A Multi-Faceted Multi-Stakeholder Approach for Increased Visibility of ETDs in Zambia

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ETD ’19 | Porto, Portugal | November 6–8, 2019
Introduction (1/3)
• The university of Zambia has had a functional Institutional Repository since 2012, with a significant uptake of Electronic Theses and Dissertations (ETDs).

Introduction (3/3)

- Ingestion of ETDs is not timely
- Huge time gaps between submission and eventual ingestion of ETDs
- ETDs have missing and incorrect descriptive metadata
Current ETD Submission Workflow

- **Key stakeholders**
  - Graduate students—Manuscript preparation and submission
  - Directorate of Research and Graduate Studies (DRGS)—Manuscript verification
  - The UNZA Library—Manuscript ingestion into IR
    - Metadata preparation and association
    - Ingestion via DSpace submission workflow
  - **ONLY two individuals responsible for metadata tagging and ingestion**
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Current Work (1/3)

• Exploration of effective submission workflow that involve multiple stakeholders
  • Integration of workflow into IR submission workflow to eliminate current manual process

“Multi-Stakeholder Approach for Effective Deposit of Repository Objects”
Angela Nyirenda, MA LIS (Current).
Current Work (2/3)

• Using machine learning techniques to automatically classify ETDs
  • Cut down on potential errors resulting from manual association of metadata
  • Reduce the amount of time taken to ingest ETDs into the IR

• Implementation of tools and plugins that interface with the classification models
Current Work (2/3)

98.1%  
ETD Type  
0.99—Precision  
0.75—Recall  
0.83—F-Score  
- ETD No. of Pages  
- Random Forests

81.1%  
ETD Collection  
0.82—Precision  
0.81—Recall  
0.81—F-Score  
- ETD Abstract  
- SGD Classifier

81.7%  
ETD Subject  
0.80—Precision  
0.77—Recall  
0.77—F-Score  
- Title+Abstract+MeSH  
- SGD Classifier

November 8 2019
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

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<tr>
<td>University of Zambia</td>
<td>1100</td>
</tr>
<tr>
<td>Total</td>
<td>1268</td>
</tr>
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Conclusion

• We are working towards a broad goal of increasing visibility of ETDs in Zambia
  • Public and private Higher Education Institutions

• We are working towards Zambia’s Vision 2030 goal of because an information and knowledge-based society
  • Make valuable research by postgraduate students accessible by government and non-profit organisations
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