

EXPLORING THE ECONOMIC STRATEGIES APPLIED FOR SUSTAINABLE ELECTRONIC INFORMATION RESOURCE PROVISION IN SELECTED UNIVERSITY LIBRARY IN NIGERIA

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ABSTRACT: *The emergence of electronic information resources in libraries have been one of the most important achievements of the higher education sector in Nigeria since the 21st century which can solve the issue of information services, and addressing the challenges of EIRs are one the concerns and problems of librarians. The purpose of this study was to explore the librarians economic initiative impact in sustaining EIRs in their respective libraries. The research design was mixed method (quantitative and qualitative). Potential participants are all academic librarians from University of Abuja, University of Jos, University of Illorin and Federal University of Technology Minna and their management team. The data collection methods consisted of questionnaire and semi structured interview. The Statistical Package for Social Science (SPSS) was used to report the quantitative findings. While the qualitative interview after coding the interview data using thematic analysis method, inclusive theme were extracted. Result of the study confirmed that though the libraries have applied various strategies in provision of EIRs services but little has been done to advance the sustainability of EIRs services in the surveyed libraries.*

KEYWORDS: electronic information resources; University library; librarians; sustainability; strategy initiative.

INTRODUCTION

University libraries' primary objective is to provide users with adequate, effective, and accurate information (Xu, Kang, Song, and Clark 2015; Fink 2019). For the university libraries to perform this function, substantial financial support from the national government and parent organisations is needed (Gould and Gomez 2010). Increasingly providing EIRs services to clientele has become a significant preoccupation of university libraries; however, EIRs' high cost is an impeding factor, especially in an environment where budget cuts to libraries have taken centre stage. It is exacerbated by the fact that deployment of EIRs services requires robust ICT infrastructure, human resources, technical support and maintenance, a green library environment, stable electricity and internet connection. These are mainly lacking in most university libraries in Africa, including Nigeria (Akinsola, Herselman, and Jacobs 2005; Nkondo et al. 2014).

The requirements mentioned above are significant to sustainable EIRs services. Therefore, ULs must adopt economic sustainability measures to maintain and secure information collections for future generations and to meet institutional objectives. Some of the sustainability measures that ULs have adopted, especially in developed countries, include but are not limited to: consortia initiatives, alternative fundraising strategies, licensing negotiation with publishers of online resources, pay-per-view strategies, green library, institutional repositories, open access, and more (Ugwu and Onyegiri 2013; Jain 2014; Makori 2015). University libraries in Africa are lagging in these sustainable strategic initiatives compared to their counterparts. It is affirmed that libraries could attain economic, social and environmental sustainability for variety and high-quality EIRs through the business model approach. The approach can be useful in developing world academic libraries.

Nigerian university libraries face numerous challenges in providing EIRs, as shown in LIS literature (Okafor 2011; Akpokodje and Ukwuoma 2016; Rabi, Ojukwu and Popoola 2016; Iroaganachi and Izuagbe 2018). These include but are not limited to depreciating currency against rising EIRs subscription/acquisition costs in dollar currency, insufficient electricity supply, inadequate ICT skills, low funding and budget cuts, and inadequate facilities (Isah 2010; Akpokodje and Ukwuoma 2016). These challenges negatively affect EIRs services in ULs, as attested by Akpokodje and Ukwuoma (2016). Echezona, Okafor and Ukwuoma (2011) indicate that no specific fund is available to sustain EIRs provision in Nigerian university libraries. economic strategies ameliorating the identified e-resources issues in ULs by Echezona et al are scarce in LIS literatures.

Baumgartner and Ebner (2010) observed that the lack of strategic planning, vital for sustainable EIRs services provision, contributes to university libraries' sustainability issues. However, there is limited understanding of the economic factors hindering sustainable EIRs in university libraries. Also, there is little appreciation of the impact of strategic implementation and how to leverage these to enhance sustainable EIRs services in ULs. All successful organisations and institutions like ULs develop and implement strategies and procedures to sustain the economic services that enhances sustainable EIRs (Saunders 2015).

The UK, USA, Australia, Germany, and the Netherlands have long commissioned sustainability studies to develop sustainability models for their libraries. The development and adoption of HINARY, AGORA and other open access (Aronson 2004), eIFL.net (Electronic Information of Library Net) (Hackett 2007), International Network for the Availability of Scientific Publication (INASP) (INASP 2017), and more were the strategic approaches applied for economic sustainability in libraries. Though these models have worked reasonably in developed countries, they have faced challenges in developing countries because of infrastructure and funding issues, among others. In the Nigerian context, LIS bibliometrics studies by Ani and Okwueze (2017) and Udo-Anyawu (2018) conducted from 2004 to 2014 revealed limited focus on the strategies for sustaining EIRs services in university libraries. Akpokodje and Ukwuoma (2016) underscore the need for ULs to respond to this gap.

Similarly, Tella and Olabooye (2014) undertook a bibliometrics study from 2000 to 2012 in a Nigerian LIS environment and found no strategic initiative on EIRs' sustainability. The findings collaborates Onyancha's (2007) that highlight a lack of sustainability studies in Africa in the LIS field. Consequently, Alhaji (2018) argues that professional librarians need to take practical steps in ensuring the implementation of strategic initiatives that sustain electronic information resources in their libraries. In Nigeria, the growing economic, social and environmental strategic initiatives for sustainable EIRs services in ULs are scarce among Library and Information Science literature. Therefore, this study aims to address issues regarding economic strategies for sustainable EIRs in selected North Central Nigeria's University libraries. It also seeks to bridge the existing gap in knowledge, for example, a literature harvest on strategies for EIRs services. It is envisaged that the outcomes of the study could inform the EIRs policy development – formulation and improvement – and spur sustainability studies on university libraries.

Objective of the Study

To examine the extent to which economic strategies were employed in sustaining EIRs services in selected university libraries in Nigeria and to find the solution to sustainable EIRs.

METHODS

The research was carried out using a mixed method comprising qualitative and quantitative approach. Data was collected through questionnaire and semi structured interview with participants. Accordingly, interviews were conducted with 8 library management staff that had sufficient experience of EIRs management. Quantitative data collection was administered to the 126 librarians of the ULs. Quantitative data was analysed using statistical package for social science (SPSS) and the analysis of data obtained from interviews was performed using the thematic analysis method.

The study population comprised the academic librarian and of the four selected university libraries, the total population of 126. The data collection questionnaire and interview contains closed-ended questions and structured Interview with library management team to address the management enquiry.

The quantitative data encoded and analysed using the statistical package for social science (SPSS) version 18. The qualitative data collected from the interview was analysed using thematic content analysis.

Result and Discussion

Economic strategies adopted for sustaining EIRs and services (n=98)

the economic strategies adopted for sustaining EIRs and services on subscription to licensed database confirmed that respondents who attested that economic strategies are adopted to a great extent were 45 (45.9%), while those who indicated to a very great extent were 42(42.9%).

	Economic strategies	VGE		GE		LE		NA	
		F	%	F	%	F	%	F	%
a	Subscription to licensed databases	42	42.9	45	45.9	8	8.2	3	3.1
b	Annual and timely renewal of data-base subscription license	36	36.7	42	42.9	15	15.3	5	5.1
c	Regular updating of institutional Repository	46	46.9	40	40.8	10	10.2	2	2.0
d	Direct purchase of e-resources to Populate library database	38	38.8	42	42.9	12	12.2	6	6.1
e	Vendor negotiation of licensed e-resources	26	26.5	44	44.9	21	21.4	7	7.1
f	Constant upgrading of internet bandwidth	38	38.8	39	39.8	18	18.4	3	3.1
g	Seeking and accessing grants for e-resources	26	26.5	45	45.9	25	25.5	2	2.0
h	Collaborating and advocating for e-resources funding from parent institution	29	29.6	46	46.9	20	20.4	3	3.1
i	Government direct funding adequate for e-resources specifically	21	21.4	40	40.8	26	26.5	11	11.2
j	Alternative source of funding for e-resources	22	22.4	34	34.7	26	26.5	16	16.3
k	There is a conscious decision to invest in EIRs	35	35.7	50	51.0	10	10.2	3	3.1
l	Library provides current and relevant EIRs	52	53.1	40	40.8	5	5.1	1	1.0
m	Access to national virtual library provided by NUC	27	27.6	35	35.7	20	20.4	17	17.3
n	Digitising print resources	46	46.9	37	37.8	12	12.2	3	3.1
o	There is a conscious drive to collaborate in acquisition of EIRs	39	39.8	39	39.8	13	13.3	7	7.1

(Source: research data)

The result showed that libraries, to a great extent, seek alternative sources of funding for EIRs, such as accessing grants. This result is in line with the findings of Sandler (2014, p.3), who revealed that in the USA, Canada, and Europe, external funding support from well-structured consortia, ministries, councils, state legislature, governors and university presidents are available to libraries to build their electronic collections. Similarly, in the United Kingdom, Brown and Malenfant (2016) indicated that various charity organisations fund public university libraries. Moreover, in the US, Dewey's (2005) study revealed how Oklahoma's university, Texas Technology University, Penn State University, and the University of South Carolina use sports clubs to raise funding for their libraries. it is not the same with economic initiatives in North

Central Nigeria's university libraries where government funding is the major source of funding, compared to the aforementioned developed nations.

Pritting (2017) noted that most libraries explore multiple funding models to provide EIRs services that include resources sharing, purchase of articles and collaborative subscription. This study's findings further revealed other strategic initiatives applied to build electronic collections to include negotiating with vendors. In this regard, Lunden, Camilla, and Britt-Marie (2018) indicated that license negotiation reduces EIRs' cost. Similarly, Savelyev (2018) noted that vendor negotiation enables warranties, copyrights ownership, usage conditions, and obligations to be enjoyed by the libraries. Above all, Organisational collaboration is another used strategy in many libraries worldwide to cushion the economic issues challenging EIRs in building electronic collections (Min et al. 2005). In addition, in the United Kingdom, Brown and Malenfant (2016) indicated that various charity organisations fund public university libraries. The current study revealed a drive to collaborate with other libraries to acquire EIRs. Besides, EIRs' services provision can become cost-effective only when libraries can take advantage of economies of a larger scale (Walter 2013). Despite the strategies revealed from surveyed ULs for provision and sustainability of EIRs and services, it's really not encouraging to support a sustainable EIRs services. However, the present economic crisis in the world, affects general social life including university libraries specifically with Nigeria case. Therefore, more strategies are required to ameliorate the EIRs services challenges in the selected libraries.

How the library economic strategies sustain EIRs services?

The finding indicated that beside the nomenclatures of EIRs provision, the libraries are yet to initiate an innovative approach in sustaining the EIRs. The study also confirmed that economic initiative must be addressed to form the bases for social and environmental sustainable initiatives. From the interview data, result indicates that the social and environmental strategic success strongly depend on the economic capacity.

Team 1:

1st respondent – *nothing really new has been done to enhance the provision and sustainability of EIRs economical and environmental but socially training and training has been on-going.*

2nd respondent – *'The most important of all is the economic initiatives that enhances the social and environmental factors for sustainable services. Despite the high cost of subscription EIRs funding has not been improved for some years now. However, without strong economic basis the social and environmental services may have no strong holding on EIRs services.*

Team 2:

1st respondent – *The EIRs resources operating system has not been advanced by any special innovative initiative for sustainability purpose. The environmental issues like electricity supply have not been reviewed, and most time low supply of internet and electricity discourages user from coming to the library. This is so because of funding challenges resulting to negative economic impact on EIRs.*

2nd respondent – *‘the common initiative is the generator electricity supply, that does not operate 24 hours and most time may not carry the Air conditions in the library’.*

Team 3:

1st respondent – *‘Social strategies on staff training for technology skill acquisition has been a norm in the library but unique funding model has not been applied in this library as the government funds has been the only source for economic support for sustainable EIRs. This can never gain the library a satisfactory output’.*

2nd respondent – *‘there is strong need for funding model if the library most meet up with the global competitive services via EIRs services in this library’.*

Team 4:

1st respondent – *‘The library economic, social and environmental strategies had been the normal traditional system of services advanced into present technology support. The library is yet to come up with the strategic planning on economic, social and environmental strategic initiatives for sustainable EIRs services for which without strong planning and policy, it will be very difficult to obtain’.*

2nd respondent – *‘the subscription of online resources were not adequate in the library due to economic issues on funding. The poor supply of data base resources in library indirectly affects the social and environmental initiatives designed by library. The funding of the EIRs subscription should be a priority as bases for social and economic innovative initiatives’.*

From your point of view, what are the key solutions to the sustainability of EIRs services in your library?

The interview findings indicate that adequate funding, stable sources of power supply, staff training, maintenance of EIRs, and subscription to online databases are key solutions in the sustainability of EIRs services in the surveyed ULs.

Team 1:

1st respondent – *‘Funding and staff training are key major issues.’*

2nd respondent – *‘There has to be an alternative source of power supply to enable EIRs use in the library.’*

Team 2:

1st respondent – *‘There should be adequate funding for the acquisition of EIRs and its maintenance in the library.’*

2nd respondent – *‘Training and retraining of manpower.’*

Team 3:

1st respondent – *‘There should be available funding for EIRs in all areas of need.’*

2nd respondent – *‘improved electricity provision.’*

Team 4:

1st respondent – ‘Provision of sufficient bandwidth, more computers, common space, more professional librarians (senior librarians) and adequate subscription to online databases are serious challenges.’

2nd respondent – ‘databases should be adequately subscribed to and well-funded for its impact to be felt.’

Do you think that with EIRs’ sustainability team, EIRs services will be enhanced in your library?

The interview responses showed that respondents believe that a well-managed skilled EIRs sustainability team can enhance EIRs services in ULs. The following excerpts are the respondents’ thoughts on the question posed above.

Team 1:

1st respondent – ‘Yes, it will, if well established.’

2nd respondent – ‘It can actually lead to satisfactory output if adequately implemented.’

Team 2:

1st respondent – ‘Yes, it is possible.’

2nd respondent – ‘The team, if given the freedom to perform according to their mandates, will facilitate EIRs services in the library.’

Team 3:

1st respondent – ‘Yes, it will certainly enhance the sustainability of EIRs services in our library.’

2nd respondent – ‘The team will certainly enhance the sustainability of EIRs services in our library.’

Team 4:

1st respondent – ‘Yes if the team will be effective.’

2nd respondent – ‘With a good vision and strong management support, the team can enhance the EIRs services.’

Sequel to the findings from interview, the first challenge reported was the economic initiative for sustainable EIRs. The findings of the study are confirmed by the 8 management team from the four surveyed ULs. Accordingly, it can be said that the surveyed ULs faces economic issue regarding sustaining EIRs services that should be sustained or advanced in their respective libraries. However, response to sustainable EIRs includes economic, social and environmental influences such as economic factors to sustain EIRs services in ULs surveyed were reported as funding, while the environmental factors reported improve electricity supply, subscription of database resources and maintenance of technology facilities and the social factor is training of staff. The study confirmed that in other to enhance sustainable EIRs services, there is need for sustainability team, the finding of the study further reported that if the team is adequately implemented, it can actually lead to satisfactory and certainly enhance EIRs sustainability.

CONCLUSION

The study provided a snapshot of the economic strategies applied in the ULs of North Central Nigeria. Librarians and library managers are taking good measures in trying to cope with the economic challenges hindering sustainable EIRs provision in university libraries. However, study findings provide evidence that surveyed libraries have applied various strategies for sustainable provision of EIRs services in their libraries that yielded a positive return. Most other libraries applied various measures as indicated in literatures, such as consortium in purchase and negotiation of resources, PPV, fundraising programs and many others. That can be adopted in these surveyed libraries for advance output. Interestingly, the extent to which surveyed libraries have applied economic strategies for the sustainable provision of EIRs is in not bad, but with confluence of weak economy in Nigeria leading to funding issues in libraries, need more advanced strategic applications. The libraries cannot advance to sustain EIRs in university libraries without a robust economic strategies supported by legal back-up. In other words, the future remains complex with this present economic strategic approach for sustainable EIRs services. As long as the information managers applies the minor economic strategic approaches revealed in this study to sustain the library EIRs provision and services. The ULs may never enjoy sustainability of EIRs. Therefore, library managers, librarians and staff need to explore best ways to sustain EIRs service, at the same time, look for more opportunities to attract and improve the library economic base.

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