DIGITAL SCIENCE AND INNOVATION POLICY & GOVERNANCE

PROMISES OF DIGITALISATION

ANTICIPATORY INTELLIGENCE
to detect patterns of emerging research areas, technologies, industries, policy issues

POLICY FORMULATION AND DESIGN
to boost policy effectiveness and facilitate the development of integrated interagency policy design

PERFORMANCE MONITORING AND MANAGEMENT
to enable an open and constantly ongoing evaluation process

OPTIMISATION OF ADMINISTRATIVE WORKFLOWS
to streamline potentially burdensome administrative procedures

DIGITAL TECHNOLOGIES AND S&I POLICY

As science and research management become increasingly digitalised, new opportunities arise for linking datasets covering diverse areas of activity and impact, including:

• research funding
• administrative data
• publications and citations
• equipment inventories
• research data
• researcher profiles and
• social media presence

These linked datasets can be analysed – using digital technologies – to usefully complement more traditional policy data sources and support. They can provide overviews of innovation system dynamics and help link R&D inputs with outputs.
Objectives of the DSIP project

While digital science and innovation policy (DSIP) initiatives hold much promise, they also raise several challenges and risks. The project will allow policy-makers and researchers to make an informed assessment of the transformational potential and possible pitfalls of DSIP. It will also facilitate international mutual learning on DSIP, and explore the potential for greater international cooperation, for example, on data sharing and common standards and platforms.

CHALLENGES AND RISKS

DATA AVAILABILITY & QUALITY
irregular data availability, unstructured data formats, discriminatory access, high costs of data sharing, data ownership

INTEROPERABILITY
development of standards, unique identifiers and protocols, fragmentation of standards

ORGANISATIONAL DYNAMICS
organisational digital capabilities, openness to data sharing, routines supporting evidence-based policy

INVESTMENTS IN SKILLS
levels of digital skills among policy-makers, abilities to use data in policy-making

TRUST IN DIGITAL TECHNOLOGIES & ACTIVITIES
personal data protection, data ethics, concerns over automated decision-making, concerns over data misuse, data-driven discrimination

Project approach

The project is carrying out an international survey of DSIP initiatives to better understand their scope, uses, and challenges. The project is also focusing on a few selected issues in depth, including the potential use of DSIP in research assessment, the establishment and roles of interoperability standards, and the roles of the private sector. The project may also do case studies of national DSIP ecosystems.

Getting involved

The project’s success depends on the active participation of policy-makers, researchers and coordinators of national DSIP initiatives. To get involved, contact the DSIP project team or consult the project website for further information.

CONTACT DETAILS

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