Research Visibility in the Global South
Towards Increased Online Visibility of Research in Zambia

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University of Zambia
Zambia presently has six (6) public HEIs and 60 registered private HEIs. However, there is little or no online visibility of scholarly research output generated by these entities.
### Introduction (2)

<table>
<thead>
<tr>
<th>ranking</th>
<th>World Rank</th>
<th>University</th>
<th>Det.</th>
<th>Presence Rank*</th>
<th>Impact Rank*</th>
<th>Openness Rank*</th>
<th>Excellence Rank*</th>
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<td></td>
<td>20041</td>
<td>16142</td>
<td>10778</td>
<td>6008</td>
</tr>
</tbody>
</table>

Research output is also key topic for Webometrics, but including not only formal (e-journals, repositories) publications but also informal scholarly communication. Web publication is cheaper, maintaining the high standards of quality of peer review processes. It could also reach much larger potential audiences, offering access to scientific knowledge to researchers and institutions located in developing countries and also to third parties (economic, industrial, political or cultural stakeholders) in their local community.

We intend to motivate both institutions and scholars to have a web presence that reflect accurately their activities. If the web performance of an institution is below the expected position according to their academic excellence, university authorities should reconsider their web policy, promoting substantial increases of the volume and quality of their electronic publications.

December 12, 2018
Introduction (3)
Research Goals

1) Empirically determine online visibility of scholarly research output.

2) Identify appropriate tools and services for improved online visibility.
Approach and Methods

1) Content analysis of HEI IRs
   ● OAI-PMH protocol used to harvest metadata
   ● OAI-ORE protocol used to harvest bitstreams

2) Tooling for increased visibility
   ● Open source platforms for effective dissemination of content
Content Analysis of HEI IRs (1)

Customer service management in the retail banks in Zambia

Atanga, Muyenga

Banks
Retail banking
MBA THESIS
Customer service

Copperbelt University, School of Business.

Content Analysis of HEI IRs (1)

Content Analysis of HEI IRs (2)

- **Step #1: Harvesting digital objects**
  - OAI-PMH used to harvest metadata
  - OAI-ORE used to harvest resources

- **Step #2: Processing harvested objects**
  - Metadata to identify structures
  - Bitstreams to help classify ETDs
1) Only two public HEIs in Zambia have IRs.

2) HEI IRs have noticeably low content.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Count</th>
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<tbody>
<tr>
<td>University of Zambia</td>
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<tr>
<td>Copperbelt University</td>
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<tr>
<td>Kwame Nkrhuma University</td>
<td>—</td>
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<tr>
<td>Mulungushi University</td>
<td>—</td>
</tr>
<tr>
<td>Mukuba University</td>
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</table>
Content Analysis of HEI IRs (4)

1) CBU IR last updated in 2014.
2) UNZA IR not consistently updated.
3) Content ingested in batches in UNZA IR
4) UNZA pre-print ingestion negligible.

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**Copperbelt University**

<table>
<thead>
<tr>
<th>Publication Date</th>
<th>Number of Publications</th>
</tr>
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<td>2016</td>
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**University of Zambia**

<table>
<thead>
<tr>
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<tbody>
<tr>
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<td>2016</td>
<td>600</td>
</tr>
<tr>
<td>2017</td>
<td>400</td>
</tr>
</tbody>
</table>
Content Analysis of HEI IRs (5)

- Batch ingestion of content in UNZA IR
- Ingestion of content conducted by Library.
Content Analysis of HEI IRs (6)

- **Quality of metadata**
  - Lack of use of controlled vocabularies
  - Missing metadata elements; only 38.66% of ETDs were classified into their respective types.

- **Submission workflows**
  - Self-archiving is almost non-existent

- **Born digital vs. digitised bitstreams**
  - 5.6% of bitstreams are digitised
Tools for Increased Visibility

1) Electronic journals
2) Subject repositories
3) Downstream aggregate services
None of the seven (7) official journals at UNZA are online [...]
The goal is to facilitate global online visibility of scholarly research output.
Subject Institutional Repositories

School of Education Subject Repository

The School of Education subject repository serves to collect, preserve and distribute digital material generated in the School of Education at The University of Zambia.

Communities in DSpace

Select a community to browse its collections.

- Department of Adult Education and Extension Studies
- Department of Education Administration and Policy Studies
- Department of Language and Social Sciences
- Department of Library and Information Science
- Department of Mathematics and Science Education
- Department of Primary Education
- Department of Psychology, Sociology and Special Education
- Department of Religious Studies

Recently Added

Tourism in Livingston
Chief, Benjamin (UNZA PRESS, 2018-08-20)
Tourism is important in each and every country. Tourism is the source of foreign exchange, is one of the key to development in each and every country.

Tourism in Livingston
Kamangu, Andrew, Kamangu, Andrew (UNZA PRESS, 2018-10-01)
Zambia is one of the countries found in southern Africa with best wildlife and natural beauty that one cannot afford to miss out on. It has national parks and private game reserves in which wildlife is reserved. The private ...
We are working towards setting up aggregate services [...]

National ETD Portal
Theses and dissertations for Universities in Zambia

Recent Submissions
1. Theory and policy in export credit insurance and finance: an analytical and empirical study
   Tue, 11 Dec 2018 18:03:43 UTC
2. Land tenure and agricultural development in Zambia
   Tue, 11 Dec 2018 18:03:43 UTC
3. State, trade unions and labour policies: theoretical issues and evidence from Zambia
   Tue, 11 Dec 2018 18:03:43 UTC
4. Export promotion possibilities in the industrial sector of Zambia: a neo-classical approach
   Tue, 11 Dec 2018 18:03:43 UTC
5. The 1980 decentralisation and district level planning in Zambia
   Tue, 11 Dec 2018 18:03:43 UTC

Collection Statistics

<table>
<thead>
<tr>
<th>Collection</th>
<th>Total</th>
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<tbody>
<tr>
<td>Copperbelt University</td>
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<tr>
<td>University of Zambia</td>
<td>1100</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>1268</strong></td>
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</tbody>
</table>

http://lis.unza.zm:8081/portal
Conclusion

- **Summary**
  - Content analysis.
  - Open source tools.

- **Potential future work**
  - Automatic classification of existing objects.
  - Challenges and perceptions of using IRs.
  - Browser plugins for effective workflows.
  - Techniques for capturing descriptive metadata.
  - Collaboration with key stakeholders.
Bibliography

URL: http://www.parliament.gov.zm/node/3097

DOI: 10.1145/379437.379449

DOI: 10.1108/07378830510636300
Questions?
Comments?
Thoughts?
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Lighton Phiri, University of Zambia