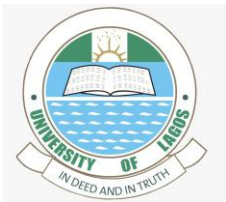
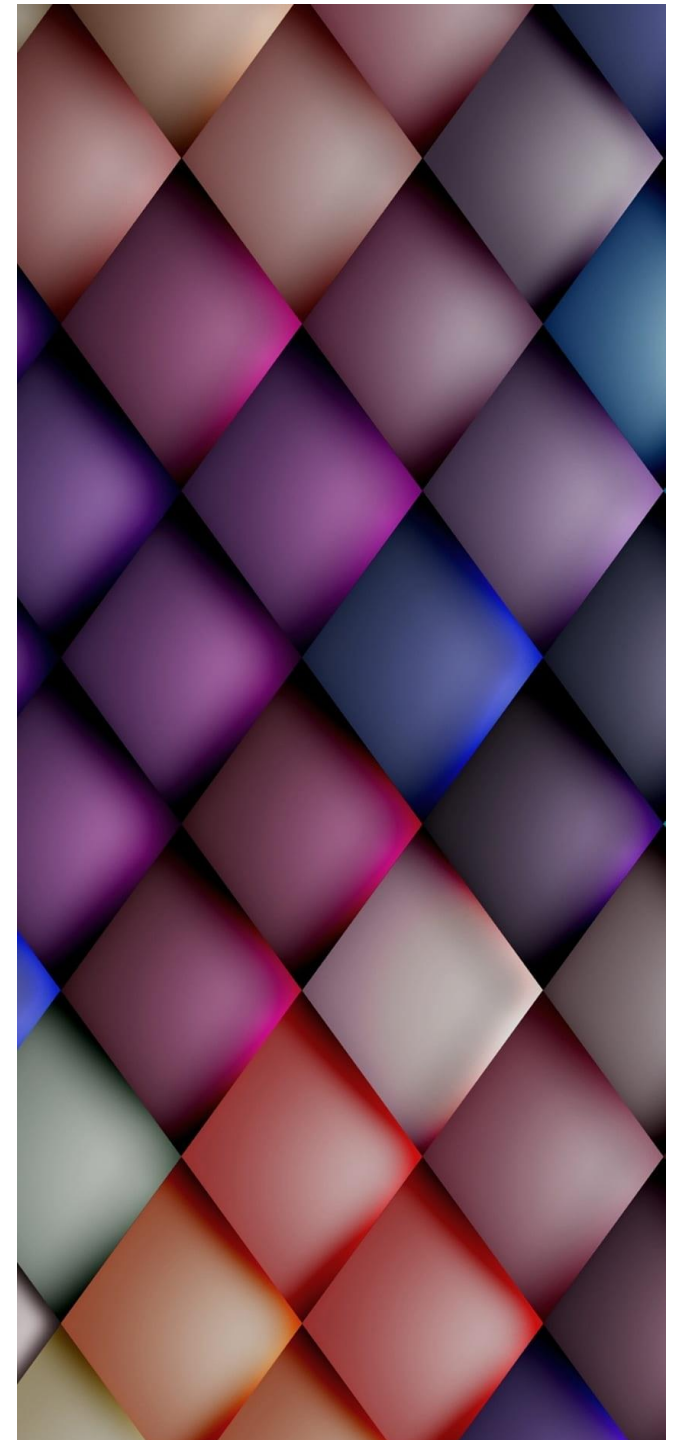


# New wine in new wineskins: Research Data Management (RDM) by Academic Libraries as innovative value added service in higher education communities

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27th October 2023



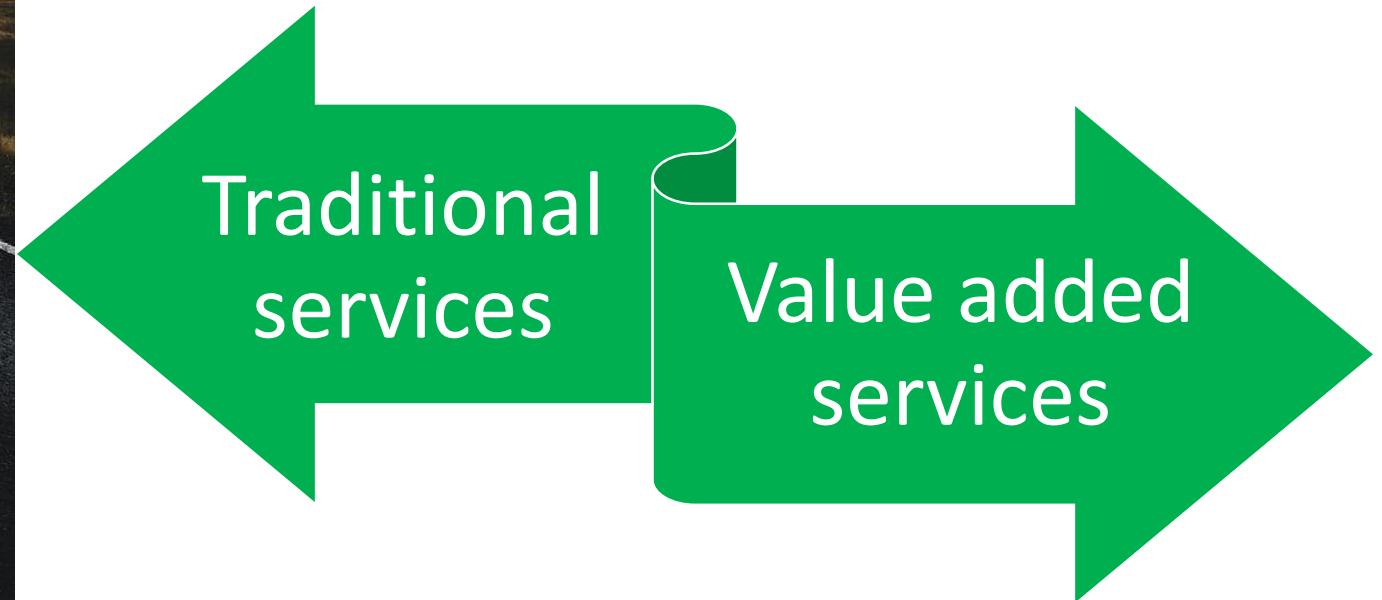
# Outline

- Context
- Case Scenario
- Research Data management and why is it important
- Benefits of RDM
- Research Focus
- Findings
- Key Takeaways
- Conclusion & Recommendation

# Context



- Libraries, prior now, have been involved in acquisitions, cataloguing and classification of print and e-resources
- Wang (2013) notes that these are “the traditional value chain of libraries” and can no longer effectively serve the library’s core values.



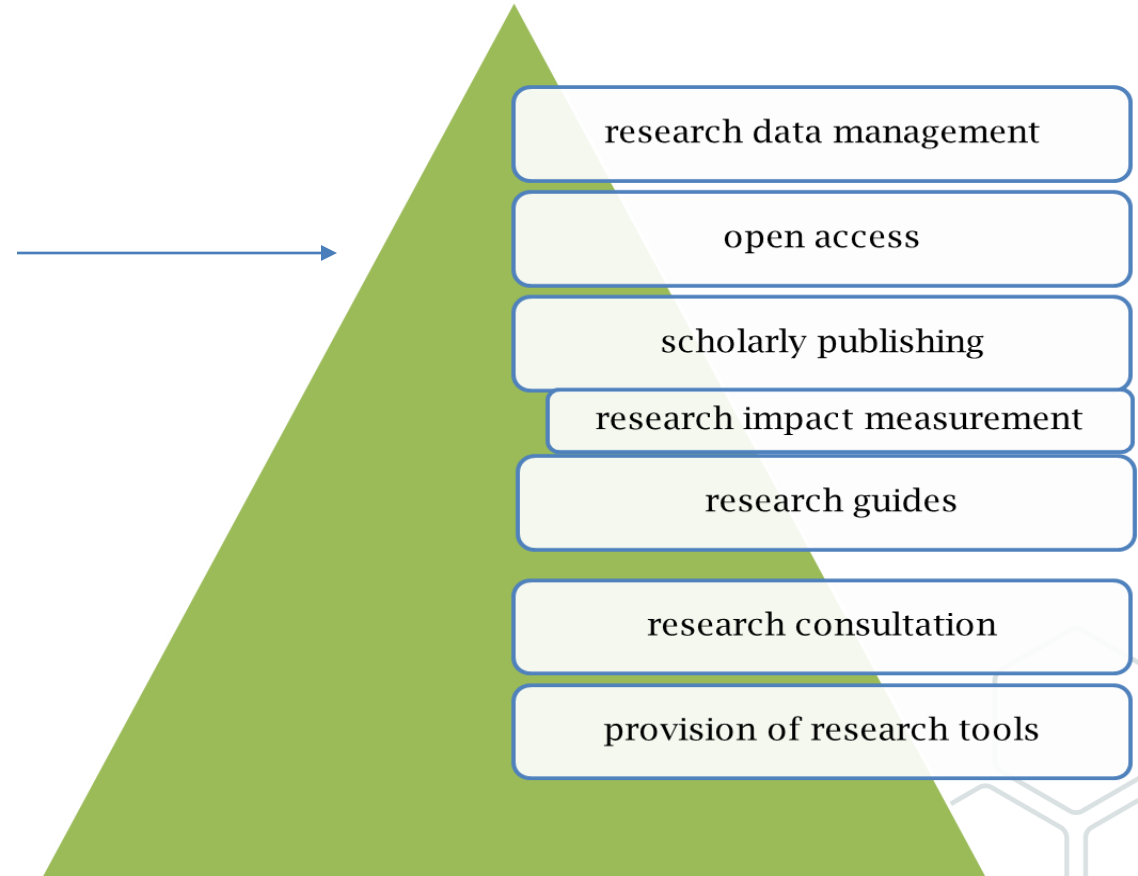
# Case scenario Fostering creative and Innovative in Education Communities

**1. Colorado state University Library seeks for a Research Data Librarian** who will explore, design and implement data services, programming, support data management planning, data use/reuse, promote data literacy, ethical data sharing, workflows, reproducibility, and the utilization of computational tools and methods; promote awareness of resources and services among faculty and students through comprehensive, customized instructional activities on all these. **Qualification: Master's degree in library science from an ALA-accredited program or international equivalent; a PhD in a data-intensive field; or a master's degree in a data-intensive field plus two years of relevant experience in the development, coordination in RDM.**

**2. Georgia State University Library seeks for a Data Services Specialist** who is intellectually curious and innovative. This position is to propel Research Data Services (RDS) in the institution. **The RDS Department's array of support services directly bolsters the University's strategic areas of Innovating Research, Scholarship & Creative Activity. Requirements:** Expertise in supporting data analysis tools & methods, data visualization, finding data & statistics, data collection, and data cleaning & management across academic discipline

# Research support services in Academic Communities

- Research support services comprises all these phases (Si et al., 2019).
- The main goal of RDM services is to ensure that maximum value is gained from the data collected in an investigation or research project.



# Research Data Management & Why is it important?

**RDM:** encompasses activities related to the storage, organisation, documentation, and dissemination of data in order to maximize the value of scientific investment (Borghi, Abrams, Lowenberg, Simms and Chodacki, 2018).

**Why is RDM important?:** makes data **findable, accessible, interoperable, and reusable (FAIR)** and also drive transparency. These principles should be the foundation for education and research communities to implement RDMS (OECD, 2007)



Figure 1: Research Data management Lifecycle (Martin, Cadiou, & Jannès-Ober, 2017)



## **Why are education communities involved in RDM as strategic priority?**

- Requirement by Funders: Researchers (students or faculty) in various academic institutions are now mandated to comply with data management and sharing requirements of funding agencies before approval of their proposal and as part of open data initiative
- critical to the advancement of science and scholarship, supports innovative solutions to economic and social challenges (Tri-Agencies, 2016)



2021-2023

# Leading the Change

Libraries in the USA, UK, Australia and Canada have made great achievements in RDM. One of the reasons for this is that academic libraries in these countries have taken giant strides and become the driving force of RDM by ensuring that their infrastructure, tools and services enables researchers within their community to maximize the value of their research data (Si, Zeng, Guo and Zhuang, 2019)



# Issues surrounding RDM

- RDM is one of the approaches needed in meeting the changing information needs of users in academic libraries, research and higher education communities (Dorcas, Jiyane, Ibinaiye and Tijani, 2023)
- Countries and institutions, especially in Africa are at different levels of RDM services. Many of these institutions do not have RDM policies, institutional infrastructure for RDM are still evolving (Chiwere, and Becker, 2018).
- Africa as a regions have a shortage of data librarians/librarians with RDM skills and very few institutions are producing data scientists viz a viz data librarians (Frederick, 2019).
- budget for implementation of RDM services is a major obstacle for libraries (Hamad, Al-Fadel and Al-Soub,2021).
- librarians should take a leadership role in RDM and drive the initiative in their institutions (Zotoo et al.,2022)
- RDM is a necessity for national development, and the onus is on academic libraries to spearhead research data management in their various institutions (Zotoo and Liu, 2019).

# Research Direction

## Statement of Problem

**Regrettably, despite the relevance of RDM in education communities,** the implementation of RDM in academic libraries in Nigeria is not well articulated in literature.

Moreover, many academic libraries in Nigeria and the rest of Africa are still grappling with Institutional infrastructural support for data management, and the professional competence necessary for provision of RDM services

## ▪ Research Objectives

1. find out the involvement of selected institutions and their libraries in RDM (Librarians, Researchers)
2. determine the available RDM tools and technologies (Librarians)
3. ascertain the initiatives taken by academic libraries in RDM (Librarians)
4. ascertain if participants have ever taken any training on Research data management (Librarians, researchers)
5. examine the RDM skills possessed and training needs of academic librarians
6. Perception of researchers on provision of RDM by Academic Libraries as a Value-Added Service (researchers)

# How Participants Were Selected

Participants were selected from universities who ranked between 1<sup>st</sup> to fourth position in Nigeria based on Times Higher Education World University Ranking for 2023.  
(UI, UNILAG, CU AND BUK)

Study Population: All Academic Librarians in these four universities AND Researchers from three Faculties  
(Science, Social Sciences and Environmental Sciences)

# Research Findings

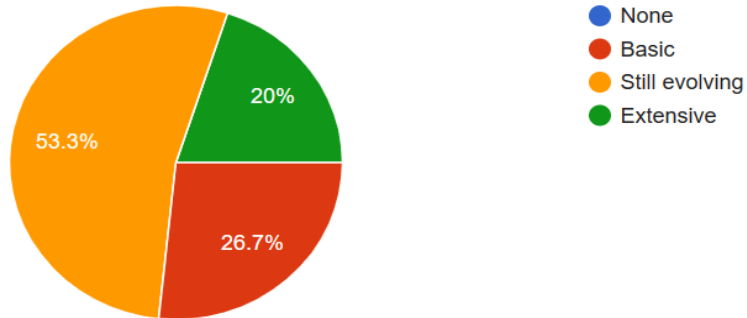
## Snippets

# Findings: Involvement of Academic Libraries in RDM

## Librarians

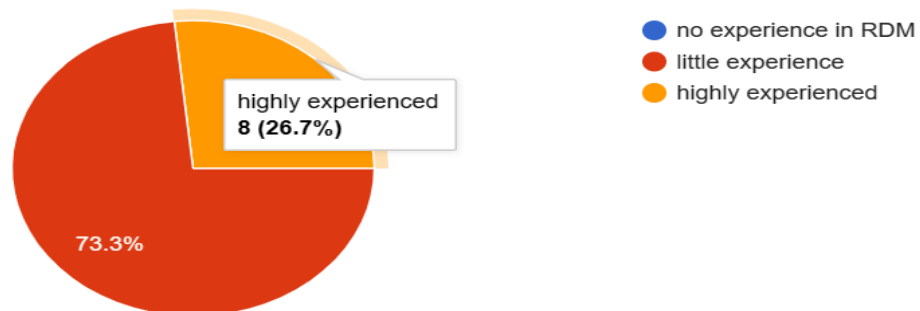
How would you describe the involvement of your library in research data management?

30 responses



How would you describe your own experience in Research data management

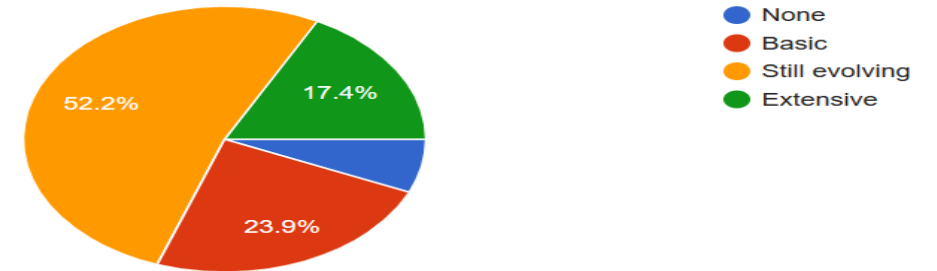
30 responses



## Researchers

What is the level of involvement of your library in research data management?

46 responses

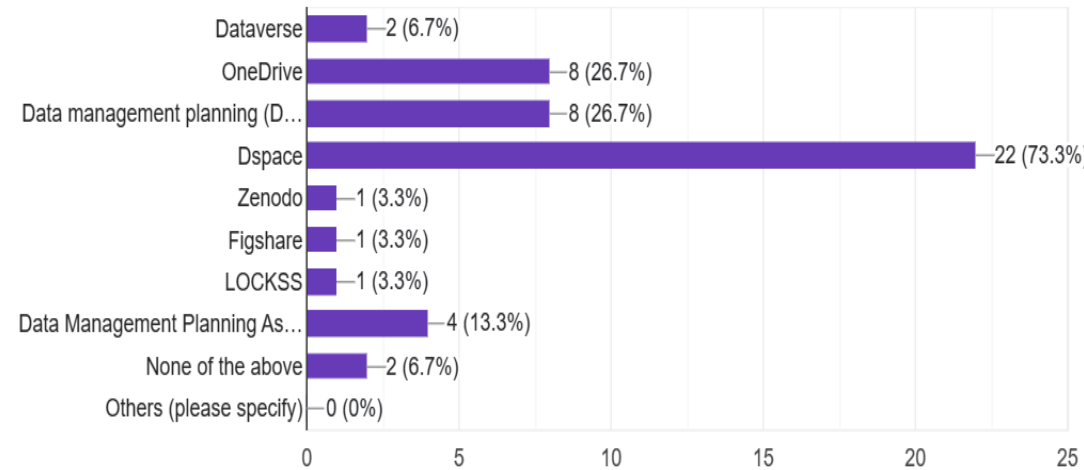


# Findings: Available RDM Tools/Technologies

## Librarians

Which of the following RDM tools are you aware of OR make use of in your library?  
(You may tick more than one option)

30 responses

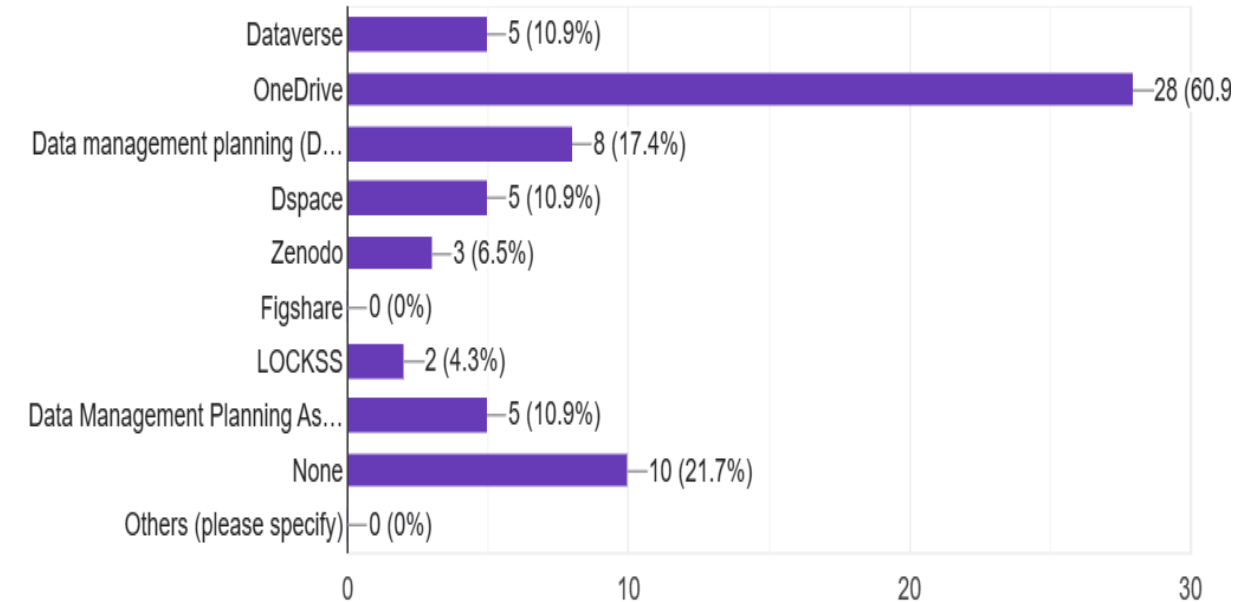


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## Researchers

Which of the following RDM tools are you aware of? (You may tick more than one option)

46 responses



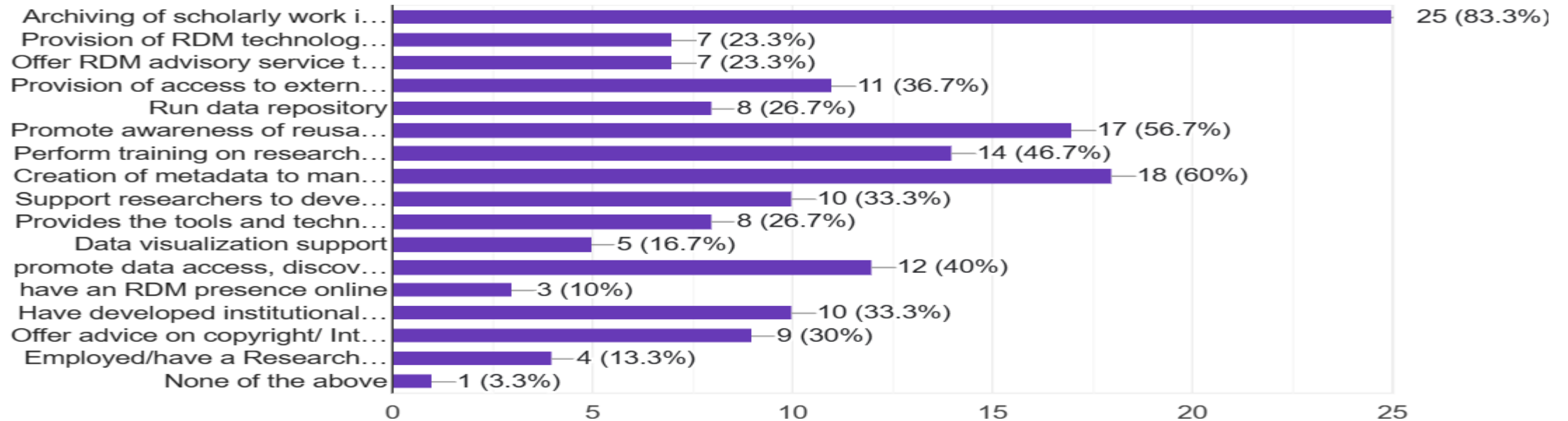


# Findings: RDM initiatives in Participating Academic Libraries



What initiative(s) has your library taken in research data management? (Tick as many that applies)

30 responses

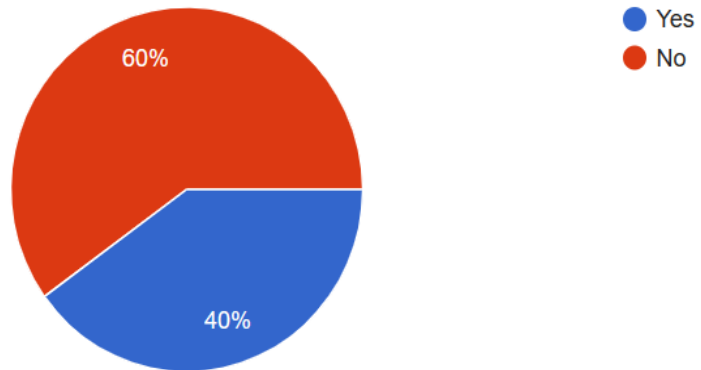


# Findings: Training on RDM

## Librarians

Have you ever taken any free training on Research data management?

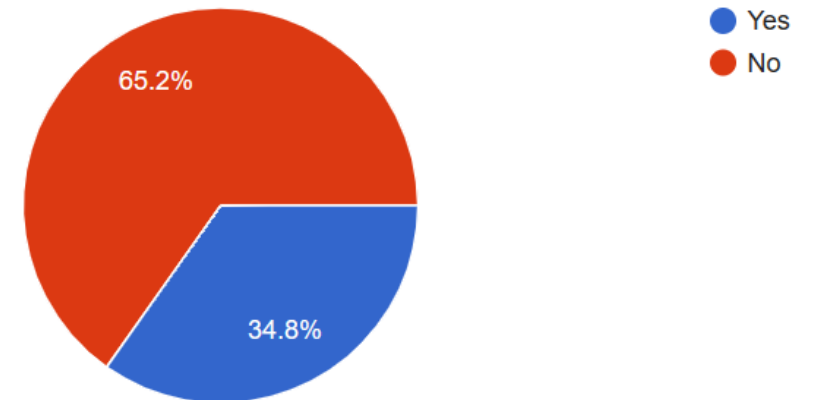
30 responses



## Researchers

Have you ever taken any training on Research data management?

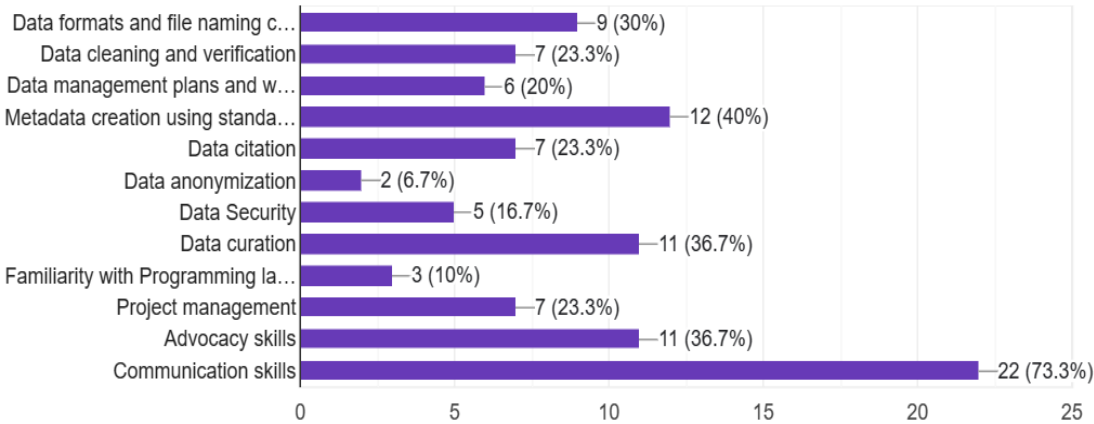
46 responses



# Findings: RDM Skills Possessed & training needs of Academic Librarians

Which of these RDM Skills do you possess?

30 responses

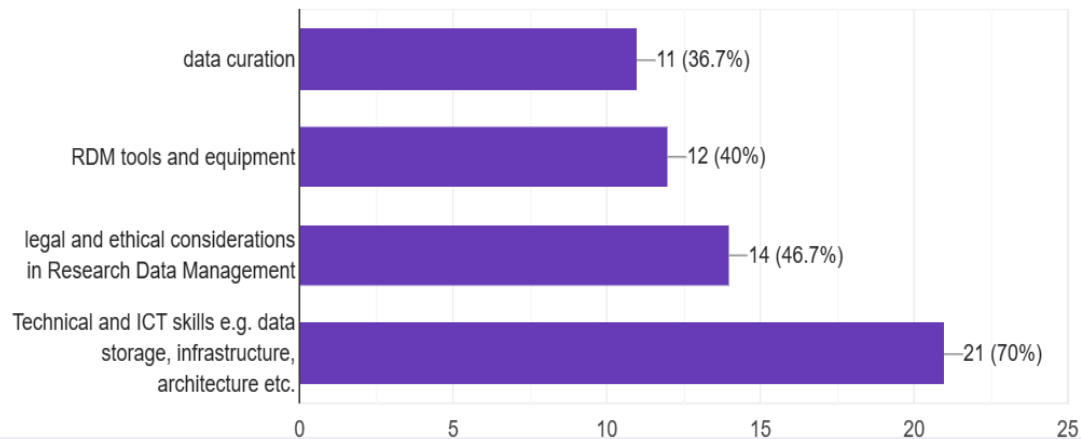


Kindly specify your immediate training needs on research data management

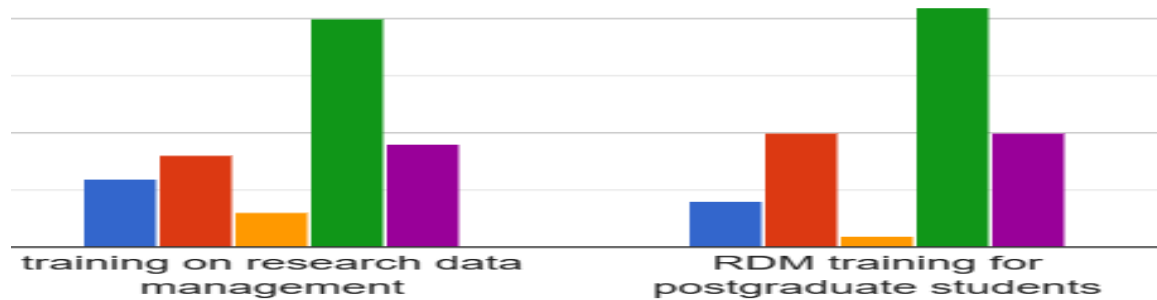
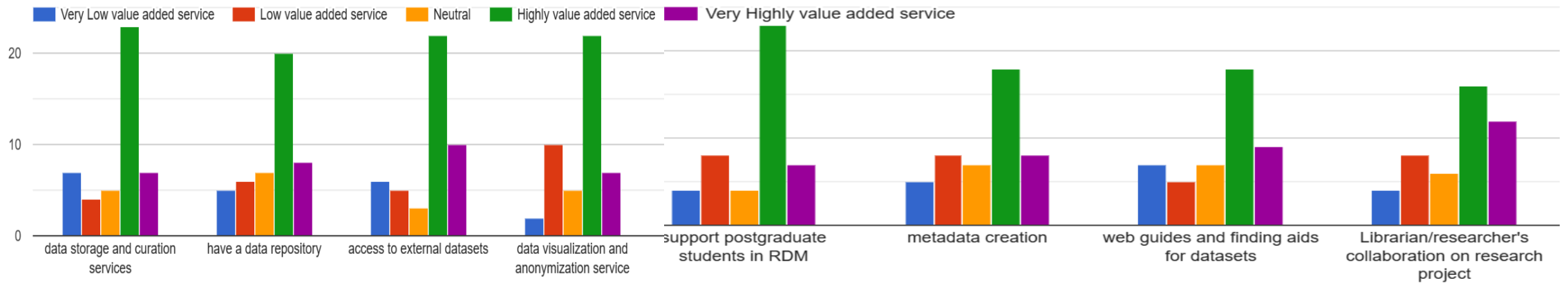


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30 responses



# Findings: Perception of Researchers on RDM as a Value added service in Academic Libraries



# Key Takeaway

Many institutions in the USA, UK, Australia and Canada have made, and are making giant strides in RDM.

BECAUSE their libraries have accepted the responsibility for RDM

THEIR LIBRARIES HAVE REFOCUSED THEIR infrastructure, tools and services TO ENABLE researchers within their community to maximize the value of their research data



**THEREFORE**

**being more proactive** in MEETING the RDM mandate in our communities SHOULD BE OUR PRIORITY

**collaboration** at National and Regional levels could be our starting point

# Recommendation on RDM



Institutional Policy  
development and  
implementation on  
RDM

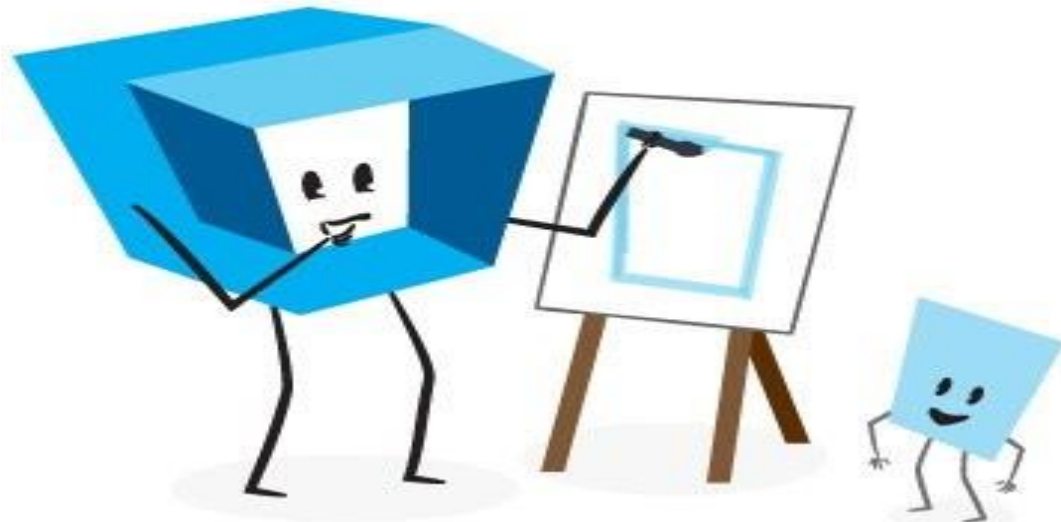
Advocacy for  
RDM and training  
for Librarians on  
RDM

Academic Libraries in Nigeria  
and Africa at large should have  
Research Data Support  
Services Department and  
employ RDM Librarian





Q&A



# Reach out to me



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