USING SEMANTIC ANALYSIS TOOLS TO ANALYSE DATA FROM THE 2017 EC/OECD STI POLICY SURVEY
HANDS-ON EXERCISE

CSTP-TIP Workshop: Semantic Analysis for Innovation Policy
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1) Brief overview of the dashboard interfaces

2) Guided example

3) Two independent hands-on exercises
Dashboards overview

The STI Policy Compass is an international initiative of the OECD and the European Commission, which aims to support the works on science and innovation policy. It covers the OECD countries, the EU Member States and the major emerging economies. In addition, the data collected are used by the European Commission for the analysis and monitoring of the research and innovation policy responses and performance of EU Member States, notably in the context of the European Semester, and feed into the work of the Horizon 2020 Policy Support Facility and into the regular economic analyses produced by the European Commission.

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The database is based on country responses to the European Commission-OECD Science, Technology and Innovation Policy Survey.

Download STIP Compass model and taxonomies (N-triples) / Download latest STIP Compass data (XML)
Main Dashboard

Visualising 2017 STIP Survey data through different lenses:

✓ A country
✓ A theme (policy issue)
✓ A policy instrument
✓ A target group

Click to zoom-in the data:

For example, clicking on Norway will open the country dashboard providing an overview of country submitted data.

Another example: clicking on SMEs will open the target group dashboard providing an overview of data submitted by all countries on SMEs.
Each dashboard provides visualisations relative to the same four dimensions.

Example: SMEs dashboard

- How many initiatives do different countries have targeting SMEs?
- In which policy themes are SMEs involved?
- What policy instruments target SMEs?
- What are the related target groups?
What kinds of policies does *Finland* report in support of the *public research system*?

**Specific queries**

1) How *many initiatives* has Finland submitted?
2) What are the most frequently reported *target groups*?
3) What are the main *policy instruments* cited?
4) What are the main *responsible organisations*?
5) What are the main *policy themes* covered?
What kinds of policies does **Finland** report in support of the **public research system**?

**Specific queries:**

1) **Key caveat:** Interfaces provide data as reported by countries.
2) What are the most frequently reported **target groups**?
3) What are the main **policy instruments** cited?
4) What are the main **responsible organisations**?
5) What are the main **policy themes** covered?
Guided example:
Public research system in Finland

Public research system in Finland

Finland's research and innovation system is in the midst of several reforms aiming for closer cooperation between researchers, companies, and the societal actors. This is driven by not only the needs of the industry, but also many grand challenges, such as aging population, marginalization, growing social and healthcare expenses to mention a few. The Research and Innovation Council has drawn up a recommendation that Finland will be the most attractive and competent environment for excellent and innovation. Terve- and Finpro merge to form Business Finland, which will introduce new funding services (for more).

Target groups

Policy Instruments

Responsible Organisations

Themes
Target groups in public research system initiatives

MAIN TARGET GROUPS

Research and education institutions (HEIs / PRIs / Private labs)
Budgets ranging between <1 M EUR and +500 M EUR

Researchers, students and teachers
Budgets ranging between <1 M EUR and 100 M EUR

Finland
MAIN POLICY INSTRUMENTS

Several National strategies, agendas and plans

Mix of institutional funding and project grants, with the former being associated to higher budgets

Support to new research infrastructures
Responsible organisations for public research system initiatives

MAIN RESPONSIBLE ORGANISATIONS

Ministry of Education and Culture
(10 reported initiatives)

Academy of Finland
(5 reported initiatives)

Ministry of Economic Affairs and Employment
(4 reported initiatives)
Main policy themes addressed

Competitive research funding
(5 initiatives)

Open science and open access
(5 initiatives)
HANDS-ON EXERCISES
Exercise 1: How do countries compare in the KT Area?

What kinds of policies do France, Netherlands, and Germany report for public-private knowledge transfers?

Queries for each country

1) How many initiatives have countries submitted?
2) What are the 2-3 most frequently reported target groups?
3) What are the 2-3 main policy instruments cited?
4) What are the 2-3 main responsible organisations?
5) What are the 2-3 main policy themes addressed?

INSTRUCTIONS

1) Pair-up with your neighbour
2) Go to http://stip.oecd.org
3) Fill in your answers for Exercise 1 in the answer sheet

Afterwards, we will resume with a discussion where you will be able to share your findings and impressions.
Discussion on Exercise: Comparing countries

How did you find the exercise?

Possible questions for discussion

- What are your **main findings** from your analysis?
- What **comparisons** did you find most interesting?
- Was it **difficult to answer** any of the queries?
- Would you like to know **something else** from the data?
Exercise 2: Knowledge Transfer Policy Themes

What kinds of initiatives do countries report in the following policy themes?

**Commercialisation of public research results**

**Intersectoral mobility**

**Cluster policies**

Queries for each theme

1) **How many initiatives** are there reported?
2) What are the 3-5 **countries** report more initiatives for these themes?
3) What are the 2-3 main **target groups** addressed?
4) What are the 2-3 main **policy instruments** used?
5) Which other 2-3 **policy themes** are relevant?
Opening themes

http://stip.oecd.org

Governance
Public research system
Innovation in firms and innovative entrepreneurship
Public-private knowledge transfers and linkages
Human resources for research and innovation
Research and innovation for society
Digitalisation
ERA-related initiatives

ESRF: Infrastructural transformation of firms
Research and innovation commercialisation and public research results
Gender and development strategies
Gender in R&D
ESRF: Infrastructural transformation of firms
Research and innovation commercialisation and public research results
Gender and development strategies
Gender in R&D

High-performance computing research and equipment
Transfer and linkages strategies
Entrepreneurial capabilities and culture
STEM skills
Targeted support to SMEs
Financial support to business R&D and innovation
Science, technology and innovation culture
Internationalisation and cluster policies

Competitive research funding
International STI policy strategy and framework
Open science and open access policy coordination
Public research strategies

Near-to-market digital technology intelligence
Non-competitive research funding and innovation for health and health-related innovation
Third-party funding
STI human resource strategies

Intersectoral mobility

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Discussion on Exercise: Comparing themes

How did you find the exercise?

Possible questions for discussion

• What are your **main findings** from your analysis?

• What **comparisons** did you find most interesting?

• Was it **difficult to answer** any of the queries?

• Would you like to know **something else** from the data?
Thank you for your attention

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