Sustainable Business Models for Data Repositories

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Sustainable business models for data repositories

Increasing need for data repositories and data stewardship:

• Increasing data volume presents a challenge;

• Growing requirements for data stewardship present an even greater challenge

• FAIR data in trustworthy data repositories, as a cornerstone of the envisaged EOSC
Sustainable business models for data repositories

Sustaining digital data infrastructure is a major issue for science policy:

• One of the more challenging aspects of the EOSC
• Project funding versus long-term responsibilities
• Inelastic structural funding versus growing requirements.
RDA Interest Group

RDA Cost Recovery Interest Group, also supported by WDS and CODATA

- Landscape survey of 25 data repositories
- Identified major income streams and funding structures
- Typology of income streams
- SWOT analysis of income streams at RDA workshop

Report *Income Streams for Data Repositories*
Feb 2016
https://zenodo.org/record/46693#.XV09JC2Q3OQ
Adoption: OECD/Global Science Forum

- OECD provided an ideal setting for this work
- Continuation of the work under the umbrella of OECD/GSF
- International expert group comprising nominees from GSF delegates and from RDA, WDS and CODATA

- Around 50 interviews in total
- Thorough economic analysis
- Innovative funding models
- Cost optimization

- Stakeholder workshops:
  - To identify and appraise possible innovative income streams and to identify approaches to cost restraint.
  - To test possible business models with stakeholders

https://doi.org/10.1787/302b12bb-en
Five high level recommendations

**Recommendation 2: All research data repositories should have a clearly articulated business model.**

Actions needed to develop and maintain a successful business model include:

* **Understanding the lifecycle phase of the repository's development** (e.g. the need for investment funding, development funding, ongoing operational funding, or transitional funding).

* **Developing the product/service mix** (e.g. basic data, value-added data, value-added services and related facilities, or contract and research services).

* **Understanding the cost drivers and matching revenue sources** (e.g. scaling with demand for data ingest, data use, the development and provision of value-adding services or related facilities, research priorities, and policy mandates).

* **Identifying revenue sources** (e.g. structural funding, host institutional funding, deposit-side charges, access charges, and value-added services or facilities charges).

* **Identifying who the stakeholders are** (e.g. data depositors, data users, research institutions, research funders, policy makers).

* **Making the value proposition** to stakeholders (e.g. measuring impacts and making the research case, measuring value and making the economic case, informing, and educating).

Because the context is dynamic, these actions should be revisited regularly throughout a data repository's lifecycle.
Elements of a repository business model

**Identify Stakeholders:**
- Data depositors
- Data users
- Research institutions
- Research funders
- Philanthropic funders
- Policy makers

**Understand Lifecycle Phase:**
- Investment funding
- Development funding
- Operational revenue
- Transitional funding

**Demonstrate Value:**
- Measure impact
- Make science case
- Measure value
- Make economic case
- Inform & educate

**Identify Revenue Sources:**
- Structural funding
- Host institutional funding
- Deposit-side charges
- Access charges
- Services/facilities charges

**Develop Product / Service Mix:**
- Research data
- Research facilities
- Value-adding services
- Contract services
- Research services

**Understand Cost Drivers & Match to Revenue Sources:**
- Scale with ingest
- Scale with use
- Scale with value-adding
- Scale with research priority
- Scale with policy mandates

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Make the Value Proposition
To conclude: what has been the impact?

- Adoption and continuation of the work of the RDA IG by OECD, a highly influential international policy organization;

- Report that landed on the desks of Science Ministries of all OECD member states, informing policy makers about the issues at stake and presenting suggestions for improvements;

- Report that offers valuable suggestions and tools for repository managers, that can e.g. be useful in discussions with funders.
Thank you for listening!

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