Current Status of Research Information Management in Peru

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About CONCYTEC

1. Public body in charge of the development of policies, regulations and promotion of activities related to Science, Technology and Technological Innovation (STI) in Peru.

2. Responsible for promoting and supporting STI activities in different fields, through financial instruments and schemes.

3. CONCYTEC is the governing body of the National System of Science, Technology and Technological Innovation (SINACYT).

-- Law 28613 (Law for National Council of Science, Technology and Technological Innovation)
Ensure coordination and coordination between different actors of the National System of Science, Technology, and Innovation, focusing their efforts on meeting the technological demands in priority strategic areas, with the aim of increasing added value and competitiveness, improving the quality of life of the population and contribute to the responsible management of the environment.

– National Plan for STI 2006 – 2021
The need for reliable information

The SINACYT does not have an information system that allows its stakeholders to manage (collect, systematize, store and communicate) the data generated during the execution of its activities.

Each member institution of the SINACYT has its own management mechanisms, which makes it difficult to share and homogenize information.

This situation does not allow to properly manage the STI activities, evaluate the progress levels of the initiatives and evaluate the results of the same.

Two-fold diagnostic on current RIM status

01

National level RIM (CONCYTEC)
- Self-diagnostic

02

Institutional level RIM
- Visit to universities and public research institutions
- Participation in OCLC-euroCRIS Global Survey
Multiple systems with insufficient interoperability
Ad-hoc data models
Dependent on data reported by researchers
Inability to generate reliable indicators
02 - Diagnostic on Institutional level RIM
(October 2017 - January 2018)

OCLC-euroCRIS Global Survey on RIM Practices

- Most valuable for CRIS systems status
- 39 respondents (~20%)

Visit to Research Institutions

- Semi-structured interview with Research Managers
- Focus on their needs, goals and perception
- Direct contact with Library and IT staff, too
- 53 universities and public research institutions visited (~30%)
National Context for Research Information Management

- IBRD 4-year-long project in place for strengthening STI activities nation-wide.
- Two-years since enacting of new Law for Universities.
- Mandate to establish Research Vice-Rectorates (previously Research Offices under Academic Vice-Rectorates).
- Mandate to report on Research Activities and Outputs to education overseeing superintendency.
- Mandate to establish Institutional Repositories (147 DSpace IRs already in place).
- Most Universities are finishing the setup or reorganization of their Research Management areas.
- Urgent need for Information Systems to facilitate their operation.
Roles and areas responsible for Research Information Management

- Mostly in charge of Research Offices in coordination with Academic Units
- Low participation of Libraries, typically with small budget and staff

Source: OCLC-euroCRIS Global Survey on RIM Practices
Drivers/Needs for RIM activities

- Most important declared driver is Supporting **institutional reputation** and **strategic decision making**

Base: Institutions with a Live Implementation or in Process of Implementing (n = 13)

- Supporting institutional reputation and strategic decision making: 85% Extremely Important, 15% Important
- Improving services for researchers: 69% Extremely Important, 23% Important, 8% N/A or Not Sure
- Managing annual academic activity reporting: 62% Extremely Important, 38% Important
- Supporting institutional compliance: 62% Extremely Important, 31% Important, 8% N/A or Not Sure
- Supporting expertise discovery: 54% Extremely Important, 38% Important, 8% N/A or Not Sure
- Recording institutional research facilities and their use: 46% Extremely Important, 46% Important, 8% N/A or Not Sure

Source: OCLC-euroCRIS Global Survey on RIM Practices
Drivers/Needs for RIM activities

- In the interviews, the most important declared driver for research information gathering was external reporting to SUNEDU.
- Information is gathered from different institutional areas and offices.
- Only a few institutions have digital support for managing awards/grants and monitoring research projects.
- RIM processes are typically carried out without a RIM system.
CRIS/RIM Systems - Implementation status

- Only 15% with Live Implementation
- 54% considering/procuring/implementing (!)

Source: OCLC-euroCRIS Global Survey on RIM Practices
Almost all existing systems have been developed in-house or by an external local provider.

No commercial products, incipient adoption of open-source.

Source: OCLC-euroCRIS Global Survey on RIM Practices
Live CRIS/RIM Systems Performance

- General low score Better for basic functionality (Profile information, research outputs and internal reporting)
- Generally unsuccessful for supporting RIM processes

Base: Institutions with a Live Implementation (n = 6)

- Reuse (in CVs, biosketches, other web pages): 17% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Registry of institutional research outputs: 17% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Internal reporting: 17% Very Successfully, 33% Successfully, 83% Somewhat Successfully, 17% Unsuccessfully
- Awards/grants management workflows: 50% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Annual academic activity reporting workflows: 67% Very Successfully, 17% Successfully, 17% Somewhat Successfully, 17% Unsuccessfully
- Reporting societal impact: 33% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Compliance and open access to publications: 17% Very Successfully, 33% Successfully, 17% Somewhat Successfully, 33% Unsuccessfully
- Publicly available researcher profiles: 33% Very Successfully, 33% Successfully, 67% Somewhat Successfully, 17% Unsuccessfully
- Identifying collaborators or expertise: 33% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Compliance and open access to research datasets: 17% Very Successfully, 33% Successfully, 50% Somewhat Successfully, 17% Unsuccessfully
- External (i.e., National) research assessment: 50% Very Successfully, 17% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully
- Reporting scholarly impact: 33% Very Successfully, 33% Successfully, 33% Somewhat Successfully, 17% Unsuccessfully

Source: OCLC-euroCRIS Global Survey on RIM Practices
CRIS/RIM Systems - Internal interoperability

- Some interoperability with internal systems

![Bar chart showing interoperability with internal systems](image)

Base: Institutions with a Live Implementation (n = 6)

- Institutional repository: 50%
- University finance and accounting system: 33%
- Human resources system: 33%
- Student information system: 33%
- Electronic Thesis/Dissertation (ETD) repository: 33%
- Research data repository: 33%
- Institutional authentication system: 33%
- Other: 17%
- Active data management system: 17%
- Grants management system: 17%
- Project management system: 17%
- None of the above: 0%
- Library management system: 0%
- Enterprise business intelligence or analytics system: 0%
- Tech/knowledge transfer (e.g., patents): 0%

Source: OCLC-euroCRIS Global Survey on RIM Practices
CRIS/RIM Systems - External interoperability

- Practically inexistent interoperability with external systems.

Base: Institutions with a Live Implementation (n = 6)

- None of the above: 80%
- Publication metadata sources (e.g., Web of Science, Scopus, ArXiv): 20%
- Researcher/author ID registry/database (e.g., ISNI, ORCID, ResearcherID, Scopus ID): 20%
- Other:
  - Research metrics sources (e.g., Altmetric, ImpactStory, Plum Analytics): 0%
  - Aggregated research data portals (e.g., RDDS, ANDS): 0%
  - Aggregated research portals (e.g., NARCIS, OpenAire, SHARE): 0%
  - Organization ID registry/database (e.g., ISNI, GRID): 0%
  - National or regional reporting system (e.g., educational/R&D statistics): 0%
  - Government and/or private grants award system: 0%

Source: OCLC-euroCRIS Global Survey on RIM Practices
- CONCYTEC implemented ORCID integration in national CV platform two years ago.
- Still, very limited support for ORCID and other researcher identifiers in institutional systems.

Base: Institutions with a Live Implementation (n = 6)

- None of the above: 67%
- ORCID: 33%
- Scopus ID: 17%
- PubMed ID: 17%
- Other: 0%
- VIAF: 0%
- ResearcherID: 0%
- ArXiv ID: 0%
- ISNI: 0%
- National authority file (LC/NACO, DAI, etc.): 0%

Source: OCLC-euroCRIS Global Survey on RIM Practices
CRIS/RIM Systems - Organization identifiers

- None at all.
- Typically, no organizational information is registered in current systems.

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Base: Institutions with a Live Implementation (n = 6)

Source: OCLC-euroCRIS Global Survey on RIM Practices
Other needs reported by Research Managers

- Research Managers requested that, in order to facilitate external reporting, national authorities such as Ministry of Education, SUNEDU and CONCYTEC should reach a consensus about what information would be periodically requested from them and how should it be represented.

- Research offices would benefit greatly from having a way to know which projects are being developed by other national institutions, in order to create synergy and avoid duplication.

- There is a great need for discovering potential evaluators for projects and publications, without conflicts of interest.
Expectations regarding CONCYTEC role

- CONCYTEC visit was very welcome at every institution.
- Institutions expect CONCYTEC to lead the homogenization and standardization of scientific information management, as well as the knowledge transfer of best RIM practices from the leading international institutions.
- Institutions expect CONCYTEC to align the research information requirements from the different government stakeholders.
- Other regional and sectorial government entities expect CONCYTEC to be able to report STI indicators on a geographical and thematical level.
- Particular value was given to CONCYTEC effort for reducing the inequality gap in research activities and fund allocation between the capital city and other regions in the country.
Ongoing initiatives

1. Publication of complete results of the study on Current Status of RIM in Peru

2. Building key international partnerships and agreements

3. Pilot project for gathering national-level research information from primary sources into a CERIF compatible system

4. Technical DSpace/DSpace-CRIS Workshop -- Arequipa, July 18

5. First National Conference on Research Information Management -- Arequipa, July 19-20
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