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Resolver Service | Directory indicator | Prefix | Suffix

Risks and trust in pursuit of a well-functioning Persistent Identifier

Knowledge Exchange

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PID

What is it?

Why is it important?

Who is dealing with it?

What are they doing?

Where is it going?

Where should it go?

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What is a PID, why is it important?

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PID

- A **persistent identifier** (PID) is a long-lasting reference to a document, file, web page, or other object.
- Persistent Identifiers and their infrastructures are argued to be of **significant strategic importance** to modern-day research.
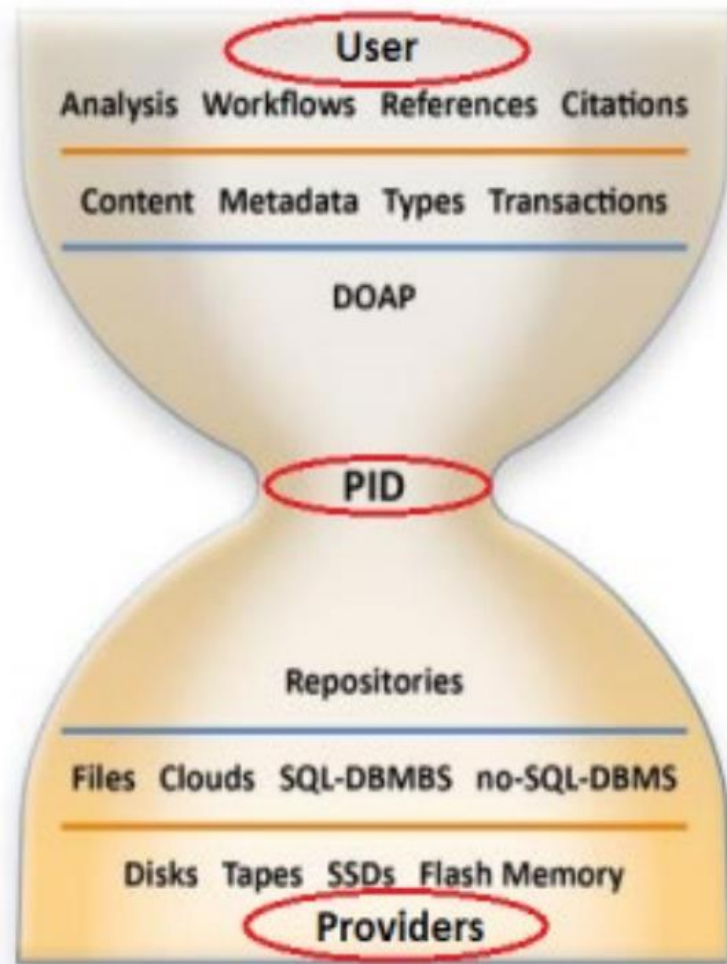- We need to better understand what is needed to build and exploit a well-functioning PID infrastructure.

FAIR Digital Object

Digital Object

Metadata

Services Interfaces

Identifier

DeiC
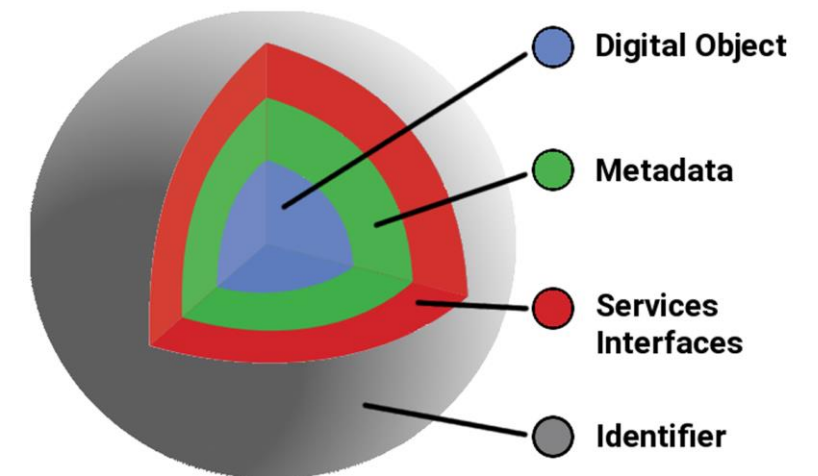
PID - at the Hourglass Waist

Science and innovation are increasingly dependent on complex data and on machines to analyse it.

"Simple principles and practices should enable a broad range of integrative and exploratory behaviours and support a wide range of technology choices and implementations, just as the Internet Protocol (IP) provided a minimal layer - the "waist" of an hourglass - that enabled the creation of a vast array of data provision, consumption, and visualization tools on the Internet".

It is thereby argued that the ability to uniquely identify any digital object constitutes the single most critical point – i.e., the waist of the hourglass.

Therefore, Persistent Identifiers (PIDs) are introduced as a crucial infrastructure concept. A well-functioning PID Infrastructure has become one of the most essential generic scientific digital infrastructure elements to pursue

KNOWLEDGE EXCHANG

*"To enable **open scholarship** by supporting an information infrastructure on an international level"*

A collaboration of 6 national organisations within Europe

DFG DFG German Research Foundation

Jisc (United Kingdom)

DeiC DeiC Danish e-infrastructure Coopertion

SURF (Netherlands)

CSC IT Centre for Science (Finland)

CNRS Centre national de la recherche scientifique (France)

KNOWLEDGE EXCHANGE
Mission & Objectives

- Compare and inspire strategies, policies and operational practice, within **open scholarship**

- Improve partners' performance sharing practice and lessons learnt and exploring beneficial cooperation

- Explore new developments in the area of Higher Education and Research infrastructures and services

- Facilitate networks of experts to exchange views and provide recommendations on desired developments

- Commission studies in areas of mutual interest: Members + Consultants

- Advise and influence peer organisations, national and international policy bodies and the EC

Scoping a PID analysis:
Risks and Trust in Pursuit of a Well-functioning Persistent Identifier Infrastructure for Research

Vision:

"*A well-functioning PID infrastructure for research encapsulates and implements the PID concept globally across all scientific areas*".

Ambition:

"*Identify, through investigation, analysis and conclusion, what might be the best possible strategic and operational recommendations to achieve a well-functioning PID infrastructure for KE member states and beyond*"

A well-functioning PID infrastructure

- Technically **user-friendly** and capable of uniquely and persistently identifying any digital object, deemed worthy of preservation.

- Globally **accepted** (interoperable in its core design and technology) such that it independently of technology and geography always points to the data owners account and related metadata (i.e., resolves to an explanatory landing page), if not also the actual data.

- Organisationally and economically **sustainable**, i.e., that the PID can still resolve even in the case of organisational change or economic turmoil - in principle for ever.

- Politically **trustworthy** – in that there is minimal risk of sudden non-interoperability, legal obstacles or exploitive vendor lock-in.

It is noted that the above elements are necessary for any identification system for research output of any kind. Hence our PID scope covers all resolving systems, i.e., all types of PIDs

DeiC

A *Draft* Report and its Contents

Working title:

"***Building the Plane as We Fly It":***
the Promise of Persistent Identifiers:

Contents:
1 Introduction (challenge)
2 Take-away messages
3 Community
4 Risks

5 Trust
6 Open infrastructures
7 Recommendations
8 References
9 Appendices

Methodological Approach

- Surveys and analyses (literature study, interviews, content analysis, design of the case studies)

- A focus narrowed from a broad theoretical analysis of what constitutes risk and trust to the case studies

- Looking at the conditions of success and failure of concrete PIDs or PID use cases under the lenses of risk and trust

- The KE Open Scholarship Framework

The KE Open Scholarship Framework

A framework that maps issues and considerations for Open Scholarship across a variety of scales, phases and arenas
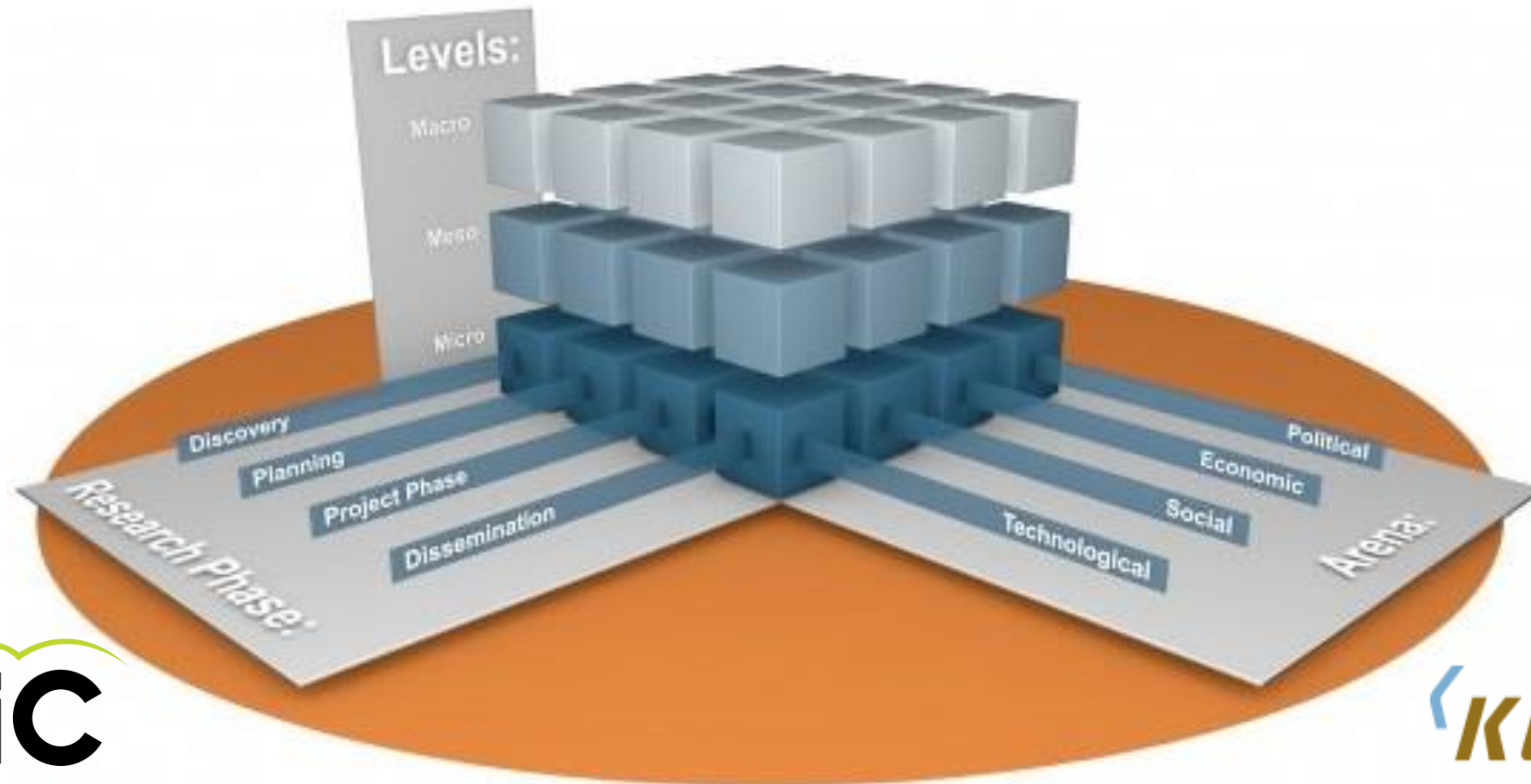
The Main Results of Surveys and Analyses

- **Openness** is critical for a sustainable and trustworthy PID infrastructure, this relates to data, documentation but also communication on risks.

- Globally, **political and social risks** are perceived as more important than technological failure.

- **Sustainability** is considered as a key **factor of trust,** while the term covers not only economical (funding, business model) but also political (strategy, governance) and social aspects (community support, acceptance).

- **Coordination** is crucial and more important than the selection of "good PIDs".

Recommendations on all dimensions of the Open Scholarship Framework

- National-level stakeholders

- Research funders

- PID Service Providers

- Institutions (Research-Performing Organisations, RPOs)

- Researchers in their institutional context

- Publishers (including Diamond OA publishers)

- A possible PID Federation

- Knowledge Exchange

Thank you for your attention

Questions
now or to
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?

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