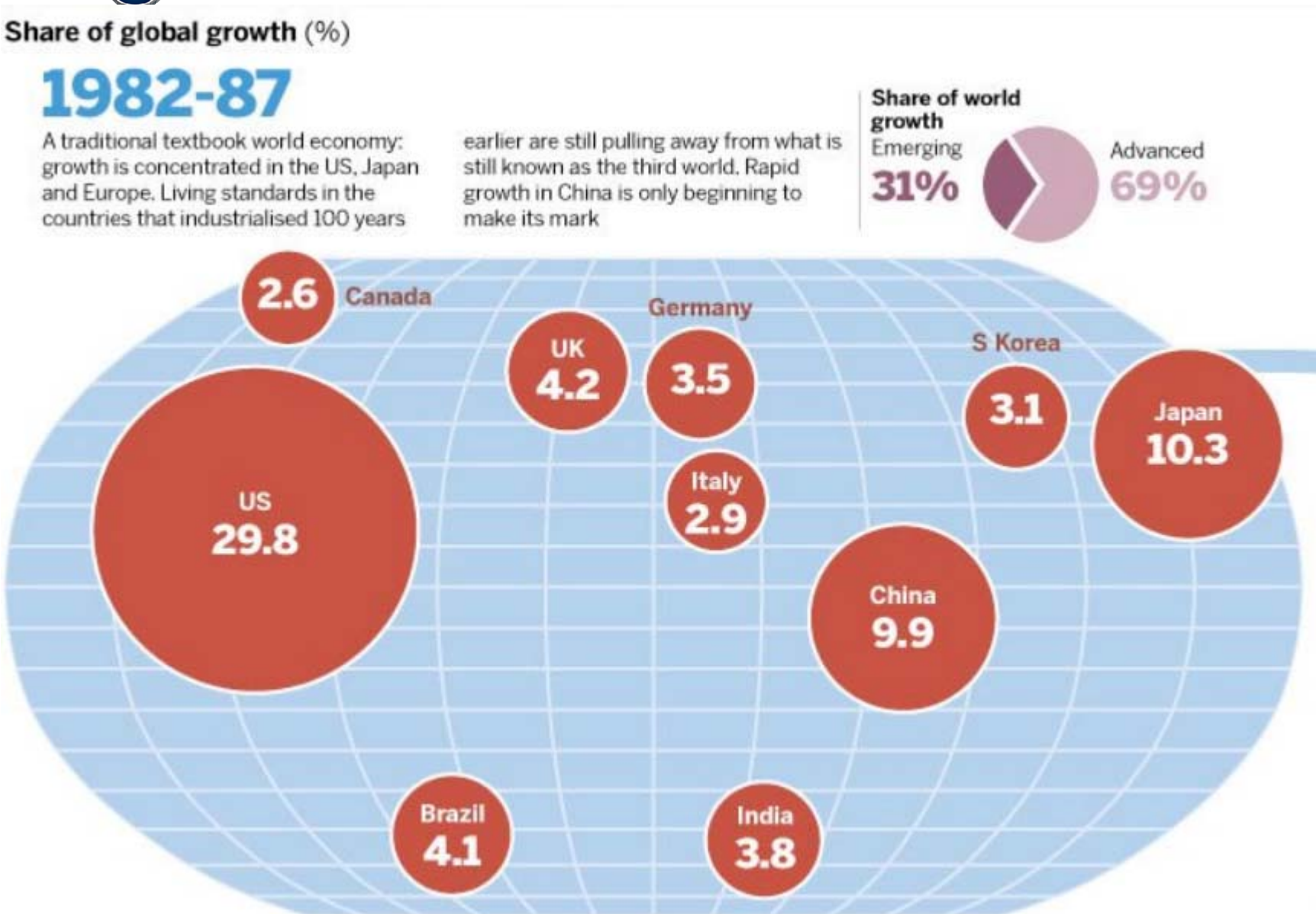
Globalisation and Hyper Competition

In 2013, for the first time since the industrial revolution in the 19th century, <u>emerging economies</u> produced the majority of the world's goods and services

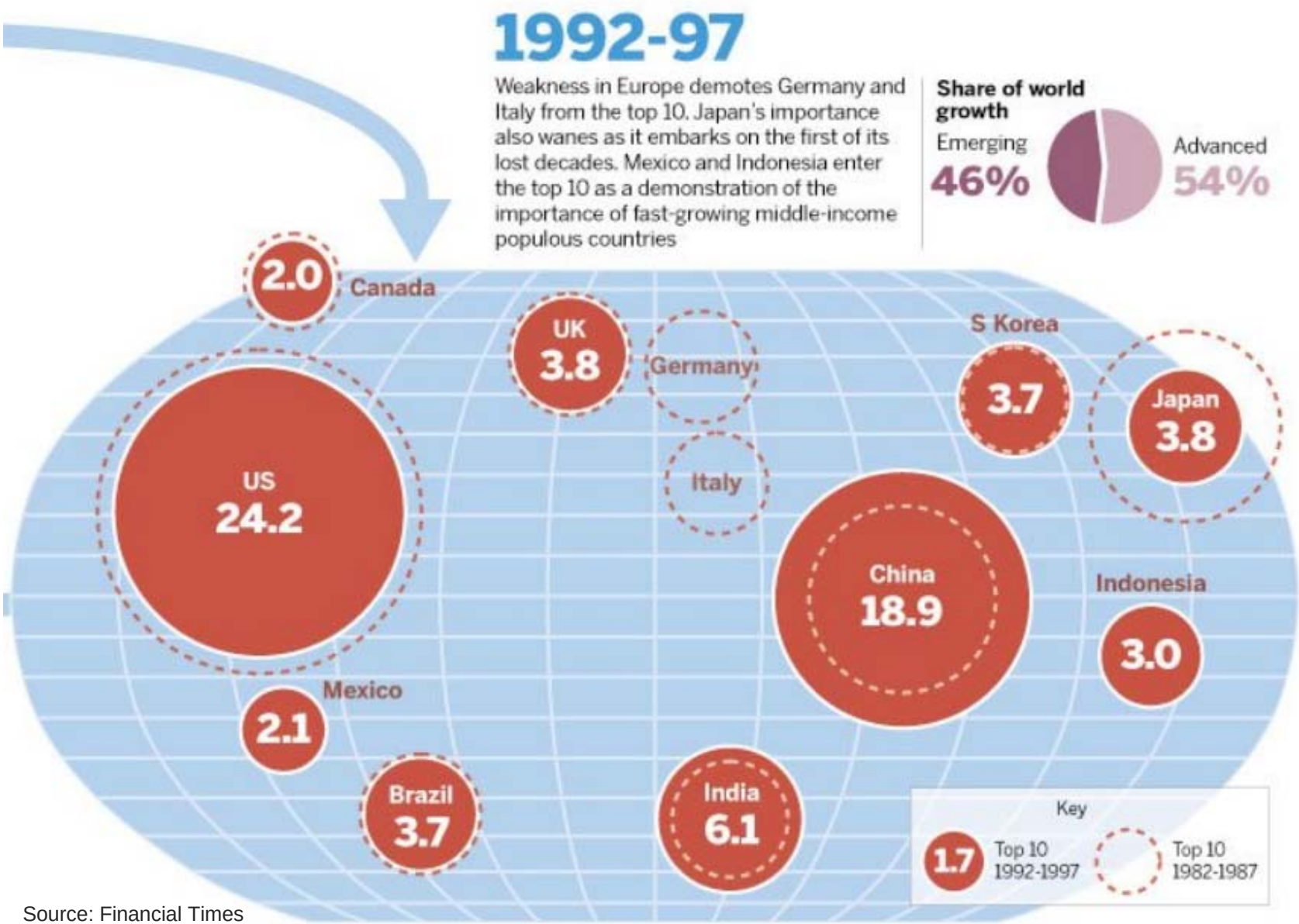
The majority of the population in the world now lives in cities

The Top Ten Leaders of Global Growth



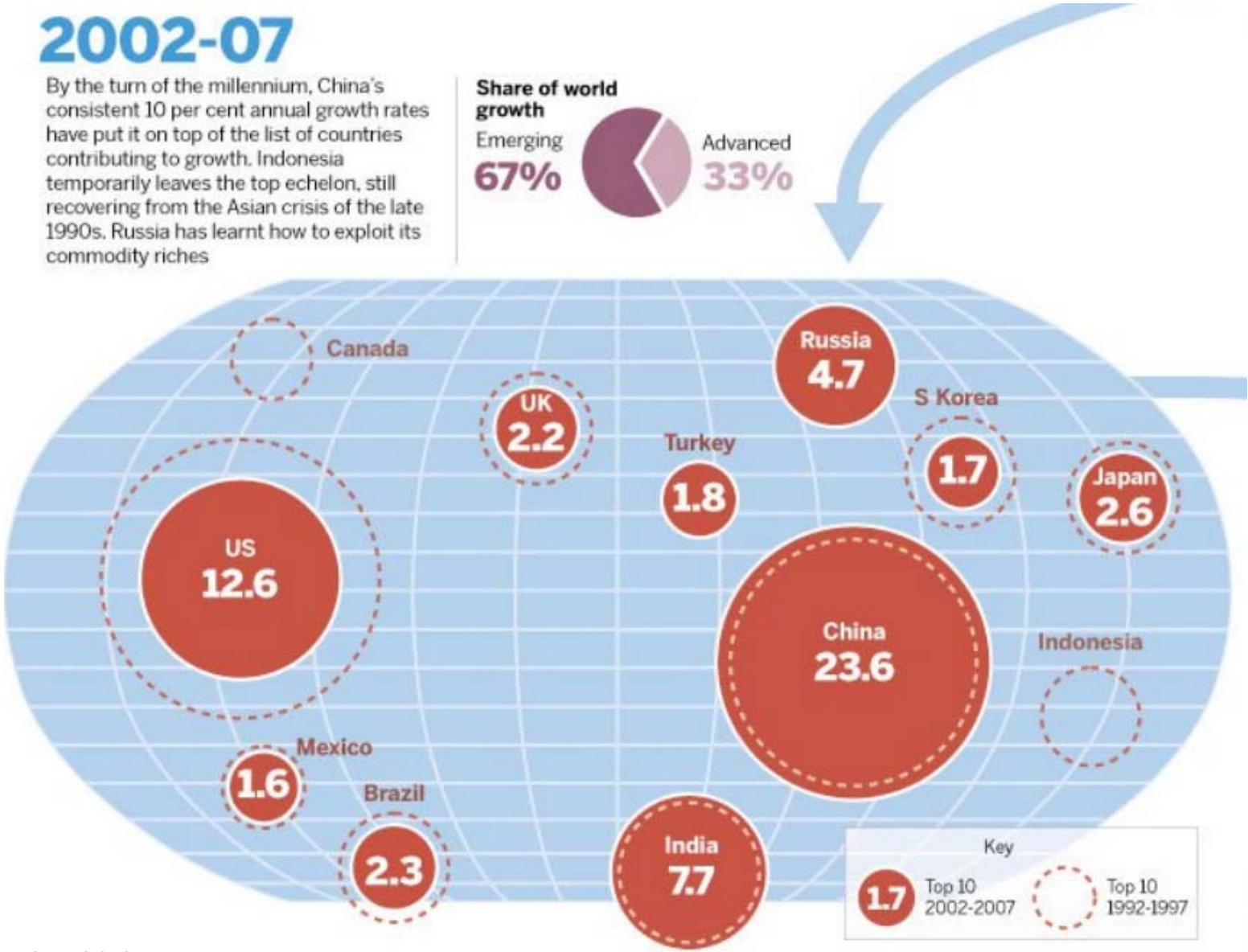
Source: Financial Times

The Top Ten Leaders of Global Growth



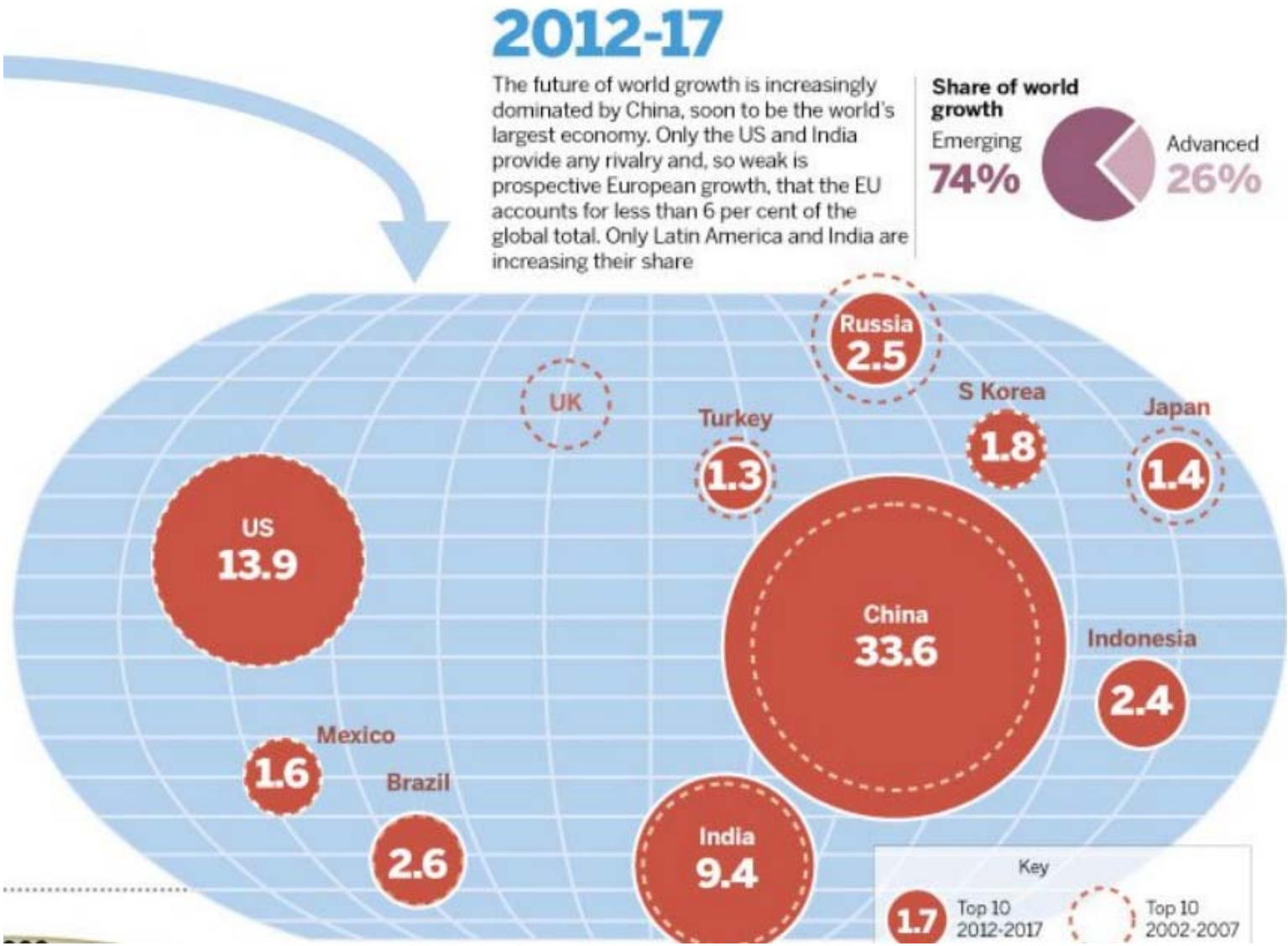
Source: Financial Times

The Top Ten Leaders of Global Growth



Source: Financial Times

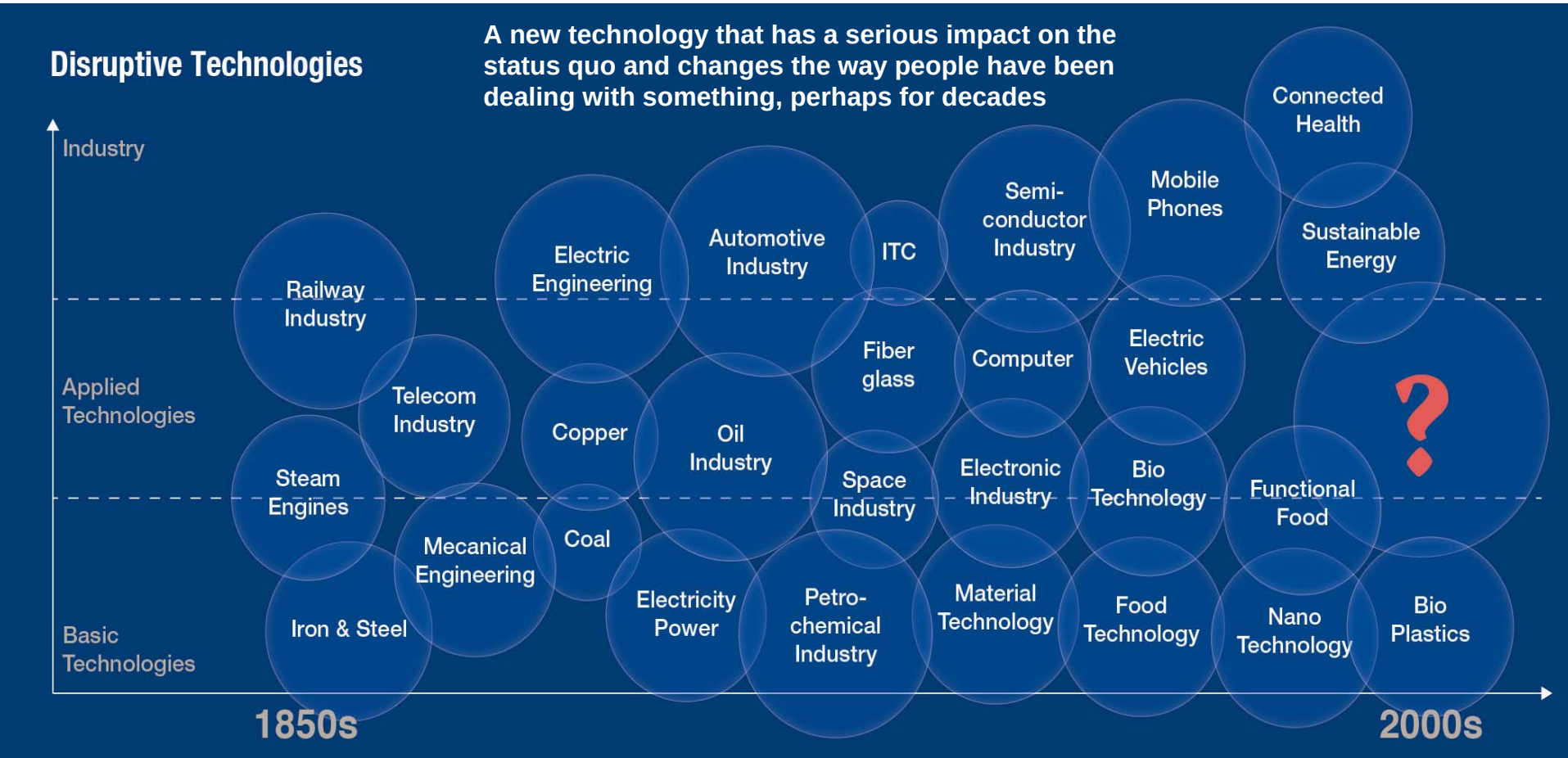
The Top Ten Leaders of Global Growth



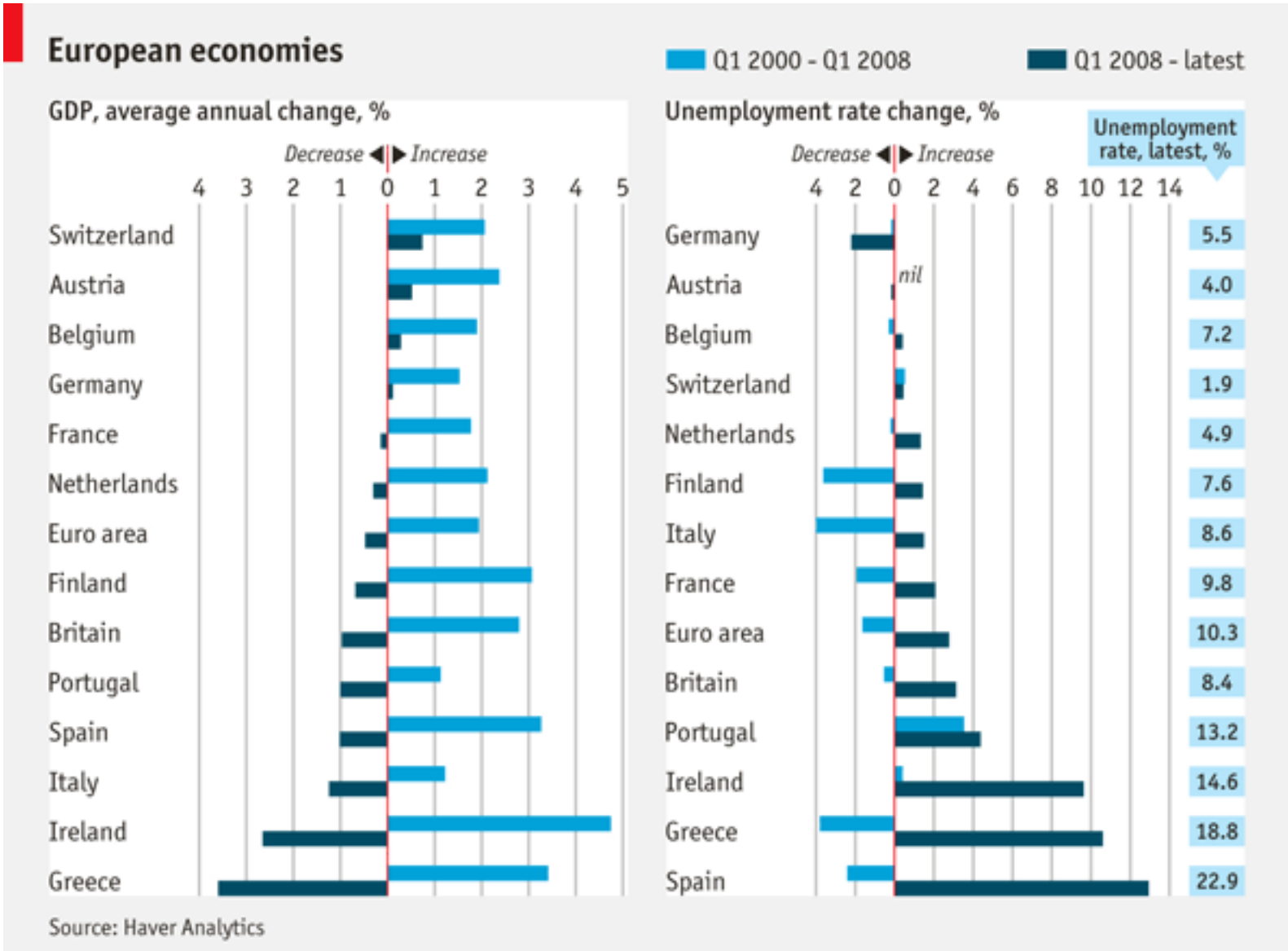
Source: Financial Times

Why hyper competition?

- Globalisation – less trade barriers and efficient transport (e.g. containers)
- Speed of hyper connected communication and the pace of modern business
- Disruptive Technologies



European Union growth rates since 2001



Source: The Economist

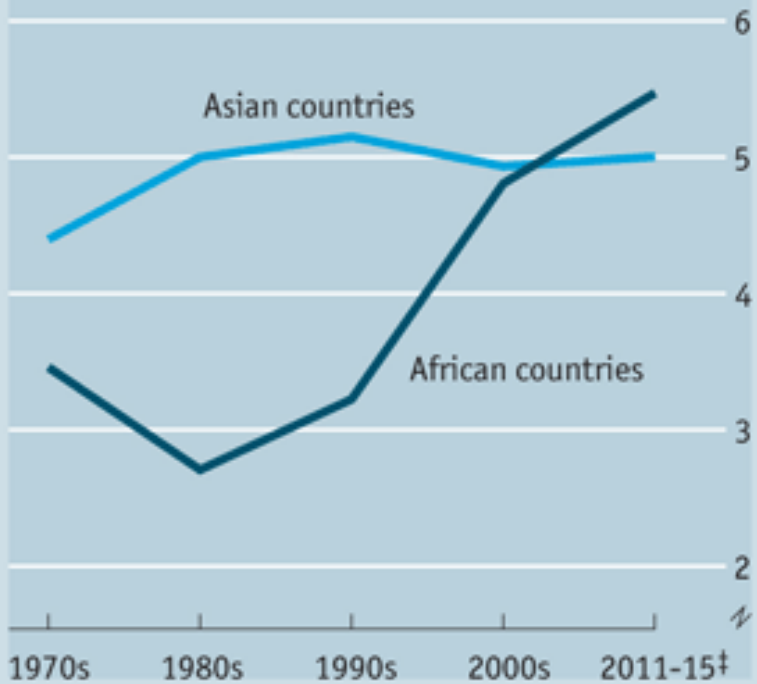
Worlds fastest growing economies

World's ten fastest-growing economies*
Annual average GDP growth, %

2001-2010†		2011-2015‡	
Angola	**11.1**	China	9.5
China	10.5	India	8.2
Myanmar	10.3	**Ethiopia**	**8.1**
Nigeria	**8.9**	**Mozambique**	**7.7**
Ethiopia	**8.4**	**Tanzania**	**7.2**
Kazakhstan	8.2	Vietnam	7.2
Chad	**7.9**	**Congo**	**7.0**
Mozambique	**7.9**	**Ghana**	**7.0**
Cambodia	7.7	**Zambia**	**6.9**
Rwanda	**7.6**	**Nigeria**	**6.8**

Sources: *The Economist;* IMF

GDP growth, unweighted annual average, %



*Excluding countries with less than 10m population and Iraq and Afghanistan †2010 estimate ‡Forecast

Source: The Economist

We live in hypercompetitive global markets

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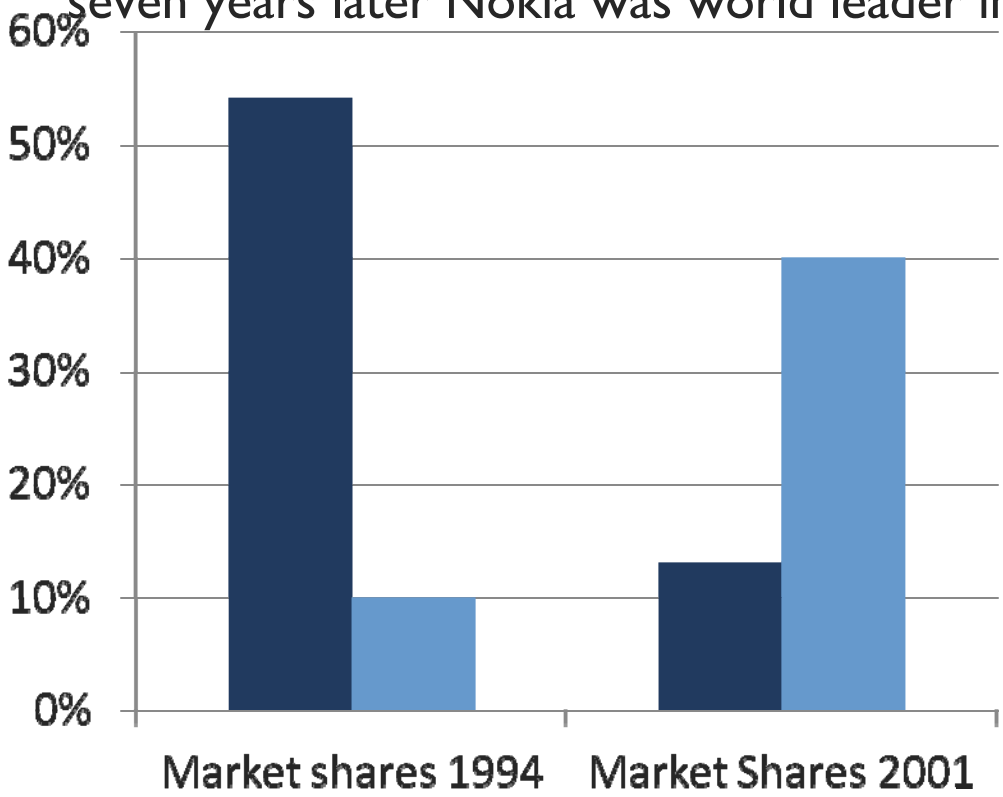
Business in hyper competitive markets

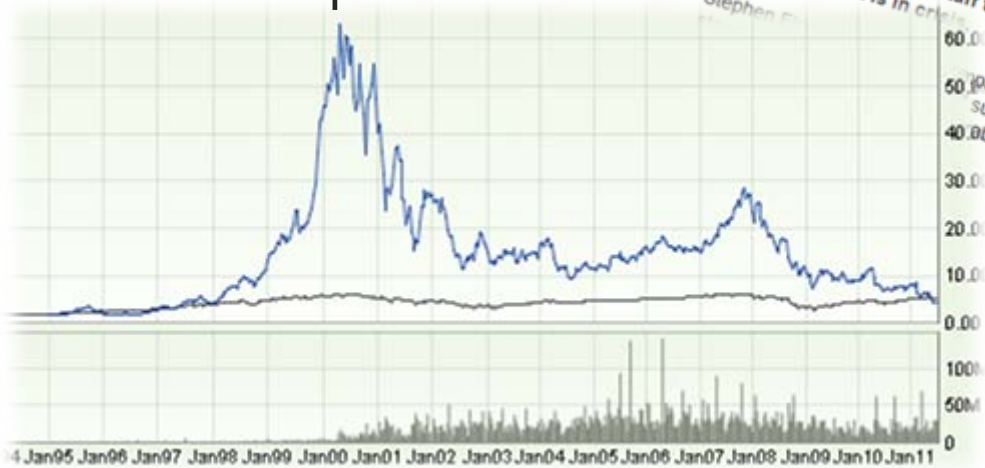
In the year 1994, Motorola was world leader in (analogue) mobiles,

seven years later Nokia was world leader in (digita



Why ?

Nokia share price



"Either you innovate or you're in commodity hell. If you do what everyone else does, you have a low-margin business. That's not where you want to be."

Sam Palmisano, former CEO IBM

"Managing innovation better may be the only way out of the abyss called commodity hell"

Jeffrey R. Immelt, CEO General Electric

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What is Innovation?

Innovation is creative destruction, where entrepreneurs combine existing elements in new ways…

After Joseph Schumpeter (1883 – 1950)

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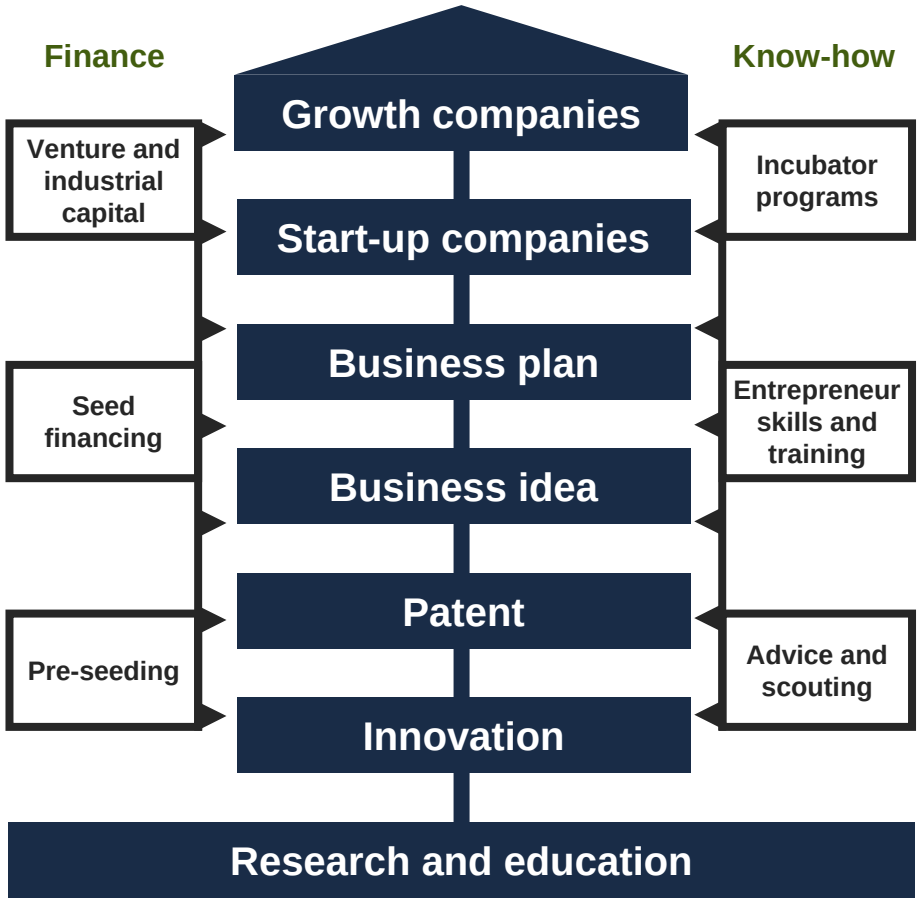
The new solution:
Innovation Environments

Key elements for creating an innovation support system

Key business elements (or “assets”) as the base for creation of an innovation ecosystem

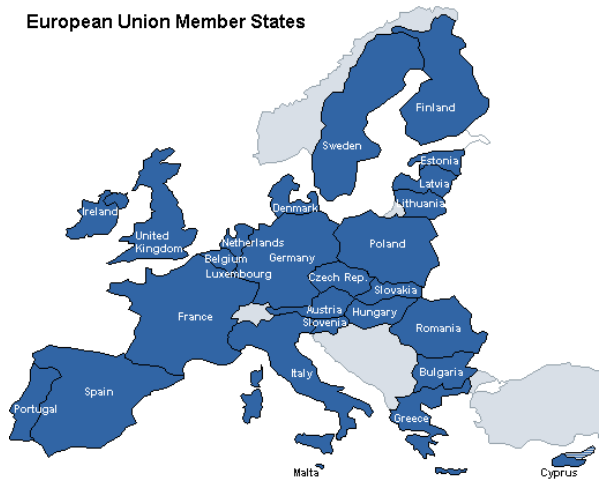
- Innovation Districts
- S & T Parks
- Business labs
- Incubators
- Accelerators
- Alumni networks
- Business Angels



“Europe is facing a moment of transformation. The crises has wiped out years of economic and social progress and exposed structural weaknesses in Europe´s economy.

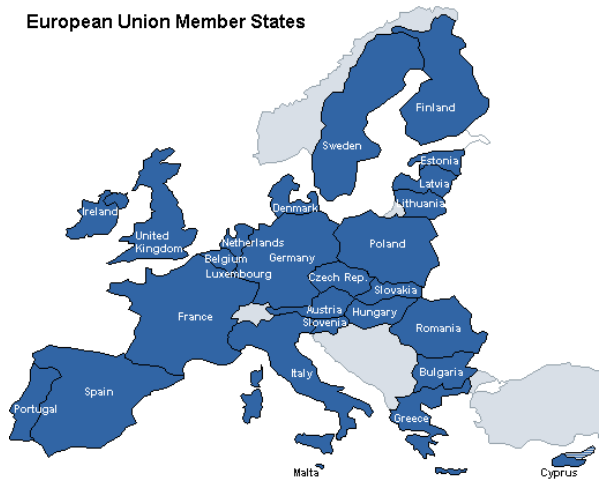
In the meantime, the world is moving fast and long-term challenges such as globalisation, pressure on resources, population ageing, are intensifying.”

- Quote from ***Europe 2020 Strategy***



The EU has set out its vision for Europe´s economy in the ***Europe 2020 Strategy***, which aims at confronting structural weaknesses through progress in three mutually reinforcing priorities:

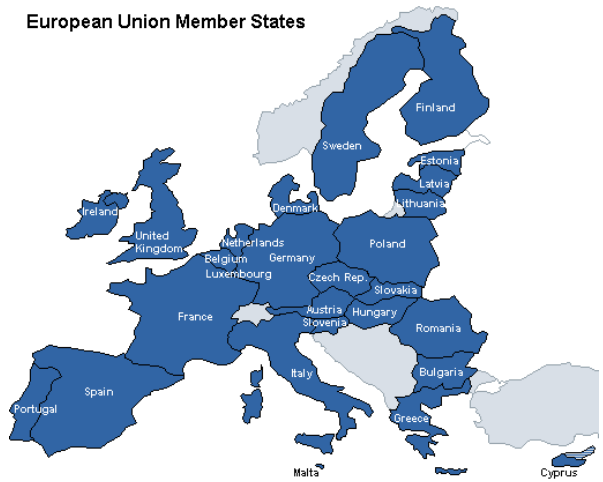
1. **Smart Growth**, based on knowledge and innovation
2. **Sustainable growth**, promoting a more resource efficient, greener and competitive economy
3. **Inclusive growth**, fostering a high employment economy delivering economic, social and territorial cohesion

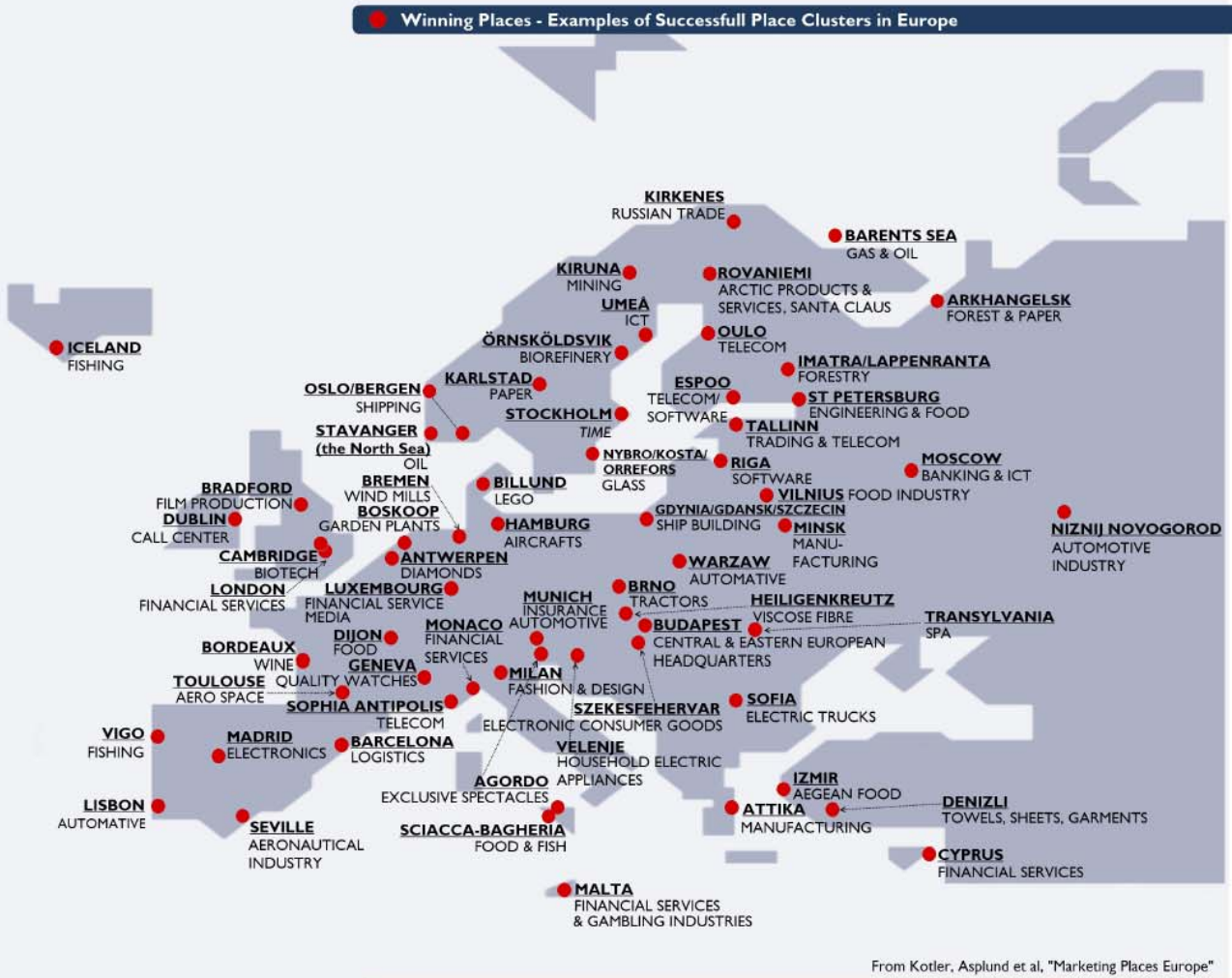


Investing more in research, innovation and entrepreneurship is at the heart of Europe 2020 and a crucial part of Europe´s response to the economic crises.

So is having a **strategic and integrated approach to innovation** that maximizes European, national and regional research and innovation potential.

It is about enhancing Europe´s capacity to deliver smart, sustainable and inclusive growth, through the concept of **smart specialization**.





From Kotler, Asplund et al, "Marketing Places Europe"

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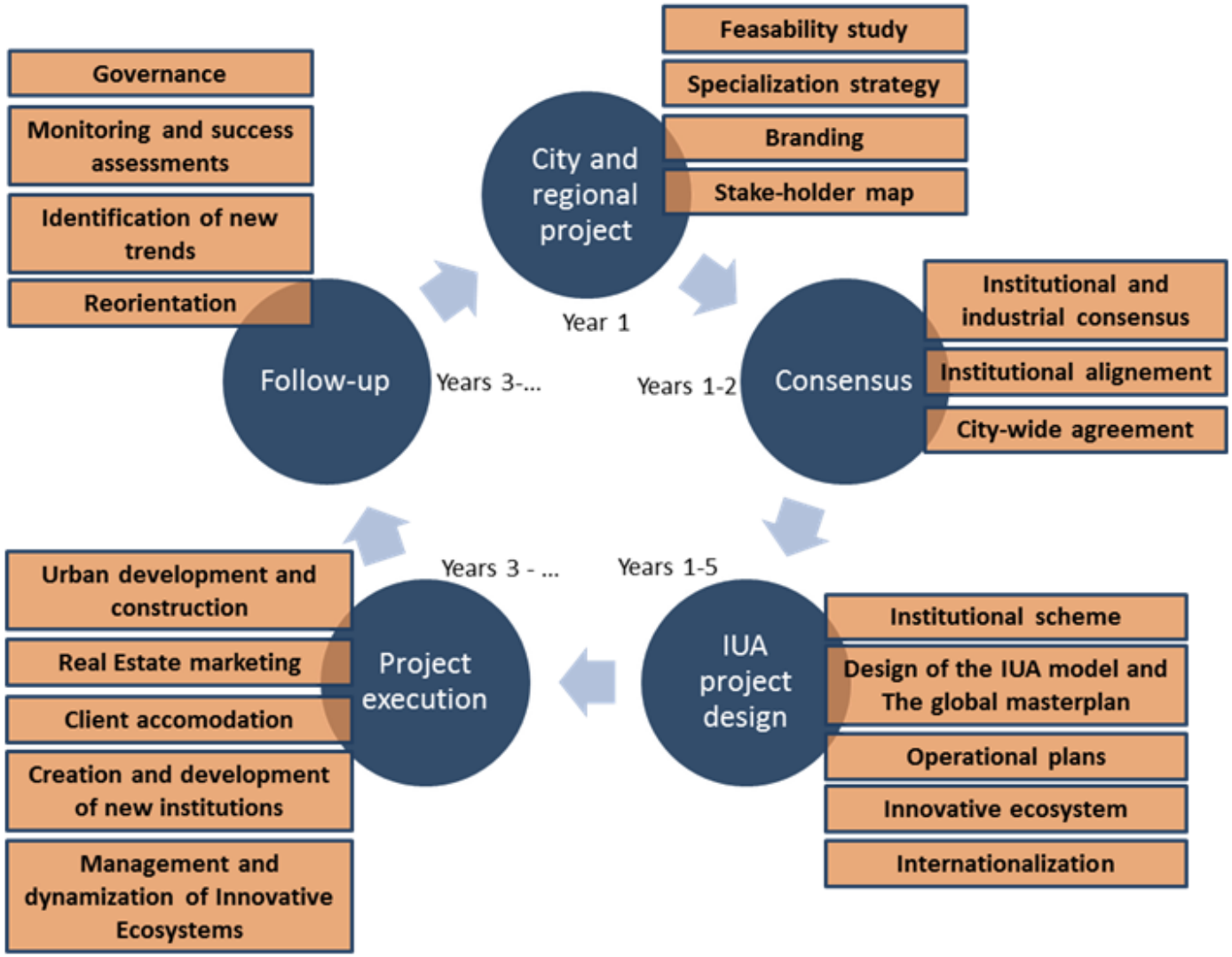
Selected European Clusters


Innovation District
22@Barcelona

Joan Clos, Mayor of Barcelona
1997 – 2006

Strong Place Manager who initiated the development of 22@Barcelona

Conceptual Development Model for Innovation District



Early in Bacelona Project – Decision on Focused Sectors

	MEDIA	ICT	BIO	ENERGY (CAMPUS)	@ ACTIVITIES	POBLENOU
Companies	Mediapro, Lavínia, Cromo	T-Systems, Indra	Sanofi Aventis	Endesa, Ecotecnia	Enciclopèdia, Montblanc	Digital District
Institutions	RNE, CAC, BTV	DURSI,FBD	PCB, PRBB	ITER		Educational Project
Specific spaces	Offices and Barcelona Media Production Centre	Interface Building	Post-incubator Bioengineer.	Offices	Offices, hotels companies	22@ Building
Universities	UPF, UOC, UB	UPC, La Salle	UB, UPF, UPC	All	UOC, UB	22@ Network
Technological Centres	ICBM (Art Center, Yahoo,…)	ICTC, ONO Telefónica,	TC Connection Bio, CREB	TC Energy RC Energy	Alstom	Urbanization
Entrepreneurs	Business incubator spaces (BARCELONA ACTIVA) Consultancy, Access to capital				Barcelona Activa	
Incubators	PBM Incubator	MediaTIC Building	-	BTEC Incubator	BA, Landing, Accel	Utilities
Residences	Zamora –Almogàvers, UPF Halls of Residences			BTEC residence	Zamora - A	Heritage
Dissemination	Media Factory	ICT House	-	Development spaces		
Other services	PBM services	Living Labs Zernike, TC	-	Campus services	UGAP, Comunication	

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Pro-Actively Recruit the Anchor Tenants

	MEDIA	ICT	BIO	ENERGY (CAMPUS)	@ ACTIVITIES	POBLENOU
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Recruit Universities and Technology Centres

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Urban renewal

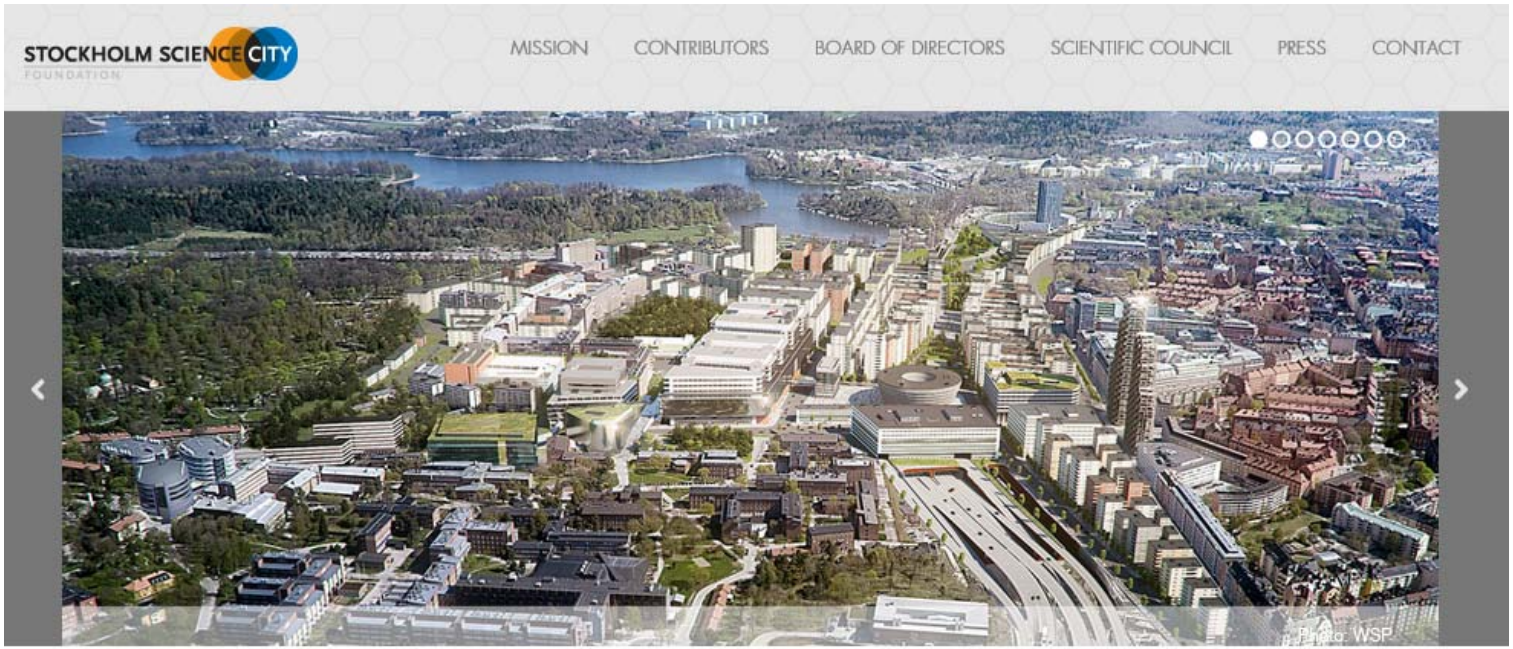
1.323.000 m² of new spaces: 70% business, 18% housing and 12% public facilities
114.000 m² of green areas
65% of historic industrial facilities already renewed
13 km of street works

Economic renewal

Aggregate revenue: 6.000 M€
1.502 new companies (2009), 54% within the areas of expertise of the four clusters
44.600 new employees, 75% graduates

Social renewal

1.500 public housing units
12 R&D institutes and 10 university facilities
25.000 university students



Stockholm Science City Foundation, Hagastaden och Stockholm Life

Stockholm Science City Foundation aim to create a strong and attractive environment for life sciences in Stockholm. We promote collaboration between the universities in Stockholm, industry and healthcare to foster development of socially beneficial and profitable innovations, products and services.

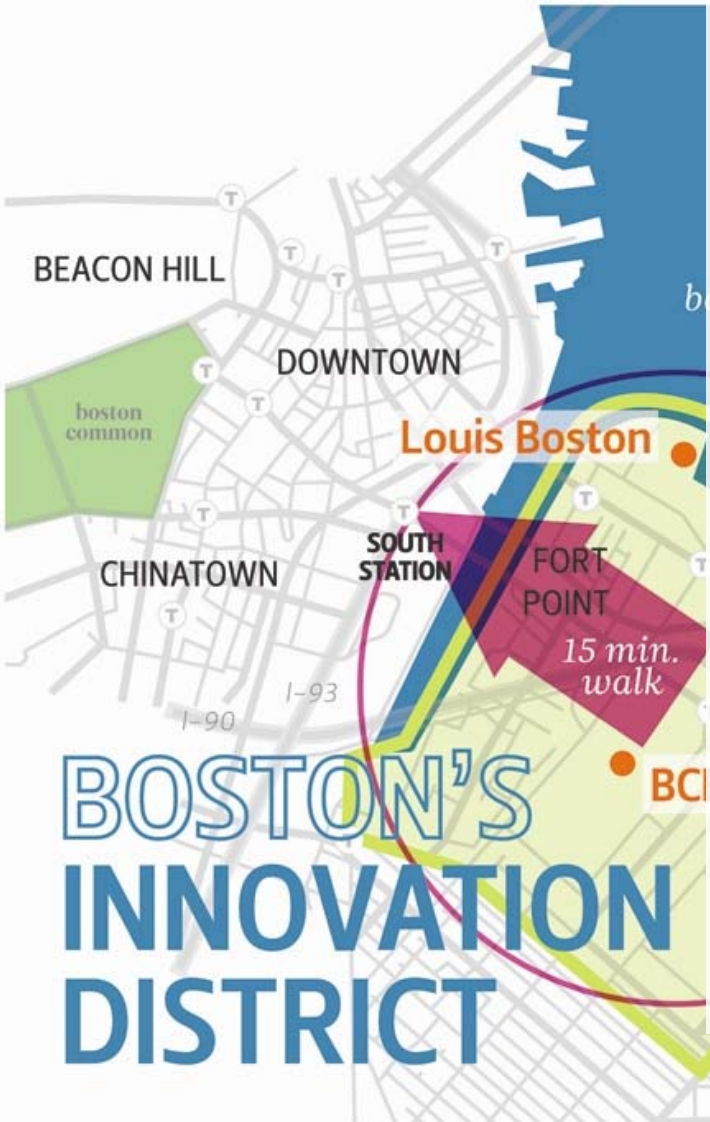
Stockholm is one of the fastest growing cities in Europe and Hagastaden is one of the largest urban development projects in Sweden. Hagastaden brings together world-class research, clinical development and innovative companies. Here students, researchers and entrepreneurs from around the world live and work side by side under the brand name Stockholm Life.

Stockholm Science City's focus is to develop Hagastaden into one of the world's premier areas for life sciences. Do you want to know more about what is happening in Stockholm's life science sector or find upcoming seminars, current calls, please visit www.stockholm-life.se

Stockholm Life

Stockholm Life Solna-Stockholm is a hub for research and development within life science in Hagastaden. The place where Solna and Stockholm


I HAMBURG
UMWELTHAUPTSTADT EUROPAS 2011
HAMBURG
winner 2011
EUROPEAN
GREEN CAPITAL



The Innovation District emphasizes three core principles:

1.URBAN LAB

Opportunities for testing groundbreaking technologies

2.SUSTAINABLE LEADERSHIP

Breaking new ground for sustainable growth

3.SHARED INNOVATION

All Bostonians can benefit from the shared idea economy

In addition to core principles, three key strategies guide the development of the Innovation District:

A.PROMOTE COLLABORATION

Create clusters of innovative people

B.PROVIDE PUBLIC SPACE + PROGRAMMING

Support social infrastructure to foster an innovation ecosystem

C.DEVELOP A 24-HOUR NEIGHBORHOOD

Provide amenities for flexible lifestyles

Metropolitan Policy Program
at BROOKINGS

The Rise of Innovation Districts: A New Geography of Innovation in America

Bruce Katz and Julie Wagner

"The trend is to nurture living, breathing communities rather than sterile compounds of research silos."

Introducing Innovation Districts

As the United States slowly emerges from the Great Recession, a remarkable shift is occurring in the spatial geography of innovation.

For the past 50 years, the landscape of innovation has been dominated by places like Silicon Valley—suburban corridors of spatially isolated corporate campuses, accessible only by car, with little emphasis on the quality of life or on integrating work, housing, and recreation.

A new complementary urban model is now emerging, giving rise to what we and others are calling "innovation districts." These districts, by our definition, are geographic areas where leading-edge anchor institutions and companies cluster and connect with start-ups, business incubators, and accelerators.[1] They are also physically compact, transit-accessible, and technically-wired and offer mixed-use housing, office, and retail.

Innovation districts are the manifestation of mega-trends altering the location preferences of people and firms and, in the process, re-conceiving the very link between economy shaping, place making and social networking.[2]

In recent years, a rising number of innovative firms and talented workers are choosing to congregate and co-locate in compact, amenity-rich enclaves in the cores of central cities. Rather than building on green-field sites, marquee companies in knowledge-intensive sectors are locating key facilities close to other firms, research labs, and universities so that they can share ideas and practice "open innovation."

Instead of inventing on their own in real or metaphorical garages, an array of entrepreneurs are starting their companies in collaborative spaces, where they can mingle with other entrepreneurs and have efficient access to everything from legal advice to sophisticated lab equipment. Rather than submitting to long commutes and daily congestion, a growing share of metropolitan residents are choosing to work and live in places that are walkable, bike-able, and connected by transit and technology.

Led by an eclectic group of institutions and leaders, innovation districts are emerging in dozens of cities and metropolitan areas in the United States and abroad and already reflect distinctive typologies and levels of formal planning. Globally, Barcelona, Berlin, London, Medellin, Montreal, Seoul, Stockholm and Toronto contain examples of evolving districts. In the United States, districts are emerging near anchor institutions in the downtowns and midtowns of cities like Atlanta, Baltimore, Buffalo, Cambridge, Cleveland, Detroit, Houston, Philadelphia, Pittsburgh, St. Louis, and San Diego. They are developing in Boston, Brooklyn, Chicago, Portland, Providence, San Francisco and Seattle where underutilized areas (particularly older industrial areas) are being re-imagined and remade. Still others are taking shape in the transformation of traditional exurban science parks like Research Triangle Park in Raleigh-Durham, which are scrambling to meet demand for more urbanized, vibrant work and living environments.

Innovation districts represent a radical departure from traditional economic development. Unlike customary urban revitalization efforts that have emphasized the commercial aspects of development (e.g., housing, retail, sports stadiums), innovation districts help their city and metropolis move up the value chain of global competitiveness by growing the firms, networks, and traded sectors that drive

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"As the United States slowly emerges from the Great Recession, a remarkable shift is occurring in the spatial geography of innovation.

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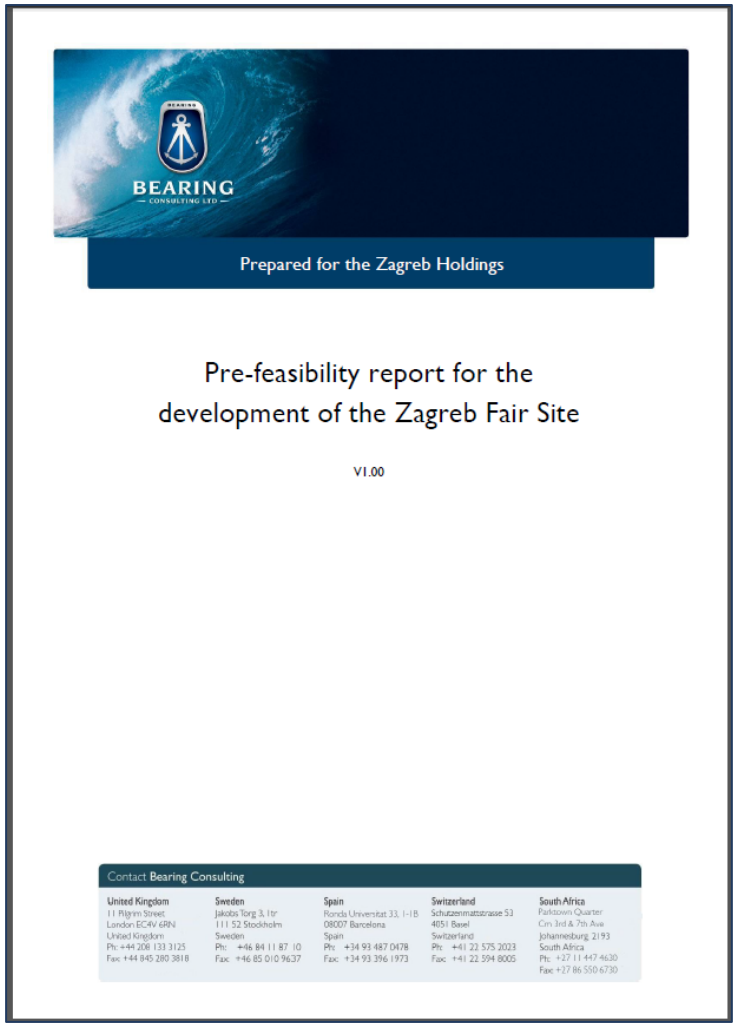
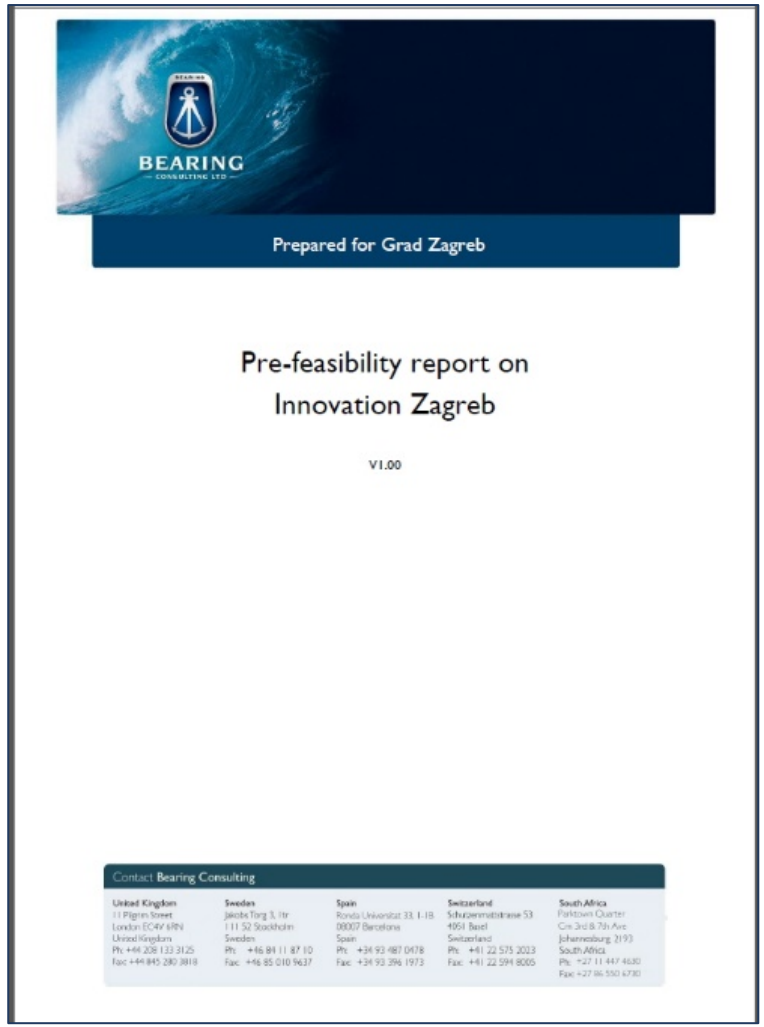
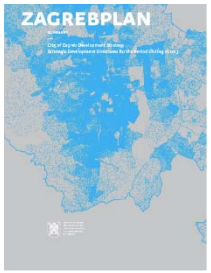
How to do it

Two pre-feasibility studies







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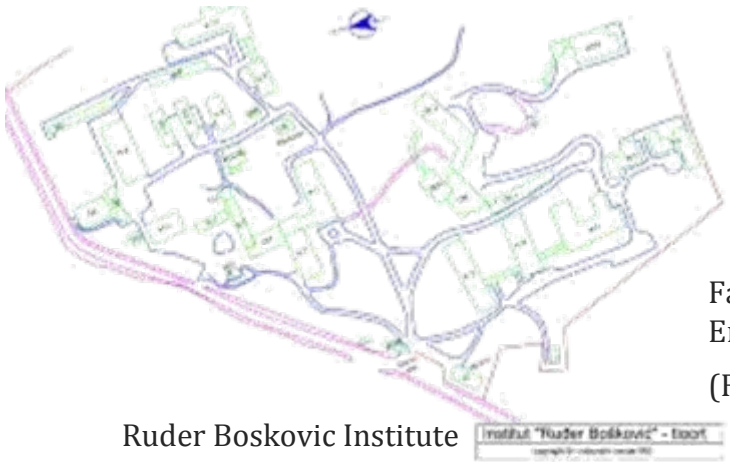
Participants in the initiative

Borongaj

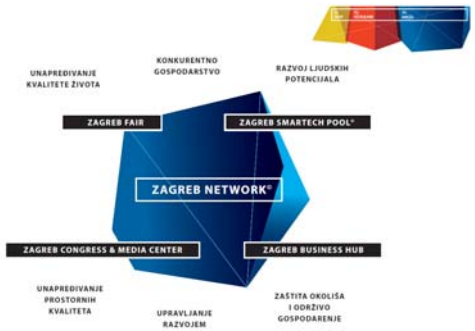


Ruder Boskovic Institute

Faculty of Electrical Engineering and Computing (FER)

oradian

ZEZ project:educational amusement center



The Technology Park of Zagreb

Microsoft

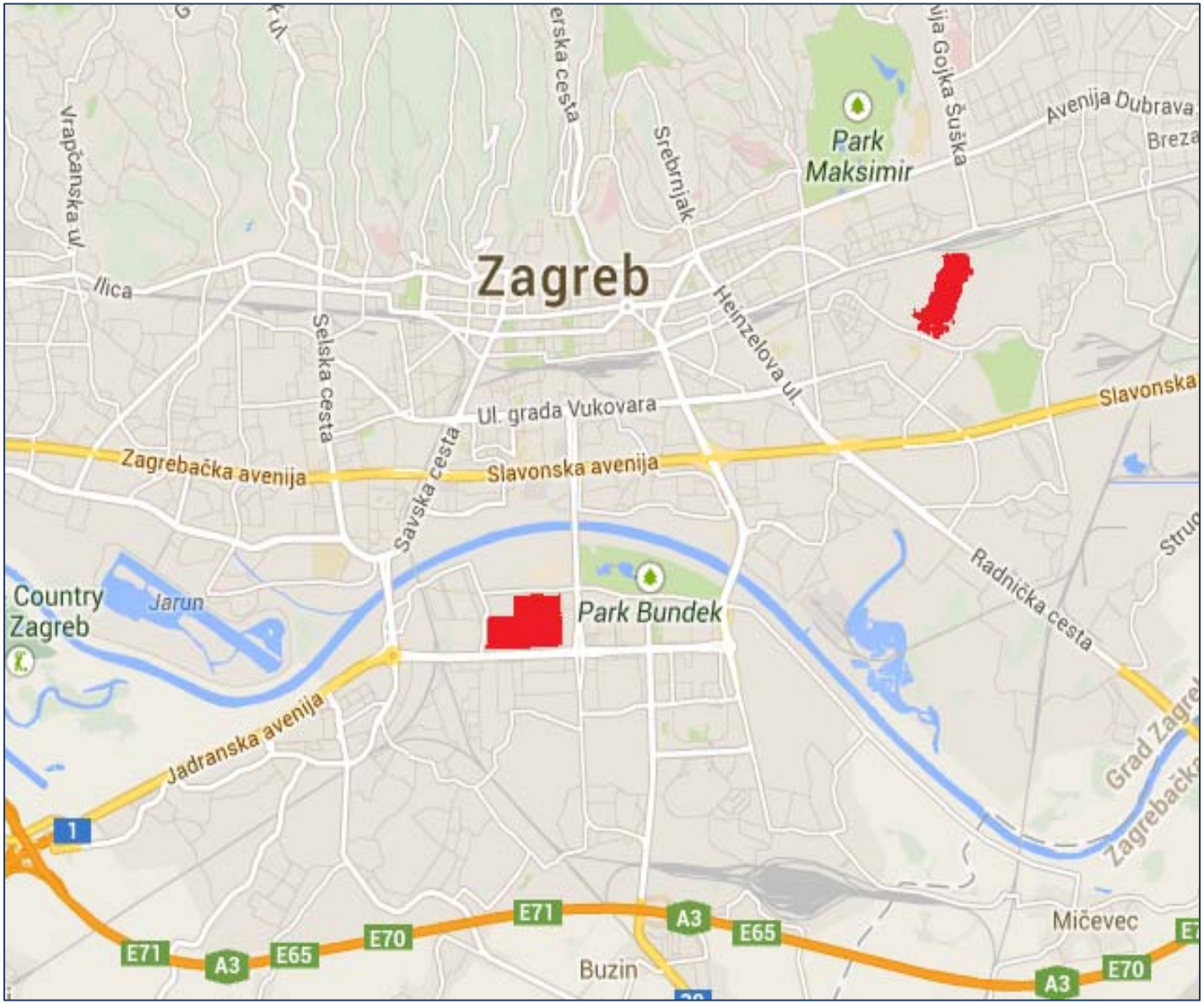
The South East European Centre for Entrepreneurial Learning

The global competition of cities is estimated to host 2,7 million towns, 3 thousand large cities and 455 large metropolitan areas with
a population over one million.

All of them compete in the struggle for attention and this is not limited to the contest between countries and cities.

Create a branding umbrella for actors, ongoing activities and new projects

Innovation Zagreb


Zagreb
Park Maksimir
Park Bundek
Country Zagreb
Jarun
Ul. grada Vukovara
Zagrebačka avenija
Slavonska avenija
Slavonska
Savska cesta
Selska cesta
Heinzelova ul.
Srebrnjak
Radnička cesta
Jadranska avenija
Avenija Dubrava
Mičevec
Buzin
E71
A3
E65
E70
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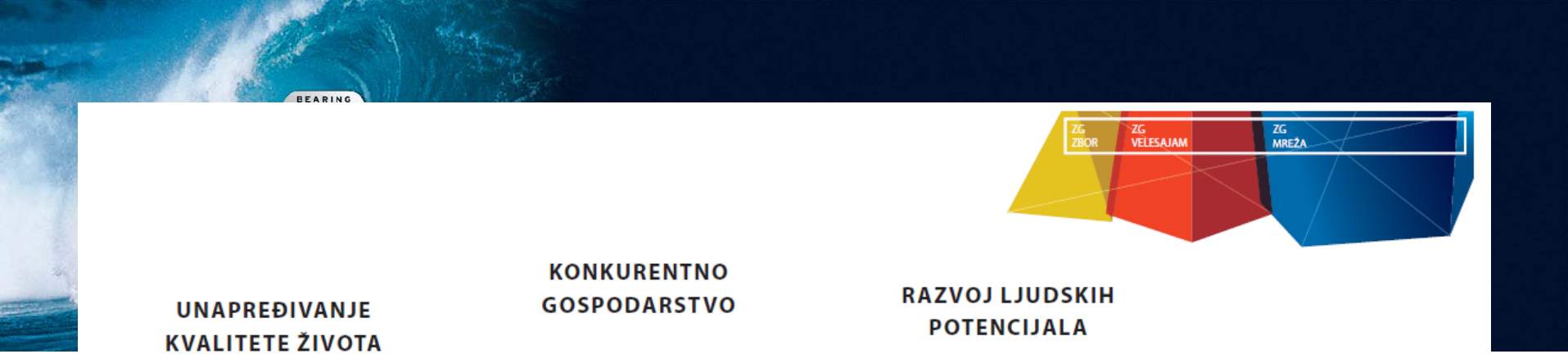


UNAPREĐIVANJE
KVALITETE ŽIVOTA

KONKURENTNO
GOSPODARSTVO

RAZVOJ LJUDSKIH
POTENCIJALA

ZAGREB FAIR

ZAGREB SMARTECH POOL©

ZAGREB NETWORK©

ZAGREB CONGRESS & MEDIA CENTER

ZAGREB BUSINESS HUB

UNAPREĐIVANJE
PROSTORNIH
KVALITETA

UPRAVLJANJE
RAZVOJEM

ZAŠTITA OKOLIŠA
I ODRŽIVO
GOSPODARENJE

Smart Specialization Priority Areas

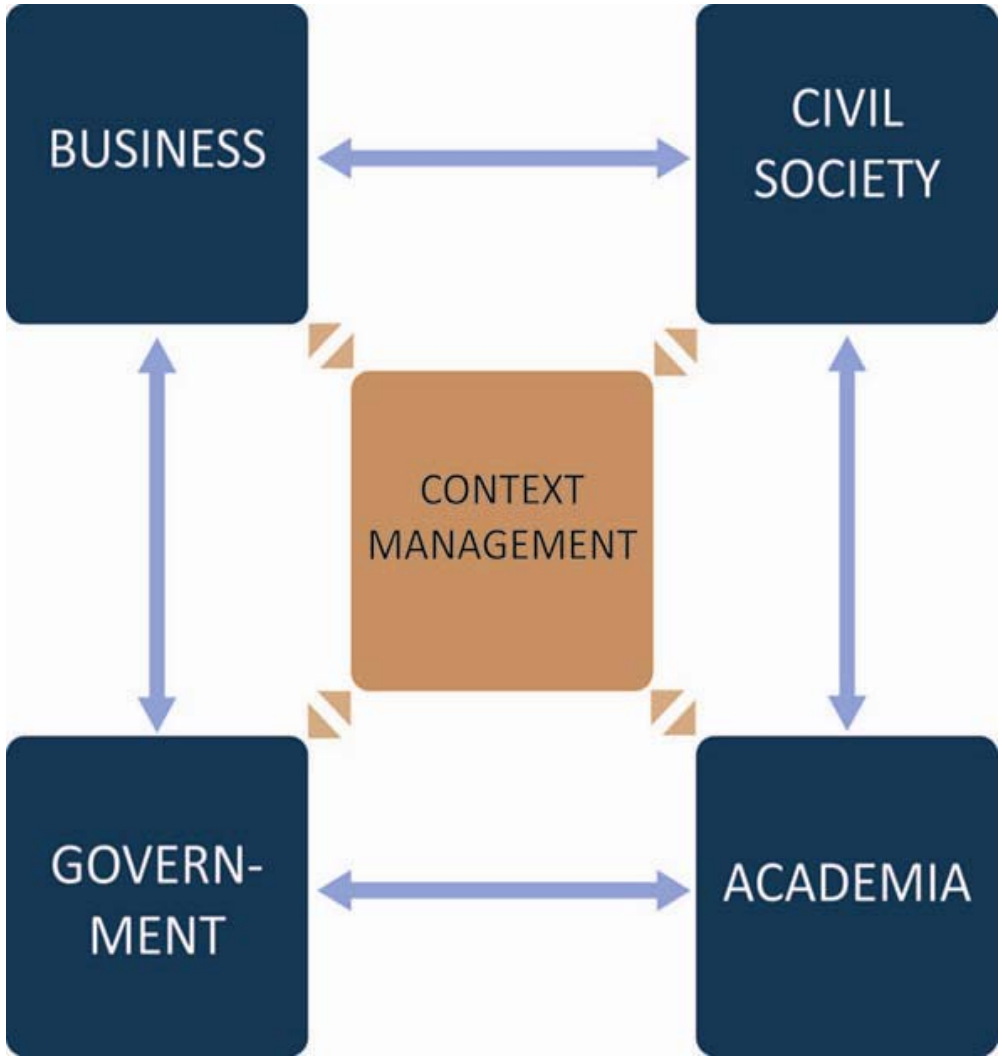
HEALTH	SUSTAINABLE ENVIRONMENT AND THE ENERERGY	ENGINEERING	BIOTECHNOLOGY AND BIOECONOMY

Horisontally overlapping sectors: KET & ICT, Tourism, Creative and culture industries, Green growth, Public challanges

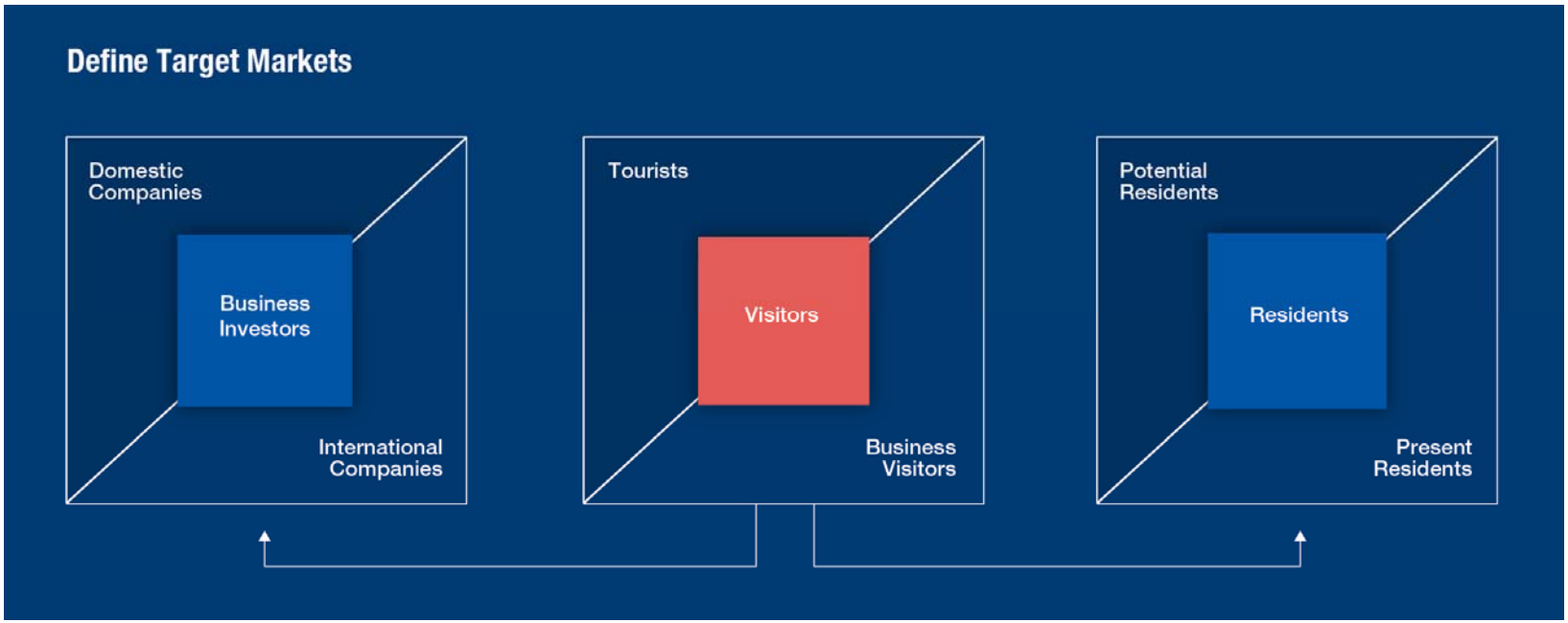
CONNECTION BETWEEN PRIORITY THEMATHIC AREAS AND THE CROSSECTORAL THEMES

Crossectoral themes/thematic priority areas	HEALTH	SUSTAINABLE ENERGETICS AND THE ENVIRONMENT	ENGINEERING	BIO-TECHNOLOGY AND BIO-ECONOMY
KETs	Industrial technology Nano technology Advanced production technologies	Advanced materials Micro i nano elektronics Photonics Advanced production technologies	Advanced materials Micro i nano elektronics Photonics Advanced production technologies	Industrial bio technology Advanced production technologies Nano technology
ICT	E- health care Robotics	Semi conductor design Robotics	Automotive embedded systems Video games Robotics	Robotics
TOURISM	Health tourism	Green tourism	ICT/tourism Transport solution/tourism	Gastro and eno tourism
CREATIVE AND CULTURE INDUSTRY	X	X	X	X
GREEN GROWTH	N/A	X	X	X
SOCIAL CHALENGES	Health, demographic changes and well being	Safe, clean and effective energy Climate changes, environment protection, effective resource and raw utillisation	Smart, green and inteligent traffic Safe society	Food assurance, sustainable agriculture and fishery, Sigurnost hrane, održiva poljoprivreda i ribarstvo, maritime affairs ad see research as well as inland water and Bio-economy

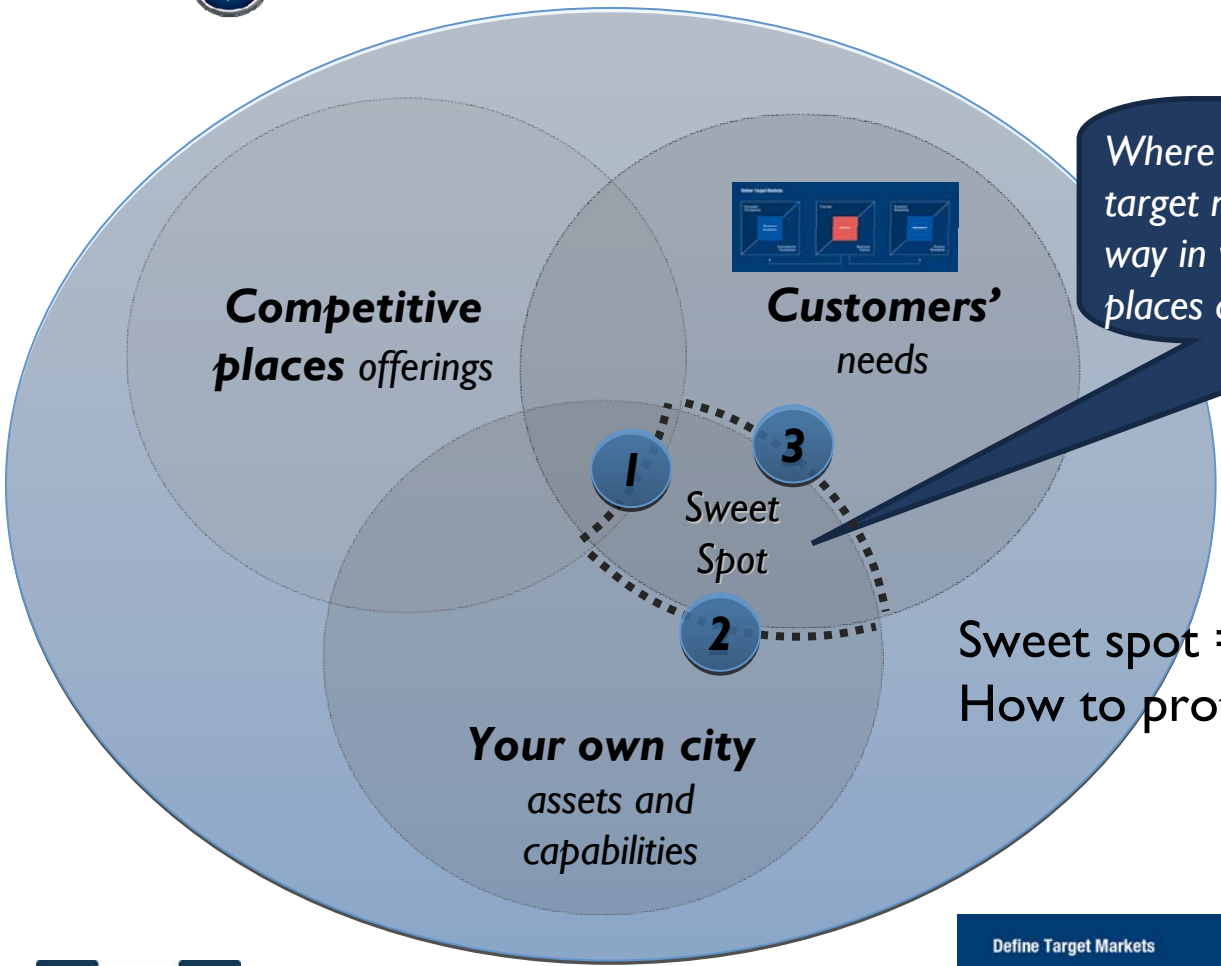
Four Sectors of Society need to drive development together



The Target Markets



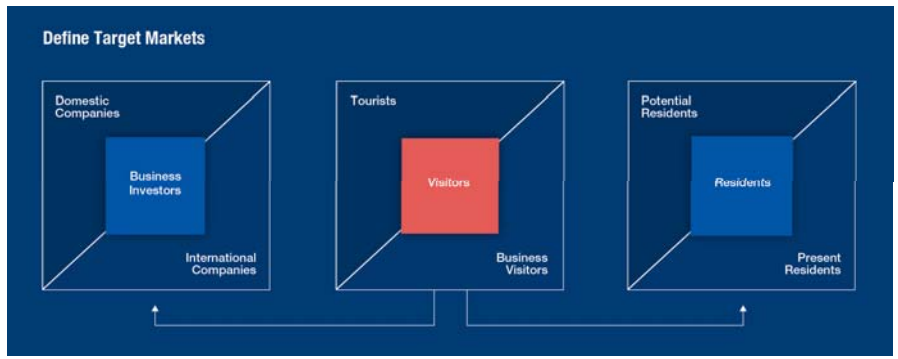
1. Vision through sweet spot analysis for clear differentiation



Where your place meets target markets needs in a way in which competing places cannot

- *What?*
- *Where?*
- *Why?*
- *How?*

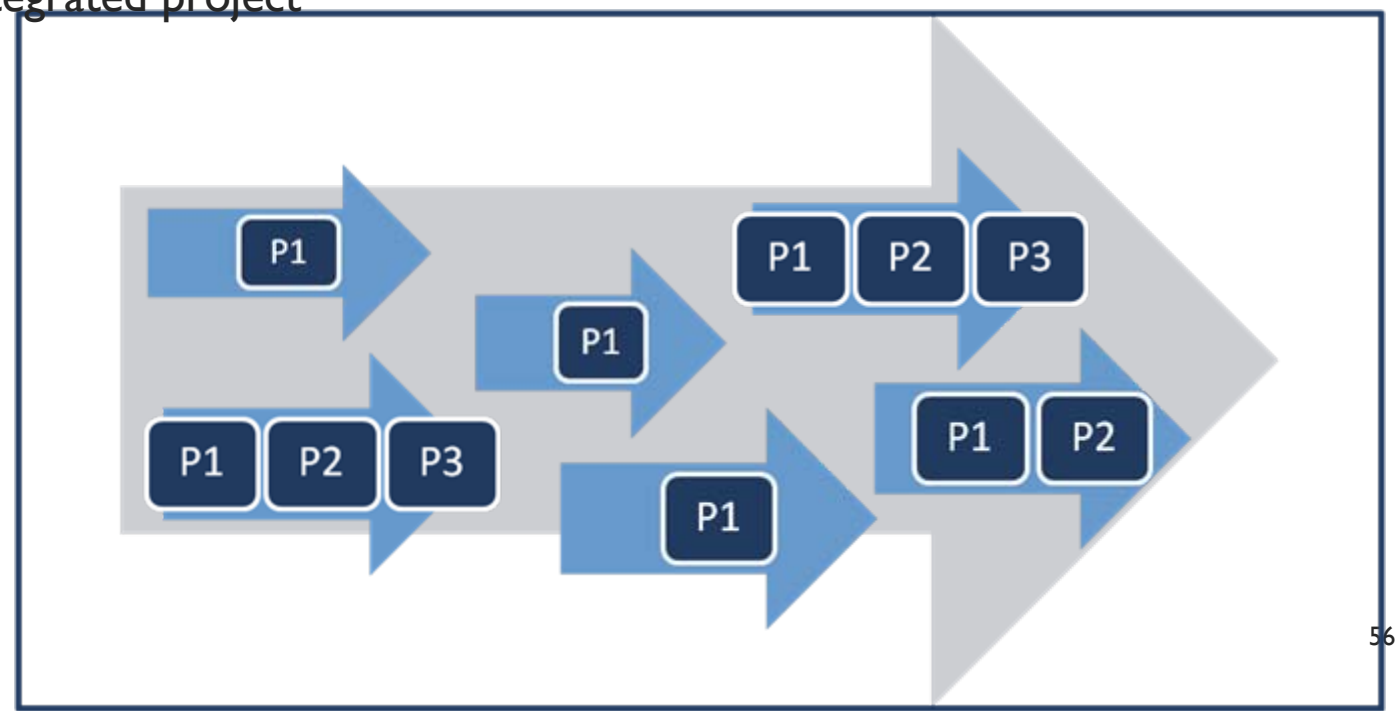
Sweet spot = unique spot
How to protect/define boundary 1,2,3



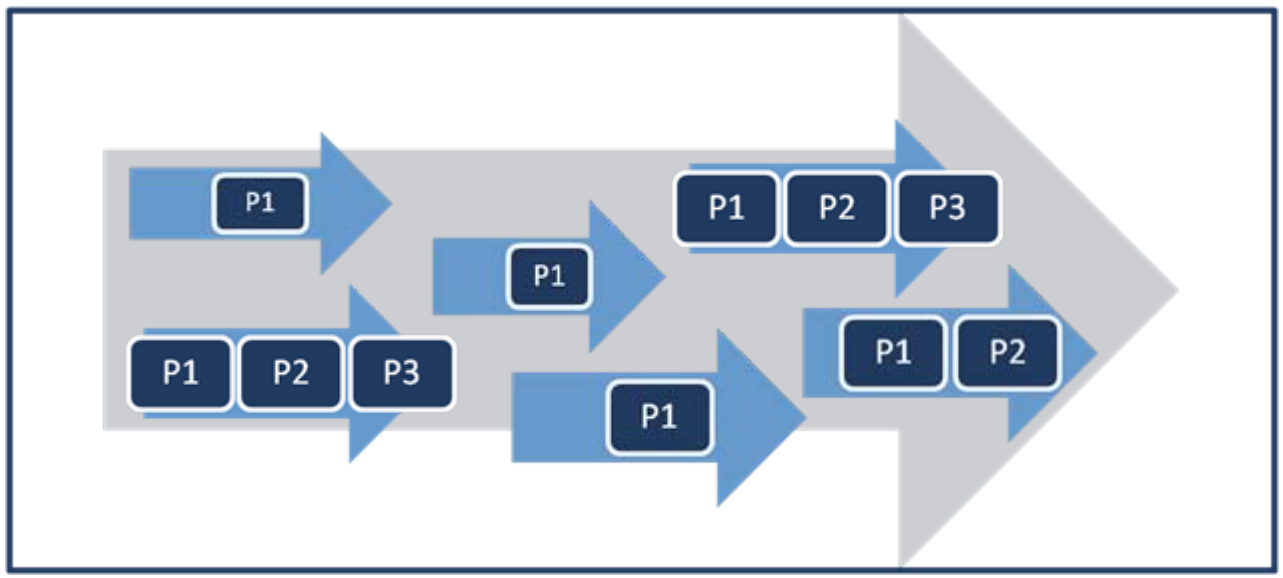
Inspired by: Collis & Rukstad (2008). Can You Say What Your Strategy Is?, HBR (April 2008)

An integrated regional development project is like a container with a set of projects, where the individual projects are aligned with the overall ***vision***, ***strategy*** and ***milestone plan*** of the overall integrated project, or programme.

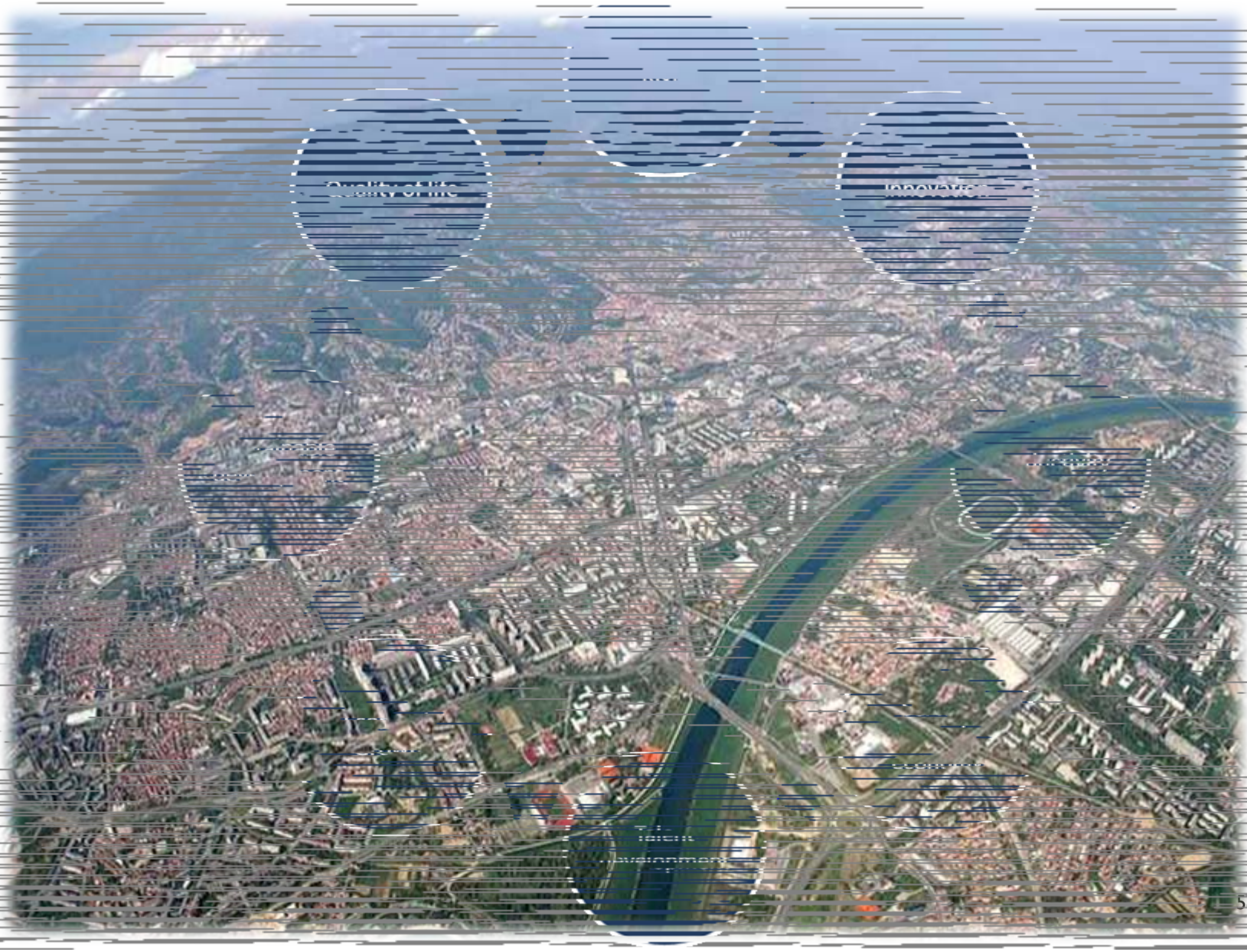
Integrated project



By working with an integrated project approach, we can show how infrastructure development, entrepreneur and business cluster support, cultural investments, social investments, private sector initiatives and other activities must align with overall goals and can be justified as components to achieve the overall vision.



Good development spiral

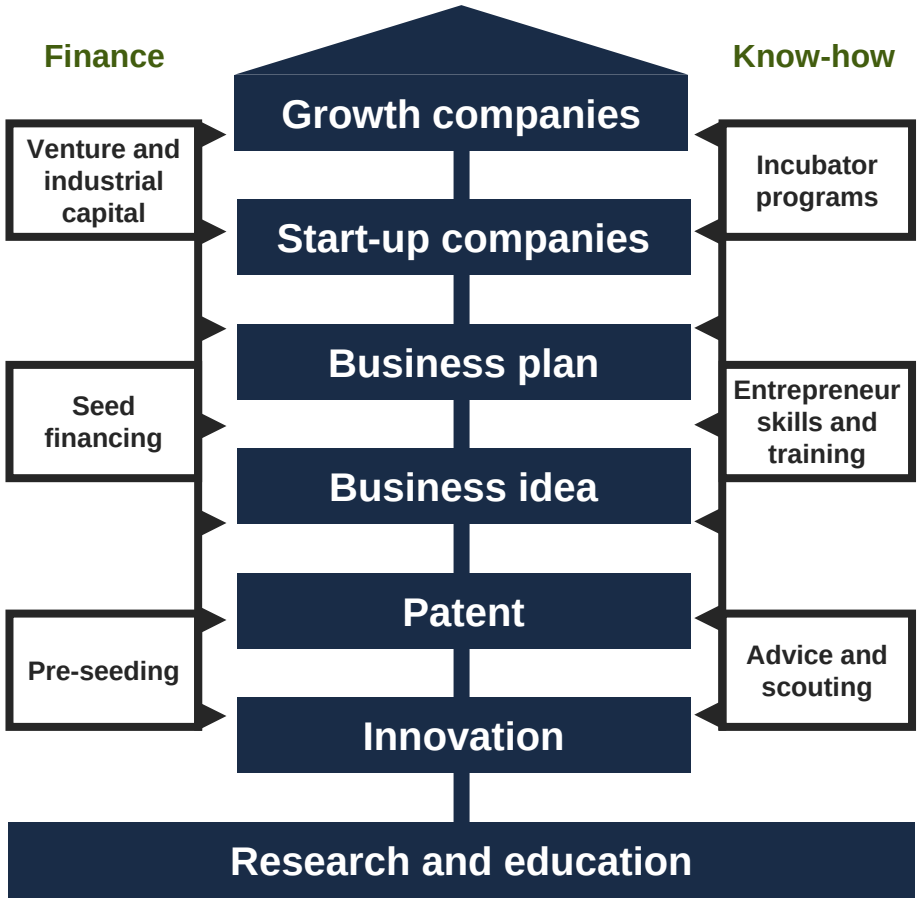


Key elements for creating an innovation support system

Key business elements (or “assets”) as the base for creation of a regional ***innovation support system***

Innovation centers are the key:

- *Science parks*
- *Business labs*
- *Incubation*
- *Acceleration*
- *Alumni*
- *Growth*



Example of how the project governance model can be set up

Regional Business Process Governance System

(This is an example – The individual process defines the specific case)

Political anchoring

Chairman forum

Regional government
Local government
County administration

Process management

Co-ordination, Prioritisation, Financing, Project office

Process management

Project Office

Regional council & University

Process development group

Process managers. & Process flow managers

Regional Council
County Council
Local Communities
University
National Finance
Market Communication, Promotion & Events

Support areas

(cross work flow processes)

- Business development
- Entrepreneurship
- Innovation environment
- Financing
- Direct investments & new establishments
- Visiting & tourism

Regional cross sectoral growth system

4. Recommended RIS3 Project Model