Chapter 7
Delivering the Next-Generation Research Repository: The Challenges of Institutional Repositories and the Need for a New Approach

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ABSTRACT

Academic libraries are looking for ways to grow their involvement in and scale-up their support for research activities. The successful transition depends to a large extent on the library’s ability to systematically manage data, break down information silos and unify workflows across the library, research office and researchers. Data repositories are at the heart of this challenge, yet often institutional repositories are not built to address the needs of modern research data management due to inability to store all research assets, lack of consistent data models, and insufficient workflows. This chapter will present a new approach to research data management that ensures visibility of research output and data, data coherency, and compliance with open access standards. The authors will discuss a ‘Next-Generation Research Repository’ that spans multiple data management activities, including automated

DOI: 10.4018/978-1-5225-8437-7.ch007
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data capture, metadata enrichment, dissemination, compliance-related workflows, automated publication to scholarly profiles, as well as open integration with the research ecosystem.

INTRODUCTION

Institutional repositories that collect a university’s research assets in one place and make them publicly available, serve an important role. These repositories, which are usually managed by the library, help disseminate the work of faculty members to a broader academic community, making it easier for other researchers to find, use, and build on the knowledge generated by a university. They also help universities comply with rules requiring research funded with public tax money, to be made publicly available. But in many ways, the institutional repositories that exist today are not meeting the needs of libraries or the research community effectively. For instance, they often lack a clear and cohesive structure, which makes research assets hard to find. They are also largely cumbersome to maintain, with inefficient workflows that make it difficult to deposit new research outputs, link publications with their underlying data sets, and add comprehensive metadata to make these assets discoverable.

As a result, the research assets of universities are not being showcased as well as they could be and staff is spending too much time on these labor-intensive tasks.

In this white paper, we will make the case for how a next-generation research repository can solve these challenges. With input from research universities around the world, we will outline a vision for a next-generation research repository that meets the needs of both researchers and institutions far more effectively (“Implementing FAIR Data Principles”, n.d.).

The Limitations of Current Repositories

Institutional repositories can mean different things to different universities but generally, they are intended to store the content created by scholars at the university and make this material accessible to a wider audience. In most cases, university libraries are tasked with managing these repositories, sometimes with the help of their IT department.

Here are some of the many ways the repositories being used today fall short of meeting institutional needs:
Authorship Pattern in Interdisciplinary Studies: Implications for Knowledge Transfer and Holistic Coverage of Nigeria
[www.igi-global.com/article/authorship-pattern-in-interdisciplinary-studies/206867?camid=4v1a](http://www.igi-global.com/article/authorship-pattern-in-interdisciplinary-studies/206867?camid=4v1a)

MOOCS Applications in Open Distance Learning (ODL): Issues and Challenges
C. Baskaran (2018). *Library and Information Science in the Age of MOOCs* (pp. 163-177).
[www.igi-global.com/chapter/moocs-applications-in-open-distance-leaning-odl/204191?camid=4v1a](http://www.igi-global.com/chapter/moocs-applications-in-open-distance-leaning-odl/204191?camid=4v1a)