Towards a National CRIS: Building and Perspectives for Open Science in the Dominican Republic

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Agenda

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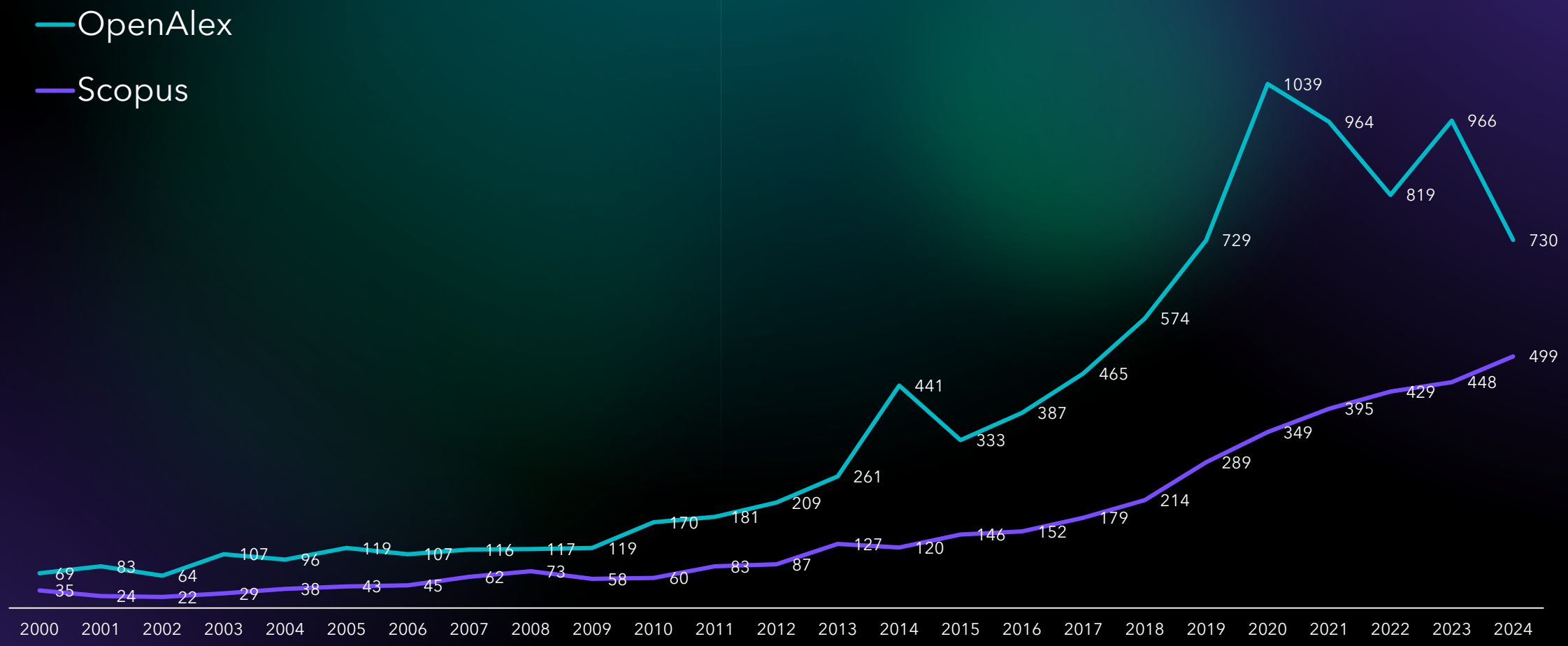
Introduction

There are a total of 56 academic institutions in the Dominican Republic and the adoption of CRIS in the Dominican Republic:

- 2020 at the Santo Domingo Institute of Technology (INTEC)
- 2021 Iberoamerican University (UNIBE)
- 2023 Open University for Adults (UAPA)

Notably, INTEC has approved a project for developing a National CRIS using its own funds, an effort led by a multidisciplinary team of researchers aiming to integrate the country's leading research institutions into a collaborative system.

Dominican Republic output 2020-2024

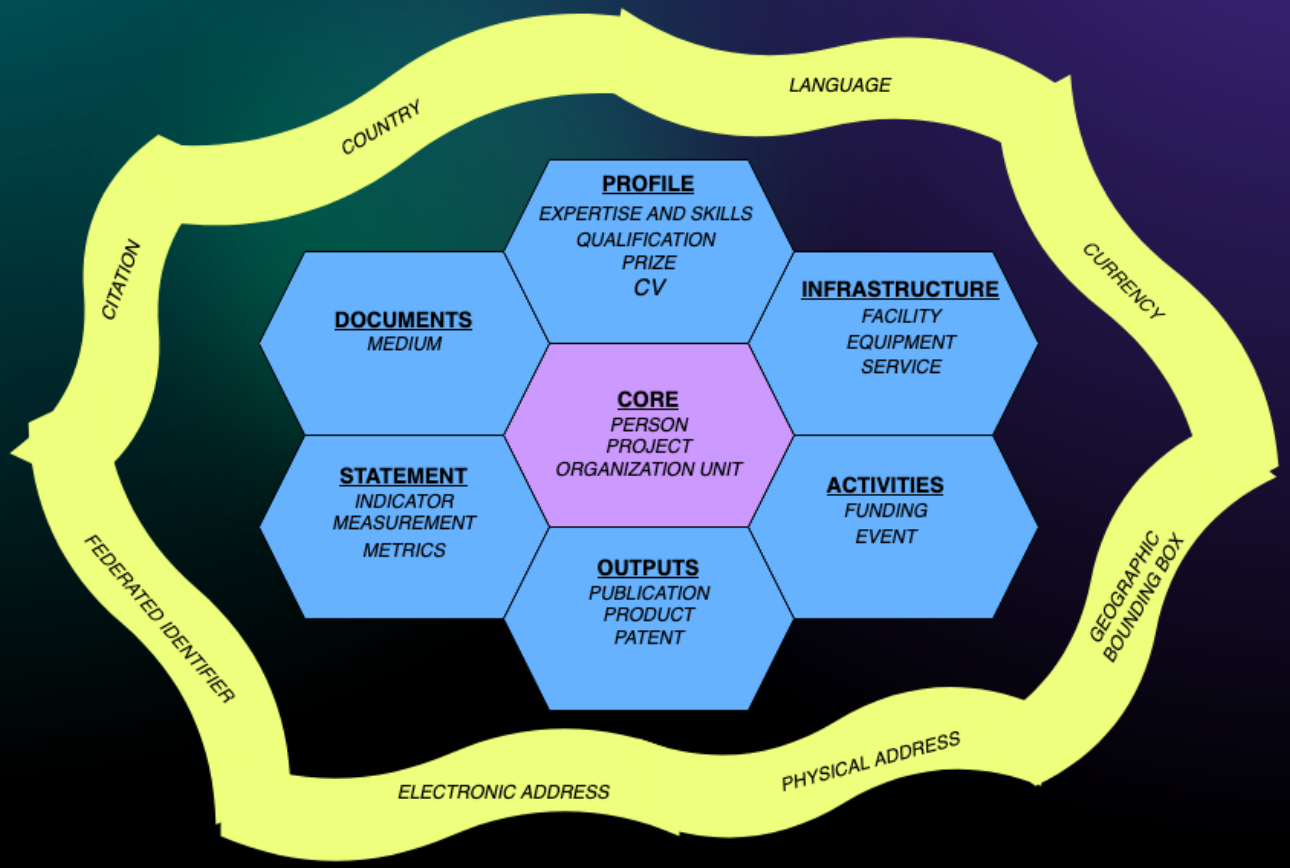


Less than 40% of Academic institution in Dominican Republic have an operational research department

Introduction

- The **objective of this project** is to develop a digital platform that centralizes and showcases research results, functioning as a national information repository.

- This initiative aligns with the FAIR, ensuring that scientific information is easily accessible, interoperable, and reusable, following the Common European Research Information Format (CERIF)



Development and tool

- The platform is built upon **DSpace** architecture, utilizing the **CRIS** component developed by 4Science specifically for research information management.
- The 4Science CRIS component for DSpace offers comprehensive functionality for managing researcher profiles, publications, projects, and institutional relationships within the CERIF framework.

Data Sources

LOCAL SOURCES:

- **Academic Journals, Open Journal Systems (OJS**): National digital journals.
- **National Repositories:** Open repositories from research institutions.
- **Ministry of Higher Education:** Publications from FONDOCyT-funded projects.
- **Research Institutions:** Affiliated institutions will upload and update researcher profiles.

INTERNATIONAL SOURCES:

- **DOAJ:** Harvesting publications and open-access journals.
- **OpenAlex:** A free and open catalog of scientific publications, authors, institutions, and journals.
- **OpenAIRE Research Graph:** Aggregating data and relationships among research agents, such as publications, software, and organizations.
- **Crossref:** scientific sources enables the validation of references through persistent DOIs, facilitating access, interoperability, and traceability of academic knowledge.

Project Phases and Current Status

- **Phase 1:** Identification of Research Institutions - Conducting a comprehensive analysis of research institutions in the Dominican Republic that will participate in the project.
- **Phase 2:** Data Collection and Standardization - Establishing clear protocols to ensure the consistency and quality of information obtained from each institution.
- **Phase 3:** Platform Development - Designing the platform architecture, considering security, scalability, and usability. Developing an intuitive user interface, based on the CERIF format for data visualization.
- **Phase 4:** Dashboard Design - Defining key metrics and establishing standardized indicators to reflect research performance in participating institutions.
- **Phase 5:** Evaluation and Testing - Conducting extensive usability and functionality tests with the participation of institutions and researchers.
- **Phase 6:** Dissemination and Training - Creating a dissemination and training plan to promote SIIRD among research institutions and other stakeholders.

Academic Leadership Perspectives on the SIIRD Initiative

We shared an evaluation via email to learn the perspectives of research and academic leaders (13 results) on the SIIRD and obtained information that supports the initiative, as a way to create a scientific culture in the Dominican Republic.

- **92%** of participants perceive a need for a SIIRD.
- **92%** of respondents believe that SIIRD will foster open science in the Dominican Republic.
- **100%** of institutional participants agree to share their research information with the national CRIS, contingent upon obtaining appropriate institutional authorization.
- **77%** of respondents anticipate that the national CRIS will facilitate significant scientific transformation within the next five years

Conclusion

- The creation of the SIIRD represents a unique opportunity to enhance the visibility of scientific research.
- Foster a culture of open science in the country. Through the integration of data from various institutions.
- Contribute to evidence based strategic decision making and support the growth of science and innovation in the Dominican Republic.
- However, the development of this tool faces several challenges, including the need to ensure interoperability between systems, integrating data from diverse sources, and ensuring the project’s long-term sustainability.

Recommendations for SIIRD Success:

01

Strengthening Institutional Cooperation: Fostering commitment and collaboration among universities, research centers, and governmental bodies.

02

Investing in Training: Ensuring that researchers and technical staff are trained to use the platform and adhere to open science principles.

03

Ensuring Sustainability: Guaranteeing financial continuity and institutional support to maintain and improve the system in the future.

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