



# AUTOMATIC SUMMARISATION OF ELECTRONIC THESES AND DISSERTATIONS FOR INCREASED MEDIA ENGAGEMENT

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## ABSTRACT

There students pursuing studies with Higher Education Institutions (HEIs) are often required to undertake some research work resulting in the publication of the research results in the form of Electronic Theses and Dissertations (ETD) [1]. These manuscripts contain a wealth of insights in social, economic and technological issues affecting society. The authors of these manuscripts provide possible solutions to challenges that are encountered by members of our society. Although many EHI have set up Institutional Repositories (IR) to harness benefits of research-finding contained in these manuscripts for academic and pedagogical values, the solutions contained in them are rarely used to guide decision-making and directing policymaking. The value of the results encompasses social and economic impact that would result from the application of the ideas espoused in them.

## INTRODUCTION

Higher Education Institutions (HEIs) in Zambia, like in many other countries, require students pursuing tertiary education to undertake some form of academic research, which normally results in production of a report, thesis or dissertation [2]. As the number of these manuscripts continues to grow, HEIs have turned to Digital Libraries (DLs) to preserve the wealth of information contained in these documents [3].



Figure 1: University of Zambia Repository home page

## AIMS OF THE STUDY

The aim of this study is to determine whether automatic text summarisation can increase media engagement with research results contained in the IRs of the University of Zambia (UNZA).

## LITERATURE REVIEW

Relevant literature on the subject was reviewed to broaden the researchers' understanding of the concepts that have a bearing on the results of this research. This summarized in

Table 1: Summary of Literature Review

TITLE	AUTHOR(S)	SUMMARY	GAP
Research Visibility in the Global South: Towards Increased Online Visibility of Scholarly Research Output in Zambia	L. Phiri	The study investigates the only presence established by University of Zambia and Copperbelt University, challenges that affects their visibility, and proposes solutions.	The research does not low engagement that the general members of the community have with research results.
Driving forces behind the management of Institutional Repositories: Qualitative evidences	U. A. Adam and K. Kiran	The study investigates the way IRs are managed, challenges faced and, recommends strategic development and policy enforcement to address identified challenges.	The study scope does not include the uptake of research findings or means to increase the impact of research findings on policy formulation.
The challenges of automatic summarization	U. Hahn and I. Mani	The researchers investigated summarization tools and methods used in automatic text summarization using abstraction or extraction approaches.	The study did lays a foundation for the application of AI to making long technical manuscripts easier to read.

## OBJECTIVES

The research will be guided by the following objectives:

- 1.To determine the extent of mainstream media coverage of research findings.
- 2.To investigate challenges Journalists face synthesising long documents such as ETDs and publishing articles about them.
- 3.To implement summarisation models for summarising ETDs for media coverage.
- 4.To evaluate the journalists' prescription of the effectiveness and usability of the summarisation tool.

## REFERENCES

- L. Phiri, 'Research Visibility in the Global South: Towards Increased Online Visibility of Scholarly Research Output in Zambia', 2018.
- [2] U. A. Adam and K. Kiran, 'Driving forces behind the management of Institutional Repositories: Qualitative evidences', Malays. J. Libr. Inf. Sci., vol. 26, no. 3, pp. 33–56, Dec. 2021, doi: 10.22452/MJLIS.VOL26NO3.2.
- [3] H. Suleman and L. Phiri, 'SIMPLE DIGITAL LIBRARIES', Cape Town University, Cape Town, 2013.
- [4] Steinberger, J., & Ježek, K. (2012). Evaluation Measures for Text Summarization. Computing and Informatics, 28(2), 251–275. Retrieved from <https://www.cai.sk/ojs/index.php/cai/article/view/37>

## EXPECTED RESULTS

Based on available literature and preliminary observations, the expected results are as follows:

- There is very limited research results being published in public media.
- Journalists face a number of challenges in publishing articles based on ETDs which might include the demand for articles that increase viewership and readership.
- Automatic text summarization might help overcome some of the challenges faced in publishing research findings in the media.
- Alternatively, automatic summarization might not make any significantly impact, in which case there would be need to re-evaluate some of the research objectives.

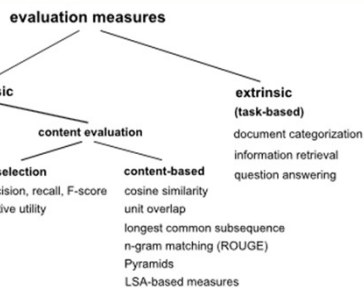


Figure 2: The taxonomy of summary evaluation measures [4]

## RESEARCH DESIGN

**Extent Of Mainstream Media Coverage:** Articles from top online media publications in Zambia will be examined to determine the extent to which research results have been published in the last 5 years.

**Challenges Journalists face in Publishing Research Findings:** Purposely selected journalist involved in sourcing and publishing new in the media will be requested to provide information help shade more light on the challenges faced in publishing research results from IRs and possible solutions.

**Implement Summarisation Models For Summarising ETDs:** ETDs will be harvested from the UNZAIR and an text summarisation model will be implemented to summarize the said manuscripts.