

Collaboration in Research and Education in the Digital Space: The Case for Library Consortia Licensing to Scientific Information in the African Region

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Purpose of the paper

- To review:
 - **Opportunities** and
 - **Challenges** in **licensing** and providing **access** to scientific literature through **library consortia** models to support education and in the African region in the **digital environment**



Objectives of the Paper

- To review :
 - Current the **characteristics of digital transformation** in both research and education
 - **Implications of digital transformation** on the conceptualization and practice in **research and academic librarianship**
 - **Benefits and advantages of library consortia** arrangement in the access to research information
 - **Issues and challenges** in sustainability of **library consortia** in the African region
- Make **recommendations** on a way forward



Methodology: Addressing the problem

- This paper is based on **literature review** undertaken to achieve the stated objectives.
- A literature search in relevant **web portals and databases** was carried to retrieve literature on to thematic areas of the paper (**50 scholarly articles retrieved**)
- Key databases consulted are: Ebscohost, IEEE Emeraldinsight, ProQuest, and Wiley
- Websites of various library consortia were also consulted such as KLISC, COTUL, CUUL, CARLIGH, CEARL, etc
- An analytical review was done again on various issues covered in this paper



Introduction

- **Role of access to & Dissemination of information to R & E cannot be over-emphasized:**
 - Current & accurate information leads to **relevant research & education**
 - Leads to greater **efficiency** through **best practices**
 - Better **research and educational outcomes**
 - Facilitates **collaboration** and **avoidance of duplication** of efforts.
 - Better continuous **adoption of innovations** by the various consumers hence **brighter future for the community**
 - , (Harley, 2010, Kavulya, 2016).



Introduction

- Thus **critical** that **accurate, & current knowledge** **efficiently** be:
 - Discovered
 - Accessed
 - Disseminated,
 - Shared,
“if the **research enterprise** is **contribute** to **bettering the society**” and if **education** is to be **modern, relevant and effective** (Kavulya, 2016)



Access to scientific information in the region: A brief situational analysis

- In spite of the current global information glut, researchers from developing countries experience challenges in accessing quality relevant scientific literature :
- Why?
 - Inability of institutions to pay subscription for published literature due to inhibitive costs,
 - Low publishing levels within/in the region
 - Dominance of academic publishing industry in the region by the publishers in the global North:
Mostly inaccessible by researchers in the global south



Access to scientific information in the region: A brief situational analysis

- Why?

- Low intra-Africa collaboration and information exchange among key stakeholders.
- Low adoption of innovations and modern practices in scholarly communication processes,
- Inadequate policy frameworks on research and knowledge access in the region

(Ezea, 2009;Dulle, 2010; Islam, Alam and Sultana, 2011;Tilvawala, Meyers & Andrade, 2009, Kavulya 2016).



Access to scientific information in the region: A brief situational analysis

- Remedy:
 - Transform the **scholarly communication** in Africa to include **library consortia** as a tool of information access
 - This paper focusses on the role of library consortia in **supporting research and education** in the **digital space**



Research and Education in the digital environment

- Both research and education have undergone a digital transform
- This is fueled by:
 - Rapidly increasing **innovations in digital technologies**
 - Rapid changes in the user community into **digital generation**
 - New environment has created new **roles, practices, attitudes and expectations**



Research and Education in the digital environment

I. Research

- **International collaboration** in research (virtual research communities leveraging on emerging networking technologies e.g. virtual conferencing)
- Blurring of subject/disciplinary boundaries in favour of multi-disciplinary, interdisciplinary and multi-institutional research networks
- Sharing technological facilities: high performance computing systems(simulation, data curation, and analysis)
- Digital research: remote access to research facilities e.g. cloud computing
- E-research
- Use of social media and networking



Research and Education in the digital environment

II. Education

- ODEL learning (off-campus courses, online learning)
- E-research: Access to e-resources (digital libraries: e-books, e-journals, models, cases, etc, digital repositories,)
- Ubiquity use of learning tools and (anti-plagiarism softwares, writing apps, referencing tools
- ICT devices fitted classrooms (PCs, Laptops, videoconferences, IPads, flipped learning



Research and Education in the digital environment

- Implications for research and academic libraries:
 - Libraries have not been spared by the ongoing digital transformation in both education and research
 - Have to provide service to **digital generation of researchers, learners and educators**
 - Both research and academic libraries exist in a **technology rich ecosystem** and therefore they themselves have to transform/ continuously adjust to provide **service to the inhabitants of the digital space**
 - Many ways play a critical role in **defining and creating** the digital environment in education and research



Research and Education in the digital environment

II. Education

- Collaborative and cooperative Learning
- Active and interactive learning (flipped classrooms, etc)
- Mixed, augmented reality
- Gamification of learning
- Artificial intelligence
- Lifelong learning: individuals are engaged in continuously renewing their knowledge and competences
- Multi tasking: learning combined with: Work, employment & family life



Research and Education in the digital environment

- Big question: What is the role of **library consortia** in this transformed environment?:
 - What opportunities,
 - Advantages
 - What are the challenges and what can be done about these challenges
- **This is the Focus of this presentation**



Library consortia: The concept

- Library consortia is a **global phenomenon** that has evolved from centuries long practices: **Library cooperation** and **Library networking**
- These concepts engender **Resource sharing** in one form or another in attaining the goal of providing information **access to the user community**
- Library collaboration can be traced back to **200 BC** when **Alexandria Library** shared its resources with **Pergamon Library**.
- Reportedly library cooperation existed among **monastery libraries in the 13th century**
- There is also evidence of library collaboration agreement Universities of Lund, and Greifswald as early as 1740



Library consortia: The concept

- Library cooperation arises from the axiomatic that **no library no matter how well endowed can be self-dependent**
- Therefore the simple definition of a library consortium is:
 - **A collaborative or coalition activity** between libraries to meet varied needs of users
 - A **formal cooperative arrangement** where libraries agree to share resources (information, human resources, facilities, etc)
- Today library consortia are part and parcel of the digital technology driven **education and research ecosystems**



Library consortia: The key drivers

- Cooperation arises from the **axiomatic that no library** no matter how well endowed can be **self-dependent**
- They key drivers of library consortium are:
 - **Expanding requirements for** information resources among user communities
 - **Information explosion** in beyond the reach of individual libraries
 - Modern **changing technological innovations** in information access and sharing
 - **Increasing cost** of global scientific information Vs **declining in library budgets**
 - Failure of the so-called **‘Big deals’** in journal supply
 - Changing model of libraries **from information stores to generators of content & facilitators of information access**



Library **consortia initiatives** in the African region: An overview

- Consortium of Nigerian Libraries (CONLIB)
- Consortium of Tanzania Universities and Research Libraries (COTUL):
- Consortium of Uganda Universities Libraries (CUUL):
- Kenya Libraries Information Services Consortium (KLISC): 2003
- Zimbabwe University Libraries Consortium (ZULC):
- Consortium of Ethiopian Academic and Research Libraries (CEARL):
- Consortium of Academic and Research Libraries in Ghana (CARLIGH):
- National Library and In-formation Consortium (SANLiC):



Characteristics Library consortia in the African region

- **Multi-type libraries** involved: research, academic, special and government libraries
- **Multidisciplinary in orientation**: Arts, humanities, social sciences and pure and applied sciences
- Mostly **national level** apart from **South Africa where they are also regional**
- **Membership driven**: activities funded from member contributions
- Managed mostly **on volunteer basis** with limited staff at secretariat



Services provided by Consortia to member institutions

- **Capacity building among LIS professionals** to equip them with digital library skills
- **Capacity building among faculty and researchers** in digital space practices (open access, e-research, research data management, information literacy, knowledge management)
- **Technical advisory & assistance in automation** (e-learning systems, library management systems, digital repository platforms, antiplagiarism software, digitization and preservation)
- **Cooperative licensing, negotiation and purchase** of e-resources (e-databases, e-cases, e-journals, etc.)
- **Consultation on policy** making support for digital context (open access, anti-plagiarism, information literacy)
- Standards and guidelines development and compliance
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Services provided by Consortia to member institutions

- **Cooperative licensing and acquisition of relevant systems** (anti-plagiarism, remote access platforms, digitization and preservation)
- **Library advocacy & marketing for digital practices** (Knowledge ambassadors initiatives)
- **Technical advisory & assistance in automation** (off-campus access applications, Mobile platforms, e-learning systems, library management systems, digital repository platforms, antiplagiarism software, digitization and preservation)
- **Promoting inter-institutional resource** sharing & mentorships



Advantages of consortia approach: The case

- **Economies of scale:** Aggregated expertise, new synergies
- Increased **purchasing power of individual libraries** broader range of materials than any one library could possibly offer
- **Negotiating power** therefore better prices: Leverage on numbers
- Avoid **procurement bottlenecks & bureaucratic red tape**
- **Variety of services & products**...anything under the sun...research & educational
- **Transformative** nature of library consortia to education and research **for digital life** (adoption of digital technologies in institutions, creating digital literacy, open access, adoption of quality standards (Catalysts for change)



Advantages of consortia approach: The case

- **Negotiation power** with stakeholders e.g. Tax rebates. VAT/
Tax exemptions by **government**
- **Savings on human resources & expertise**....most staff work on
volunteer basis
- Ease of **resource mobilization**...internal or external (funding for
country-wide projects)
- Fosters **multidisciplinary & multi-institutional collaboration**
- Raises **institutional visibility**
- Professional **growth of LIS professionals**
- They offer libraries the ability to give users the access they
are coming to expect and demand (**customer satisfaction**)
- Improve **operational efficiencies**, and reduce transactional
costs (**Economies of Processes**)



Challenges of Library consortia arrangement

- Poor **remittance of subscription fees** by members
- Poor **usage of information resources** (low research activities, low information literacy, technological limitations)
- Legal issues to **copyright & intellectual property rights** (cross-border issues, unclear copyright exceptions & limitations for research and education)
- Unfavourable **licensing terms** (and archiving & curation)
- Escalation costs of scientific e-journals and databases (5-7% annually)
- **Unrealistic expectations** (service level, number of databases, that consortium can acquire everything under the sun...)
- Keeping service levels beyond sustainability to avoid member dissatisfaction



Challenges of Library consortia arrangement

- **Conflicting demands** from different institutions
- Avalanche of offers of products to consortium from publishers, aggregators
- Complex and varied pricing models from suppliers
- Burden of developing **equitable member cost-sharing structures on the consortium**
- Heavy **workload in consortium processes** (evaluation of New products, negotiate licenses, process renewals, monitoring and evaluation, consensus building among members,
- Inadequate **ICT infrastructure** in some member institutions



Conclusions

- Library Consortia:
 - Are a **matter of necessity** in the current research and education ecosystem
 - Have to with digital transformation, information explosion and economic hardships
 - Library consortia have catalytic & transformational role in the research and education



Recommendations

- There is need for **further strengthening** of library consortia across the African region
- Need for **closer collaboration between stakeholders**: NRENS and library consortia & governments
- Deepening the **customer-orientation of consortia services** i.e targeted services to categories of users: researchers, engineers
- Regional **networking among library consortia** to share best practice and information



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**Thank you so much for your
attention!**

