

Culminatum Innovation Oy Ltd

Warsaw 11.3.2010

Pasi Mäkinen



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Mazowsze.
serce Polski

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Projekt pt. „Praca wysokiej jakości (PWJ). System identyfikacji dziedzin o dużych potencjałach wzrostu zatrudnienia wysokiej jakości w woj. mazowieckim. Mechanizmy, instrumenty i rozwiązania.” jest realizowany przez Fundację „Instytut Badań nad Demokracją i Przedsiębiorstwem Prywatnym” i współfinansowany przez Unię Europejską z Europejskiego Funduszu Społecznego w ramach Programu Operacyjnego Kapitał Ludzki.

Finland: Plenty of reasons to be proud!



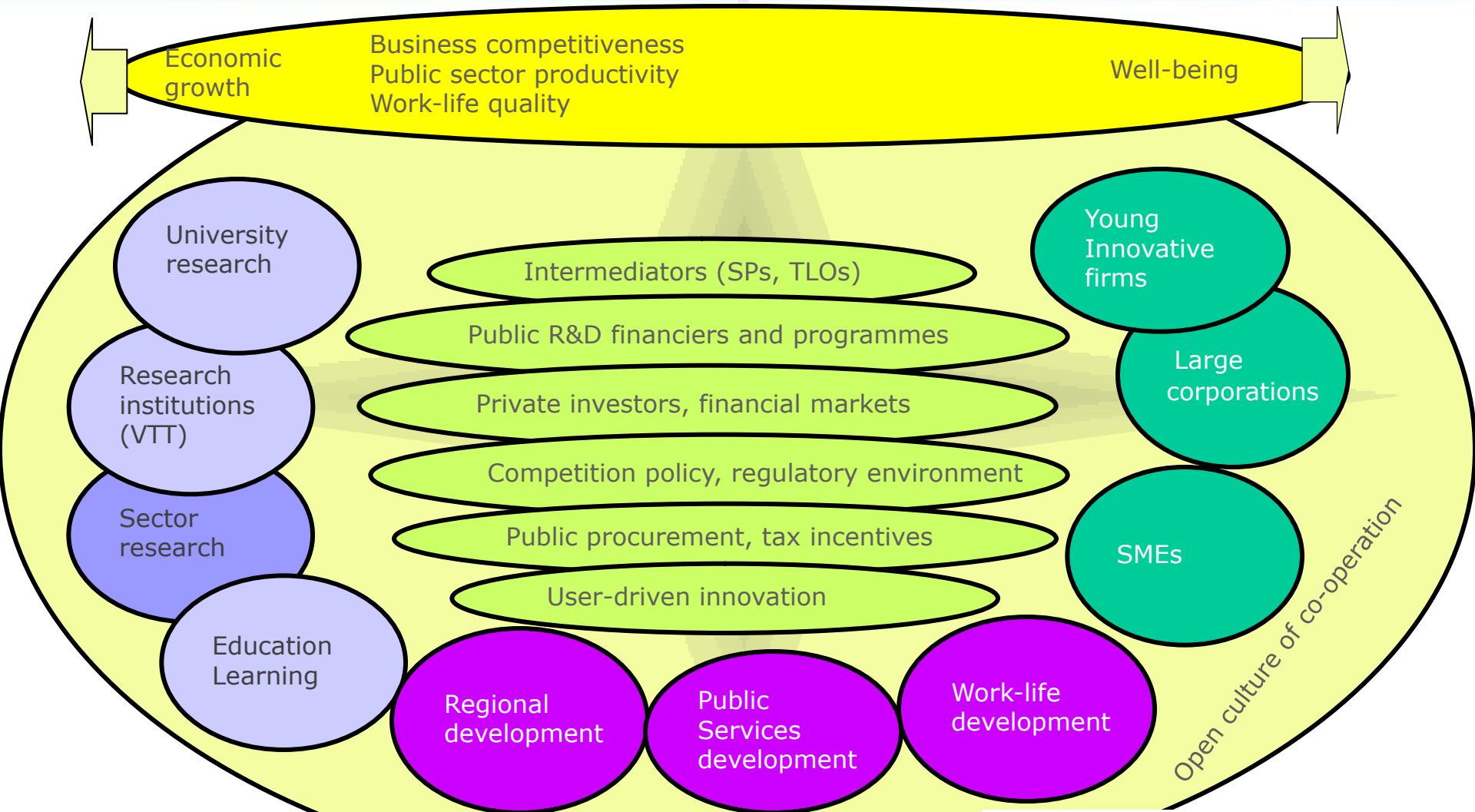
- Competitive nation (IMD, Harvard)
- Innovations with commercial potential (MIT)
- World innovation index (Harvard)
- R&D investment as % of GDP (3.5%, 2/3 by the private sector) (OECD)
- Fraction of researchers in the total population (OECD)
- High-value creative jobs in the total economy
- (Carnegie Mellon) (US #11)
- Most competitive IT industry (OECD)
- Penetration of mobile and Internet
- Public education system (OECD)

Source: Will Gardwell, Technopolis Ventures

5 Million people – effectively networked
Finland is not a country, it is a Club



"Extended" innovation environment



Innovation =

- new product, technical solution
- new production process
- new (industrial) service

Innovation =

- new expert-service
- new business model
- new design or brand

Innovation =

- improved public service
- organisational or ..structural improvement



Culminatum – Independent development platform

The Helsinki Region



- 1,2 million inhabitants
- 8 universities
- The biggest technology campus in Nordic countries
- 6 technology parks
- Nokia cluster
- Main logistics hub in Finland, connections to Russia and Baltic countries
- One of the best international airports in the world



- 50 % on the financial services in Finland
- 48 % of the business services in Finland
- 37 % of the telecommunication services in Finland
- 31 % of the public services in Finland
- 22 % of the construction in Finland



Regional development company in the Helsinki - Uusimaa Region

- Founded 1995
- < 40 employees
- CEO, Mr. Pasi Mäkinen

Innovations & networking

- 9 Centres of Expertise in Helsinki Region
- Regional development

Independent development platform

- To combine capacities of universities, business sector and local government in order to catalyse knowledge based industries
- Triple helix ownership: science, business and public sector
- Non profit support services for the businesses and other stakeholders in these cluster operations

Science community 34%

Universities
Universities of applied sciences
Research institutions

Public sector 43%

Uusimaa Regional Council
City of Espoo
City of Helsinki
City of Vantaa

Business community 23%

Chamber of Commerce
Science Parks
Companies
Financial institutions



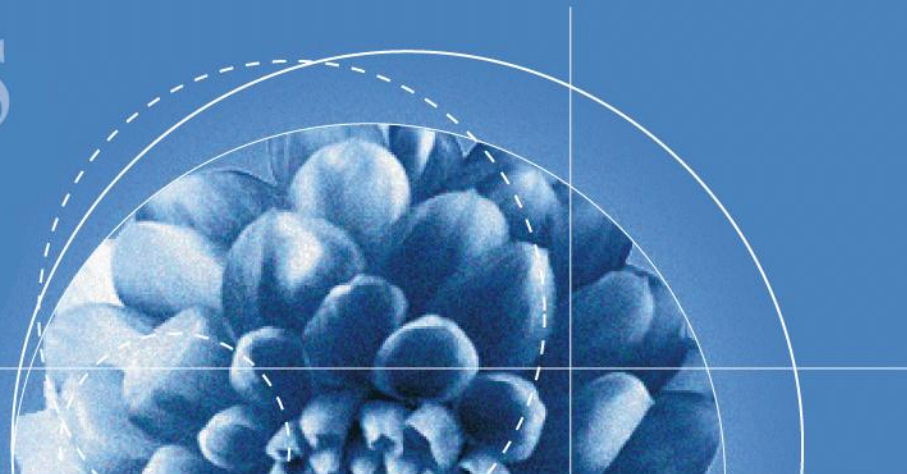
Innovation strategy 2005

Competitive strategy 2009



PROSPEROUS METROPOLIS

Competitiveness Strategy for
the Helsinki Metropolitan Area



Priorities and action lines



European Union
European Regional Development Fund

Leverage from
the EU
2007–2013



Uudenmaan liitto
Mylands förbund



Priorities of the strategy

1. Improving top-quality education and know-how
2. Building good quality of life as well as a pleasant and secure living environment
3. Strengthening user-driven innovation environments and developing public procurements
4. Internationalisation of the metropolitan area and its connection to global networks



Cluster development

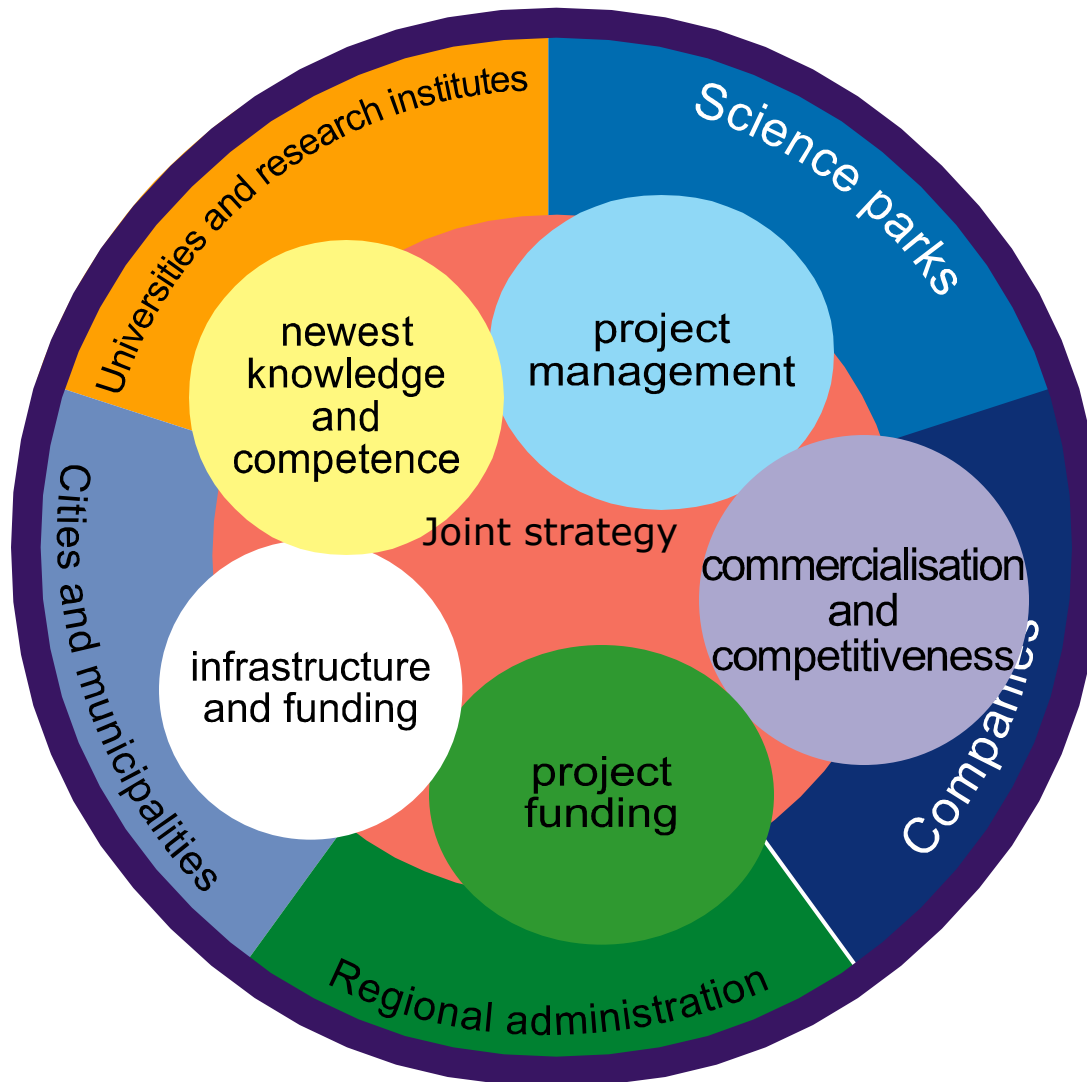
The operating fields of OSKE



A fixed-term national programme pooling
local, regional and national resources to utilise top expertise

- **Internationality** in R&D and business activities
- Boosting the **growth** of **knowledge-intensive companies**
- **Activating** knowledge intensive SME 's **innovation** actions
- Linking the regional-driven innovation actions to national and transnational innovation framework

Partners at regional level



Fields of Expertise 2007 – 2013



DIGIBUSINESS Cluster

Environmental Technology Cluster

Food Processing Development Cluster

HealthBIO - Health Cluster

Living Cluster

Nanotechnology Competence Cluster

Tourism and Experience Management Cluster

Ubiquitous Computing

Well-being Cluster

KIBS – Knowledge Intensive Business Services

Innovative Public Procurements

The centre of expertise strategy is simple



The Helsinki Region ecosystem develops
The international competitiveness of the Helsinki Region improves
The well-being of the whole Finnish society grows



The new know-how based business grows
The local industries renew by the added value of new know-how
- *The companies grow : revenue, employees*



Activating the companies & other stakeholders
- *Provide: Promotion, partners, project building*



Knowing the ecosystem - Recognizing the spearheads and needs
- *Know: Academia, business sector, authorities, NGOs, R&D funding, VC, networks, etc*
- *Utilise: Thematic microclusters, daily contacts with the stakeholders*

Service offering



- Partnering needs analysis
- Networking events
- Cluster building
- Cluster / Ecosystem

Facilitation and
Development

Partnership
building and
networking

- Technology and knowledge transfer
- Business development for companies and development platforms

Innovation and
commercializ
action services

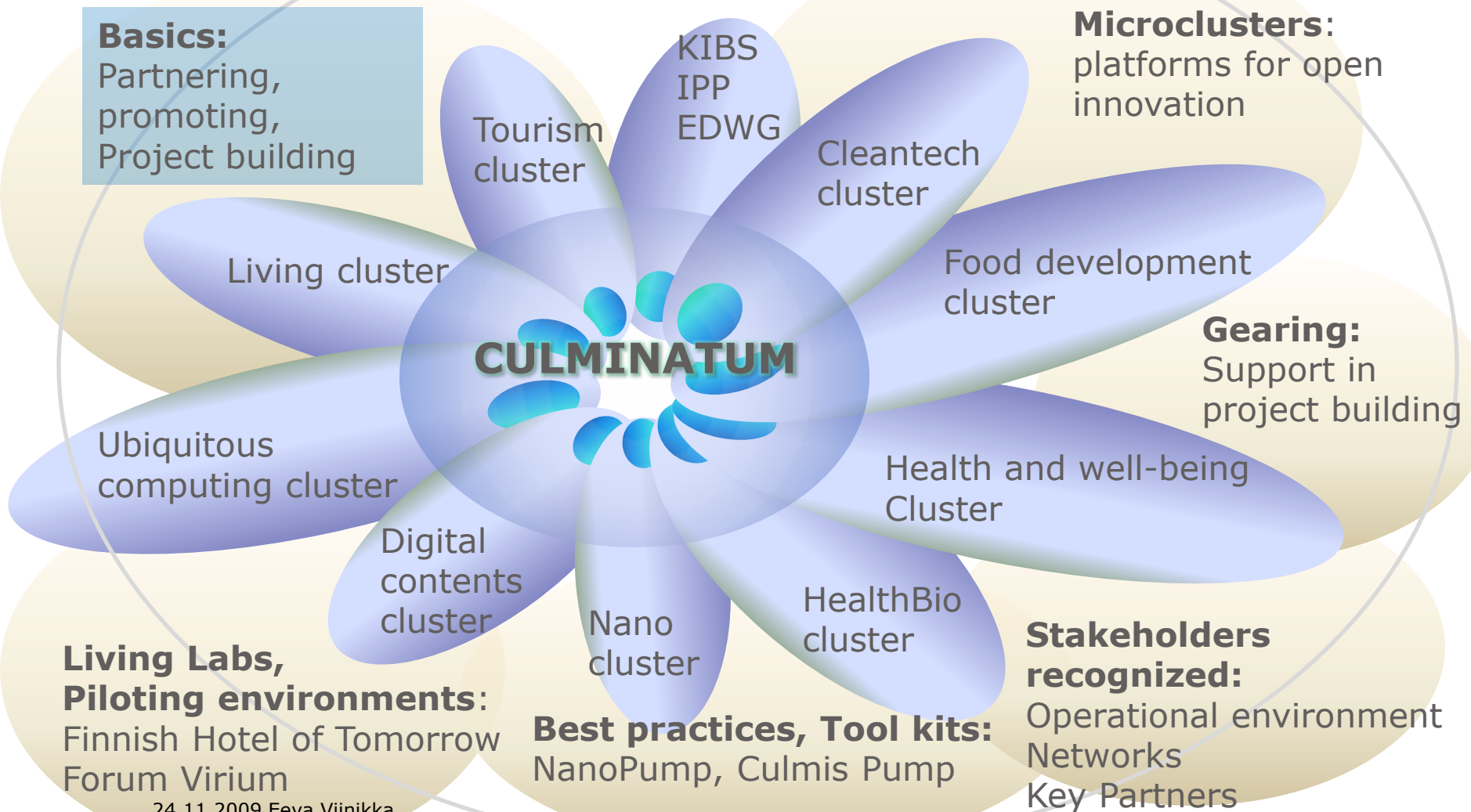
Project services

- Project ideation
- Project preparation
- Project partner search
- Organizing financing
- Project manage / coordination

+ cluster-specific
extra services

Culminatum Practices and Clusters

The 9 Clusters and 3 local units within provide a tool for recognising multidisciplinary potentials and development needs



Example: Nanotechnology Centre of Expertise

The operational environment





Share (%) of competed finance

Number of

- Jobs created
- New development platforms
- New innovations
- New business opportunities
- International projects
- S, M and L enterprises, research and educational institutions, other organizations cooperating actively (and share of total by group)

+ Culminatum Innovation is implementing EFQM quality measures.



Projects and clusters

Innovations & commercialization: NanoPump project



R E S E A R C H

New know-how from academic world...

- Invention prize
- HelsinkiNano-yearbook
- Commercialization course

... to the companies

Target: companies with

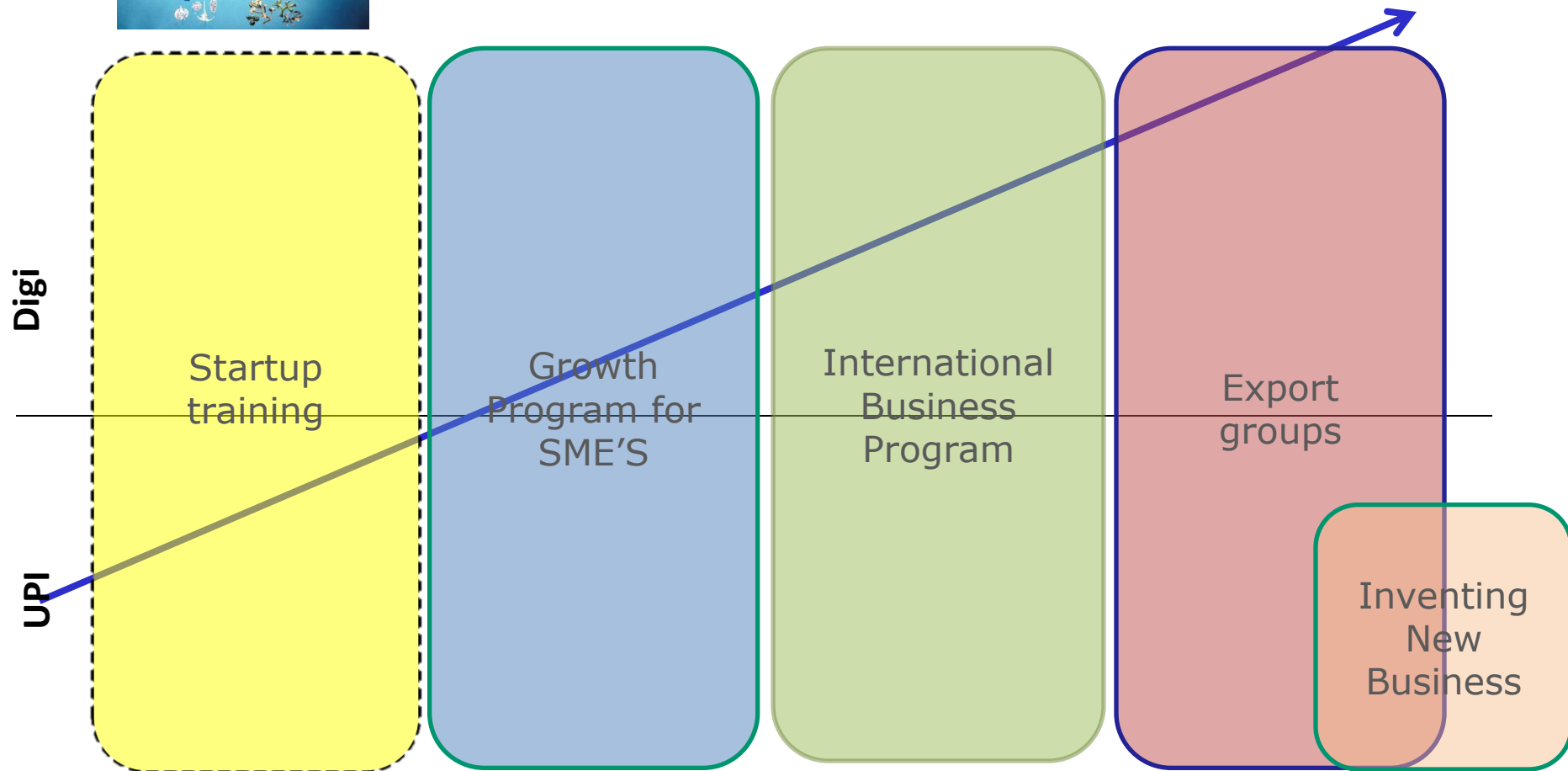
NO nano know-how

- Concretic value adding suggestion
- New B-to-B sales
- Development projects

S M E , S



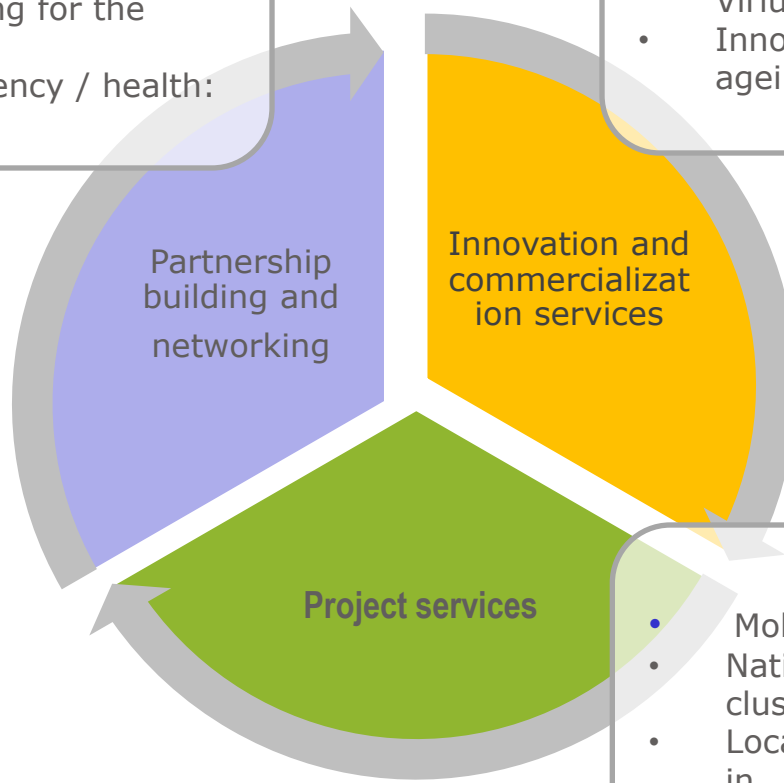
ICT Development portfolio





- Active Ageing –clustering in Baltic Sea Region
- IKÄ-networking and seminars incl. spin off –projects
- Seminar series: living for the ageing
- European Space Agency / health: seminar

- Innovations for Kontula elderly care center
- Development project for metropolitan thematic innovation platforms (Forum Virium, Active Life Village, RFID Lab)
- InnoGame ideation workshop for healthy ageing at home



- Mobile home health care solutions project
- National cross-functional cooperation in clustering in Baltic Sea Region
- Local, national and international projects in...



Innovative public procurements

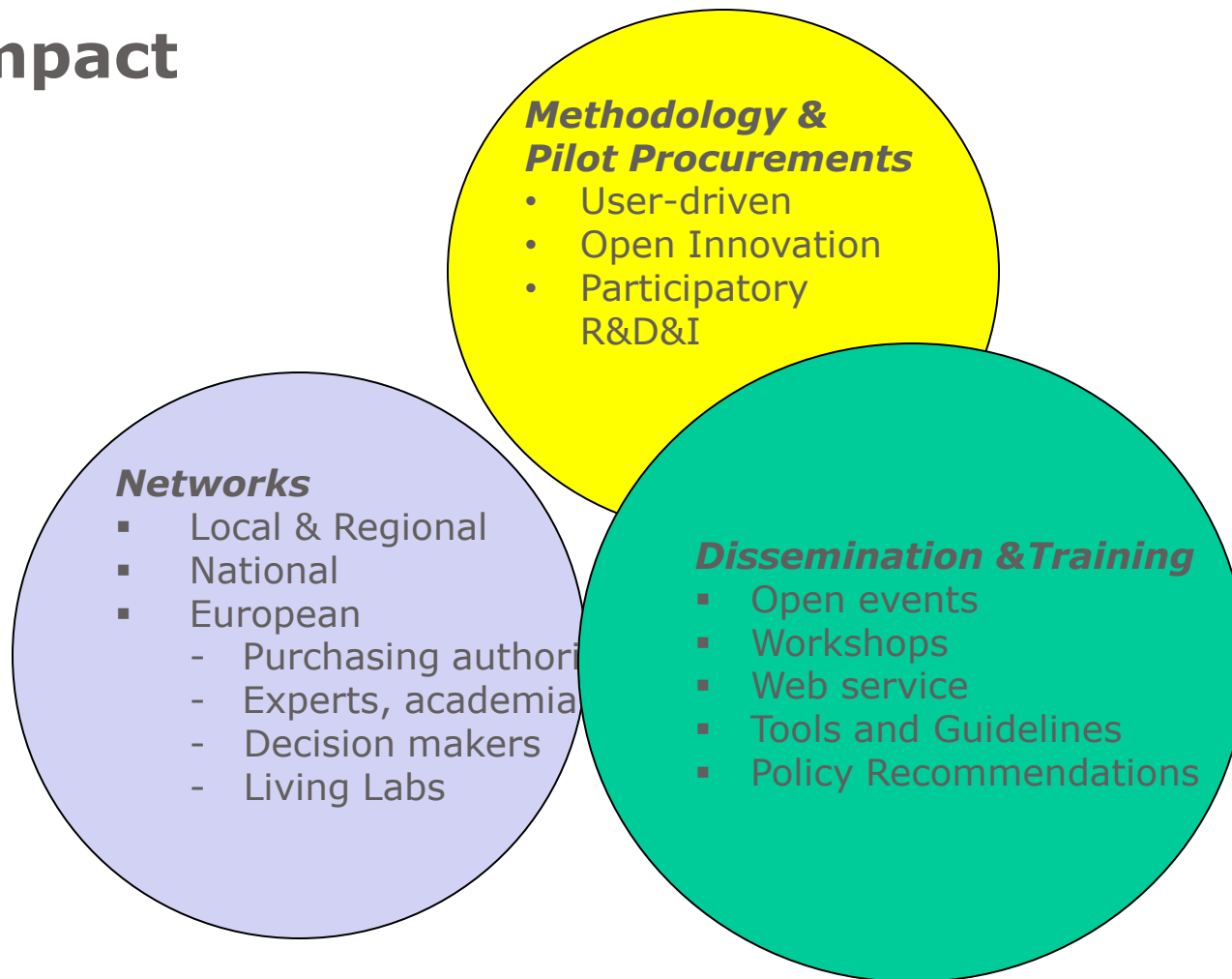


The programme will

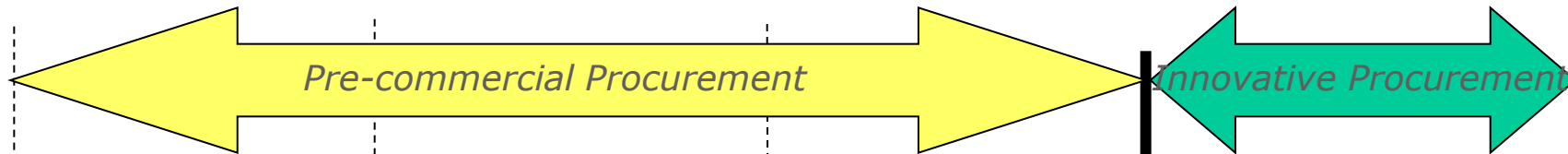
- Identify how public authorities can achieve highly innovative solutions through greater market engagement
 - *Thematic focus on*
 - Energy Efficiency / Sustainable Construction
 - Health and Well-being, ICT for Health
 - *Approach*
 - User driven innovation eco-system creation
 - open innovation and participatory RDI
 - IPR and legal constrains
- Develop **tools and guidelines** driving innovation through PCP
- Develop **policy recommendations** for national / regional procurement strategies
- Push and support **pilot procurement actions**
- Organize a **series of events** across Uusimaa Region and Europe to raise awareness and present best practices on Innovation & Public Procurement



Impact



Pre-commercial Procurement



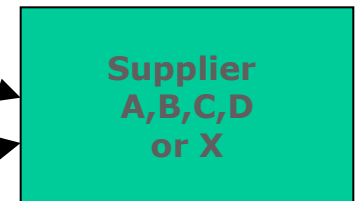
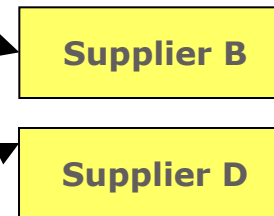
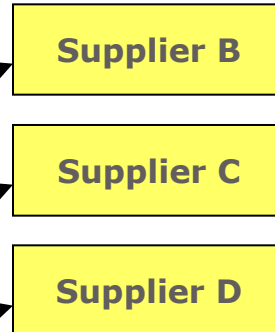
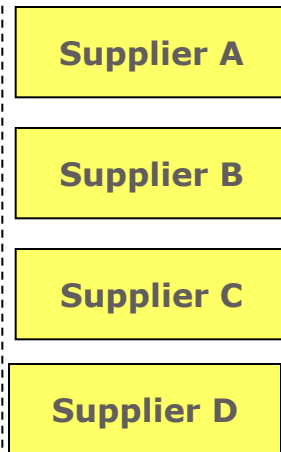
Phase 0
Exploratory
Research

Phase 1
Solution design

Phase 2
Prototype
development

Phase 3
Pre-commercial
small scale
product/service
development
- Field Test

Phase 4
Commercialisation
Diffusion
of product/service



*Pre-commercial Tender
(WTO GPA & Procurement
Directives not applicable)*

*Tender for commercial deployment
(WTO GPA & Procurement Directives
applicable)*



University cooperation

Helsinki Education and Research AREA – HERA



- Hera Competence
- Hera International
- Hera Innovation
- Hera Bilingual

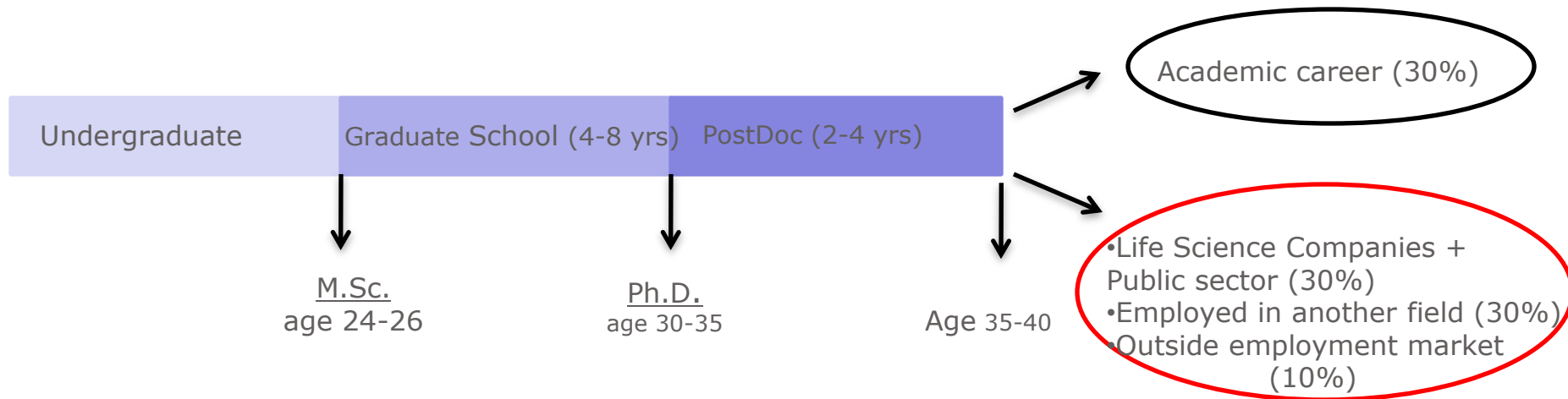


Tohtoreita yrityksiin

"PhDs to Business Life"

Culminatum Innovation Oy Ltd

PhDs to Business Life: Background



- Significant investments on PhD training starting in the mid 90s:
 - Professional scientist (academia, public sector)
 - Teaching (academia, polytechnics)
 - Demanding positions in expert organisations (companies, industry, civil service)
- Biotech companies are interested in hiring PhDs (according to inquiries):
 - If the companies can reach competent job seekers easily
 - If PhDs had more extensive understanding on the requirements of the business and industry.
- In March 2009, a total of 52 unemployed PhDs in Science/Life Science in the Uusimaa region.



The project enhances the employment of Life Science PhDs (in the Uusimaa region) in Biotech companies *) by providing

1. Training in Business and Industry Skills

- PhDs in Business Life course (3 ECTS);

2. Career coaching

3. Recruitment support for PhDs; and

4. Financial aid for companies for hiring unemployed jobseekers.

*) Pharmaceutical, diagnostics, biomaterials, food, or chemical industry



Thank You for Interest!



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