

Online Platforms and Tools for Policy-Making

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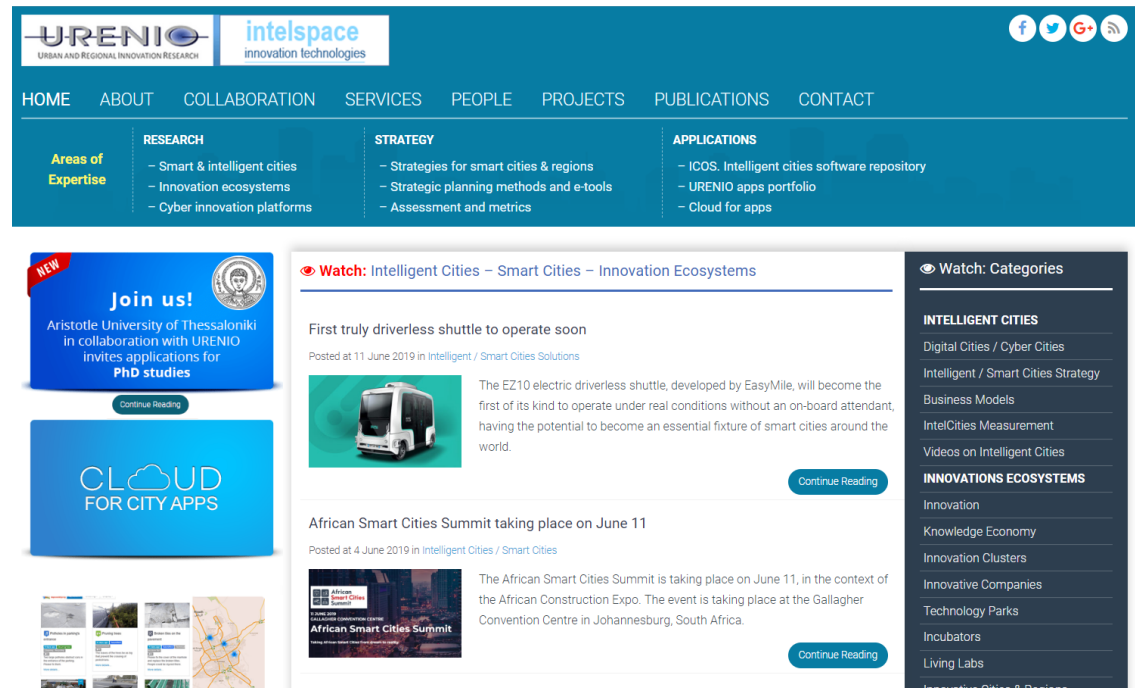
Trend Kick off meeting @ Reggio Calabria | 26 06 2019



URENIO RESEARCH

<http://www.urenio.org>

A University Lab of Aristotle University of Thessaloniki for the promotion of applied research and the supply of technological services in the field of innovation ecosystems and intelligent cities.



Intelligent – Smart Cities – Innovation Ecosystems

The research focuses on (1) **cyber-physical systems of innovation**, (2) **structure, ontologies and architectures**, and (3) **policy, strategy, platforms, applications**. Our effort is to devise solutions integrating human, collective, and machine intelligence.

Information systems for knowledge based policy design

- Strategy design and implementation: complex effort characterised by uncertainty and ambiguity, requires transdisciplinary knowledge and a wide variety of skills.
- ICT systems: feed the strategy with data, can be used either as e-learning assistants or as step-by-step roadmaps to strategy elaboration
- RIS3 evaluation reports highlight the difficulties in designing and implementing a RIS3 strategy.
- Online tools through the JRC platform allowing the effective detection of any emerging landscape of specialisations and benchmark regions



ESIF - Digital



Regional Benchmarking



EU Trade

Policies for regional economic resilience

- Address the system's **structural factors of vulnerability**, i.e. dependence on a single sector, technology or market; lack of collaboration and networking (Bristow et al., 2013; Berkes, 2007)
- Emphasis on **protective factors** which enhance the adaptive capacities of the system's agents and structures, such as creating endogenous sources of new knowledge and connecting those to external ones; securing related variety; facilitating networking and learning and establishing a climate for creativity and innovation (Winges, 2009; Ficenec, 2010)
- Polycentric and multilevel governance (Lebel et al., 2006)
- **Principles:** flexible (CLES, 2010); with decreased interdependencies (Bristow et al., 2013); they have to be place-based, sensitive to the geographic, social, economic and political context (Gailard, 2010); but, at the same time, open and outward-looking (McKinnon and Derickson, 2013); they should also be placed on the basis of an on-going process, setting long-term objectives for the area (Dawley et al., 2010).

2 Cases. Scientific production profile + Related variety

Tools for Smart Specialisation

The Online S3 Platform gives you access to free online tools and a comprehensive guide for creating, monitoring and updating your regional or national Smart Specialisation strategy.

Create a user account to get the most out of the platform.

[Register now](#)

Online S3 Platform was developed in the framework of H2020 - SwafS. It is a different initiative from the JRC S3 Platform.





2.5 Regional scientific production profile

Production of 'scientific profiles' for regions based on Web of Science (WoS) data, Scopus and Google Scholar data.

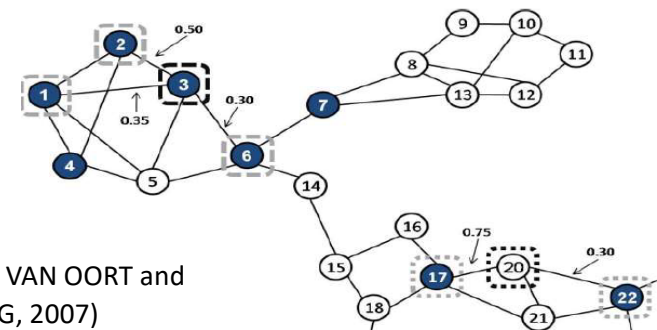


4.3 Related variety analysis

Calculates the Related/Unrelated variety entropy indexes. It will compare 2-digit and 5-digit sector shares (%) and will estimate the entropy index for regions.

Diversification: Related Variety Analysis

- Related or unrelated diversification? Which is most rewarding for stability and growth?
- Related variety: Which industries are related in terms of shared / complementary competences
- Is related variety in the X region beneficial for externalities in knowledge spillovers, startups, thus enhancing growth and employment?
- Does unrelated variety (productivity gains) protects the X region against external asymmetric shocks in demand and thus against rising unemployment?



(FRENKEN K., VAN OORT and VERBURG, 2007)

Scientific production profile for identifying scientific specialisation

Online S3 Platform
Regional scientific production profile

About | Guide | Related Documents | Access to application

Online S3 Platform

Scientific Production Profile

City/Country Profile

Regional Profile

Online S3 Project | Applications | Toolbox | Analytics | Support | Contact

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Subject Area Analysis Affiliation Analysis Annual Analysis

Press it to clear the data and Insert new

Subject Area Analysis

Add CSV file(s) Clear

Radar Chart

austria_subjects.csv

Arts and Human... Agricultural an... Veterinary Undefined Social Sciences Psychology Physics and Ast... Pharmacology, T... Nursing Neuroscience Multidisciplina... Medicine Mathematics Materials Scien... Immunology and ... Health Profess... Environmental S... Engineering Energy Economics, Eeon... Earth and Plane... Dentistry Decision Scienc... Computer Scienc... Chemistry Chemical Engine... Business, Manag... Biochemistry, G... Arts and Human...

Export Report Doc

Report

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Files Uploaded:

1 austria_subjects.csv

Information for uploaded files

Activate it to include the chart in the report

Add Radar Chart to Doc

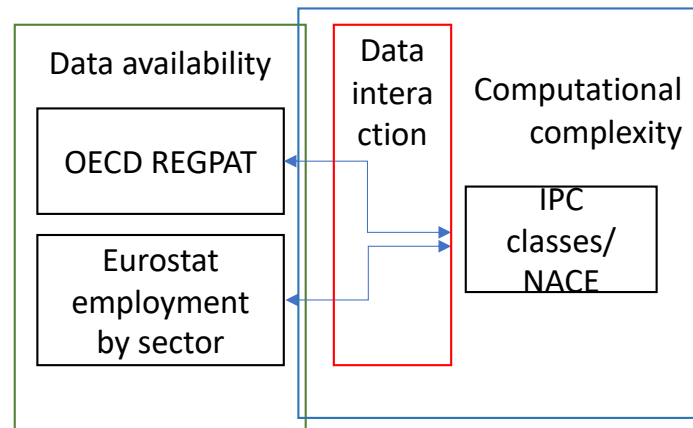
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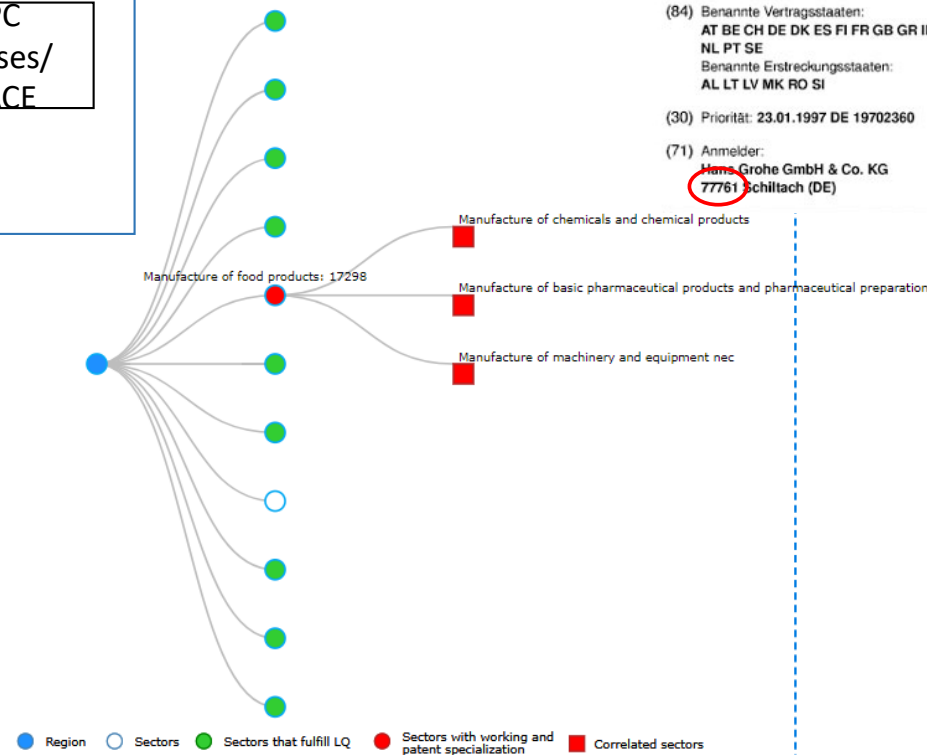
Bar Chart Display the Bar chart

Add Comments About Charts Add Comments

Related variety for the selection of specialisation



- Technological specialisation
- Cognitive proximity



Europäisches Patentamt
European Patent Office
Office européen des brevets

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(12) EUROPÄISCHE PATENTANMELDUNG

(88) Veröffentlichungstag A3: 21.10.1998 Patentblatt 1998/43 (51) Int. Cl.⁶ **F16K 35/02, F16K 31/60**

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(22) Anmeldetag: 20.12.1997

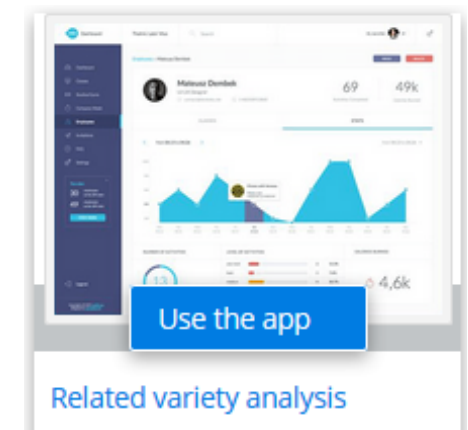
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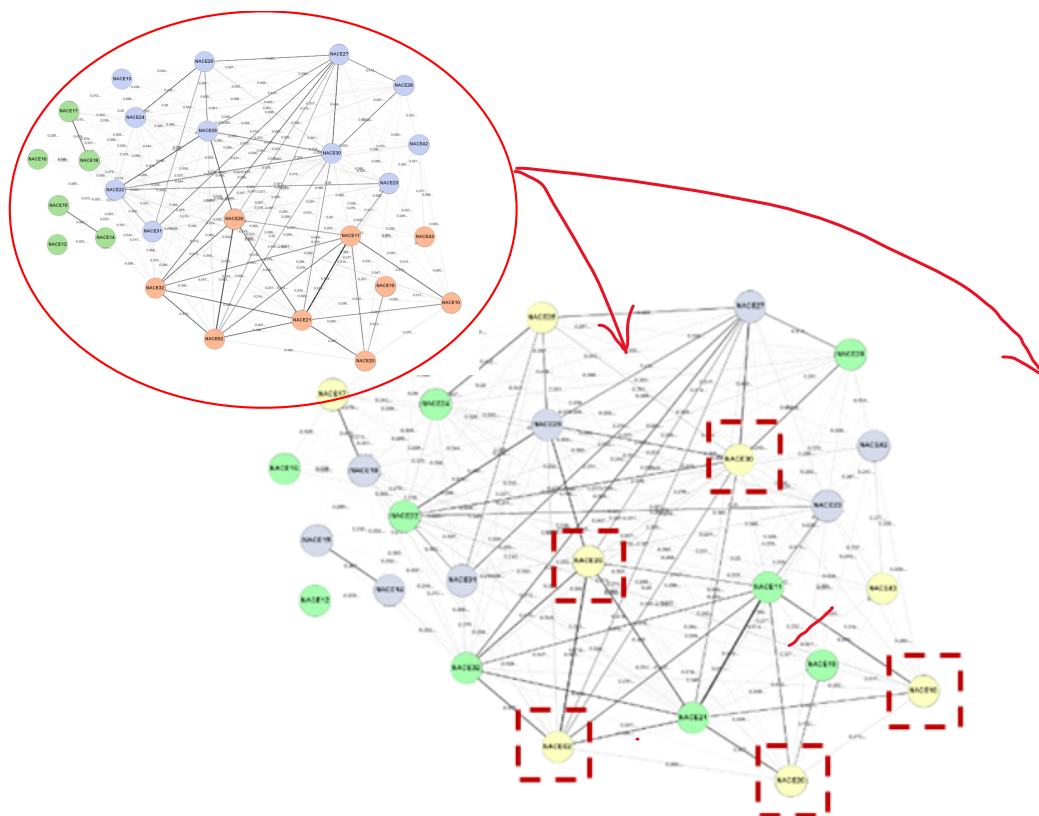
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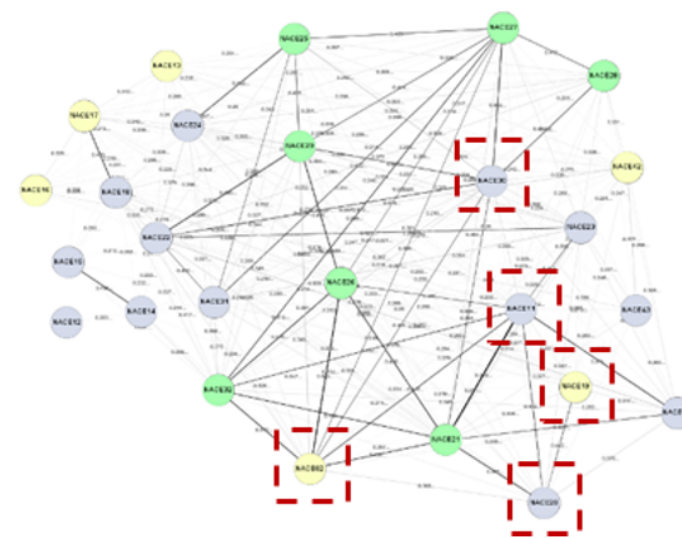
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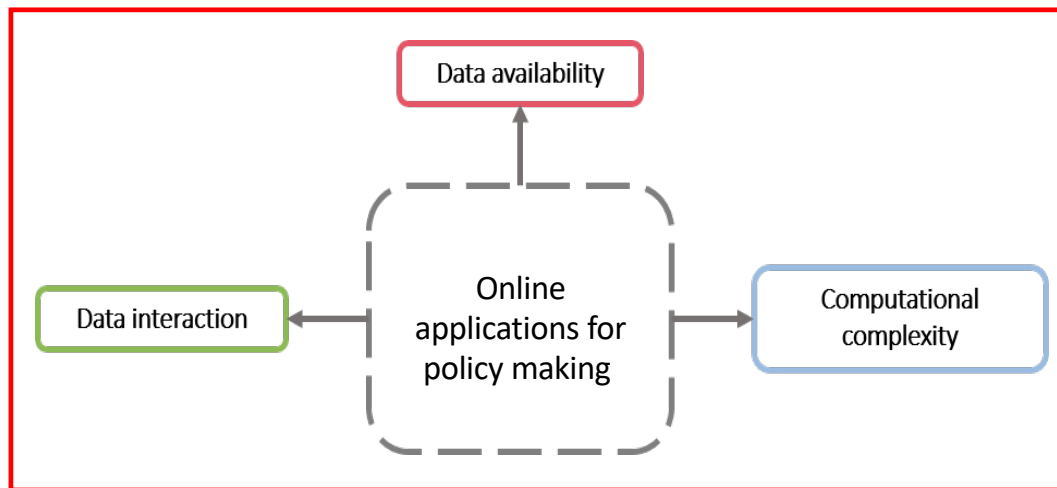
(a) Northern Netherlands – NL1



(b) Baden-Württemberg – DE1

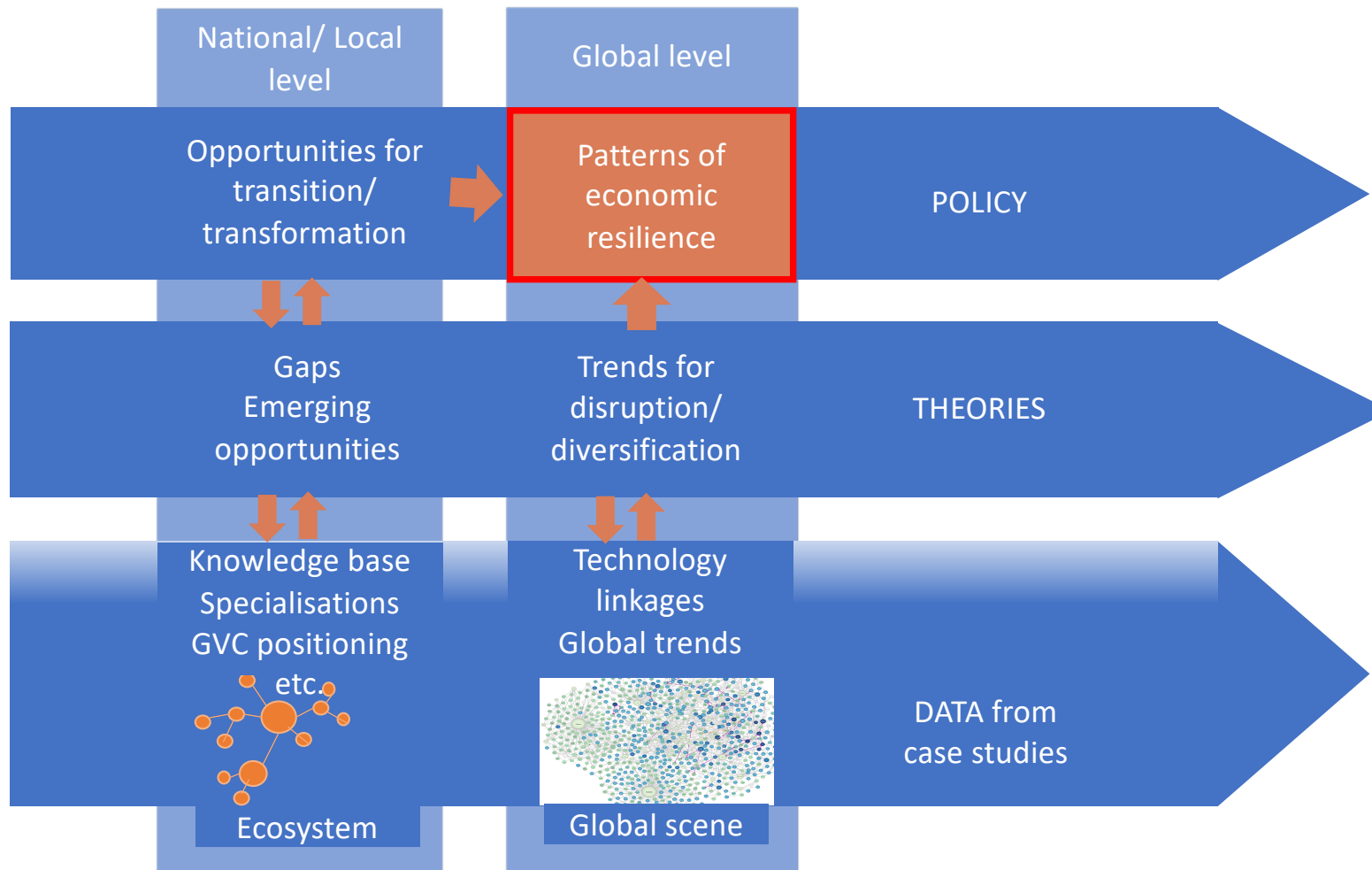
■ 2-digit NACE category with LQ > 1.5
 ■ 2-digit NACE category with RTA > 1.5
 ■ 2-digit NACE category with no specialisation

Mechanism of intelligence within the applications



- Data availability: refers to the need for the user to provide the essential input to the application, in order to obtain a result
- Computational complexity: is related to the feature of a tool to perform any computational process, such as calculation of indices, assessment of co-design processes, visualization of results, etc.
- Data interaction: apps whose outputs are used as inputs for other tools; ii) apps that receive feedback from other tools as input to perform their functionalities; and iii) apps that combine these two characteristics.

Open Access Toolkit within the TREnD project



Thank you!

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