

Full Length Research

Institutional Repository for Academic Output in Universities, Nigeria

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The article investigated institutional repository for academic output in Universities, Nigeria. Survey research design was adopted in the study. The study population comprise of all the 5,639-academic staff in the eight South-West universities that have IRs. 373 sample size was used for the study via Slovin's sampling formula for the determination of the sample size; while the simple random sampling technique was used to select and administer the study instrument to respondents. Data subsequently collected from 254 respondents through a self-structured questionnaire via Google form online were analyzed using descriptive statistics (simple percentage and mean/standard deviation) to answer the study research questions via SPSS version 20.0 to arrive at the following major findings: level of academic staff output is low, likewise IR awareness among academic staff in South-West Universities due to several challenges upon which recommendations were made; to include the urgent need for the universities management to seek avenues to increase IRs awareness among academic staff to spur high usage for the improvement of their academic productivity outcomes and visibility in the global academic environment.

Keywords: Institutional Repository, Academic Staff, Output, South-West, Nigeria.

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INTRODUCTION

Access and use of information are essential to academic staff growth and development. This phenomenon is especially important to academic staff in universities for the purpose of effective teaching, learning and research activities commonly referred to as improved academic staff productivities or output. In achieving these purposes, scholars are expected not only to be aware and develop positive attitudes towards the use of Institutional Repositories (IRs) but be willing to accept and deposit their research outcomes in their institutional IRs to stimulate optimum use via access to scholarly communications in form of innovative research efforts or information.

The quest for free and wider access to research

efforts/information has become necessary and fundamental following the fact that no individual or nation would attain considerable height in economic growth and development without adequate access to vital information. The knowledge and idea behind information recognition as a vital tool to national development has long been emphasized among economists all over the world by tagging information as the fifth factor of production/economic progression after "land, labour, capital and entrepreneur". Thus, the institutional repository initiatives and campaign among scholars all over the world especially at the university level where research efforts are paramount for the overall growth of the human society through advanced education. Indeed, societal growth and development are the end products of education wherein the university is supreme. The

university is of course the highest arbiter of learning for manpower development capable of improving and growing any nations' socio-economic development. The university cannot effectively carry out this function without the inputs of its academic staff in form of innovative academic outcome or output. Thus, the success and failures of universities in this direction largely depends on academic staff's productivity or output.

Output is viewed as the rate at which an organizational/institutional employee or worker such as academic staff, or a country generally produces goods and services (Ogunsanwo, 2018). It stands for the ratio of manpower output in ratio of the energy or amount of resources committed to his job. Invariably, output could be seen as the output of a staff to the ratio of the amount of remuneration received in an organization. Moreover, Madhuri, Srivastava and Srivastava (2014), described output as the rate of a product items or services' outcome in comparison to the amount of resources committed towards its production in any organization or institution. To this end, the research efforts of Ali, Ali and Adan (2013) on the output of employees, discovered that the quality and degree of access to information in workplaces determines the level of employee's productivity or output. This is an indication that there is a relationship between access to information and output of employees such as the academic staff in the educational setting, especially at the university level, and that improved staff access to enabling facilities via information has direct relationship with staff productivities or outputs in organizations and institutions. In effect, their study points to the fact that there is a positive relationship between staff access to information and staff productivities or output. Output therefore connotes expected outcome of employees in ratio of energy exerted for the job at hand (in this case, the academic outcome of faculty/academic staff in universities). To this end, Rogers (1998), stressed that for organizations or institutions to improve productivity, they should establish an information systems vision. This is the tenet of Institutional Repository (IR) initiatives across the globe. Indeed, institutions with in-depth understandings of the importance of information use in our modern world, has long been enjoying the benefits of information driven production processes and gaining global economic competitive advantages via effective use of open access information resources.

The essence of open access initiatives is to widen access opportunities to information products (academic outputs) preserved or stored in all forms of institutional databases. It includes unpublished literature in support of learning and teaching; as well as to standardize institutional information storage and access. It also mirrors improved ability to keep track of research records and usage by overcoming publishers' information access permission barriers, thereby helping knowledge driven institutions such as the university to share their knowledge and expertise easily, better, wider and free of

charge globally. This new trend in information access, has prompted many higher institutions across the globe to be engaged in the establishment of Institutional Repositories (IRs) including those in Nigeria. Indeed, IRs play fundamental roles in today's educational growth system via access to quality research output free of charge (Koutras & Bottis, 2013). Thus, IRs were projected as one of the key information access strategies for the achievement of open access initiatives. Fundamentally, institutional repositories collect and provide free access to the research output of any given higher institution of learning. Undoubtedly, the main objective or function of IR is to provide free access to full texts of research outcomes or outputs such as journal articles and technical reports within and outside an institution by members of an institution hosting an IR or that has an IR. Today, IRs serve as means through which many institutional libraries provide effective access to quality information resources and engage in the dissemination of institutional research outcomes and products to patrons globally without undue restrictions experienced in the past decades.

Libraries are currently achieving this new trend of mandates (open access initiatives and movement) through constant adaptation of their organizational mission and services to meet those of their parent institution's goals which they are meant to serve (Zervas, Kounoudes, Artemi & Giannoulakis, 2019:1). From the above IRs definitions and concepts, it is evident that Institutional Repository is institution based, which basically contains scholarly publications that are well organized to provide free access to their full-text contents globally. Thus, IR could be defined as "a type or kind of digital library package established by an individual university, populated by the staff and students' academic and research outcomes or productivities as well as those of other members of the university community and to be consulted by all members of the university and the outside world free of charge without users' discrimination and restriction". Although it was mentioned that the purposes of Repositories may vary (for instance, some universities have teaching/learning repositories for educational materials), in most cases they are established to provide open access to the institution's research output for the purpose of increased academic output among staff (Koutras & Bottis, 2013). This is the focus of the current study. Indeed, if IR is adequately put into use, it would no doubt help to increase academic staff output as well as the overall research outcome of the institution through adequate awareness and good or positive attitude towards IR use.

Awareness is fundamental to IR usage for increased academic output. Awareness is therefore an important pre-requisite to IR use except that an individual uses it coincidentally or unknowingly. Indeed, a wide range of users' awareness is required for proper use of IRs beauty and importance in an academic setting or environment.

Ogbomo (2011) indeed identified lack of awareness as one of the issues that adversely militated against the development and use of IR in Nigeria over the years. Christian (2008) emphasized that there exists high level of institutional repositories awareness' problems among academics or scholars in academic and research institutions in the country. To this end, "he lamented that more than 74% of his study respondents in his survey research carried out in 2008 were completely unaware and unfamiliar with IR contents and benefits". This implies that the knowledge of IR is very low among academics who are expected to be seen as major stakeholders of IR development and use, especially in developing nations like Nigeria. Thus, awareness of IR among academic staff seems to be one major issue affecting the use of IR for research in developing countries. It is only when awareness is tackled in an empirical study of this nature that usage may be enhanced for the purpose of improved output among users especially the academic staff in universities. Thus, this study investigates "Institutional Repository for Academic Output in Universities, Nigeria".

Research Questions

The following research questions were used to guide the study.

- 1) What is the level of academic staff output in South-West Universities in Nigeria?
- 2) What is the level of IR awareness among academic staff in South-West Universities in Nigeria?
- 3) What are the factors challenging IR usage among academic staff in Nigeria?

Review of Literature

The fundamental principles of open access movement initiatives originated from information sharing and equitable distribution of knowledge globally. Such information and knowledge availability on the basis of free access is very important for many developing countries striving to improve their educational sector's responsiveness to national growth and development issues with the ultimate aim of addressing educational challenges to achieve equitable national growth and development. The synergy between education or knowledge and national economic growth and development cannot be overemphasized simply because, when a nation has abundance of natural endowments or mineral resources such as Nigeria, it must be ready and knowledgeable enough to transform such resources to finished products that are capable of meeting its individual and collective national needs. Infact, it was argued that such transformation process requires access

to requisite information and knowledge (Ogbomo, 2011, cites Christian, 2008).

Ghosh and Das (2007) further disclosed that the difference that exists between institutions of developed and developing countries lies on the nature and pattern of information/knowledge generation, management and access as well as their relevance to their peculiarity in terms of economic circumstances surrounding their overall national growth and development. In this ambience, Ghosh and Das (2007) acknowledged that the developed nations of the world are basically information rich countries. They acknowledged that the developed nations with viable enterprises and institutions or organizations exert considerable control and improved access to valuable information resources management and utilization; while developing nations on the other hand such as Nigeria, are at critical juncture on the ground that requisite information and knowledge for the development of essential technologies needed for national economic growth and development are grossly inadequate due to several managerial issues or problems. Open access advocacy therefore becomes a useful means and opportunity for such countries like Nigeria to access and circulate requisite knowledge needed for growth and development free of charge globally. Put differently, the author(s) or creator(s) of knowledge in open access initiatives automatically grants permission for unrestricted use of their intellectual contents with due acknowledgement and importantly not meant or used for commercial purposes (i.e. must embrace the free of charge use of scholarly information initiatives) manifested through IR developments and use.

Institutional repository is transforming academic activities in higher institutions of learning via free hold of information and sharing anchored on open access initiatives all over the world. Indeed, IR is helping to improve academic productivities among scholars in no little measure recently (Ogbomo, 2011). Thus, IR was conceived as "a set of information services that institutions provide to members of its community through effective collection, management and dissemination of digital information/scholarly materials created by the institution or its community members free of charge to users with the potentials of offering various benefits to support academic output and development among scholars globally" (Lee & Stvilia, 2017:2). The research outcome or output of scholars could include "electronic copies of pre-prints as well as post-print articles, conference and working papers, committee papers, teaching materials, thesis and dissertations, monographs, multimedia, student projects among others" (Ivwhighrehweta, 2012:2). From the foregoing, it appears that institutional repository seem to have come to stay and at the same time, radically revolutionizing the methods and patterns of information resources' preservation as well as communication of research outputs or products in academic and specialized research

institutions. In effect, Institutional Repositories (IRs) aim at pushing out the research output of institutions (making scholarly works readily and widely accessible) such as universities, polytechnics, colleges of education and related research institutes to members of the public by making them readily available and free of charge upon which such institution's library act as the main hub.

METHODOLOGY

The descriptive research design method was employed for the study. The study population is the academic staff in South-West Universities with IRs in Nigeria. It is one of the regions with the highest numbers of IRs (eleven IRs) out of the 25 IRs that currently exist in 21 universities the six existing geo-political regions in the country (Opendoar, 2018, Adam & Kaur, 2019). Thus, all the 5,639 academic staff in the eight (8) universities in the region with IRs formed the population of the study from

which 373 were sampled via Slovin's formula for the determination of sample size. The universities are: University of Lagos, Akoka, Lagos; Federal University of Technology Akure, Ondo State; Federal University, Oye, Ekiti State (have 2 IRs); University of Ibadan, Ibadan, Oyo State; Covenant University, Otta, Ogun State (have 3 IRs); Afe Babalola University, Ado-Ekiti; Fountain University, Oshogbo, Osun State; and Elizade University, Ilara-Mokin, Ondo State. University of Medical Sciences, Ondo was excluded from the study because there is no IRs yet in the University library website. Self-structured questionnaire was the instrument used in data collection via multi-stage sampling technique and Google form online. Data subsequently gathered from 254 respondents randomly selected from the sampled population of the study were analyzed via SPSS version 20.0 through descriptive statistics using frequency counts, simple percentages and statistical means in answering the study research questions to arrive at its findings.

Research Results and Discussion

Research Question I: What is the level of academic staff output in South-West Universities in Nigeria?

Table 1. Showing Level of Academic Staff output in South-West in Nigeria

Statement	VLE	LE	HE	VHE	Mean	Total
1. My extent of Books or Monographs output via IRs use	36.4% 90	45.1% 117	16.7% 40	2.8% 7	1.70	100% 254
2. My extent of journal articles output via IRs use	39.2% 102	36.4% 95	18.7% 50	2.8% 7	1.75	100% 254
3. The extent or rate of my theses & dissertations output via IR use	39.2% 102	38.8% 96	21.0% 56	0% 0	1.82	100% 254
4. My extent or rate of Conference Papers output via IRs use	41.1% 107	35.0% 94	18.7% 50	1.2% 3	1.70	100% 254
5. My extent or rate of Learning Objects output via IRs use	40.3% 105	41.3% 110	15.2% 35	1.5% 3	1.70	100% 254
6. My extent or rate of Presentations or Term Papers output via IRs use	42.7% 111	43.5% 113	11.5% 27	1.5% 3	1.68	100% 254
7. Extent or rate of Technical Reports output via IRs use	41.6% 1033	45.9% 119	10.4% 29	1.5% 3	1.70	100% 254
8. Extent or rate of Working Papers output via IRs use	36.0% 94	51.4% 128	9.2% 23	2.5% 9	1.79	100% 254
9. My extent or rate of Teaching Materials or Lecture Notes output via IRs use	35.2% 92	47.1% 117	17.5% 42	1.5% 3	1.83	100% 254
10. My extent or rate of Multimedia Works output via IRs use	34.0% 89	40.3% 105	18.7% 45	6.9% 15	1.94	100% 254
Overall / Cluster Mean = 1.806						

Source: Field Survey, 2021

Table 1 showed the mean ratings on the level of academic staff output in South-West Universities in Nigeria. The data indicates the mean ratings of all statements respectively based on the cut-off point of 2.50 for a four Likert scaling. With a cluster mean of 1.806, the data indicates that all items rated were rejected indicating that the level of academic staff output in South-West Universities in Nigeria is very low. This finding is in conformity with the study of Achonna (2018) who reported "low level academic output among scholars in university libraries in Southern part of Nigeria.

Research Question II: What is the level of IR awareness among academic staff in South-West Universities in Nigeria?**Table 2.** Level of IR Awareness among Academic Staff in South-West Universities in Nigeria

Statement	VLE	LE	HE	VHE	Mean	Total
1. My level of awareness that IR collects and provides free access to journal articles to boost research output of academic staff	33.9% 86	48.0% 122	10.4% 29	7.5% 17	1.91	100% 254
2. My level of awareness that IR provides free access to books in digital form of a university	34.5% 88	49.2% 125	14.8% 35	2.5% 6	1.84	100% 254
3. My level of awareness that IR provides unrestricted access to Theses & Dissertations of a university	35.8% 91	47.2% 120	10.4% 29	5.6% 14	1.87	100% 254
4. My level of awareness that IR provides free access to digitized Conference Papers of a university	35.8% 91	44.9% 114	16.7% 40	3.5% 9	1.87	100% 254
5. My level of awareness that IR store and disseminate Learning Objects of a university free of charge	33.5% 85	44.5% 113	15.4% 39	6.7% 17	1.95	100% 254
6. My level of awareness that IR widely make Presentations or Term Papers of a university accessible to users via the internet	34.6% 88	43.7% 111	15.9% 43	4.5% 12	1.92	100% 254
7. My level of awareness that IR provides free access to Technical Reports of a university	31.9% 81	48.4% 123	14.4% 39	4.5% 11	1.92	100% 254
8. My level of awareness that IR collect and disseminate digitized Working Papers free of charge to users	26.4% 67	57.5% 146	14.0% 33	3.2% 8	1.93	100% 254
9. My level of awareness that IR provides free access to digitized Teaching Materials or Lecture Notes of a university	27.0% 66	50.0% 127	17.9% 43	7.2% 18	2.05	100% 254
10. My awareness level that IR provides free access to digitized Multimedia Works of a university	24.0% 61	44.5% 113	27.0% 71	3.6% 9	2.11	100% 254
Overall / Cluster Mean = 1.937						

Source: Field Survey, 2021

Table 2 showed the mean ratings on the level of IR awareness among academic staff in South-West Universities in Nigeria. The data indicates the mean ratings of all statements respectively. Based on the cut-off point of 2.50 for a four Likert scaling, with a cluster mean of 1.937, it indicates that all items rated were rejected showing that the level of IR awareness among academic staff in South-West Universities in Nigeria is equally low.

Research Question III: What are the factors challenging work deposit and use of IR among academic staff in Universities in South-West Nigeria?**Table 3.** Showing Factors Challenging IRs Use among Academic Staff in Universities in South-West Nigeria

Statement	SD	D	A	SA	Mean	Total
1. Unawareness of the benefits of IRs	7.9% 20	25.8% 63	56.1% 140	12.2% 31	2.72	100% 254
2. Lack of willingness to deposit works in IRs	9.4% 24	28.1% 74	44.7% 116	15.7% 40	2.68	100% 254
3. Inadequate skills to access materials in IRs	12.6% 32	21.2% 69	47.4% 123	11.8% 30	2.59	100% 254
4. Open access materials in IRs are of low quality	9.8% 25	30.5% 80	48.8% 124	9.8% 25	2.59	100% 254
5. Fear of the future that few people may like to use works IRs	12.2% 31	28.9% 76	44.1% 112	13.8% 35	2.59	100% 254

Table 3 continuation

6.	Fear of the future that higher institutions management may not accept or use works deposited in IRs for academic staff promotion exercise	11.8% 30	29.7% 78	42.7% 116	11.8% 30	2.57	100% 254
7.	Availability of materials in IRs is not guaranteed	13.0% 33	25.6% 70	48.2% 120	12.2% 31	2.59	100% 254
8.	IR materials may encourage plagiarism among academic staff.	13.4% 34	29.0% 71	46.2% 120	11.0% 28	2.56	100% 254
9.	IR materials are likely to be misused or plagiarized	14.2% 36	27.0% 71	45.9% 119	11.0% 28	2.55	100% 254
10.	IR materials are not compatible (well matched) with existing traditional (commercial) scholarly communications (e.g. quality in peer-review of works before publishing)	13.4% 34	27.7% 73	48.9% 119	11.0% 28	2.56	100% 254
Overall / Cluster Mean = 2.60							

Source: Field Survey, 2021

Table 3 shows the mean ratings of factors challenging work deposit and use of IR among academic staff in South-West Universities in Nigeria. The data indicates the mean ratings of all statements respectively. Based on the cut-off point of 2.50 for a four Likert scaling with a cluster mean of 2.60, it shows that all items rated were accepted indicating that the factors challenging work deposit and use of IR among academic staff in South-West Universities in Nigeria are many/high.

Conclusion and Recommendations

The study reflected the aim and impact of IRs development and use on academic staff productivities in advanced nations of the world; as well as how it has stimulated academic activities in several academic settings. Thus, IRs development and use in Nigerian Universities cannot be over-emphasized. However, the study specifically revealed that academic staff output in South-West Universities is low; likewise their awareness level of IRs. The study also discovered that several factors are challenging the use of IRs among academic staff in South-West Universities in Nigeria.

This scenario is not good enough for academic staff and students alike in the bid to attaining academic success as it amounts to waste of energy, time and resources committed to the development of IRs in Universities in South-West. Thus, the following recommendations were put forward to help address the identified anomalies in line with the study findings especially if quality university education via access to quality academic output is of any concern to university management in Nigeria:

- University management in Nigeria should urgently encourage IRs use among their academic staff via intensive awareness creation in their respective

institutions.

- Academic librarians in universities should take the lead in the encouragement process of IR usage campaign to spur high academic output among colleagues in South-West Universities so as to justify the energy, time and resources spent in the establishment of IRs in the institutions library.
- Moreover, measures should be taken by university management to surmount identified challenges confronting academic staff in the use of IRs so as to overcome the low academic output circumstances discovered among academic staff in South-West universities in the country among others.

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