

Digital Object Identifiers and Unique Authors Identifiers

to enable services for data quality assessment, provenance, access

<http://www.digoiduna.eu/>

Paolo Bouquet

Dept. of Engineering and Information Science –
School of Management, Business and Economics

University of Trento (Italy)



The context of the study

Scientific Data e-Infrastructures: supporting the transition to e-Science

Presentation at the Alliance for Permanent Access Conference
24 November 2009, The Hague

Kostas Glinos
Head of Unit INFSO F3
European Commission

The complexity of the data deluge challenge

Preservation, access, data formats, discovery and navigation, protection, trust, certification, quality control, persistent identifiers, IPR, ethical use, ...

Governance and management, funding models, sustainability

Data repository infrastructure

Interplay EU – Member States

Increased connectivity
Virtual scientific communities
Data deluge
Massive cross-linkage of data
and datasets
Cloud-based infrastructures
...

standardisation, best practice,

Objectives of the study

The objective of the study is twofold

1. Assessing the **impact** and **risks** of adopting a solution for ID management for digital objects and authors in the development of Europe-based ICT-Infrastructures for e-Science
2. Giving **policy makers** a simple and yet powerful instrument to map different **strategic objectives** onto different **socio-technical solutions**



Main outcomes of the study

The DIGOIDUNA study will deliver:

1. a comprehensive analysis of the **relevant initiatives** in the area of digital object and author identifiers
2. a fine-grained **SWOT analysis** connected to the establishment in Europe of e-Infrastructures for scientific data repositories using an identification system
3. a list of **forward looking scenarios**, main **challenges** and **recommendations** for policy makers

Results will be formally presented in a **special event** which will take place in Brussels in mid September 2011



The DIGOIDUNA team



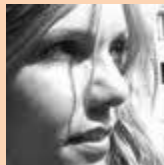
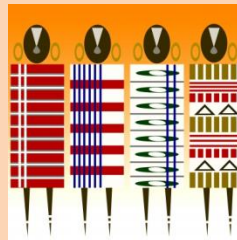
Angela Fogaroli
University of Trento



Paolo Bouquet
University of Trento



Heiko Stoermer
University of Trento



Barbara Bazzanella
University of Trento



Ruben Riestra
INMARK (Spain)

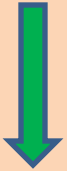


Martin Dow
Acuity Unlimited (UK)



A typical pattern ...

Let's talk about digital objects and authors identifiers in e-Infrastructures!!



Hey, XYZ is going to provide a solution for managing identifiers for people and digital documents in your organization



Wait a minute ... mmmh ... what do you mean ... but what if ... I mean ...
Let's talk about it!



Examples of concerns

What do I do with my other identifiers?

My organization cannot give up control on information access

How much is it going to cost me?

How much overhead this will produce in curation?

Is it going to become an industry standard?

Can I trust the authority behind the system?

Is it going to be sustainable in the long run?

I'm going to lose control over my data!

Is this system going to ensure long term preservation?



A very complex issue



Policy



Economical



Social



Technical

← Features of existing solutions →

A very complex issue



Policy



Economical



Social



Technical

Centralized / distributed platform

A very complex issue



Policy



Economical



Social



Technical

Actionable / not actionable IDs

A very complex issue



Policy



Economical



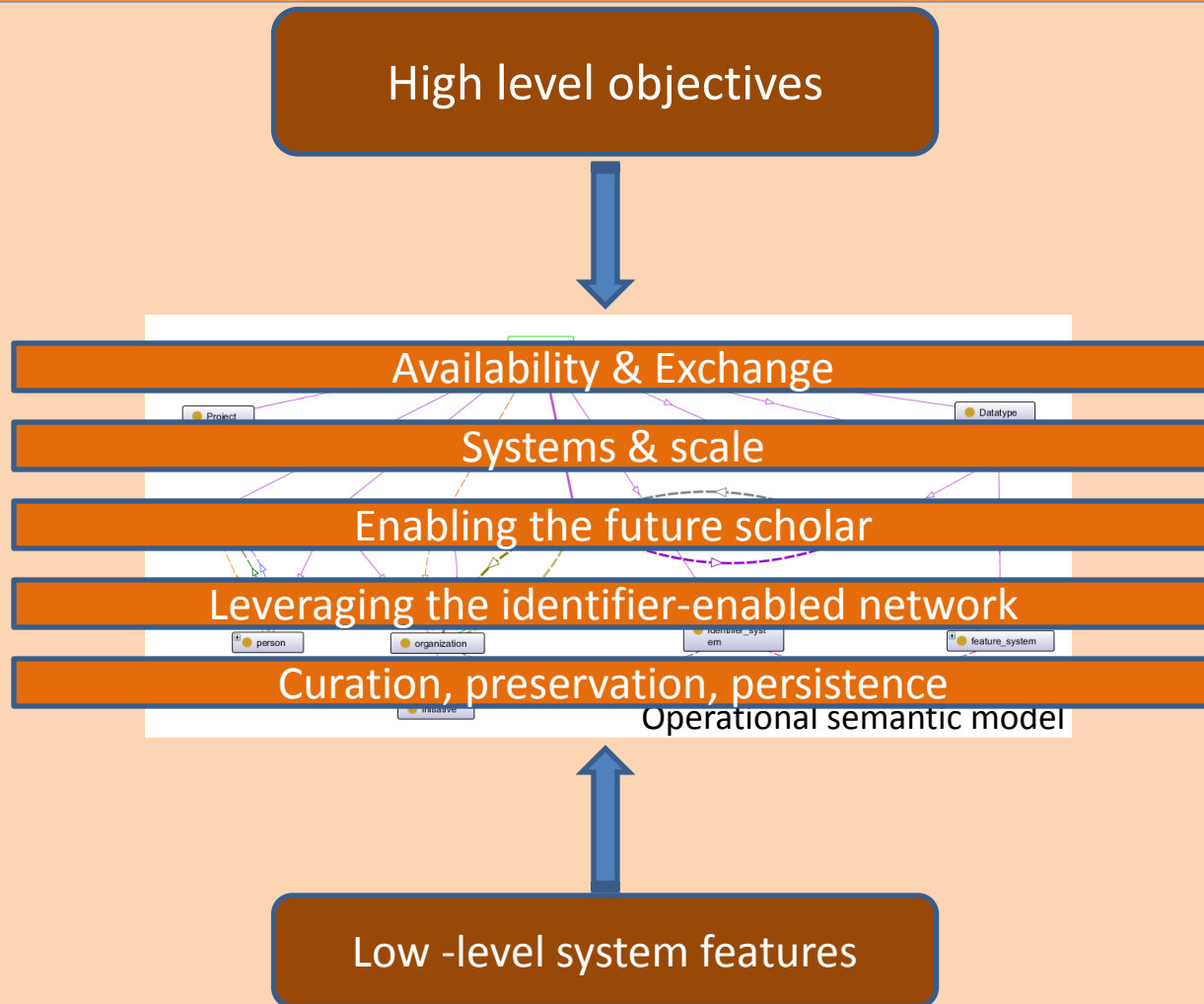
Social



Technical

← Granularity of identification →

Our approach to manage this complexity



Eliciting low-level features: analyzing technical systems

Handle

DOI

Others ...

Data Cite

Low-level features

ORCID

URN:NBN

ARK

URI - Linked Data



Eliciting high-level objectives: talking to different stakeholders

Librarians

Publishers

National & Intl funding org

National libraries

Scientists,
researchers

Right organizations

High level objectives

Research institutes,
scientific organizations

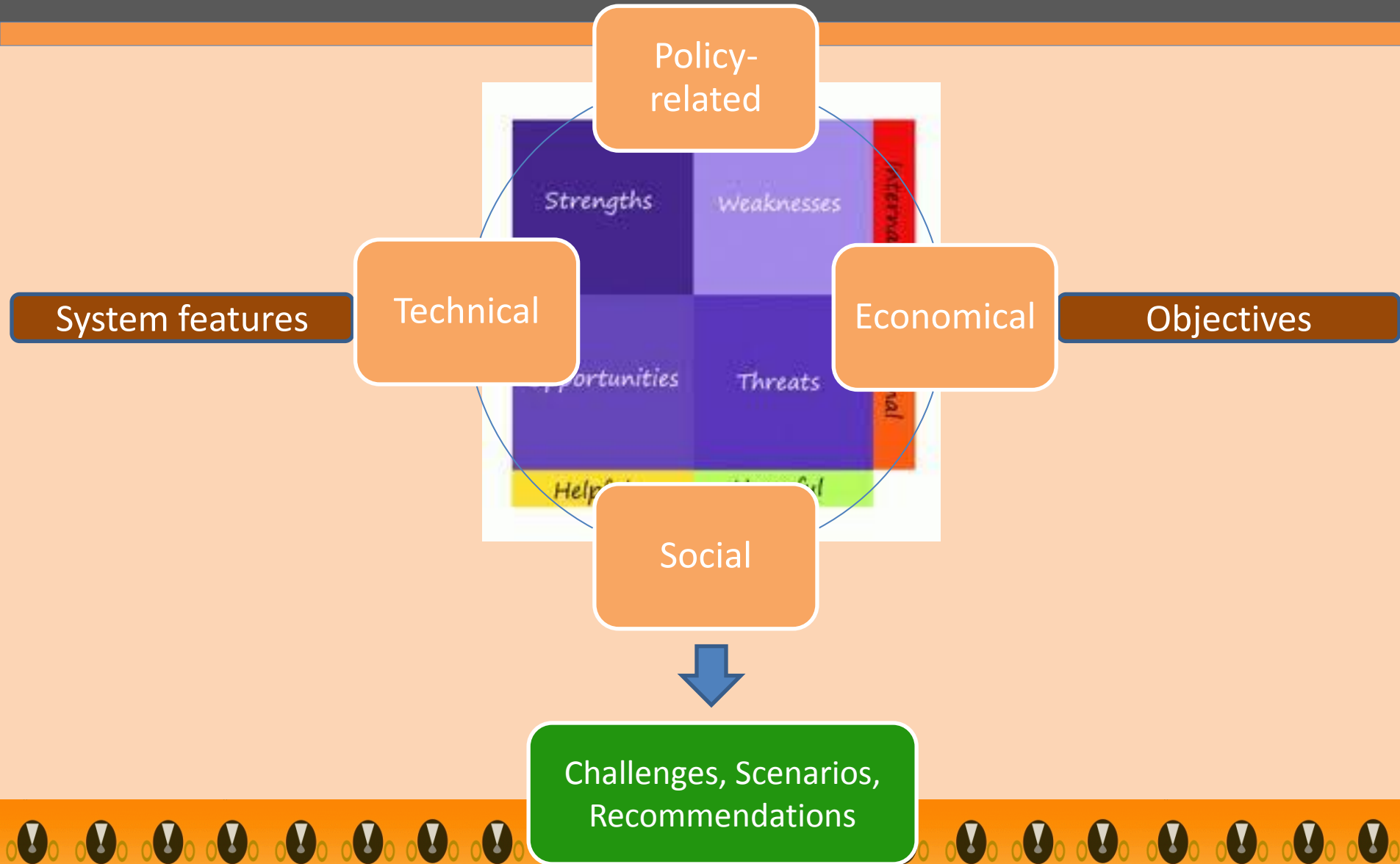
Dataset communities

Standardization initiatives

European Commission



SWOT analysis



Example questions DIGOIDUNA is trying to answer

1. Should the European Commission **invest** in an “EU-id” initiative (in the context of SDIs) for DOIs and DAIs, or rather adopt (a combination of) existing solutions?
2. What is the (social, economical, technical) **impact** of adopting a given solution? And what are the connected **risks**?
3. How can be people and institutions be **motivated** to join and adopt the selected solution?
4. How can we secure the long-term **sustainability** of a potential solution? What are the main available business models to sustain such an infrastructure? How should **stakeholders** be involved?
5. What is the relationship between the EU **policy** on identifiers and national and institutional policies?



Call for action

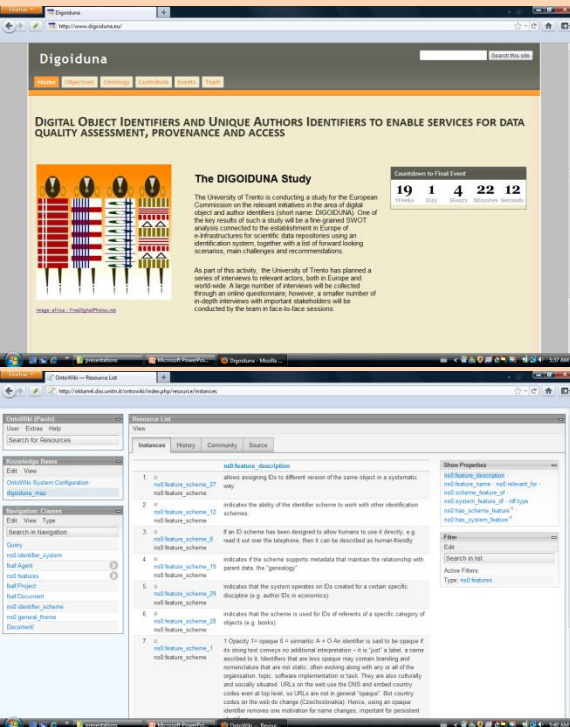
We need your collaboration:

1. Come and talk to us before the end of the day. Perhaps we can schedule a follow-up meeting / conf call
2. Provide details of the appropriate contact(s) within your organization we can follow up for DIGOIDUNA
3. Help raise awareness across your professional network about the online DIGOIDUNA questionnaire we will circulate soon
4. Send us links to relevant people / initiatives / documents / systems / projects that you are aware of in the domain of identifiers for digital objects and authors
5. Join us at the final DIGOIDUNA event in Brussels (September 2011)

... and please feel free to send us any ideas or feedback that may help us to improve the DIGOIDUNA study!



Stay connected with DIGOIDUNA



The DIGOIDUNA web site at <http://www.digoiduna.eu/>

The upcoming DIGOIDUNA OntoWiki at <http://www.digoiduna.eu/ontology>



By email at info@digoiduna.eu

