In the current knowledge economy, Africa is relegated to the periphery of knowledge production as it is considered to be more of a ‘consumer’ of the world’s knowledge as opposed to a ‘producer’. There is sufficient evidence to show that a significant factor contributing to this low research output is limited access to scholarly content to support research. An influential element to this limited access is the exorbitant cost of information. Exacerbating this status is that research conducted by Africans is not easily accessible to the international audience, as the dissemination of African research content is severely prejudiced by the propensity of international publishers to focus on output from the north which generates larger profit margins. This prejudice relegates Africa further into the status of being a silent and invisible contributor to research production.

**Bridging the ‘Research Output’ Divide**

For Africa to move from the periphery to the epicenter of world knowledge production, there has to be a radical improvement in access to information. It is a given that not all of the issues pertaining to improved access can be resolved through the collusion of ubiquity and the web. But as it may, this collusion serves as the perfect foil for an alternative mode of distribution of scholarly literature and the radical improvement in access to such literature. This alternate mode, open access (OA), provides researchers with a conduit to make their research findings available to the widest possible audience and improve their research impact and visibility without compromising the integrity and rigour associated with quality academic publishing. There is great anticipation that the growth of the open access movement will radically improve access to the world’s scholarly output; it will also serve as the impetus for networking the world of scholarship. One of the significant outcomes of this networking is the capacity to draw the ‘south’ (the ‘developing world’) to the epicentre of the world’s knowledge production and facilitate the cross-pollination of knowledge to and from the ‘north’ (the ‘developed world’) and south. OA presents Africa with opportunities to transform from a consumer of knowledge to a contributor to the world’s knowledge production.

**The Open Access Paradigm**

In an era of easy access to open source software, there are sufficient opportunities for libraries to utilize this software to enhance their role in collecting, organizing and disseminating the research output of their respective institutions. Academic institutions in developed countries are exploiting open source software in the development of their repositories. The question that begs an answer is why African academic libraries are not vigorously taking up opportunities that are presented by the open source movement. Further, a new role for the 21st-century academic library is that of engaging in the publishing processes, again, using open source software such as Online Journal Systems.

The benefits of open access through utilizing open source software, especially for the developing world, are enormous. However, in recent months there has been a transformation from the philanthropic base to an alternative business model for publishing. In this new and growing business model, the subscriber is exonerated from fees to access research findings. However, huge tolls are levied on authors (through author page fees) to publish in OA journals. These cost barriers leave knock on to scholarly content to support a thesis. Open access is considered to a contributor to the world’s knowledge production.

Stellenbosch University, a leading South African research institution, is committed to contributing to changing this status quo through the open access distribution of its own research output. Primary research output by researchers affiliated with the University, are accessible through the institutional research repository. This is commonly referred to as the ‘green route’ to open access. The University has also adopted the ‘gold route’ to open access through publishing open access journal titles. In both instances, open source software is used: DSpace (developed by MIT and Hewlett Packard) to manage the institutional repository and Open Journal Systems (developed by PKP) to manage online journals.

Given the expertise Stellenbosch University has built over the past years, and given the challenges that have plagued Africa in developing processes for the distribution of their research, Stellenbosch University has developed the African Open Access Repository Initiative (AOARI). This initiative is aligned with the HOPE Project, through which the University is committed to producing and sharing new knowledge to address African development issues. The AOARI platforms also break down the barrier with regard to the lack of personnel skills and good ICT infrastructure, with the express mandate of supporting efforts to strengthen the culture of research in Africa.

AOARI can be described as a ‘hyper’ repository for African academic and research institutions to share their scholarly output with the widest audience possible. In keeping with the principle of “openness”, it uses open source software: Ubuntu (latest version 12.04) is used as an operating system and DSpace (version 1.8.2) to manage the repositories. Open Journal Systems (OJS) is used to host open access journals. The AOARI platforms present African researchers with the option of publishing in an open access platform at absolute minimum cost – the window of opportunity is thrown wide open for the widest possible distribution of content without the burden of infrastructural cost and the lack of skills.

The fundamental purpose of the repository is to provide a digital service that collects, preserves, and disseminates research related material in digital format. The primary purpose of the journal publishing platform is to create a forum to facilitate ‘self-publishing’ without compromising academic publishing rigour; preserving content and radically improving the distribution of the scholarly content. The benefits of using AOARI centre around the core purpose of open access, and that is to make research findings available to the widest possible audience thereby improving visibility, citation count, impact and enhancing the prestige of the author and his/her institution.

Limited training has been provided at the Berlin 10 Open Access Conference in November 2012, held in Stellenbosch, South Africa. For AOARI to be a success, the next step would be to market the initiative extensively to ensure that the platforms are exploited en route to Africa becoming a significant contributor to global knowledge production.

**Conclusion**

There is very little debate that access to scholarly content is essential in the generating of new content. A significant factor debilitating Africa’s contribution to the world’s knowledge is the lack of access to scholarly content to support a thesis. Open access is considered as one of the mechanism to circumvent the issue of limited access. However, the introduction of open access has also brought with it closed publishing avenues as African authors cannot afford exorbitant page fees. AOARI is option created by Stellenbosch University for the free flow of academically sound research output. It is an option that should be exploited in Africa’s transition to a knowledge producer.

**Reference**


**About the Authors**

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The African Open Access Repository Initiative (AOARI)