



Aalto University

The Aalto Way: Creating innovation and entrepreneurship in research Infrastructures;

Markku Markkula

*Member of the EU Committee of the Regions
Aalto University*

2014



How to Develop Pioneering Innovation Ecosystems?

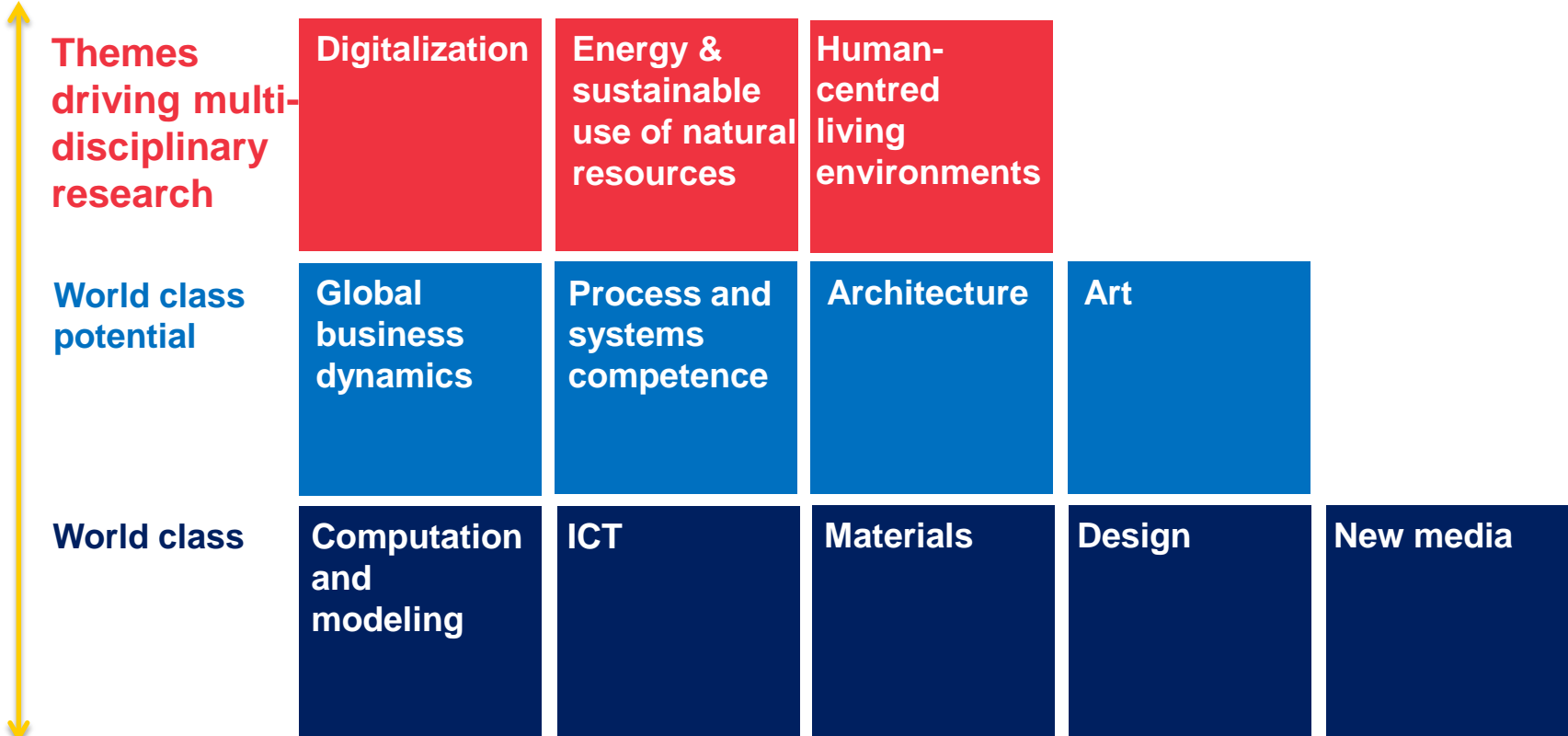
Why the regional innovation ecosystems are the drivers of change? There is a **huge gap between the latest research knowledge and real life practice**. What do we need to do to fill it? CoR has defined the following guidelines:

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.

Aalto research excellence

Focus and relevance by building on strengths

PULL



PUSH



Aalto University

Based on extensive international research evaluation (RAE), 2009,,,,,,,,,,,,,,,,,,,,,

Aalto aims to educate game-changers



- Increasingly *project based courses*
- *Real-life cases* from the industry
- Students as co-creators leads to new openings, increased motivation and self-confidence



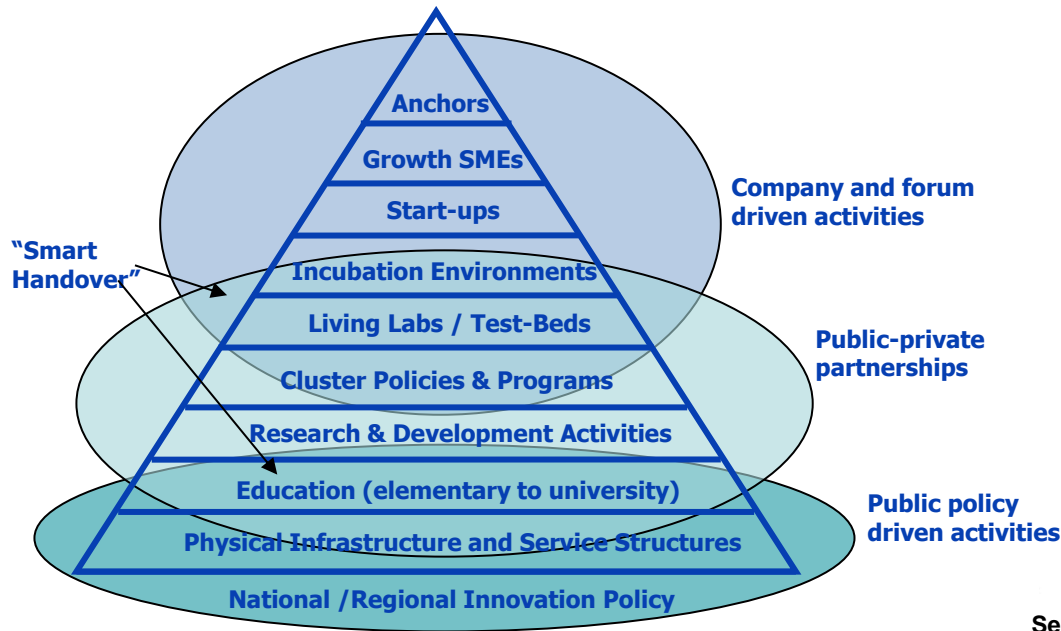
- Risk-taking and diversity as resource
- *Multidisciplinary programs* (e.g. PdP, IDBM, CS)
- *Factories*
- International links and collaboration (e.g. we.learn.it)



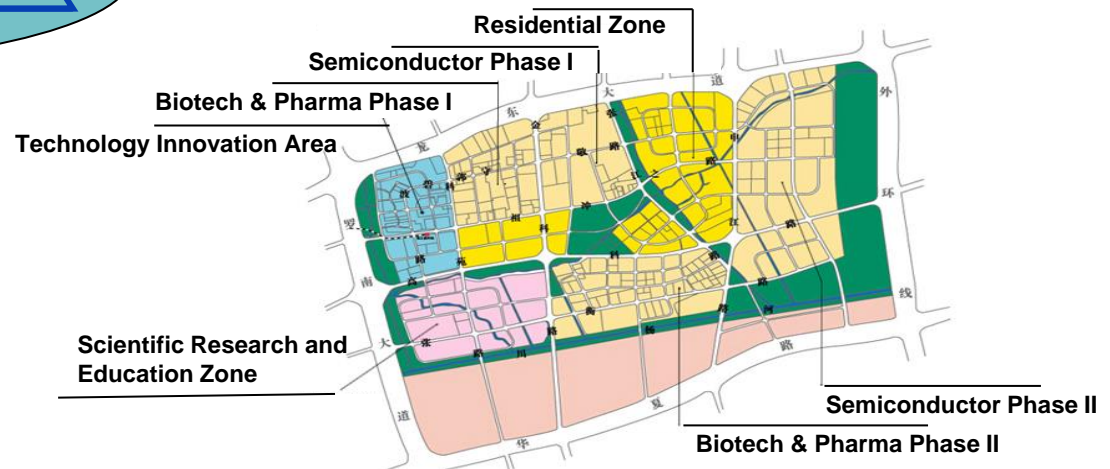
- Startup Sauna, Aalto Ventures Program, Aalto Center for Entrepreneurship, Start-up Center and AppCampus
 - Entrepreneurial mindset and skills
 - *Business acceleration*
 - Ecosystem creation

More Bottom-up Activities in a Systemic Way

From Triple Helix to Regional Innovation Ecosystems: Using The Hubconcepts™ - Innovation Hub Framework



First-class master plans
&
Innovation Hub concepts
complete each other



Read the article by Jukka Viitanen & Markku Markkula & Carlos Ripoll in the Knowledge Triangle Book 2013.

Espoo Innovation Garden & Aalto University Campus 2020

Microsoft

Rovio

Aalto University

EIT ICT Lab

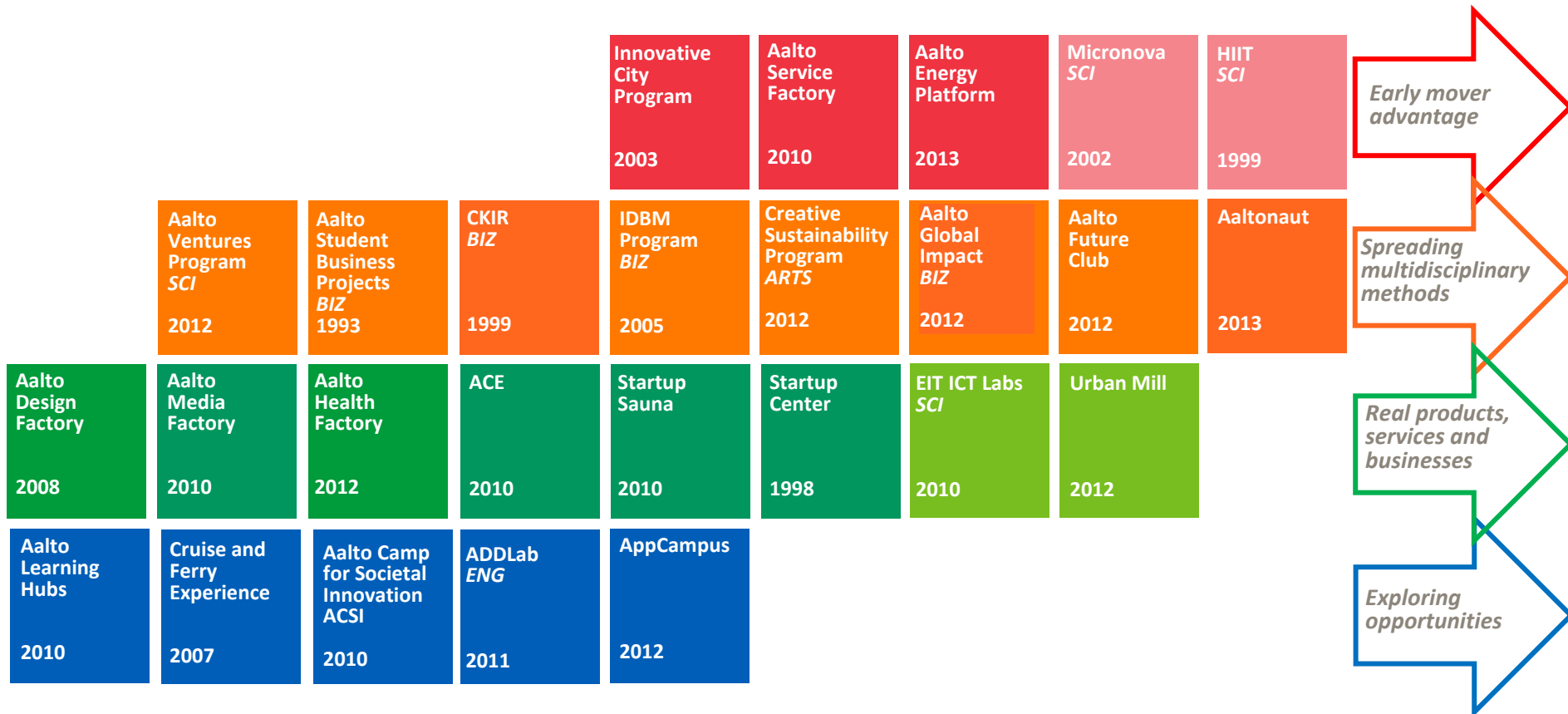
Tapiola Garden City

Laurea



According to the plans, in the next 10 years, there will be new investments of 6 billion €: metro, tunnel construction of ring road, other infra, housing, office and business buildings, public services, university buildings, sports and cultural facilities...

Multidisciplinary platforms at Aalto: The whole range of abstraction levels



Hubs for interaction – Aalto Factories

Design
Factory

Media
Factory

Service
Factory

Health
Factory



Environments for learning, research, and **co-creation**

- Students
- Researchers
- Companies

Unicef	Coreorient	Locomotec	RAY	Fluid
Audi	Ensto	Metso	Sako	NSF
eFM	Ericsson	MetsäWood	Wärtsilä	Storaenso
Washtec	GE	NetMedi	Rovio	Introdex
Carvajal	Helsinki	Nextim	Qonsalt	Unicef
Biolan	Kone	Nordic Hug	Chemical	Toyota
Comnet	Konecranes	Philips	Industry	VWG
Kesko	USP		Federation	

- Society – e.g. Urban Mill
- Strong global interest and expanding presence



Learning as Exploration & New learning spaces

- Solutions to today's most pressing problems will not be found by people in isolation
- Support teams, give them space, possibilities, support and protection to learn and grow
- Create flexible facilities to make things, collaborate on solutions virtually
- Cross boundaries, experiment, fail, learn, repeat



we.learn.it Workshops

- Workshops for teachers & students
 - experiment and explorer with facilitators
 - learning basic techniques (e.g. accessing open satellite data), other tools – e.g. specific apps, thermal images etc.
- get inspiration & plan projects
- several techniques used – e.g. dragons' den



Log in Register

we.learn.it

About Schools Expeditions Events Tools Surveys

Blog Home *feel free to contact us!* support@we.learn.it

Young students interview young entrepreneurs
Anna-Kaarina Kairamo, March 21, 2014, Blog, Learning-Expedition, 0

Some 20 seventh grade students participating in learning expedition "Professions through the eyes of

we.learn.it meets Frankfurt Book Fair
claudiadidjurgelt, February 28, 2014, Blog, Learning-Expedition, 0

A we.learn.it delegation headed by partner ELIG was invited by the Frankfurt Bookfair this Friday in

we.learn.it meets UnternehmerTUM.de
roland, February 27, 2014, Blog, entrepreneurship, 0

we.learn.it strives to integrate the maker and "do" philosophy in schools in order to foster entrepreneurship

Recent Posts

- Young students interview young entrepreneurs
- we.learn.it meets Frankfurt Book Fair
- we.learn.it meets UnternehmerTUM.de
- 120 students visit the #Tekniska Museum today with #iMuseum and #iGames
- Prof. Pachler explains the Evaluation Protocol



EUE: Need to Integrate Research to Real Life Practice and Challenges

City and people

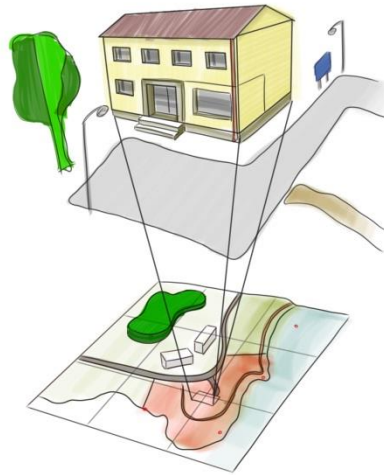
Open accurate 3D-world –
compare and produce
plans - Espoo

Living Labs

Regional Information
Model

Citizens and decisionmakers
Demos, Apps, Future

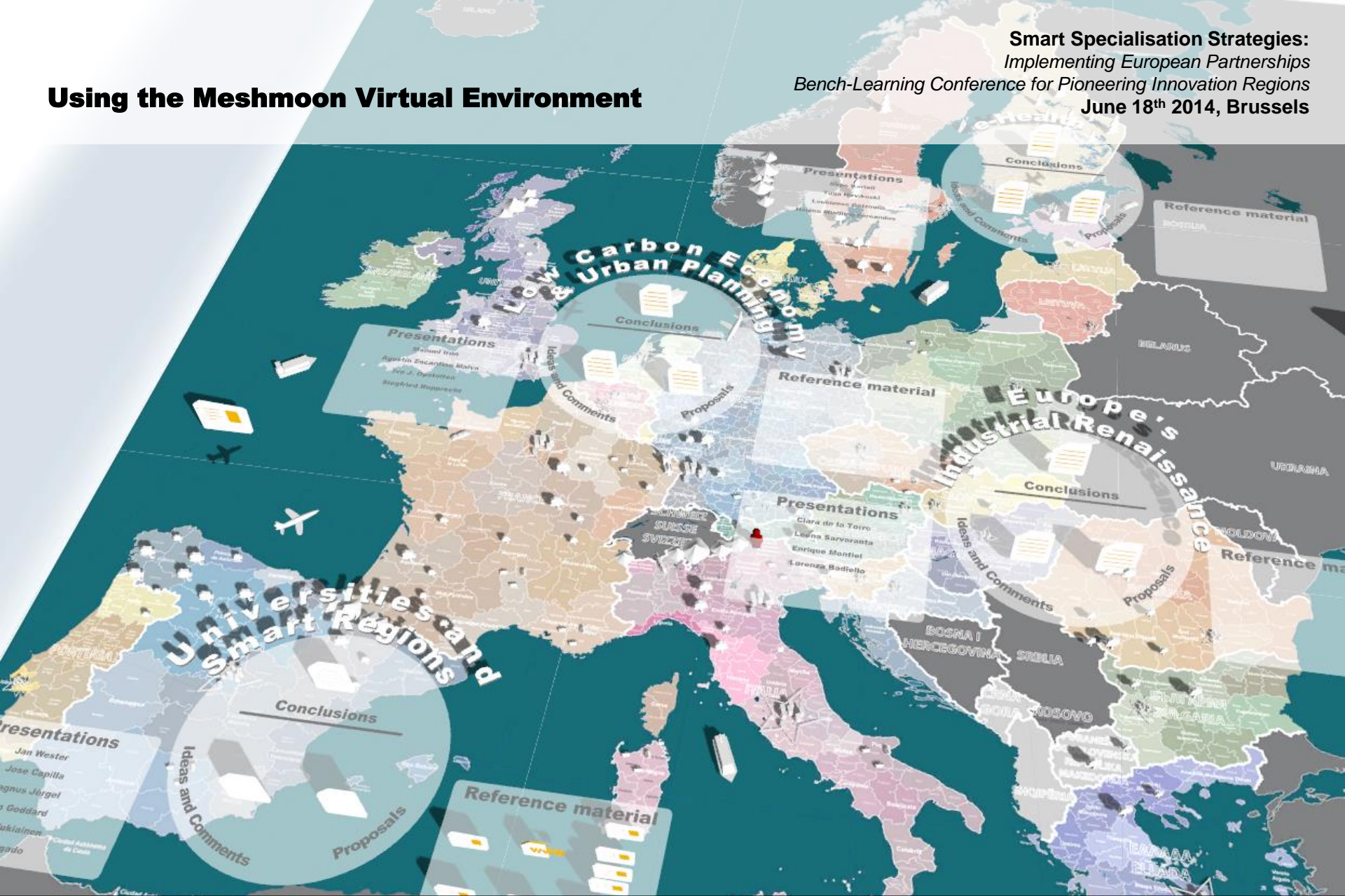
Human behaviour &
Knowledge
management in
Regional Information
Model



EUE is a 4 year and €20 million research program (financed 50 % industry, 50 % public).

Using the Meshmoon Virtual Environment

Smart Specialisation Strategies:
Implementing European Partnerships
Bench-Learning Conference for Pioneering Innovation Regions
June 18th 2014, Brussels



2014

Markku Markkula, Juho-Pekka Virtanen, Lars Miikki, Ali Kämäräinen, Tommi Hollström, Marika Ahlavo, Hannu Hyypä, Hank Kune



EKA – Forerunner Area
Helsinki Region,
Workpackage B, 2014