Power Automate: Enhancing Workflows In Institutional Repository Management

Section 1: Contribution Details

Contribution	Detail
Authors Name(s)	**Cecil Gasa, Neli Tshabalala**
Title of Submission:	**Power Automate: Enhancing Workflows in Institutional Repository Management.**
Sub-Theme(s) of Submission:	**Implementation of AI and machine learning (ML) in library systems and services.**
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Section 2: Abstract Text

Institutional repositories in academic libraries play a pivotal role in managing research outputs, metadata, and digital assets. Effective repository management supports research, enhances service delivery, and ensures compliance with institutional and regulatory requirements. AI-driven automation tools, such as Power Automate, offer innovative solutions to streamline workflows, automate routine tasks, and improve data accessibility.

This study explores the application of Power Automate in institutional repository management, focusing on document extraction, workflow automation, and metadata curation. By reducing manual processes, libraries can enhance data scalability, promote e-services, and lower operational costs. Given the challenges associated with software adoption and IT support, the study underscores the need for sustainable automation strategies.

A qualitative, exploratory research approach employing case studies is adopted to examine the effectiveness of predictive workflows. Findings reveal that AI-driven automation not only enhances research capabilities but also improves collaboration, accelerates information discovery, and optimises data workflows. Additionally, Power Automate streamlines metadata capture, facilitates dataset organisation, and automates reporting processes, allowing library staff to focus on essentially valued intellectual and analytical tasks.

This research contributes to the development of robust data repository infrastructure and long-term preservation strategies. It positions academic libraries as central to research excellence and improved service delivery while supporting broader institutional goals. Practical implications include reduced manual effort, streamlined document approvals, and accelerated data curation, ultimately enhancing institutional research output. By leveraging automation, libraries reinforce their role as dynamic hubs for knowledge creation and dissemination.