

# Chapter 61

## Research and Output Management in Digital Era: Emerging Challenges at UB

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### ABSTRACT

*The institutional commitment to research that was hitherto left to individual researchers and few research centres came with the University Strategy, 'Shape Our Future'. The Strategy, with clear mission and vision of research excellence, provided support for the development of a policy framework, subsequent research, output management infrastructure, and associated processes. This paper has reviewed these developments and emerging challenges posed by resource intensive paper based processes that need to be addressed inline with increasing aspirations for digital scholarship. Efforts to address these challenges are largely to reduce intensity of resource use inline with digital scholarship aspirations that embrace information and communication technology (ICT). However, the dynamism of developments and innovations in ICTs are characterized by high frequency of system obsolescence that could be costly to emerging resource poor Universities, particularly proprietary systems. This leads to the need of embracing the use of open source ware by investing in human resource development for capacity building and sustenance of digital scholarship.*

### INTRODUCTION

The turn of the century witnessed the development of commitment to research by the University of Botswana with the setting up of the Office of Research and Development (ORD). The office was charged

with the responsibility of foremost formulating and implementing research policy that provided for research capacity and quality development and management through funding and training, as well as celebrating success in research. The impetus to this commitment was further boosted by the University's overall strategy 'Shaping

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Our Future' that identified research excellence as one of its strategic goals that have now been clearly articulated in the Research Strategy (UB 2002, 2008). In line with the vision and mission of the University, the specific functions that have emerged from the initial policy and subsequent policies to support the development of research excellence include:

- Developing and coordinating a strategic research plan of the University.
- Facilitating the development of Departmental research plans.
- Facilitating the alignment of the internal research funding with research activities that support departmental research plans.
- Designing and implementing an effective funding system which sources research funds from internal and external sources.
- Assisting Departments to align their teaching and research activities so as to achieve research – led teaching.
- Increase research activity through various means including the creation of Centres of Study, post doctoral programmes, and collaboration with external partners.
- Establishment and implementation of a management system that provide for continuous rise in research quality.

Other functions focus on the outputs of research that include the dissemination of the findings by encouraging staff to publish research through peer reviewed channels that include well established external and internal University owned journals.. The effort is in support of the publication drive aimed at enhancing the University research visibility locally and internationally. The ORD also produces and publishes a comprehensive Annual Research Report which markets UB by serving as a tool for raising awareness locally and internationally about its research capabilities, and enabling it to attract consultancies for the mutual benefit of the University and its clients. This will also

support the drive towards commercialization of research outputs, which is also the responsibility of the ORD.

Given this broad functions, the ORD has since been developing and articulating the necessary infrastructure that should support processes of delivering on the functions. This paper highlights some of the infrastructure components that include policy frameworks, institutional provisions and processes. Challenges that have surfaced are highlighted together with efforts put in place to address them by embracing technological developments that are continual supporting the digitization of research and information. While the paper shows the potential of digitization to enhance the management of research, it concludes by identifying challenges in the area of technology development that continue to experience rapid dynamism that may require high resource endowment to keep up with the global developments.

## **Research Policy Framework**

As noted above, a policy framework that continues to improve with the strategic development of research and its support, signifying the University commitment, backs the ORD functions. The policies that are currently being implemented include: Research Policy; Policy on Ethics; Intellectual Property Policy; Policy on Centres of Study (UB 2002 and 2004). In addition, the recently approved Research Strategy provides an overall framework of which the implementation will be supported by these policies.

- **Research Policy:** This overall research policy was approved by UB Council in 2002, and it sets out the University position on research. It provides a framework for developing consistency, quality management, accountability and strategic direction for research activities. The Policy provides for the University Research Advisory Committee (URAC) to advise

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