Next generation research evaluation:
the ACUMEN Portfolio and web based information tools

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Presentation Outline

1. ACUMEN portfolio
2. Implementation plan
3. Towards portability
Academic Careers Understood through Measurements and Norms

European 7th Framework collaborative project
Capacities, Science in Society 2010
Grant Agreement: 266632

9 institutional partners, in 7 countries

website: research-acumen.eu
Evaluation Machines [1]

- Researchers cannot opt out of evaluation
- Decreased openness to question evaluation practices
- Institutional support for evaluation is often stronger than evidence about its use
- Pressure to do evaluation is often stronger than the pressure to do good evaluation

Research Evaluation Gap

➡ discrepancy between evaluation criteria and the social and economic functions of science

➡ evaluation methods (esp. qualitative) have not adapted to increased scale of research

➡ available quantitative measures are often not applicable at the individual level

➡ lack of recognition for new types of work that researchers need to perform
ACUMEN research

- Assessment of scientometric indicators in performance evaluation
- Assessment of webometric (and altmetric) indicators
- Comparative analysis of peer review systems in Europe
- Analysis of gender dimension in researcher evaluation
- Ethnographic study of important evaluation events

aimed at empowering researchers (and evaluators)
ACUMEN research

assessment of scientometric indicators in performance evaluation

assessment of webometric (and altmetric) indicators

comparative analysis of peer review systems in Europe

analysis of gender dimension in researcher evaluation

ethnographic study of important evaluation events

Common Data Strategy

15 European countries
Bulgaria
Czech Republic
Denmark
Estonia
Finland
France
Germany
Hungary
Israel
Italy
Netherlands
Poland
Slovenia
Spain
United Kingdom

4 Academic Disciplines
(a) astronomy and astrophysics
(b) public and occupational health
(c) environmental engineering
(d) philosophy (including history and philosophy of science)
ACUMEN Portfolio

Career Narrative
Links expertise, output, and influence together in an evidence-based argument; included content is negotiated with evaluator and tailored to the particular evaluation.

Expertise
- scientific/scholarly
- technological
- communication
- organizational
- knowledge transfer
- educational

Output
- publications
- public media
- teaching
- web/social media
- data sets
- software/tools
- infrastructure
- grant proposals

Influence
- on science
- on society
- on economy
- on teaching
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Evaluation Guidelines
- aimed at both researchers and evaluators
- development of evidence based arguments (what counts as evidence?)
- expanded list of research output
- establishing provenance
- taxonomy of indicators: bibliometric, webometric, altmetric
- guidance on use of indicators
- contextual considerations, such as: stage of career, discipline, and country of residence
Aims: Portfolio & Guidelines

- Instrument for empowering researchers in the processes of evaluation
- Taking into consideration all academic disciplines
- Suitable for other uses (e.g. career planning)
- Able to integrate into different evaluation systems
Implementation Plan
ACUMEN-2

CWTS (lead partner)
- research
  - EU eval policies
  - national policies
  - indicator standards
  - link portfolio to DBs

ARMA
- int’l coordination
  - international policies
  - research management
  - standards & practices

euroCRIS
- implementation
  - CERIF
  - CASRAI
  - ORCID
  - others?

translate portfolio concept to CERIF/CASRAI
Policy Alignment (ACUMEN 2)

National & EU Research Evaluation Policies

common evaluation elements

portfolio expression(s) in CERIF

standard mode on the basis of commonality

ACUMEN Portfolio

EU research evaluation protocol

Spain eval policy

Finland eval policy

Greece eval policy

…

UK RCUK/REF

Netherlands NWO/SEP

France eval policy

Norway eval policy

Denmark eval policy
CERIF - interchange solution

... by making use of standard identifiers (ORCID, DOI, etc...)

... and based on standard business definitions (CASRAI)
Potential Obstacles

- increased quantity of evaluations and added pressure on evaluators
- researcher information often locked in institutional CRIS systems
- validation workflows can create a bottleneck (and validation not portable)
- provenance of research objects, especially with regard to non-standard output
- profile fatigue: institutional website/CRIS, grant applications, ResearchGate, Academia.edu, LinkedIn, etc.
Profile Portability

Interoperability among research object metadata benefits from persistent IDs that are both open and accessible across systems

...this is possible today
Proposal

Author ID

DOI
- article
- dataset
- software
- other
- OA version

Open ID Stack

Organization

Funding source
Open ID Stack

CRIS systems
export to CERIF/XML for use elsewhere

open to use by Web services
thank you!

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