Presented by: Dr. Ayanda A Lebele
Director, Library Services

Date: 20th October 2020
Venue: Virtual
To map the Botswana IR case while also soliciting for global support in advocacy for open access of Botswana, Africa’s research output.

- Botswana: The Development & Research Agenda
- Libraries and Institutional Repositories
- BIUST -AAU Database of African Thesis and Dissitations (DATA-D) training workshop
- Note on methodology
- Findings
- Conclusions
• The national development agenda - driven through 2 main guiding frameworks:
  ➢ National Vision 2036
  ➢ National Development plan (NDP11 of 2017-2023)
• both draw from aspirations of UN-SDGs & AU Agenda 2063
• Both have strong elements of human development & engagement.
• The country had to assess and re-engineer policies, processes and structures in the education sector & establish supportive parastatals for quality assurance, aligning skills development with national demands
- Botswana Innovation Hub; Botswana Qual Authority (BQA) Human Resource Development Council (HRDC) & Botswana Institute for Technology, Research & Innovation (BITRI).

• These research entities & institutions of higher learning have a collective mandate to generate knowledge so as to inform planning for economic diversification & to inform development of innovative products.

• The research output is predominately in hard to reach platforms like personal computers, sponsor’s private collections & expensive scholarly journals (Moahi, 2009).
• Libraries leverage on ICTs & Open Access (OA) facilities to increase visibility & accessibility of these hidden pieces (promotes author, institutions; making African grown research visible - Bangani 2018:40)

• Adopt Moahi (2009)’s simplified definition of IRs as ICT enabled online platforms that university libraries or research centers use to collect, process and flexibly disseminate knowledge to a broader spectrum of users.

• IRs are an essential component of digital library services
• There are inevitable differences in the uptake; the development and content of IRs

• Content can be dissertations, published papers, unpublished pre-prints, working papers, conference presentations, data sets; technical reports; teaching materials; chapters authored by institution’s researcher, past examination and other institutional archival documentation (Rosenblum, 2008; Eke, 2011; Bangani, 2018:49)
Note on Research methodology

• observational qualitative methodology as defined by Eldredge (2004: 83) who notes its common in library informatics
• guided by an interpretive approach that’s blended with critical theorist stance to capture reality so as to inform strategies towards a challenge on the ground than to strictly adhere to a research methodology.
• Data gathered through questionnaire to academic and research librarians who participated in DATAD-R training workshop hosted by BIUST & Association of African Universities (AAU), Palapye, Botswana (informal discussion, observations & Lit review)
• DATAD-R(Database of African Thesis and Dissertations including Research) = digital platform by AAU to promote access & visibility of research findings from African institutions.
The workshop empowered researchers, librarians and IT specialists with skills needed to develop or revamp institutional repositories in their organizations.

BIUST library set out to assess organizational capabilities of academic libraries in Botswana to develop IR.

The tool inquired about the available structures and systems (people and technologies) needed to develop sustainable IR in academic libraries in Botswana.

Out of the 60 workshop participants, only 36 (60%) responded to questionnaire. These were all local librarians.

4 Institutions had IRs- Different levels; 2 not in workshop (only one was developed by engaging consultant)
Findings on Institutional capabilities

- **inadequate Policies, processes for IR**
  - Has a bearing on both the IR uptake & content due to poor guidance for libraries & researchers as information owners.
  - many lamented the lack of supportive institutional systems (informal discussion throughout workshop)
  - 78% of the questionnaire respondents indicated that their institutions had no IR policy.
  - 14% of the respondents indicated no related guidelines to develop the service.
  - 64% participants indicated that their institutions did not have a digitization strategy, a process that as noted by Eke (2011) is core to IR development.
The literature shows that although there are a variety of IR software packages the most widely used is DSpace (Moahi 2009: 5; Eke, 2011). This study corroborates that

Those already with IRs were all operating on DSpace

Two indicated that they used their library management system for the IR- response to further questions conflicted that

The absence of supportive policies & processes handicap development of IR even when using D-Space as a free OA software
Qualified & Keen people to develop IR in Botswana

• The unavailability of sound policies & processes render it almost impossible for even the qualified & skilled workforce to deliver functional IRs.

• Almost half (46%) of the participants had degree qualifications or masters, they indicated that they had capacity to develop & and operationalize the IR;(eg develop submission & archiving plans; guidelines for users; create metadata to ensure discoverability of the content & engage with users / contributors.)

• The fact that these respondents were learning and participating satisfactorily during the hands on workshop is further testimony of their capability
Response rate
A total of 24 questionnaires were distributed to institutions that participated in DATAD-R workshop
- Used google forms and follow up telephone calls.
- A total of 18 institutions responded to the survey, giving a response rate of 75 %. (One participant/institution)

(RECAP ON DATAD-R workshop
- I was to Introduce and provide hands on training for setting up or revamping IRs so as to Make research findings from African institutions more accessible to the research community on the continent.)
OBSERVATIONS A YEAR AFTER DATA-D WORKSHOP

1 additional IR that are fully functional/publicly accessible
4 @ software installation; customization & trials
3 @ different stages of policy/ guidelines development

Amongst these new ones 7 use D-space while one used LINUX (this was for trial purposes)
Challenges in setting up/ Revamping IRs

- Lack of IT resources
- Slow bandwidth, poor internet connectivity and infrastructure
- No storage space
- Lack of management support
- Software installation issues
- Issues of Customazation of the IR interface
- Lack of time
- Trained staff left the institution
- Delay from IT department
- Lack of Infrastructure and Running within Proxy controlled environment
• Libraries do not have IRs supportive environments
• Weak / no policies that guide the teaching, learning and research communities (key users and contributors of content) limits IR in Botswana (Moahi 2009:3; Oladokun, 2015: 48). –Still a challenge
• By acknowledging that there is a qualified workforce, gives credit to the LIS schools & professional bodies for collectively closing skills gap observed by Moahi (2009: 9).
• None of the earlier noted supportive parastatal bodies have functional IR
• The workshop made positive impact that needs to be sustained through national professional bodies
• The concept of IR still has to be developed and advocated for even amongst libraries.
For more information contact:
Dr. Ayanda A Lebele
Director, Library Services
Tel: (+267) 4931000  
E-mail: lebelea@biust.ac.bw

Ms Tuelo Ntlotlang
ntlotlangt@biust.ac.bw
&
Ms Winnie Jamara
moziklaw@biust.ac.bw