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Marketing Open Access Institutional Repositories in Ghana: Context and Prospects.

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Background to the study

Academic institutions have looked for ways to realign the means of scholarly communication, and institutional repositories seem to be the new platform for disseminating intellectual productivity due to the inherent benefits they possess. Lynch (2003) considers IRs to be a set of services that a university offers to members of its community for the management and dissemination of digital materials created by the institution and its community members. Due to their focus on the removal of limitations, open access platforms such as institutional repositories have benefits which transcend academic institutions, researchers, funding agencies, publishers and a country (Giarlo, 2005; Canada, 2009; Cullen & Chawner 2009; Abukutsa-Onyango, 2010; Willinsky, 2010, Suber, 2012). In the view of Jain (2012), repositories are effective vehicles to information exchange between and among countries. With the availability of insufficient funding to libraries, Christian (2008) believes this type of unrestricted access to information helps researchers in the developing world. Canada (2009) further stresses that, considering the limited financial resources available, the potential for researchers, educators, and institutions in developing countries to benefit from open access platforms is great. Due to features such as reduced cost and unrestricted access, the repositories option enjoys higher level of acceptance among many academic institutions (Giarlo, 2005; Grundmann, 2009).

Owing to the strategic position libraries occupy in supporting the teaching, learning and research mandate of academic institutions, they tend to be highly instrumental in the development and operations of repositories. Adeya (2002) insists that libraries, through open access, are now instruments of education, thereby contributing to users' intellectual development. The Association of College and Research Libraries (2003) Environmental Scan recognized IRs as an emerging issue that may affect the future of academic libraries.

Moahi (2009) observes that in many universities, the library is often solely responsible for the development of repositories. As Cho (2008) succinctly puts it, libraries are becoming alternative publishers through open access institutional repositories. Kiran and Yip (2009) also contend that in Malaysia, academic libraries are the pioneers of open access institutional repository initiatives.

The rate of deployment of institutional repositories in Africa is very low as compared to other areas of the world (DOAR, 2014; OPENDOAR, 2011; Moahi, 2009). Consequently, the development of sustainable repositories implies a completely new approach within the campus community regarding why others have failed and how to prevent such failures.

Statement of the problem

Africa accounts for less than 5% of the world's research output notwithstanding the many research activities occurring on the continent (Moahi, 2012). This, Alemna (1998) and Alemna (2005) found out to be due to the fact that a lot of research findings from Africa fail to see the light of day owing to inadequate indigenous sustainable journals as well as issues of copyright. Thankfully, the use of repositories to widely disseminate intellectual discourse has received wider acceptance on most academic institutions. However, a cursory look at the literature concerning institutional repositories in Ghana and Africa suggests that many of the institutional repositories crash out shortly after their take-off, often attributable to reasons of inadequate materials, technical and human resources (Corletey, 2011, Moahi, 2009; Campbell-Meier, 2008; Rieger, 2007; Bailey, 2006). These ascribed reasons may well be, since much effort is concentrated on software and engineering protocols at the design stage to the detriment of other equally important issues relevant in the sustainability of repositories.

Limited research exists on the critical issues such as marketing and promotion of repositories to attract higher patronage by the academic community. The quest to meet the changing expectations of patrons, compounded by the information overload has led many not-for-profit institutions such as libraries to adopt marketing and promotion to keep and win existing and new patrons respectively. It is for this reason that this study sought to empirically assess the issues pertaining to the campus-wide collaborative marketing and promotion of institutional repositories leading to a sustainable use by the academic community and beyond.

Objectives of the study

The study largely assessed how operational institutional repositories are marketed and promoted for use by the academic community of two private and two public universities in Ghana. Specifically, the study sought to:

- 1. assess the overview of repositories in the study area
- 2. identify the key actors in the marketing and promotion of IRs
- 3. find out the strategies for marketing and promoting institutional repositories;
- 4. explore the factors affecting the marketing and promotion of institutional repositories; and
- 5. establish the challenges faced in the management of institutional repositories.

Significance of the study

The study will contribute to the process towards developing an acceptable standard for the promotion of repositories as alternative means of scholarly communication within academic

institutions. Policy makers could thus rely on the findings of this study to model the marketing of their repositories. Practitioners could, through this study, also identify the existing best practices which have worked elsewhere, in mobilising human and material resources to enjoy the buy-in of all members of the campus community.

Above all, this study will also contribute to the body of literature of, especially, the marketing and promotion of open science platforms. That is, it will situate institutional repositories from a Ghanaian perspective within the global or world view.

LITERATURE REVIEW

Intellectual productivity and scholarly communication

In most developing economies, especially in sub-Saharan African countries, there are often restrictions to scholarly materials which curtail the advancement of intellectual productivity. Academic librarians have, for a number of years, been vocal on the topic of a "serials crisis", which is the situation in which the cost of journal subscriptions has taken up an increasing share of stagnating library budgets. Lawal (2002) established that libraries were paying three times for 7% fewer journal titles in 2001 than in 1986. This situation explains why many librarians have misgivings about the traditional journal system and publishers.

Well-established journals wield the power to control the process of professional advancement but are in turn dependent on faculty content to also survive (Tiamiyu & Aina, 2008). Wellcome Trust (2003) claims that the monopoly held by publishers in the current system does not act in the interests of either the academic community or the public, but rather it further worsens the disparities that exist between resource-rich and resource-poor countries. Issues of professional recognition, scholarship contribution and career progression have often been high on the radar for academic authors. Authors are willing to give away the copyright to articles they have written in exchange for the services of the publisher in the form of peer-review, quality labelling, marketing and disseminating (Bjork, 2004). In return, the author gains recognition in the academic field and career advancement. This situation could however not stand the test of time as content providers such as lecturers as well as curators began to consider a rather costeffective and impactful alternative for disseminating intellectual output. This then called for an entirely free access to online scholarly materials for all users would widen the audience and recognition, and increase the impact and number of citations, thus advancing scholarly communication and research (Lawrence, 2001; Correia & Teixeira 2005).

Open Access Institutional Repositories

As a concept, Open Access (OA) means an unlimited access to online peer-reviewed scholarly research works such as thesis, dissertations, book chapters, and scholarly monographs (Schopfel & Prost, 2013; Schwartz, 2012). Being an ardent advocate of this phenomenon, Harnad (2008) describes the characteristics of open access as information which is free, immediate, permanent, full-text, on-line and accessible. Several authorities have defined online digital open access repositories differently. Johnson (2002) views a digital institutional repository as any collection of digital material hosted, owned, controlled, or disseminated by a college or university, irrespective of purpose or provenance. Swan and Chan (2009) consider open access institutional repositories as digital collections of the members of a university's research community that make their contents freely available over the internet for archiving and long-term preservation.

Crow (2002), Johnson (2002) and Shearer (2003) have summarily described the key attributes of online digital institutional repositories as being institutionally-defined, scholarly, cumulative and perpetual as well as open and interoperable. This essentially implies that beyond academic institutions, agencies such as governmental departments, non-governmental or intergovernmental organizations, museums, independent research organizations, federations of societies, and commercial entities that wish to capture and openly disseminate its intellectual product could set up a digital repository, thus contributing to scientific/scholarly discourse and benefiting from global organizational visibility.

The concept of online institutional repositories is remotely rooted in a movement in 1994 when Stevan Harnad called authors to deposit their work on internet File Transfer Protocol (FTP) servers (Cho, 2008). The main motivation behind these initiatives was high journal subscription rates which often compelled libraries to pay huge subscriptions for restrictive journals. Another remarkable condition that propelled the growth of institutional repositories was the pervasive public access to the World Wide Web in the late 1990s and early 2000s (Jain, 2012). Rogers (2003) believes that for an innovation to spread and be adopted, it should have relatively better advantages over the existing technology, have an appreciable ease of use and as well be compatible with the existing values, past experiences and the needs of potential users within the social system. For him, whereas adoption is a decision of full use of an innovation as the best course of action available, rejection is a decision not to adopt an innovation. Institutional repositories lead to an increased global visibility and prestige, serves as a marketing tool for universities to attract funding, students and quality staff. It also provides an avenue for the centralization and long term curation of all types of institutional outputs (Johnson, 2002; Pickton & Barwick, 2006; Lyte et al, 2009; Jain, 2010). As Jain (2012) puts it, it is a way of maximizing availability, accessibility, discoverability and functionality of scholarly research outputs at no cost to the user.

The growth of IRs has been concentrated largely in institutions in the developed world. This notwithstanding, there seems to be a growing awareness and use of IRs due to the rapid trickling down of technology from developed countries to developing countries, coupled with decreasing cost of internet-enabled electronic gadgets. In Ghana, the Consortium of Academic and Research Libraries in Ghana (CARLIGH) and International Network for the Availability of Scientific Publication (INASP) has provided immense support to academic libraries in their quest to set up institutional repositories. An outlook of the Ghanaian situation, according to Corletey (2011), depicted that most of the IRs were at the pre-operational stage, with the few operational being mostly for public universities.

Marketing and promotion of institutional repositories

Over the years, the concept of Marketing has been seen differently by different people. It is seen by Evans and Berman (2001) as the anticipation, management and satisfaction of demand through the exchange process. It is the process of making sure that the right goods and services are produced and find their way to consumers. To some, it is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives (The American Marketing Association, 2006). The key functions of marketing include buying, selling, advertising, consumer analysis, marketing research, distribution, pricing, promotion, management and social responsibility.

While conceding that myriad of definitions exist for the concept of marketing, Ramirez and Miller (2011) believe that that of Kotler is most befitting for non-profit organisations. Marketing is seen by Kotler (1975) as the analysis, planning, implementation and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives. Academic communities share a common characteristic with other non-profit organizations being that, instead of a tangible product, they offer services. To Kotler (1975), a service is any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything". Services often do not appear in a physical state and so are inseparable from the service provider. As such, the quality of service can differ based on consumer demand as well as the service provider.

Kurtz (2010) sees promotion as an important part of marketing mix of a business enterprise which involves creating demand for the product through activities that bring out the special characteristics of a product and service. Promotion is one of the four elements of marketing mix – product, price, promotion and place – which creates a communication link between sellers and buyers for the purpose of influencing, informing, or persuading a potential buyer's purchasing decision. The benefits of promoting library services include: increased usage, increased value in the organization, education of users and changed perceptions (Kurtz, 2010; Jestin & Parameswari, 2002).

There is often the feeling that library-related information or services should not be marketed or promoted because the library is a social agency established to serve the educational and information needs of society. Confirming this assertion, Anafo (2014) found out that librarians sometimes feel uneasy with this concept partly because the idea of 'marketing' has acquired commercial connotations; and perhaps, partly because the concept of a market-led service driven by customer needs contradicts the traditional subordinate and independent 'client-toprofessional' relationship. Most libraries summarily conclude that the marketing concept is "offensive and unethical, and those who practiced it were to be treated with some suspicion (Condous 1983, [cited in Ramirez and Miller, (2011)]. By virtue of the fact that most academic libraries saw themselves as essential part of the campus community, they deemed it unnecessary to market their services or products. This stance is considered as part of the reasons to blame for a dip in the image of the library in most academic institutions. Conversely, information marketing has become very essential in recent years because of reduced funding for library services worldwide. The earlier passive approach of information professionals waiting for clients to bring in their requests, has long given way to professionals rather being more proactive to anticipate the requests of clients. Competition for limited funding threatens the continued survival of information centres. This makes it even more imperative for information services and products to be marketed and, for libraries to review their information providing activities in order to retain existing users and win back lost ones.

What is more, developments in Information and Communication Technology (ICT) have further complicated the already complex nature of the user. It is, however, believed that this same ICT could be seized to further improve the work and image of information providers to become even more relevant in their service provision. When e-resources are involved, technology is needed to create the desirable awareness about their availability, and to ensure accurate, timely and reliable delivery of the information. It is heart-warming to note, as existing literature suggest, that marketing of academic products have currently become widely accepted, albeit sophisticated and strategic (Hemsley-Brown & Oplatka, 2006; Ekpenyong, 2003). Though many have been slow to adopt marketing strategies, there seem to be a great payoff accruing to libraries which embraced publicizing their services. There is enough evidence to suggest that information professionals are beginning to appreciate the value of marketing, and thus promote their collections and services to the campus community (Smykla, 1999; Gibson, 2005). This is evidenced in a change of library users' attitude towards the library and the services it provides.

Entsua-Mensah (2010), in discussing the relevance of marketing in a non-profit making establishment, points out the need for information workers to adopt some marketing strategies to get information to their clientele. This comes in the wake of an earlier recommendation by Alemna (1998) for libraries in Ghana to adopt marketing initiatives in order to ensure survival and sustenance. This is because in his opinion, the conditions which challenged libraries in developing countries to adopt marketing and total quality management strategies are very much prevalent in Ghana at present.

Creating awareness about the existence of the contents of an online institutional repository is far-reaching. It is for this reason that Crow (2006) suggests for close ties to exist between the repository development process and marketing for a wider adoption and use. Smith and Albaum (2010) are of the view that effective information marketing often begins with research. The aim of such research is to find out more about the prospective users of the information and the type or format they are interested in. Such research also reveals the full range of services needed and the efficient channels to assist users receive the service. In the University of Maryland for example, the library system created and maintained a document that defined the target audiences, listed the key benefits of using the IR, and provided specific communication strategies for contacting campus entities and groups throughout the first academic year after launch (Ramirez & Miller, 2011).

Strategies for marketing and promoting IRs

Strategies could be seen as a set of procedures adopted by an individual or organization for the attainment of set objectives (Mintzberg, 1980)

Several strategies have been identified to market, promote or publicize institutional repositories and e-resources in general. Among these techniques necessary to ensure that information resources gets to the right people in real time are:

1. Using creative repetitive communication through word of mouth (informal), notices, posters, banners and radio announcements

2. Inclusion in annual reports, brochures and newsletters

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3. User education/training

4. Meetings and various fora, seminars/workshops and special events such as open days

5. The library's homepage, other websites, Facebook, blogs and e-mail (Listserve)

In the view of Leong (2009), the strategies to increase awareness of electronic resources typically fall into three categories: using the contact opportunities afforded by prospective content generators and users who are seeking help; providing outreach information on the web site; and proactively delivering information directly to end-users. Ramirez and Miller (2011) reiterate that on some campuses, personalization is one of the most effective outreach strategies adopted by repository managers to reach faculty members. According to them, this strategy breeds a favourable response from faculty, especially when they receive customized emails that reference their recently published scholarship, including a journal name and article title, mined from citation or journal databases. Though many have suggested the use of hand-outs, flyers, pamphlets and websites, it is believed that a lot more could be achieved when campus opinion leaders are involved. They proceed that when faculty members are notified of monthly download statistics of their materials for them to realize how often their work is being used, coupled with an annual report of repository's accomplishment, there is then a renewed interest. Marketing strategies change as the IR project matures. To some repository managers, the focus on marketing often is at the pre-launch and launching stage. During the early stages, marketing efforts focus more heavily on the mechanics of the IR, including software, policies, benefits, and processes for getting started with the service. Hand-outs, pamphlets, bookmarks, and other paper collateral are useful tools to inform target audiences. Workshops and other "miniconferences" on the changing scholarly communication model, the open access movement or educating faculty on related IR issues such as copyright, publishing processes, and citation analysis to draw attention to larger issues facing higher education are also useful (Ramirez & Miller, 2011). Some believe that by capturing the attention of faculty with these issues, many opportunities unfold to highlight the value and use of the IR in a broader context.

Strategically, on some campuses, library leaders and library-led committees are commonly employed to identify specific campus or faculty groups that would benefit from an institutional repository, and often, the Provost and other campus administrators are cited as important initial audiences. It is often when the benefits of the repository are linked to the Provost's mission of research visibility and advancement that a strong case is made automatically for the IR on campus. This approach raises awareness of, and garners support for the initiative (BEPress, 2009). As the Diffusion of Innovations Theory postulates, early adopters are very crucial in the success of any new innovation (Rogers, 2003). As such, such opinion leaders who are held in

high esteem by peers could be selected to become champions for the IR, raising awareness with colleagues and influencing others to use the repository. In other words, if it comes from a respected campus official, people are more likely to pay attention to the message. This could then be followed up with occasional report about the statistics, achievements, and future areas of growth.

It is the position of Revell and Dorner (2009), that subject librarians are in a better position to act as change agents by promoting institutional repositories as an innovative resource while aiding students and academics to meet their information needs. They continue that as the project gains acceptance, IR managers could then gather and incorporate anecdotes, quotes, and stories that directly illustrate how the repository has solved problems or benefited faculty. Generating good word-of mouth advertising involves relationship building with key users over time (Whitler, 2014). By working with a pilot group of faculty, the value of the IR can be demonstrated on a small scale. Given the right circumstances, these faculty members will articulate the value of the IR to their colleagues, who are other potential IR contributors, in understandable terms.

Even though different institutions engage in different marketing or promotional activities, the main purpose still remains getting the word out about the IR using an array of methods. In general, at the launch of the IR or at new phases of development, far reaching communication tools such as campus-wide announcements, newspaper articles, letters, post cards, brochures, bookmarks, emails, give-aways, workshops, flyers and press releases are used to raise awareness (Ramirez & Miller, 2011; Crow, 2006; Andreasen & Kotler, 2003). At other stages, depending on timing and repetition, more directed forms of marketing may play a significant role and may be used in a variety of ways. For example, Ramirez and Miller (2011) report that after exceeding 100,000 downloads from its repository, Cal Poly issued a press release, a campus announcement, and ran a story in the library's annual publication to draw attention to the achievement.

Marketing experts believe that no matter the approach, repetition is very important. This is because individuals do not readily accept a message at the first instance. Even though there is no agreement about the exact number of times before a concept is accepted, Andreasen and Kotler (2003) report that several of the institutions they surveyed indicated that they expect to contact faculty as many as seven times in order for the message to yield the desired results. It is obvious that there is competition for faculty attention; hence, conveying the marketing message in a number of ways increases the likelihood of eliciting the desired response.

Beyond the number of times, the actual timing of promotional events is also critical. Typically, at the launch of an IR, the service is new and fresh. This indicates a burst of marketing and therefore provides an opportunity for a lot of people to be reached. Again, with the arrival of a new faculty comes an opportunity to reach a new and a potentially receptive audience. Ramirez and Miller (2011) report that in Cal Poly, there is the inclusion of marketing materials in new faculty packets as well as faculty members who have recently received research grants. Reaching faculty at the early stages of research may result in obtaining research materials in the future. When material distribution is aligned with the campus calendar to cater for events like breaks and reopening, it becomes helpful.

Challenges in marketing IRs

Several constraints have been associated with marketing e-resources in academic environments. These setbacks notwithstanding, in the view of Martey (2003), the academic librarian should be motivated to plan and implement a marketing strategy to ensure heavy patronage, as heavy use determines the worth and survival of the library in the face of stiff competition from new and aggressive entrants into the information market place. Active and dynamic marketing requires that promotional programmes are incorporated right from the earliest stages of repository development, clearly spelt out in policy, even predating software acquisition and hiring of personnel. This is because, according to Foster and Gibbons (2005), the "build it and they will come" attitude is no longer effective.

As Ramirez and Miller (2011) put it, marketing is not an exact science, but rather an art. Every institution is unique and as such, would have a peculiar combination of marketing techniques that resonate with its faculty and students. Marketing an IR to campus, while it may entail focusing persistent attention on target audiences, is an effort rewarded with the building of strong, long-term relationships with faculty and students. Effectively marketing the IR opens up new opportunities for libraries to recast their role and utility on campus as educators,

MATERIALS AND METHODS

collaborators, and innovators.

The study was guided by the Qualitative School of Thought where the researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting (Creswell, 2014). The research design used was the Case Study Research Design. Hamel, Dufour and Fortin, (1993) as well as Sarantakos (2005) consider Case Study designs as allowing for in-depth description of features of the issues under consideration. Whereas single cases are used to explore often-inaccessible phenomenon, multiple cases

simply follow replication logic to strengthen a theory. Applications of case study methodology have been done by several researchers to study institutional repositories because by their nature, institutional repositories research relies heavily on qualitative methods of inquiry.

This study, using a multiple case study approach to gather and analyze data, investigated the marketing and promotion of repositories in some private and public universities in Ghana, ascertaining the various issues that influence best practices. The repositories of Ashesi University College (AUC) Central University College (CUC), Kwame Nkrumah University of Science and Technology (KNUST), and University of Ghana (UG) were engaged in the study. The population of this study largely included human subjects, records and documents which allowed for understanding of marketing repositories on the campuses. Accordingly, persons who mattered in the marketing and promotion of repositories were engaged in the study. These included University Librarian, Digital Librarian, the University Archivist, Dean of Graduate Studies and Research, University Public Relations Officer and the Information and Communications Technology Director as well as any other peculiar persons who were significant in some institutions. Also, views were sought from lecturers – both those who have ever submitted and those who have never submitted contents to the repository.

All but the lecturers were selected through purposive sampling approach. The lecturers, including two who had their contents in the repository and two who did not, were conveniently selected with the aid of the repository website. The online repository platform allowed for lecturers who had their works in the repository to be identified. An email invitation was then sent to them to participate in the study. This exercise was carried through until a willing lecturer was gotten. Lecturers who did not have contents in the repository were also approached and their consent sought to participate in the study. These steps led to the sample as shown below:

		Institution					
		AUC	CUC	KNUST	UG	TOTAL	
Res	University Librarian	1	1	1	1	4	

Table1: Sample for the study

Digital Librarian	1	1	1	1	4
University Archivist	1	1	1	1	4
University ICT Director	1	1	1	1	4
Dean of Graduate School	-	1	1	1	3
University Public Relations Officer	1	1	1	1	4
Lecturers	4	4	4	4	16
Other*	-	-	-	1	1
Total	7	8	8	9	40

*Office of Research, Innovation and Development (ORID)

Data was gathered from respondents by the use of semi-structured interview guide. This instrument was preferred since, in the view of Sarantakos (2005), it allows room for the accommodation of peculiar issues whilst ensuring consistency. It can however be time-intensive and prone to possible bias. Items on the interview guide found out the roles of the respondents, which of the marketing strategies had worked well for students, lecturers, administrators and persons outside of campus, and factors of (or the means of evaluating) the success or failure of marketing strategies.

Prior to the interview, a visit to the various institutions under study was done to familiarize with the environment in order to ascertain how best the interview sessions could be schemed to accommodate the resources and unanticipated events. A convenient date had been scheduled with the prospective respondents prior to the interview giving ample time for both the interviewee and the researcher to prepare well for utmost success. Four people were trained as field assistants to help in the gathering of the primary data.

Transcripts of the interviews were sent to participants to ensure that the content and contexts had been correctly recorded by the researcher. Not only did this allow for corrections and additions, but it also increased construct validity (Yin, 2003). Room was made to accommodate the options of email and telephone interviews to clarify some issues and also as a substitute for situations where a face to face interview was not possible.

Other key documents such as policy statements that support the establishment of institutional repositories as well as the website hosting the repository was observed and studied accordingly.

Secondary data for the study included various journal articles and books in both print and electronic formats.

Qualitative research comes with it a very large volume of research data often laden with contextual subjectivity which often calls for a revision to represent major themes or categories of the phenomenon under study. The audio interviews were transcribed and coded after a thorough reading. This brought out the emerging patterns and categories which were subsequently used as the basis of the analysis. Microsoft Access and Microsoft Word were used to organize the data into the themes, categories and subcategories for the respective institutions.

Throughout the entire study, high levels of ethical standards were observed. These were by way of seeking informed consent, observance of confidentiality and privacy before engaging a respondent for the study.

DATA ANALYSIS

Data collected regarding how repositories are marketed and promoted have been analyzed and presented in this section. The analysis, which have been comprehensively put together under the various themes, were gathered from interviews with respondents, content analysis of repository policy documents and an observation of the website hosting the repository. This brings out the differences and similarities based on the themes emanating from the data sources within the context of the objectives of the study.

Overview of repositories in the study area

The number of items in the repositories under study included Kwame Nkrumah University of Science and Technology (10,620), Ashesi University College (231), Central University (327) and University of Ghana (7,829) (KNUST, 2018; AUC, 2018; CU, 2018; UG, 2018). In all the institutions under study, the repositories exist to project the university's image in the global space, with research productivity being the main driving force. For instance, "UGSpace, the institutional repository of the University of Ghana (UG), simply fits into the current milieu of the university, which is a focus on research as it aspires to become a world class research-intensive university" (UG, 2014). Consolidating the argument of the use of research productivity to promote institution's image through the IR, a respondent indicates that "having fulfilled its teaching target over the past decade, the Ashesi University College hopes to commence the next phase which is to concentrate on research, and this is where the Ashesi Institutional Repository (AIR) becomes even more strategic" (AS 1). This is the same thinking

of the Central University College, where the proponents of the IR believe that the Central University College Academic Repository (CUCAR) "is just another avenue to project the University's image by showcasing the intellectual output of its faculty and students". And being the first ever to have been established, KNUSTSpace, the Kwame Nkrumah University of Science and Technology's Institutional Repository, it was affirmed, "was created in 2008 with the utmost aim to preserve its administrative documents and to project the image of the university and the campus community through the sharing of scholarly research" (KN 3).

Actors in the marketing and promotion of IRs

In all the universities, the library and IT units directly dealt with the technical issues of repository development and as well, collaborated with the public relations and other outfits such as Graduate School, to publicize the IR. Whereas there were Schools of Graduate Studies and Research in the other universities which played key roles in the repository development, Ashesi University College had no such outfit. Also, Office of Research, Innovation and Development (ORID), an adjunct office for the advancement of scholarly communication, existed in the University of Ghana, with clearly spelt out roles towards the repository.

According to respondent from the University of Ghana, "the publicity of UGSpace is a collaborative effort among the library, ORID, Public Relations, School of Graduate Studies and Research and in fact, the entire academic community, with different levels of promotional activities". To another in this same university, "the activities of the Office of Research, Innovation and Development (ORID) are geared towards attracting more materials from content creators. This unit is seriously in league with the various colleges, schools and departments with the utmost aim of receiving more documents to populate the repository" (UG 3).

A similar situation pertains in the Central University, where, "influential persons such as the president, deans, heads of departments and the SRC executives, complement the efforts of the library and the ICT in promoting the repository to the academic community" (CU 4).

It also emanated from the various interviews that in all the institutions, the outfit of the university library has been spearheading the marketing of the repository, with irregular support coming from the Public Relations outfits. As insinuated by this respondent, "marketing is a shared responsibility but the e-resource librarian is largely in charge" (CU 2).

Even though only a select few have been involved in the marketing of the repositories, it was accepted that wider participation of the campus community could yield greater results. As

confirmed by one respondent, "the next level of marketing is envisaged to be a campus-wide responsibility where every unit will have a role to play" (AS 5).

Strategies for marketing and promoting institutional repositories

In order not to engage in a one-size-fits-all approach to marketing, different marketing schemes existed for the different target groups or situations. Promotional activities for the various IRs under study could be classified as being conventional and non-conventional, as well as inward and outward marketing programmes. Classical or conventional marketing strategies include the use of posters, fliers, word of mouth, among others to project the repository. In promoting the KNUSTSpace, different schemes exist for the different target groups (KN 3). Marketing of the repository is done to two broad categories of communities – community of content creators/depositors and the community of content users. The content generators include students, lecturers and administrative staff. Students (especially final year graduate students) are under compulsion to submit their thesis and dissertations to the library for onward addition into the repository. This suggests a nearly 100% deposit of the annual primary research of the university in the repository from students. However, since lecturers and other administrative staff of the university are not under such obligation, a lot of the marketing activities towards populating the repository with materials are engineered towards them.

The word of mouth approach of publicizing the IR as well as the use of the main university website was common to all the four universities under review. According to a respondent KN 3, "the word of mouth approach has also been very much useful in promoting the repository. Librarians are the main evangelists of the IR and are thus entreated to win more souls. Hence, library staff has been encouraged to mention the repository to colleagues anytime they come into contact with them". Confirming this, another respondent, KN 6 affirms that "this word of mouth strategy to promote KNUSTSpace is really apt because it works in both formal and informal environments. It also provides the avenue for quick feedback and again, to detect the feelings of people concerning the repository" (KN 5).

Flyers about KNUSTSpace are often handed to users of the main library and research commons (KN 3, KN 5). The flyers contain the basic information one needs to know about the repository with the anticipation that it will trigger a visit to its website. In a different vein, the Head of the International Central Gospel Church, the parent institution of Central University College, uses the church and the numerous international fora to publicize the repository.

Inward marketing programmes have often been targeted at the immediate members of the academic community such as students, lecturers, researchers and administrative staff of the

institutions. A respondent in Ashesi University College believes that "marketing activities have been mostly internal with the aim to get faculty, students and administrative staff to patronize the repository, and that, the awareness of the campus community about the repository is 50-50" (AS 2). There is often face-to-face or word of mouth publicity to faculty by the library staff, and this has been observed to be working very well" (AS 3). The trickle-down effect is that, "lecturers, after having been impressed upon to patronize the repository, also go ahead to influence students to do same. In effect, our marketing activities targeted at students (especially in the final year) are greatly augmented. Internal marketing approach is often adopted by the two private universities, as affirmed by a respondent from Ashesi, "it is our belief that after the repository has been effectively promoted among the campus community; it will be very easy to market it to the outside world" (AS 4).

This is not to say that the public universities do not target the campus community. According to a respondent from the University of Ghana "we also impress on some lecturers who are 'friends of the library' to encourage their students to patronize the repository" (UG 2).

For instance, with respect to the school of Graduate Studies and Research "since, as a policy, students are mandated to supply their final thesis to the repository manager, promoting to trigger material submission is not much the problem as compared to getting students to use the IR. Thus, to encourage more usage from the front of the about 3,587 graduate students, the School, in association with the university library, organizes series of orientation programmes for fresh graduate students and a number of seminars and workshops for continuing graduate students during their thesis writing (UG 5). "Such activities", as confirms another respondent, "are interspersed with the distribution of fliers and the use of posters at vantage points to publicize the repository" (UG 2).

Again, user-education or orientation programmes were a common platform for promoting repositories in all the study sites. A respondent from the Central University insists that "regular education of the various members of the campus community about the repository has been significant in promoting the repository. At the beginning of every academic year there are orientation and training programmes for students on how to access e-resources. This approach has been successful because the participants were always informed on time, and the trainer was always well prepared" (CU 1).

"When we organize any public event, we don't miss the opportunity to tell the audience about the wonderful things residing within our repository. Again, when we get any opportunity to participate in any event outside of our campus, we make people aware of UGSpace. It is our belief that these efforts, in no small way, direct traffic to the repository" (UG 11). It also emerged that in some instances, certain strategies already in existence were used to publicise the repository as well. A case in point is at the University of Ghana where a respondent intimates that, "the library already subscribes to a number of online academic databases. So the Electronic Resources Librarian, as part of her roles to market academic databases to students and faculty, uses the opportunity to thoroughly promote UGSpace to ensure that the IR becomes a preferred destination of students and faculty" (UG 2). In the Central University, "well-patronized events such as SRC weeks, durbars, university retreats and chapel services have been used to publicize and promote the repository. The CUCAR, being a repository of a religious-owned university, "enjoys much publicity through various mentions by our chancellor and president when they travel to preach or present papers" (CU 4). In some situations, as it did emerge from the study, 'all who mattered' in repository development were assembled together in a workshop to deliberate on how the repository could enjoy wider patronage within the immediate campus community and beyond. Typical of the University of Ghana, the library often "teamed up with the university archives and ICT to hold occasional seminars and workshops on digitization and institutional repositories for the key stakeholders such as lecturers, ORID, Public Affairs and librarians" (UG 3). Similarly, another respondent involved in the marketing of the repository posits, "we have not ceased to seize any opportunity to drum home the repository to management and faculty during board and council meetings".

A key issue which emerged was that, in promoting the repositories, a lot of efforts are made to reduce the 'build it and they will come' attitude which has plagued most information centres. In the words of one respondent, "if we are to sit down and hope that lecturers will, on their own, submit materials to the library to be uploaded, it will never happen. It is only when we go to them that we are able to appreciate the difficulties they (lecturers) have in terms of their time schedule, copyright issues and even their limited understanding of the benefits the repository provides" (UG 3).

Beyond the campus community, the other strategies were used to target external traffic from prospective national or global audience. This is done especially through the university website which has the repository site embedded in it. A respondent observes that "there are links to the repository from the main university website to faculty, staff and students" (AS 3). Confirming the value that online platforms have for promotion, a respondent from the Public Affairs Unit of the University of Ghana believes that,

"now, it is not only the main university website that is being used to project the university's image to the outside world but also, the UGSpace platform is used to 'sell' the university. The institutional repository is one of the few items whose link is showcased permanently on the main university website since it has a symbiotic relationship with the website to enhance the image of the university (UG 11).

For this reason, a lot of publicity is done for the repository at the various local and international events which the university participates in. At the Central University College, "other trendy digital technologies are used to publicize the repository. "We engage in more publicity using Facebook, twitter by creating links which directly connects the repository to the outside world. There is also the use of memos, phone conversation and email reminders" (CU 2).

As intimated earlier, other non-conventional marketing strategies were relied on in marketing the repositories. Peculiar to the Kwame Nkrumah University of Science and Technology was the existence of Open Access week as well as the use of a radio station to promote the repository. Recounting its efficacy, a respondent surmised that:

"one whole week was set aside by the university to promote everything open-access with support from Biomed. It is a period where all the influential people of the university came together to educate members on open access platforms and the benefits of some open access platforms like open access journals and open access institutional repositories among others. This was a highly participated programme bringing on board university management to champion the need to subscribe to open access platforms. Here, the university's repository, KNUSTSpace featured prominently" (KN 2).

Another respondent from same university, who was directly involved in marketing the repository, intimated that "when KNUSTSpace took off, we secured a slot on Radio Focus (a campus-based radio station) to sell the IR to the campus community. This success propelled us to go all the way to Citi FM (a popular radio station in Ghana's capital, Accra) to publicise our repository" (KN 5). He went on to say that "our university again hosted an open access conference with Biomed and our repository featured prominently (KN 5).

Lending credence to the efficacy of interdepartmental approach to marketing, a respondent from the University of Ghana intimates,

"What ORID has done is that, its officers have been assigned to the various academic departments and lecturers. So all what these officers do is to engage with the lecturers, telling them about the potency the IR has in increasing the impact of their publications by way of wider coverage. As such, ORID is able to secure manuscripts or published articles for onward upload into the repository. The collaboration between ORID and the library has worked so well that, the proportion of research articles as compared to theses and dissertations is increasing of late" (UG 6).

Accordingly, when a significant feat is chalked, it becomes a huge resource for further promotion of the repository. For example, in KNUST, "the library outfit has not ceased to proclaim the benefit the university received in terms of its ranking, appearing 52nd in Africa right after the IR became operational, and currently 45th (KN 6). This feat has always been used to impress upon members of the campus community to submit materials to populate the repository. "Members of the academic community have thus been told that an enhancement of the image of the university by virtue of its global presence via the repository is a shared glory since their own image will also be enhanced" (KN 3). In actual fact, some lecturers are already enjoying this global acknowledgement as the piece from this lecturer suggests: "after my paper was showcased, a German journal wrote to me to consider publishing with them. It brings some pride" (KN 7).

Factors/challenges affecting the marketing and promotion of institutional repositories

The challenges confronting the promotion of the repository broadly comprise operational issues which indirectly affect marketing, as well as issues which directly affect the process of marketing. Operational issues affect such as content population, constant running and ease of access of contents marketing. This is in the sense that the core focus of marketing is to simply attract content depositors and content users to appreciate and patronise the repository. Consequently, any issue which interrupts the smooth operations of the repository will naturally make the repository unattractive. A myriad of operational issues which indirectly affect marketing of the repository were outlined. As indicated by this respondent,

"the IT outfit of the library has to intervene in the upload of materials since content creators don't have the permission to do so directly. Some materials brought to the repository manager exist in the print format. As such, extra time and effort have to be expended to digitize them before finally uploading into the repository. Even more worrying is that, sometimes, when they are made available in soft format, you find out that the CD supposedly containing the soft copy of master's thesis turns out to be blank or contain videos or music tracks" (UG 2).

Another respondent also suggests that

"broadly, some technical and operational issues thwart the effort of repository managers to sell the repository to members of the campus community. Imagine that you go to tell lecturers to bring their thesis to be uploaded into the repository or access the content of the repository, and the next thing is power outage or erratic internet connectivity. Instances like these kill their interest, and thus indirectly affect our marketing and promotion efforts" (KN 3). Another challenge had to do with the lack of decentralization in especially, material submission. In almost all the study sites, the outfit of the library had to intervene in the processing and uploading of materials into the repository. This led to a great burden on the outfit of the library. The problem comes about as a result of the fact that content generators have not been taught how to independently submit materials, or don't have the permission or are not keen on doing it by themselves. For instance, as revealed by this respondent,

"a key psychological issue that confronts us in our bid to secure materials from lectures for submission into the repository is when we are questioned about our mandate. Sometimes, you go to a lecturer and he asks you, 'what obliges me to give my own publication to you?' (UG, 3).

Confirming this notion, another respondent from Ashesi also states that "the overarching challenge is the difficulty in getting buy-in from considerable members of the campus community" (AS 1).

One other main challenge has been a lack of staff time dedicated to activities of the repository. "This institutional repository was done as a small project. However, with passing time, it has now assumed a wider dimension. As such, the IT unit can no longer combine the technical responsibilities with the duties of marketing." (CU 5). Again, "after several efforts have been made for faculty members to understand the benefits of the repository, issues of copyright do not encourage them to contribute" (AS 5).

Direct challenges under the ambit of marketing had to do with lack of comprehensive policies or lack of implementation of policies thereof. It emerged that there was no comprehensive policy on the creation and management of the repositories of Ashesi and Central to begin with. However, the two public universities, KNUST and UG had. That is, some of the institutions had no IR policies at all, and those which had, did not have a comprehensive coverage on how the repository should be promoted.

"Certainly, due to the nonexistence of comprehensive marketing policy for the operations of the repositories of some of the institutions, as well as non-implementation of policies at institutions which have, it makes it difficult to gain collaboration from members of the academic community", posits respondent UG, 4.

The above situation implies that very little or funds are made available for marketing and promotion of the repositories. Pointing to the issue of inadequate funds for marketing, a respondent opines, "there is no extra budgetary allocation for the marketing and promotion of the repository so all marketing activities have to be funded from the already-constrained general library budget" (CU 1).

Bemoaning the issue of lack of a collaborative approach to marketing, a respondent from University of Ghana, UG 8, reiterates,

"there have been several kinds of collaboration across and within the university but the marketing bit is such that it must involve some highly placed people in the university in order to succeed, it must not be left in the hands of the library alone. It takes the involvement of some key personalities for any promotional programme to be effective. The library outfit alone is unable to handle such an obligation successfully".

Laying further credence to this, a respondent retorts,

"It is not getting the top support. Our community is such that you need to get some top people to be personally interested. For instance, the Open Access Week which served as a huge platform to market the repository to the campus community is no longer celebrated" (KN 3).

As another laments, "there used to be open access week which received wider participation but I think now it has died down. I don't think it is there anymore" (KN 7).

Strategies to publicise IRs

A number of solutions were proffered as being capable of driving more publicity and participation by the academic community in repository development. It came to light, according to some respondents, that there needed to be material and human resources dedicated to the marketing and promotion of the repository. Respondent AS 3 for instance opines, "There is the need for a repository librarian who will devote all attention to the operations of this initiative". Another respondent also shared an opinion in a similar manner,

"for me, if the repository was to be established again, with the benefit of hindsight, I would wish we had someone who is an IT person committed to it. I mean, I think it will also be good to have a member of library staff whose duty it will be to ensure that stuff are uploaded and metadata assigned. Also, I would have tried to get more colleagues involved" (AS 1).

However, others suggested a rather more compelling approach to getting significant campus members on board:

"You know, most of the things about promoting the repository are all about lobbying. Now I have lobbied for this place [where we are sitting] to be used as a state-of-the-art Research Commons for graduate students, and this is very significant in directing traffic unto the repository" (KN 5).

Another respondent, CU 5, believes that marketing should even precede implementation of the actual project, in that,

"with the adoption, acceptance and ownership by the entire university community, this can be future challenges could be overcome. In fact, if the repository is to be developed again, then university management should take serious interest in it, whet up the appetite of the entire campus community before the whole thing takes off. That is, first create awareness and then form committees to handle the various features of the creation and management of the repository".

A respondent also believes that

"there should be some administrative order encouraging or compelling lecturers to deposit materials into the repository, probably as part of their conditions of service. This could be stated in the appointment letters of new faculties that they have to submit materials into the repository. This is one sure way of getting more of research articles into the repository" (UG 2.

It also emerged that striking stories or key gains made by the repository project were told to other members of the campus. As shown in the words of KN 4,

"Generally, the IR is actually on track and making steady progress. The repositories webometrics ranks our repository 35th in Africa, having been at 57th position at the previous ranking. We publicised this great feat to all through campus radio news bulletins, notice boards and other public fora on campus. So certainly, if we are to bring more people on board, then we should highlight every major and minor success the repository makes".

Narrowing in the issue of campus-wide involvement, a respondent suggested that the various players on campus such as repository content generators, implementers and users get involved. As he puts it,

"if the operations of the repository are to be efficient, then the various aspects such as content submission and upload, accessibility and use of the contents, marketing and preservation, have to be decentralized. For instance, it would have been okay if content creators or authors could submit the material directly into the system. Then, when approved, the document be uploaded automatically. This, as opposed to the existing practice of having to go to lecturers for contents, will afford the various units such as the library, ORID and ICT to concentrate on the critical issues that concerns the daily operations (UG 8). This kind of division of labour is seriously needed for the repository to be sustainable" (UG 6).

In the wake of these challenges, the repository comes with several benefits by way of uplifting the image of the institution in terms of global visibility through the showcase of its intellectual output. As affirmed by respondent AS 4, "Our students' theses are recognized and some of them are even approached with publication offers. The repository is thus even more strategic in the next decade journey of the university which is a focus on faculty research. Specifically, to the library, "the repository has brought us an avenue to improve our digital service provision" (AS 1). Another respondent from a different institution, CU 6, affirms that:

"the institutional repository has given the university community wider options in access to scholarly materials. There is easy information retrieval making life easier for students, faculty and researchers. To academics who have their materials on the platform, it leads to wider distribution of their works and several opportunities for global collaboration".

DISCUSSIONS

Overview

The study reveals that institutions have established the open access repositories to enhance scholarly communication, preservation as well as promote the image of the university. This is in consonance with existing literature about the alternative avenues libraries are developing towards collection development. Just as was seen in the four institutions under study, the current level of unbridled advantages enjoyed by established publishers has compelled most libraries to consider an alternative means of developing their collections (Carpenter et al, 2011; Glenn, McGuigan, & Russell, 2008). Championed by the library outfit, academes of the institutions under study have been encouraged to share their scholarly findings with the rest of the world through open access. Priti (2011) as well as Dulle and Minishi-Majanja (2009) found out that authors as well as their affiliate institutions benefit greatly from establishing and operating repositories. This is by way of enhanced visibility of their research from online publishing emanating from broader dissemination and increased use. This is also confirmed by Giarlo (2005) and Grundmann (2009) who states that this format of scholarly communication presents numerous opportunities and is seen as appropriate for providing a faster route to scholarly and research work.

Actors

According to Lynch (2003), for any institutional repository to be sustainable, its developmental process must engage key members of a campus community key amongst them being librarians, information technologists, archivists and records mangers, faculty, university administrators and policymakers. As pertains in this study, of the three key constituencies in repository development – content generators (lecturers, students, and administrative staff), implementers (librarians, information technologists, archivists) and users (students, lecturers, researchers) – it was the implementers who were largely involved in marketing and promotion activities. This is not so different from what pertains in other jurisdictions where the library and the IT units were directly involved in the marketing of repositories. Since, most often, the library outfit is the curator of e-resources; the promotion of same within the academic community also rests with them. Campbell-Meier (2008), in her study of six doctoral academic institutions, pointed

out that key stakeholders such as university administrators and faculty are often left out in issues pertaining to the repository. This, in the estimation of Jain (2012), could be that as pertains in other institutions around the world, institutional repositories are mostly hosted within academic libraries. However, Moahi (2009) insists that sustainable repositories call for a thorough consideration of issues such as organizational goals, culture, policies, and governance issues among others.

It must be noted, though, that regarding this study, even though the library leads in the marketing and promotion of the repository in the institutions studied, it as well, collaborated with others such as the public relations and faculty to publicize the IR. That is, however limited it was, there were some levels of collaboration with some units of the institutions in some key activities of the repository. This lends credence to the advocacy of Ashworth (2006) that since on different campuses, different people assume different responsibilities relating to an institutional repository, it behoves on libraries to know about the principles, benefits and operations of repositories in order to promote, and act as their evangelists.

Strategies

Marketing and promotional activities work very well when the promoter understands and communicates the benefit of the product or service for the prospective user to understand same. That is, librarians who are the implementers of the repository service should first understand the significance of this digital initiative in order to drive other members of the academic community to buy into such a new phenomenon. Campbell-Meier (2008) is of the view that if the faculty or librarians do not understand what open access is or why the repository is important, there is no incentive to participate, regardless of the positive story associated with it.

In all the institutions, the outfit of the university library had been spearheading the marketing of the repository, with occasional support from the Public Relations outfits. The library's involvement of marketing and promotion of information sources is in sharp contrast to what pertained in the past where most libraries summarily concluded that the marketing concept was "offensive and unethical, and those who practiced it were to be treated with some suspicion (Condous 1983, [cited in Ramirez and Miller, (2011)]. This was because most academic libraries saw themselves as essential part of the campus community thereby no need to market their services or products. The residual effect of this former stance is partly to blame for the incoherent approach to marketing library products and services including online digital repositories. Even though the repository project is an avenue to showcase scholarly output of an institution, it actually does compete with the existing scholarly communication models. It

therefore becomes important for any marketing approach to reveal the peculiar benefits that the institutional repository provides such as higher accessibility and increased citation rates, especially to prospective content providers. Alemna (1998) recommends for libraries in Ghana to adopt sound marketing initiatives in order to ensure survival and sustenance. This is because in his opinion, the conditions which challenged libraries in developed countries to adopt marketing and total quality management strategies are very much prevalent in Ghana at present. As such, in order to attain wider adoption and use, there need to be close ties between the repository and marketing as proposed by Crow (2006). Similarly, Smykla (1999) and Gibson (2005) are of the view that the repository cannot be promoted the same manner that other digital initiatives of the library such as Online Public Access Catalogue (OPAC), interlibrary loan and citation linking have been promoted. This is because these services mentioned earlier are completely internal as compared to the IR which transcends the physical confines of the institution.

Of the four universities, even though none had a coordinated and comprehensively developed long-term marketing plan, there were pieces of evidence to suggest that information professionals now appreciate the value of marketing, and thus promote their collections and services to the campus community. The word of mouth approaches, use of fliers as well as the main university website in publicizing the IR were common to all the four universities under review. Again, user-education or orientation programmes were a common feature in all the study sites. Peculiar to the Kwame Nkrumah University of Science and Technology was the existence of Open Access week as well as the use of radio station to promote the repository. Also, the Head of the International Central Gospel Church, the parent institution of Central University College, uses the church and the numerous international fora to publicize the repository.

Although the aforementioned approaches are good, a great deal of dexterity is needed to make such strategies impactful. In using any of these approaches, intentional repetition among all stakeholders is very important to ensure sustainability. Entsua-Mensah (2010), in discussing the relevance of marketing in a non-profit making establishment, points out the need for information workers to adopt some marketing strategies to get information to their clientele. Timing and conveying the promotional message in a number of ways increases the likelihood of eliciting the desired response. Andreasen and Kotler (2003) report that several of the institutions they surveyed indicated that they expect to contact faculty as many as seven times in order for the message to yield the desired results. Ramirez and Miller (2011) have also considered personalization as one of the most effective outreach strategies adopted by

repository managers to reach faculty. They again noticed that in the University of Maryland for example, the library system designed a document that defined the target audiences, listed the key benefits of using the IR, and provided specific communication strategies for contacting campus entities and groups throughout the first academic year after launch of the IR.

Challenges

It emerged from the study that marketing had not been given enough attention as a policy issue in the operations of the repository. To begin with, only the repositories of the public universities were backed by formal IR policies. The two private universities, on the other hand, operate their repositories with unwritten policies. A lot of the attention had been given to content population and engineering protocols, losing sight of the fact that marketing and promotion are what hold the key to sustainability. Lending more credence to the effect of marketing and promotion, Bjork (2004) reveals that authors are willing to give away their copyright in exchange for quality labelling, marketing and disseminating services of the publisher leading to improved recognition in the academic field and career advancement.

Again, in this study, it emerged that the fulcrum of the challenges of marketing the repository was about getting the involvement of the broader campus community to participate fully. Meanwhile, it has been discovered that to change the current structure of scholarly publishing requires a buy-in of key stakeholders such as faculty, librarians and publishers (Ming, 2000; Johnson, 2002). As the Diffusion of Innovations Theory postulates, early adopters are very crucial in the success of any new innovation (Rogers, 2003). As such, bringing on board respected campus officials such as the vice chancellor, the provost and the university registrar would make them champion the course of the repository to the entire campus community. Moahi (2009) believes that doing this implies understanding the "existing human landscape" in the form of the organizational climate (culture, policies, governance issues, politics and goals). Hence, the study agrees with the assertion of Chan et al (2005) and Moahi (2009) that the real pivot of sustainable repositories are not the technical issues but rather the cultural change necessary for the repository to become embedded in the activities and normal behavioural pattern of the campus community. But Rogers (2003), in shedding more light on the Diffusion of Innovation Theory, argued that before members of a community would totally adopt a new technology, idea or concept, they need to be fully convinced that it has higher advantages over the existing one. This is about persuading the various campus communities about the superior ability and advantage a repository has over existing avenues of sharing and preserving digital content as well as projecting the image of the university. However, no form of formal assessment of the interest of the campus community was done prior to the creation

of the repository in all universities. Unfortunately, creating and operating repositories in this manner, and later employing marketing or promotional strategies to 'push' the concept to the entire academic community would definitely be ineffective. Campbell-Meier (2008) is of the view that change takes time, and involving stakeholders such as campus administration and faculty early in the process will provide early identification of potential problems. For Starkweather and Wallin (1999), since the current scholarly publishing outlets serve the needs of some faculty, they may not participate in the IR concept unless they believe it really serves their needs. The solution, as suggests Rogers (2003), lies in involving all the actors within this system right from the initial stages of the IR development in order to attain complete adoption of this novelty.

Another key issue had to do with the lack of decentralization in especially, material submission. In almost all the study sites, the outfit of the library had to intervene in the processing and uploading of materials into the repository. It is however believed that even though the tenets of institutional repositories are stimulated by librarianship techniques, sustainability will come about if other members of the campus community are also involved in removing barriers, simplifying the process of material submission and also, partake in the training of other stakeholders to contribute content and as well, use the repository (Walters, 2007; Jain & Bentley, 2008; Moahi, 2012).

The above challenges notwithstanding, should propel repository managers to strive for sustainability to this novelty. In the view of Martey (2003), academic librarians should always be motivated to plan and implement a marketing strategy even in the midst of difficulties to ensure heavy patronage. This is because heavy use determines the worth and survival of the library in the face of stiff competition from new and aggressive entrants into the information market place. Active and dynamic marketing requires that promotional programmes are incorporated right from the earliest stages of repository development, clearly spelt out in policy, even predating software acquisition and hiring of personnel. This, according to Foster and Gibbons (2005), is because the "build it and they would come" attitude is no longer effective. It could be concluded, based on the findings of the study, that institutions see the worth of online digital institutional repositories in advancing the scholarly communication and preserving intellectual and administrative or heritage materials. Hence, to trigger increased material submission and use of the repository, several marketing strategies have been adopted targeting the campus community and beyond, especially involvement of key personalities on campus, to create a wider acceptance of the concept by the general university community. The institutional aspect of the repository leaves much to be desired.

RECOMMENDATIONS

There is the need for institutions of higher learning to formulate a comprehensive repository policy which addresses sensitive issues such as marketing and promotion. Repository policies should marry the existing library and ICT policies and accommodate the broad vision of the institution. This will lead to total ownership of the project other than it looking like an imposition on the rest of the campus community. A good IR Policy will ultimately cater for content population, copyrights, marketing and awareness creation, preservation and usage.

Again, there is the need for library managers to harmonize the various marketing strategies and put in place a substantive marketing team. There should be a permanent marketing librarian who will work with other members of this marketing committee drawn from the various faculties, schools, departments, sections and units. This will ensure that the diversities of the campus community are always taken care of to make the repository embraced by all. Furthermore, every available time and physical or virtual space should be capitalized upon to publicise the repository to the campus community and beyond. These include word of mouth, posters, hand-outs, interactive electronic platforms such as email, Whatsapp, LinkedIn, twitter as well as university events such as open days, SRC weeks and sports festivals.

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