Brokerage Event Towards a FAIR Compliant Commons in the ASREN Region - The Somalia Experience

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Outline

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Some Background

• The Somali higher education sector has in the past 6 years recognized research as a mission critical pillar for international and national accreditation and started a trend of research production and management commitment

• SomaliREN’s Digital Repository Services Initiative started as a response to this research focus of the member institutions

• Previous efforts to deploy DSpace as the platform for the repositories did not turn out as expected
  • A key challenge was the dependence on external resources to implement the system and provide support
  • Also, an easier to manage and maintain software platform for repository management was needed
Motivations

- Lack of localized open access research output
  - The limited research outputs produced by local institutions were not adequately showcased to interested constituencies and global citizens outside academic institutions

- Limited research output visibility
  - This has negatively branded the universities as in-competent to produce any form of research content

- Quality of the research output needed to be improved

- No measures against localized plagiarism that can severely impact academic integrity
Opportunities and Enablers

- Partnerships with key players in the Open Access and FAIR principles compliant repository sphere, especially INFN and the University of Catania
- Knowledge transfer, technical assistance and support with cloud infrastructure was available at UbuntuNet Alliance although we used our own infrastructure for the current deployment
- Available local expertise that could absorb and build on top of the skills and knowledge transfer
- A growing demand of digital repositories within our community
Implementation Issues

- Limited infrastructure resources to deploy the platform
- Limited technical resources
- New skills needed for the underlying technology
- No identity federation in Somalia
- No National Open Access Policy of Somalia for Higher Education
- Need for end-user community adoption of the repository which is a key limiting factor to the exponential growth of the repository content
SORER Status

- SORER is live now at https://sorer.somaliren.org.so/
- Conducted Two Introductory workshops so far:
  - Workshop for Rectors, VCs and Heads of Member Institutions
  - SORER Technical Workshop for University ICT directors and librarians
- 8 different Communities have been created so far on it by the members
- 18 researchers have already registered to SORER
- 15 different publications and presentations have already been published
- Open to non-SomaliREN users (thanks to the concept of “Communities”)
- Every research output published on SORER will get a DOI for easy identification (Thanks to UbuntuNet Alliance)
- SORER technical guide has been prepared and published on the repository
SORER has been configured and deployed using the Synthetic procedure to replicate the INFN Open Access Repository, which was originally written for the deployment of NADRE in Ethiopia.

**SORER:**
- Adopts leading-edge technologies in the domain of digital repositories such as INVENIO
- Relies on containers and containers’ orchestrators for maximum reliability and scalability
- Exploits the concept of “communities”, which is central in the Zenodo architecture, to cope with several aggregations of contents: per University, per Department/Faculty, per project, etc.
- Supports DOI minting and versioning
- Is compliant with FAIR principles
- Is compliant with Plan S requirements
Lessons Learned

• Technical feasibility of any project should be ensured during the planning stage
• Openness in research and open access is critical for quality research output
• Openness is also key to tackling the plagiarism ‘pandemic’
• Centralization of the repository for communities with shared interest and outlook can simplify the implementation, operation and support of the repository.
What is Next for SORER?

• Development of strategies to make SORER part of the graduation thesis and conference organization workflows.
• Develop strategies and policies for enhancing the quantity and quality of publications and content in the SORER database
• SomaliREN to work with the relevant parties to prepare the National Open Access Policy of Somalia for Higher Education
• Promote Open Access/Open data in Somalia and across the continent to make science more efficient, reliable, and responsive to societal challenges
• Finalize the preparation of extensive resources based on the development of SORER in partnership with INFN and the University of Catania; and support other NRENs in the deployment and operationalization of repositories based on INVENIO and Zenodo
And last but not least...

“If you can't pay it back, pay it **forward.**” — Catherine Ryan Hyde.

*Together with our friends at INFN and the University of Catania, we are ready to support other NRENs in the deployment of similar solutions that are compliant with the Open Access and Open Science principles.*
THE END

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Thank you
Grazie