Open, Social, and Responsible Innovation

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Finland

Thematic workshop

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European Union | European Regional Development Fund

TAMPERE REGION (NUTS 3)

22 municipalities, 5 subregions

Population 512 081 in total (9,3 % of Finland)

Economy
GNP/capita (2016p): 36 044 €/capita
GNP/capita increment: 4,2 %
GNP/capita in Finland: 39 326,5

Demographic
dependency ratio
Tampere Region 59,6
Finland   60,8

High expertice
Higher education statistics (2018)
Staff (man/year) 2 582
Students 30 780
Graduated students 6 066

RDI expenditure
Total EUR 660,5 million (2017)
Companies EUR 445 million
Public sector EUR 33,6 million
HEIs EUR 181,9 million

Industrial structure – the most employed industries

Employers total	202 800	
Human health and social work activities	36 300	18 %
Manufacturing	31 500	16 %
Wholesale and retail trade	22 700	11 %
Admin. and support services	14 900	7 %
Education	14 400	7 %
Construction	13 400	7 %

Number of companies
Total (2018)   33 800
Growth companies (2014-2017) 226
Startup companies (2019)   170

Value added in digital service companies EUR 890.6 million

Employment ratio
Tampere region 66,4 %
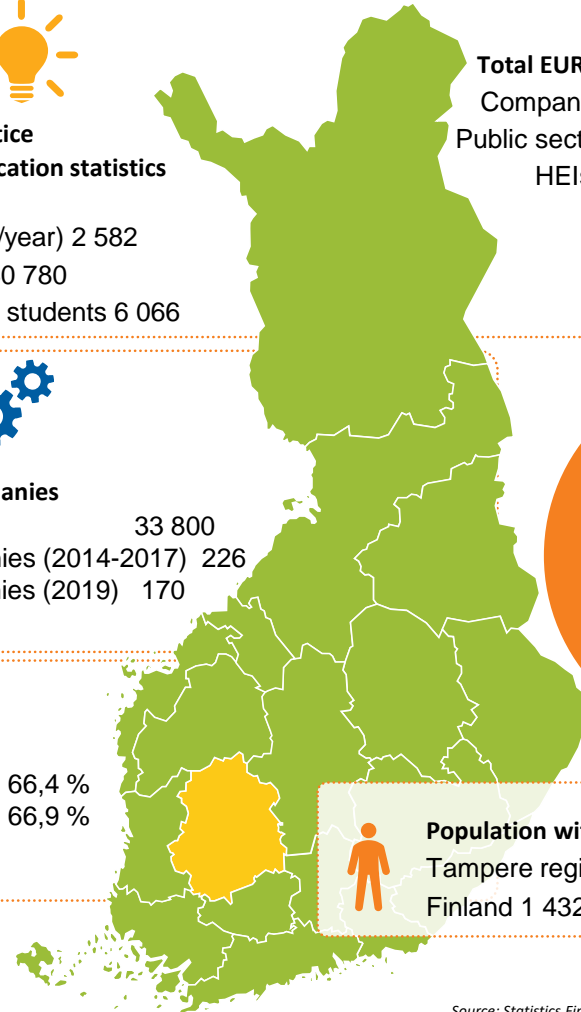Finland   66,9 %

Migration and commuting

Migration to Tampere region:15 865 (+1,45 %)
Commuting to Tampere region (2016): 11411

Migration from Tampere region: 13 241 (-2,11 %)
Commuting from Tampere region (2016): 15871

Population with higher education
Tampere region 136 920 (32 %)
Finland 1 432 276 (31 %)

Source: Statistics Finland; Council of Tampere Region

Council of Tampere Region

- Regional Councils are statutory joint municipal authorities operating according to the principles of local self-government, principally funded by their member municipalities

- Responsible for regional development and land-use planning

- Creates the regional strategy, including Smart Specialization Strategy

- Manages one part of ERDF and regional funding for universities, municipalities, research centers…

  but cannot fund enterprises directly

Laura Vanzo, Visit Tampere

COUNCIL OF
TAMPERE REGION

MARIE Interreg Europe
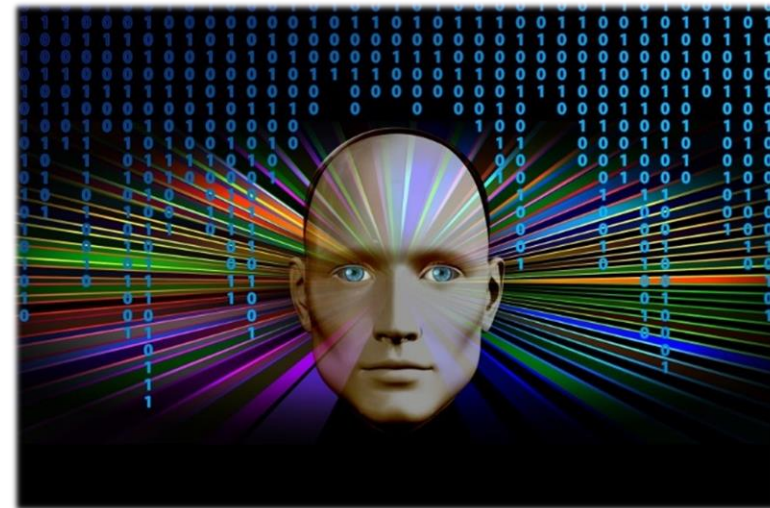
Findings from MARIE activities:

- Tampere region doing fine with many of the RRI elements:
  open innovation, gender equality and science education

- Open innovation platform policy provides good conditions for openness and engagement of different actors in innovation processes

- Ethical evaluation commonly used in academic funding BUT not in innovation funding

- Ethical consideration based on the evaluator, no standardized evaluation criteria or method

MARIE Interreg Europe

European Union
European Regional
Development Fund

RRI in Artificial Intelligence

- AI is chosen to be the strategic focus of ERDF funding for 2019-2020 in Tampere region → to boost the competencies for AI and AI ecosystem building

- AI is a disruptive innovation, with high risks of safety and ethics and remarkable influences to the society

- Active national level discussion on ethics in AI but no regional agenda

- Tampere region is willing to be a forerunner in responsible AI development

RI evaluation criteria

- Developed together with Tampere University and VTT

- To create innovation projects that have taken RI elements more comprehensively into account

- To boost discussion of RI and change mindsets

- RI elements evaluated:

  ETHICS — Integrity, human dignity and individual freedom
  Equity and equality
  Privacy

  ENGAGEMENT — Comprehensibility
  Acceptability
  People's control over innovation

  OPENNESS / TRANPARENCY

  SAFETY / RELIABILITY

Evaluation questions

1. What ethical questions and possible challenges have been identified in the project and how will you respond to them?

2. What actors and stakeholders will be engaged in innovation activities and why? How will they participate?

3. How will the project achieve openness and transparency?

4. How will you ensure the reliability and safety of project activities and results?

Results and findings

- Evaluation of responsibility was well accepted

- The first strong RI oriented multidisciplinary project was funded – ethics strongly included

- New ways to deliver RI to SMEs was created

- ➢ According to the answers, ethical risk assessment particularly difficult
- ➢ Safety issues often connected to GDPR issues
- ➢ Openness mixed with communication

Outputs for SMEs

- Workshops for responsible AI designing

- Service point for companies for responsible AI

- Mapping citizen expectations for AI for companies to use

- Mapping the level of knowledge of companies in responsible AI

- Mapping the needs of the companies for better AI development

- Tool box for designing and developing responsible AI solutions

- Reliable data environments for companies to test their products

- Networking with ethical experts and researchers

- Responsible principals for companies to be committed when joining project activities

Results

- Influenced amount of funding is about 1,7 M€

- The criteria will be used in the next ERDF funding call in Dec 2019
  - About 2 M€ to be delivered
  - Thematic focus on AI and development of innovation environments
  - Widened focus demands improvement of the evaluation criteria
  - Improvements are done based on the experience from the first pilot call

- Impact evaluation need to be developed during 2020

Recommendations

- Start from the 'low hanging fruits'

- Even the biggest started small

- Qualitative / Quantitative?

- Use possibilities to increase knowledge

- Storytelling: increase public discussions with blogs, events etc. Show references if possible!

For whom?

- For regions where it is possible to add an additional evaluation

- For regions with moderate maturity for some RRI elements already but lacking in ethical evaluation

- For regions where responsible and sustainable issues in regional development are discussed already