Markku Markkula

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EUROPEAN UNION

Committee of the Regions

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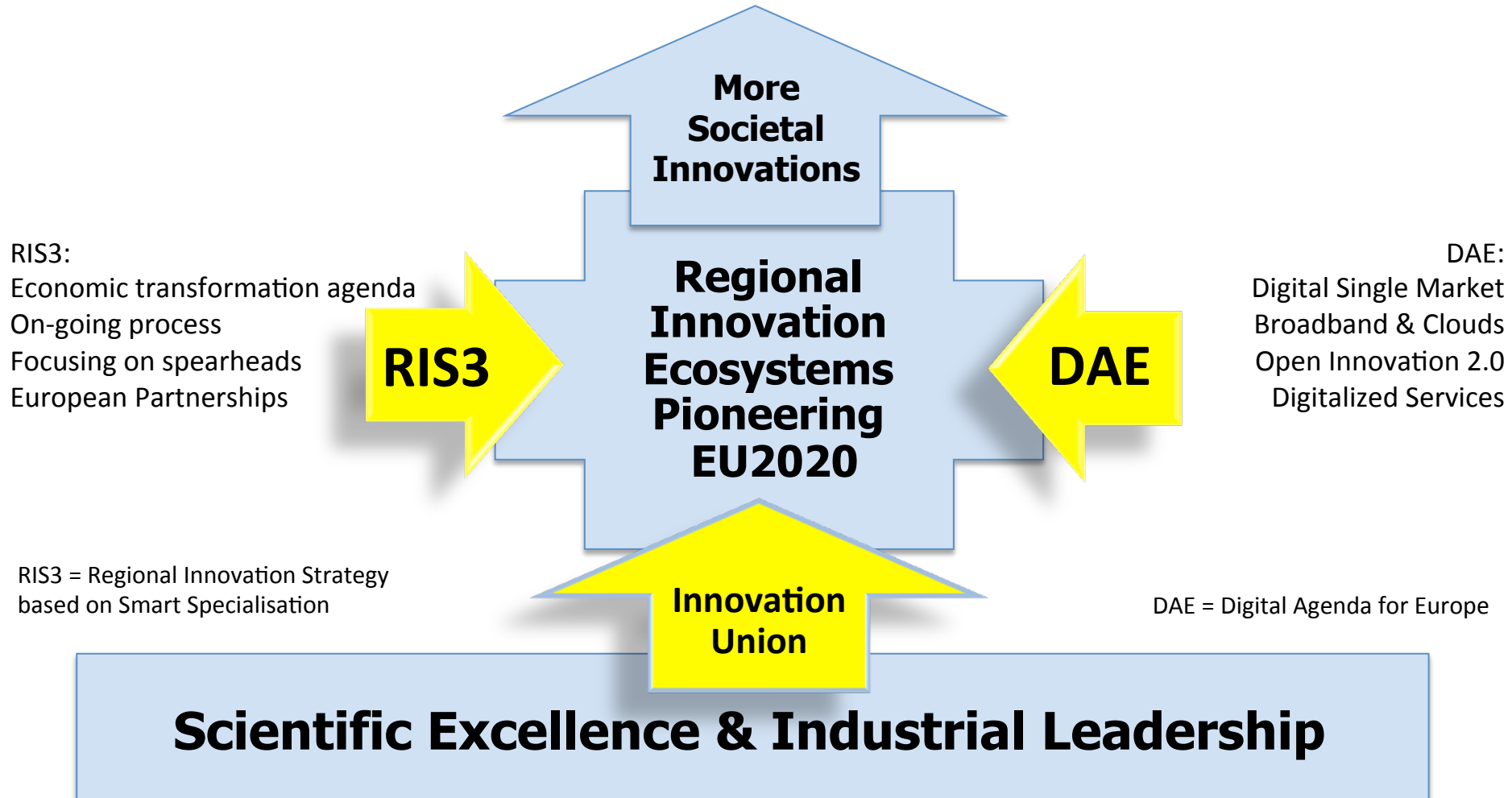# Local and Regional Innovation: European Perspective

There is a **huge gap between the latest research knowledge and real life practice**. What do we need to do to fill it? CoR has defined the following guidelines:

1. Europe needs **pioneering regions** to be forerunners in implementing the EU2020 and through that to invent the desired future.

2. Lifelong learning and the **full use of ICT** are cornerstones for this **change of mindset towards entrepreneurship and innovation.**

3. We need the dynamic understanding of **regional innovation ecosystems** where public, private and third sector learn to operate together. **Modernize Triple Helix.**

4. We need methodologies to mobilize public private partnerships and encourage especially people participations: **user-driven open innovation & living labs.**

5. We need to **speed up the change by scalability & implementation.** European partnerships with universities at the core need to be used as the drivers.

Source: CoR Opinions 2011-2013

Governance →
Orchestration to speed up and scale up the EU 2020 implementation:
Focus on Regional Innovation Ecosystems

More Societal Innovations

Regional Innovation Ecosystems Pioneering EU2020

RIS3

DAE

RIS3:
Economic transformation agenda
On-going process
Focusing on spearheads
European Partnerships

DAE:
Digital Single Market
Broadband & Clouds
Open Innovation 2.0
Digitalized Services

RIS3 = Regional Innovation Strategy
based on Smart Specialisation

DAE = Digital Agenda for Europe

Innovation Union

Scientific Excellence & Industrial Leadership

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"Smart Specialization Strategies for Research and Innovation. Different regions different approaches"

- Our CoR experiences coming from many regions give a strong support on the following Smart Specialisation Platform statements: "**RIS3 is an economic transformation agenda. RIS3 is a dynamic and evolutionary process** (not a structure) deeply grounded in an entrepreneurial discovery process (not a one-off action) where **governments are rather facilitators** than in a position of command and control. RIS3 is for innovation leaders and for those lagging behind."

- The smart specialisation approach is not just about a more focused and limited approach to cluster funding. **RIS3 is a structural reform to upgrade the entire business environment and innovation ecosystem in the region.**

- Smart specialization is opening up important opportunities for joining forces, matching roadmaps and building more world-class clusters.

- Regions can now spend up to 15% of their funds outside their programme area, if it is to the benefit of their territory.

RIS3 new opportunities are open for our use.

Local Digital Agenda for the Helsinki Region based on Smart Specialisation – Draft (the process goes on)

We will pioneer solutions to tackle Grand Societal Challenges. We will focus on:

1. **Smart Urban Design, especially Open Data**
2. **Active and Healthy Ageing**
3. **Low Carbon Economy, especially Cleantech & Smart Traffic**

This means especially fueling Industrial Leadership by focusing on:

1. **Regional Service Architecture and Modeling**
2. **Digitalization of System Processes, especially Services**
3. **Mindset and Other Enablers for Start-up and Growth Companies**
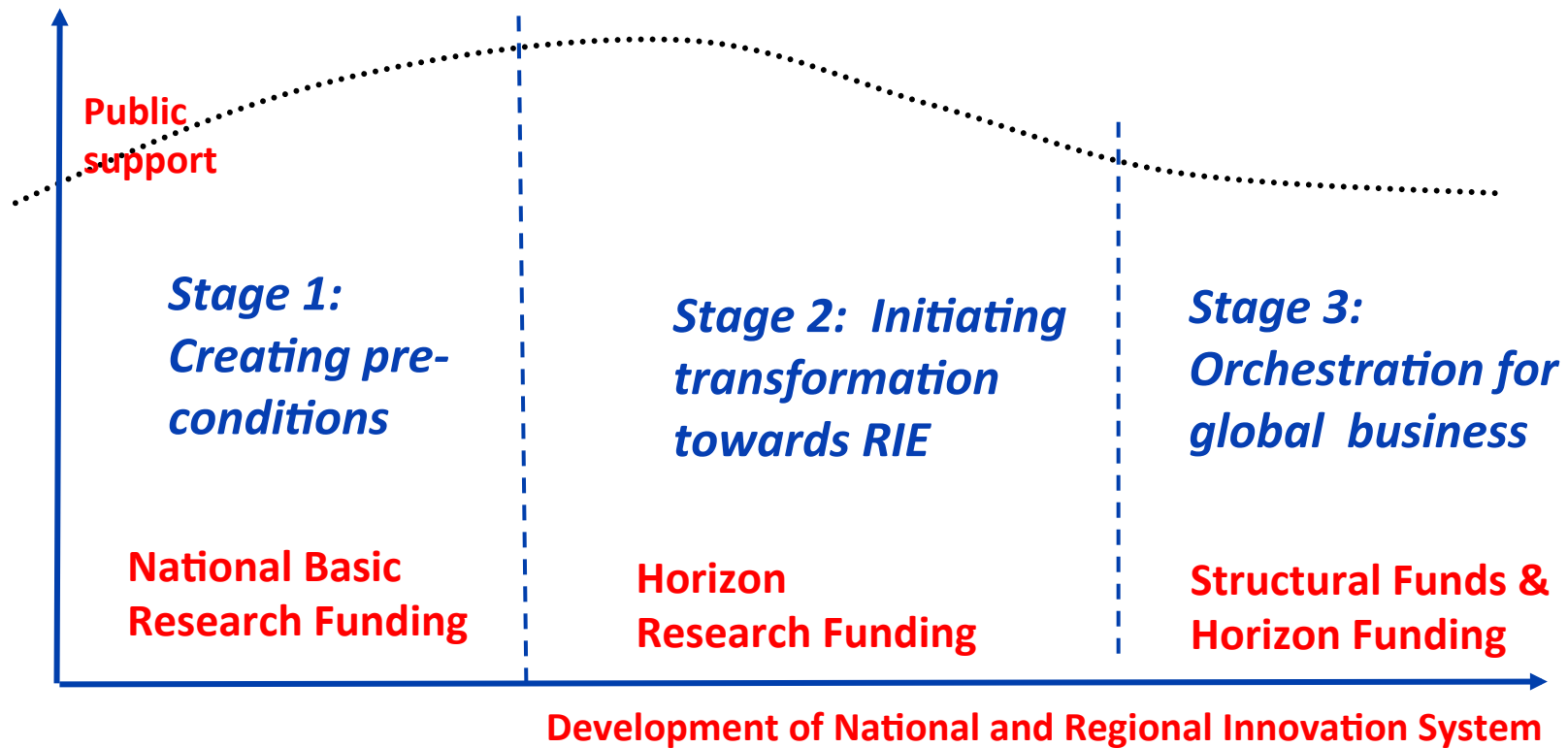
And this means scientific excellence focusing on:

1. **Open Innovation Interlinked Ecosystems**
2. **Human Centered Living Environments: Integrating Real and Virtual Reality**
3. **Key Enabling Technologies and their multidisciplinary applications**

Draft by Markku Markkula Fall 2013: based on the CoR Horizon 2020 opinion, European collaboration on LDA activities, the EUE/RIE plans, the EU Smart Specialisation Mirror Group and Helsinki Region policy programmes.

The Development Path of the Regional Innovation Ecosystem (RIE) → Funding Potential to Scale up throughout Europe

This is the process we are applying in practice in the Espoo Innovation Garden regional ecosystem through the research program "Energizing Urban Ecosystems" (20 million euros in 4 years: industry driven 50% funding from industry, 50% from Finnish public funding) .

Public support

Stage 1: Creating pre-conditions

Stage 2: Initiating transformation towards RIE

Stage 3: Orchestration for global business

National Basic Research Funding

Horizon Research Funding

Structural Funds & Horizon Funding

Development of National and Regional Innovation System

Source: Jukka Viitanen & Markku Markkula & Carlos Ripoll, article in the Knowledge Triangle book, 2013

The RIE Development Path in More Detail
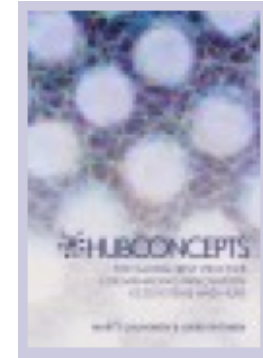
Stage 1 Regional pre-conditions:

1. Potential of existing regional/international innovation system (=audits)

2. Willingness to utilise this potential (=active participation)

Stage 2 Creating the innovation hub:

1. Joint R&D

2. Joint innovation capacity

3. Joint commercialization

4. Joint platforms

Stage 3 Orchestrating RIE:

1. Mindset change

2. Implementing Knowledge Triangle

5. Integrating innovation activities with research programs

Book Hubconcepts™ - The Global Best Practice for Managing Innovation Ecosystems and Hub
See: http://hubconcepts.com/en/catalog

Source: Jukka Viitanen & Markku Markkula & Carlos Ripoll, article in the Knowledge Triangle book, 2013

Case Helsinki Region: Regional Cohesion Funding (Structural Funds etc) will assist in making this development a reality. Universities are key actors in this.

![Aalto University logo] A!

Mindset is the Key

I have never enjoyed school as much as I have this past year in the IDBM program.

Have a look at: www.aaltodesignfactory.fi

Expertise made fun

...at times it felt like we lived at Design Factory, but that's the best way to experience the true power and possibility of the building

EU Calls for Transformation:

Europe needs pioneering regions, as pathfinders and rapid prototypes. Helsinki Region has forerunner instruments in use:

→**Aalto Design Factory**

→**Aalto Startup Sauna**

→**Urban Mill**

→**Aalto Camp for Societal Innovation**

→**and many more …**

Intensive experiences

The ability to share knowledge is one of the most rewarding features.

Markku Markkula
CoR & Aalto University

Sharing ideas

Public – Private – People – Place

Inspiring – Innovative – Interactive – Integrating

Sustainable Innovation Ecosystem = complex function (Governance Systems + Economic Systems + Social Systems + Urban Systems)

European Capital of Innovation Award

BARCELONA IS THE FIRST INNOVATION CAPITAL IN EUROPE

What is behind the curtain? How? What next? Something pioneering?
In the Espoo Innovation Garden (One of the six finalists in the EU i-Capital competition):
We will take in use Virtual Reality Platforms
and integrate these with
the Regional Information Modeling

- To be able to tackle the Grand Societal Challenges **we need to create synergy with the RIS3 & Living Labs & hundreds of projects**. And mobilize the best knowledge and resources.

- In the City if Espoo, **we have created a new governance concept with 5 policy programmes**. Planning phase is over. Implementation has started:
  - Ambitious targets set by the City Council.
  - These are based on multi-sectoral, multi-discipline and multi-stakeholder collaboration.
  - Steering groups 5 + 5 persons: jointly top decision makers from the city council and top civil servants.
  - Themes: Innovation and Entrepreneurship & Sustainable development & Youth Inclusiveness & Active Healthy Ageing & Citizen Collaboration and Active Partnering

What has been done in 2010-2014? → A unique societal innovation:
The globally pioneering flow of activities to create a strong solid base for "the Espoo Innovation Garden"

Phase 1 = three groups of key enablers

1. **Aalto University** started in 2010 as a result of merger: **Multi-disciplinary** = Science and Technology & Economics and Business & Art and Design. Strategy 2020: a strong focus on top research creating a strong base for innovation and entrepreneurship

2. **Encouraging bottom-up activities**:
   – Factories (Aalto Design Factory…)
   – Societal Impact (Aalto Global Impact , Aalto Camp for Societal Innovation ACSI…)
   – Platforms (Aalto Entrepreneurship Society & Startup Sauna, Urban Mill, Learning Hubs…

3. **Energizing Urban Ecosystems**: Integrating university campus development with attractive business environment and modern residence area. Mental & physical development. All these making a committed transformation towards "Espoo Innovation Garden".

Phase 2 = three groups of key enablers

1. **Digital City & Sustainable City & Inclusive City**:
   – Aalto University campus development: Green campus, Lively campus, Well-connected campus…
   – Scientific excellence on the Regional Information Modeling & Integrating Real and Virtual Worlds

2. **Orchestration**:
   – Modernizing Triple Helix with industry
   – Further development of Aalto Platforms
   – From separate projects to orchestration of mega-endeavors
   – Implementing Prof. Nonaka's Ba & Flow

3. **From Triple Helix to RIE** (regional innovation ecosystem):
   – Open Innovation 2.0,
   – Aalto Entrepreneurship Ecosystem
   – Aalto Factory Concept 2.0