Integrating Research Data Management Services into Institutional Workflows: a South African Perspective

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Cape Peninsula University of Technology

- South Africa
  - 26 Universities
  - 6 Universities of Technology
  - Western Cape Region
  - Cape Town
CPUT LIBRARIES E-STRATEGY

• Library e-Strategy
  • Six focus areas:
    ➢ e-Research – development of researchers’ RDM infrastructure and services
    ➢ e-Learning – integration with Learner Management System
    ➢ Digitization – of university’s intellectual outputs
    ➢ Open Scholarship – Open publishing, OERs
    ➢ Library Web Environment – Communication & Information Services
    ➢ e-Resources and Discovery Platforms – Resources & Access
Why eResearch at CPUT Libraries?

The approach is to enable the library to:

• Comprehensively support research projects by closely accompanying their related life cycle
  – Proposal Writing, Data Management Plans, Data Collection, Data Analysis, Data Storage and Preservation, Publication of Results and Dissemination of Scholarly Outputs

• Establish adaptive library services in order to provide tailor-made solutions for research projects’ data management requirements
ACADEMIC LIBRARIES & RESEARCH DATA MANAGEMENT

• Is it our role to Manage Research Data
  – YES
    • Data from research – “an integral part of the global knowledge base & their management is an extension of the current library’s role”
  – NO
    • “the scale of the challenge in terms of infrastructure, skills and culture change requires action by a range of stakeholders – not just the university libraries (Lewis 2010)
RESEARCH DATA MANAGEMENT IS A COLLABORATIVE EFFORT........

Institutional Culture

Infrastructure, services and human capacity

Policies
E-RESEARCH DRIVERS CPUT

Library’s eStrategies

Growing Research Outputs

CPUT eResearch Programme

University’s Research Strategy

Growing Research Infrastructure
DEVELOPING RDM CULTURE

• Creating Institutional Partnership
  – CPUT RDM Working Group
  • Membership; Roles; Outputs
RDM CULTURE

• RDM Working Group
  – Chair, membership

• Alignment to University’s Committees
  – Senate and Senate Sub-committees
    • Senate Research and Innovation Committee
    • Senate Library Committee
    • Senate
    • ICT Committee
    • Council’s IT Governance Committee
RDM CULTURE

• University’s Research Strategy
  – Research, Technology & Innovation Blueprint (RTI)
  • 10 Year Roadmap – growth & development of research at CPUT
ROLE OF THE LIBRARY IN THE UNIVERSITY’S RESEARCH STRATEGY

• Enhanced library research support systems and services, access to information, digital platforms, support for research skills

• Curation, dissemination and promotion of traditional outputs of research in terms of articles and theses, and curation of research data and innovation output, including enhanced research data management systems
POLICY DEVELOPMENT

• Research Data Management Policy
  – Aligned to Other Related Institutional Policies:
    • Policy on Intellectual Property
    • Research Policy
    • Contract Research Policy
    • Institutional Operation Plan (IOP)
    • Research Management Plan
    • Research and Innovation Plan
    • Open Access Policy
RDM POLICY DEVELOPMENT

Consultation Process

• Research Data Management Policy
  – Introductory Workshops with Research Centres and rest of the research community (concept discussion, Policy discussion and input)

Collaborative Workshops
RDM POLICY DEVELOPMENT

• Collaborative workshops
• Follow approved institutional policy making process
• Policy Approval
## POLICIES

- **CPUT RDM Policy**

### RDM Policy

<table>
<thead>
<tr>
<th>Policy Group(s):</th>
<th>B: Teaching &amp; Learning</th>
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<tbody>
<tr>
<td></td>
<td>F: Technology, Partnerships, Research and Planning</td>
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<tr>
<td>Type:</td>
<td>Policy ✔️ Guideline</td>
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<tr>
<td>Procedure</td>
<td>Regulation</td>
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**CPUT Statute and/or \Regulation:**
- Reference No and date:

**Relevant Legislation and/or policy, Codes of practice, Professional Authorities:**
- Plant Breeders' Rights Act 15 of 1976
- Patents Act 57 of 1978
- Copyright Act 98 of 1978
- Trade Marks Act 104 of 1993
- Designs Act 125 of 1993
- Counterfeit Goods Act 37 of 1997
- Competition Act 89 of 1998
- Electronic communication and transaction act 25 of 2002
- Biodiversity Act 10 of 2004
- Technology Innovation Agency Act 26 of 2008
- Intellectual Property Rights from Publicly Financed Research and Development Act 51 of 2008 (hereinafter the IPR Act)
- Protection of personal information Act 4 of 2013

**Relevant Institutional policies/ Documents/manuals/ Handbooks:**
- Policy on Intellectual Property
- Research Policy
- Contract Research Policy
- Community Engagement Policy 2008
- Policy on Short Courses
- Institutional Operation Plan (IOP)
- Research Management Plan
- Research and Innovation Plan
- CPUT Libraries Open Access Policy
NATIONAL MANDATES

• National Mandates - NRF Open Access Mandate
INFRASTRUCTURE AND SERVICES

• Collaboration with other Universities
GOALS OF THE COLLABORATION

• Set up international working groups on various RDM development aspects
• Develop an Open Source Platform for managing RDM cycle
• Set up institutional working groups to feed into the development of the Open Source Platform and Services
INFRASTRUCTURE AND SERVICES

- eRIC (eResearch Information and Communication)
INFRASTRUCTURE AND SERVICES

- Platform – Open Source
  – MediaTum
RDM PILOT PROJECTS

• Institute of Biomedical and Microbial Bio catalysis
  – 15 leading researchers led by a Research Chair (funded by the South African National Research Foundation)
  – Used to be part of the South Africa Medical Research Council
    • Brings a wealth of research experience and lots of data requiring management
PILOT PROJECT REPORTING

• Continued communication between the Library RDM Team and the Institute’s Researchers

• Final pilot project results to be reported jointly to various university committees
ALIGNING INSTITUTIONAL PROCESSES TO RDM SERVICES

• Grants Application Process
• Postgraduate Students Document Management Systems
  – HDC – Higher Degrees Committee

IATUL Annual Conference 2017
ALIGNING INSTITUTIONAL PROCESSES TO RDM SERVICES

• Data Management Plans & HDC Process
Theses and Dissertation Submission Process

– Print Copies
– Electronic Copies
– Data sets
  • DSpace – linked to deposits in institutional repository
Future Integration Projects

- CPUT - Enterprise Research Information Management System
  - Internal Systems
    - Research Information Management System
    - Higher Degrees Management System
    - Research Data Management Services
    - Institutional Repository
  - External Systems
    - ORCID
    - Other Systems/Platforms ................................
THE FUTURE

• CPUT eResearch Centre
  – A coordinating unit to bring together and lead the drive towards specialised advisory services on research data management in various research disciplines
  – Connect digital research to national and international eResearch initiatives
  – Play a leading role in CPUT’s involvement in the Western Cape Data Intensive Research Facility
THE FUTURE

• Western Cape Data Intensive Research Facility
  – DST (Department of Science & Technology) invests millions to expand cyberinfrastructure
    Shared resource, focused initially on astronomy and bioinformatics, supporting major initiatives such as the MeerKAT/Square Kilometre Array (SKA) and the DST's Bio-economy Strategy.
• Led by University of Cape Town with University of Western Cape, Stellenbosch University & Cape Peninsula University of Technology as partners
THE FUTURE

• Training Librarians in Research Data Management Support
  – Through Institutional, National & International Programmes
Thank you