SEMANTIC APPROACHES TO DATA ANALYSIS USING DATA FROM THE EC/OECD 2017 STIP SURVEY
USE CASE: KNOWLEDGE TRANSFER POLICIES

CSTP-TIP Workshop: Semantic Analysis for Innovation Policy
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Embedding taxonomies into the STI Policy Survey

• We run an international survey on national STI policies every two years, jointly with the European Commission since 2015.

• In the 2017 edition, data collection is more firmly structured by taxonomies, making responses more comparable and facilitating analysis. These taxonomies are:
  – An STI Policy Model (theme taxonomy) that structures the issues (questions) covered by the Survey
  – A policy initiative taxonomy (survey response unit)
    • A policy instrument taxonomy (e.g. innovation vouchers)
    • Taxonomies for target groups and budget ranges

• We plan to continue developing these taxonomies, including external inputs from an STIP Expert Group
New online survey tool: Data collected following the taxonomies

International survey on science, technology and innovation policies

- 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
Structured data → Semantic visualisation tools

Interfaces to access and visualise policy data now available at http://stip.oecd.org

Hands-on exercise on how to use them, with an emphasis on Knowledge Transfer after lunch!

14h30 – 16h00 @ Room CC20
Knowledge Transfer policy area:
Target groups and policy instruments

Target groups
- R&E institutions
- Researchers, students and...
- Firms
- Intermediaries
- Capital and labour
- Governmental entities
- Emphasised social groups

Policy instruments
- Direct financial support
- Guidance, regulation and...
- Governance
- Collaborative platforms...
- Indirect financial support
Knowledge Transfer policy area:
Semantic analysis of policy objectives

commercialisation
intellectual property
competitiveness
higher education research
research networks
patenting
networks
partnersing
research infrastructure
research excellence
critical mass
social challenges
public-private partnerships
intellectual property rights
knowledge transfer

productivity
training
research projects
research results
region
basic research
capabilities
clusters
energy
international cooperation

innovation system
innovation networks
education
private investment
scientific disciplines
exports

skills
standards
applied research
public investment
economic growth
patents
smart specialisation

research infrastructure
technological development
energy
international cooperation
Consider that, in the survey response, any policy initiative:

- May be linked to more than one theme.
  - Example: Competitive research funding and Collaborative research.

- May use more than one policy instrument.
  - Example: Grants for public research and technology transfer.

These links can be used to measure how themes and instruments are closely related to each other:
Business innovation themes are linked to public research system themes and research and innovation for society themes often through knowledge transfer.
Most initiatives use **direct financial support**

these are combined with

**guidance and regulation**
(e.g. IP incentives, technology transfer / business advisory)

and

**Collaborative platforms and infrastructures**
(networking & information services and databases)
Ongoing work

- How do countries report designing and implementing policy instruments?

- How do instruments, target groups and budget ranges vary depending on the policy issue at hand?

- What combinations of policy instruments are reported by countries?

- Are there cross-country patterns in these dimensions?