Librarians’ Innovation in the Federal Universities in Nigeria

Thomas A. Ogunmodede a,*, Sunday Olanrewaju Popoola b

* OlasegunOke Library, LadokeAkintola University of Technology (LAUTECH), Ogbomoso, Oyo State, Nigeria.
# Department of Library, Archival and Information Studies, University of Ibadan, Ibadan, Oyo State, Nigeria.

* Corresponding author. tamodede@yahoo.com

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Abstract

The demand for new types of services from the users, change in technology application in university libraries, and inadequate budgetary provision faced by libraries has made innovation a necessity rather than a mere consideration by librarians in Nigerian universities. Innovation has become a veritable means of survival in the face of challenges facing library and librarians across the globe. The quest to channel information to library patrons spurred the creation of several innovative services that has facilitated the link between traditional library information services and emerging technological application. Therefore this paper investigated the innovation by librarians in federal universities in Nigeria. The respondents’ age was 40.58 ± 2.30 years and 59.1% were males. Respondents’ qualification were Master’s degree (62.7%), Bachelor’s degree (18.1%), Ph.D’s degree (13.5%), and M.Phil degree (5.6%). 654 librarians from the 40 federal universities in Nigeria formed the population of study and were enumerated. Data were analysed using descriptive statistics. 79.2% respondents filled and returned the questionnaire. The result shows that the level of innovation by the librarians in the federal universities is high (X̄=86.60). Different innovation strategies were employed by the librarians to market library products and services of their workplace. Significant difference exists in the innovation of the librarians based on the universities. Therefore, library administrators should create conducive atmosphere where innovative ideas can be promoted and rewarded among the librarians.

Keywords: Product innovation, Service innovation, Marketing library services, Librarians, University libraries, Nigeria.

I. Introduction

The enormity of challenges confronting libraries, especially the university libraries in the developing nations of the world have changed innovation from the stage of contemplation to necessity. Libraries globally, are operating under a climate of budget cuts and rising costs under a scarce resources situation. University library managers are inevitably bound to make astute decisions in relation to how innovations will be adopted and executed in their libraries. Brundy (2015) emphasised that the two fundamental factors critical for adopting innovation in academic libraries, especially university libraries, are changes in technology and declining budget. The Association of Research Libraries (2014) reports that forty members of their libraries experienced declined university expenditure. Lowry (2011) buttressed the fact that the trend of reduction of university library budgets is expected as a result of economic challenges such as financial crisis and economic recession that have resulted in budget cuts for several libraries. Islam, Agarwal and Ikeda (2015) maintained that university libraries across the globe are experiencing challenges of service maintenance and use and must expand amid indefensible costs, declining use of library collection, increased demand for new services and change into digital services. To adequately combat these arrays of challenges, innovation is inevitable. The sudden information explosion on the web has posed a major threat to the survival libraries across the globe. Although, much of the information on the Internet appears to be irrelevant as much as serious academic work is concerned. Majority of these array of information are not censored, and the resume of most of these authors’ knowledge in their field of endeavors can be quarried. Despite these demerit on the credentials and certification of the authors of most of information resources on the internet, the fact that people can Google out some search...
term has already provided a very strong alternative for library economy. To weather the storm of these challenges, innovation is the answer, especially on the part of the librarians who doubled as gate keeper of relevant information.

Innovation is a process whereby the ideas generated are, filtered, captured, modified, funded, developed, clarified and eventually implemented or commercialised. Innovation is a process of implementing a change in the way library operations are done. Though, libraries are overwhelmed in routines and regulations essential for protecting fair use. Innovation is embedded in the use of technology and in the way librarian interacts. Therefore, innovation in university libraries is also exemplifies in functioning routines for library effectiveness.

Innovation application in libraries has revolutionised the method of operation by librarians. Library services that hitherto domiciled in the university libraries are now being accessed and enjoyed remotely by the users. The development of information technology and information explosion has made library users in the university environment to be more prone to select various information sources such as the Internet, CD-ROM, and different platform of social media, besides the library. Though this may be considered as a major factor that can erode the functionality of librarians, experience has proved that library users do not find most of the information sought through the internet relevant and adequate to meet their information need. Therefore, the demand for services like selective dissemination of information and answering users queries provided by the librarians is increasing day by day. Librarians are now providing online reference services on literature search and access, telephone reference services and e-mail reference service to their users (Chunli and Jinmin, 2011).

Other services provided by librarians in the digital age include the use of library blog that has become communication links between the library and her users for the reason that it is an interactive platform. Chunli and Jinmin (2011) reported that information services provision by librarians are traditionally passive oriented. This is because most of the library users access the library resources from their websites. Therefore, university libraries should innovate traditional reference services and transit into knowledge services where librarians will directly participate in solving library problems. However, it is to be noted that the library clients need in the digital age transcends documents and information but the changing information into products. Therefore, librarians must innovate so as to meet up with the users’ changing needs.

Another area in which librarians can provide service innovation is in users’ participation in the collection development, building partnership with other librarians and building partnership with vendor and commercial communities (Yeh and Watter, 2016). There are several ways which services innovation can be applied in the library. These include innovation in the entire library services that allows shift from general services to personalised services; innovation in funding through new partnership and seeking donation, etc. Library can organise e-day events where information literacy can be taught. Digital lending service can as well be done as it is the practice in United Kingdom (UK) where many libraries now offer e-book lending (More, 2017). Similarly, Mori (2017) averred that academic librarians are using digital format to preserve their specialised collections and make them more accessible. For example, the foundation project at Cambridge University Library has digitised their early important collection in the field of religion and science which are now available and accessible to users.

Furthermore, university library can innovate in the areas of marketing library products and services. Konya (2013) defines marketing as the process of planning and execution of development, pricing and promotion and distribution of products/services and ideas to make interactions that satisfy organisational objectives. Marketing of library product and services aims at shaping the wants, demands and needs of the target patrons though designing and delivering of suitable products/services effectively for achieving organisational objectives. Pantage (2013) maintains that marketing of library services and product is a novel area presently attracting the attention of researchers, market and the business scholars. Marketing library services was also defined by different authors in a variety of ways. Therefore, when a library markets its product and services, it will promote the partnership between the library and their host community.

The fact that library services are embedded in routines make the matter worse. Routines is a major enemy of innovation. Routines does not allow an employee to think outside the box. Routines lock the door of idea generation and it closes up implementation of idea generated if any. From the fore-going, it is imperative to unravel the level of innovation among librarians and to know if significant difference exist among these group of professionals in federal universities in Nigeria.

II. Objective of the Study

The following specific objectives of the study are raised.

**To:**
1. Determine the level of innovation of librarians in the federal universities in Nigeria;
2. Find out the innovation’s strategies employed by librarians in the federal universities in Nigeria;
3. Determine the significance difference in the innovation of librarians based on the universities, that is, place of work.

III. Research Questions

Arising from the objectives of the study, research questions are:

1. What is the level of innovation by librarians in the federal universities in Nigeria?
2. What are innovation’s strategies employed by librarians in the federal universities in Nigeria?

**Hypothesis**

Ho1. There is no significant difference in the innovation of librarians based on the universities.
IV. Literature Review

The desire of librarians to meet up with the speed of development and growth calls for creative and innovative expertise. The continued growth of academic libraries, especially university libraries is largely depends on how much innovative services they can offer (Islam et al, 2015). Innovation in librarianship is all about looking for new ways to improve library services (Onuoha, Anyawu, Ossai-Onah and Amaechi, 2015). The need for innovation and creativity among librarians as asserted by Njoku (2008) was based on the fact that the library environment in which professional have to perform or discharge their duties is significantly changing due to economic, demographic, educational, political, technological and social development. The uprising in computers, communication and contents in the last few decades has had dramatic effect on the information management career and as the information world is becoming more paperless, changing from the paper-based to electronic information, innovation is inevitable.

Innovation, according to Onuoha, Anyawu, Ossai-Onah and Amaechi (2015) is the introduction of new things and adjustment of what has been. Innovation in libraries can be new ideas that is introduced in the learning process, it is all about presenting new ideas, practices and knowledge that are capable of effecting positive changes to libraries. These ideas could be the method of charging and discharging information resources, management of traditional and online resources, digitising information resources and management of local content in libraries, etc. Anyawu (2010), admitted that innovation is the capability to apply new concepts that will enable you to carry out activities in a different ways. In her view, through personal initiatives, thoughts, perception and insight, things can be turned around. On the other hand, librarianship is all about discovering of new ways of carrying out library and information services (Onuoha, et al. 2015). This assertion is true when comparing the traditional way of cataloguing and classification and the way it is being done today. Innovation in libraries has granted access to knowledge domain of other libraries and librarians, copy cataloguing is now part of librarians’ professional practice. This has reduced drastically the amount of time that could have been wasted in the professional practice of individual cataloguing.

Trott (2005) asserted that innovation manages different tasks involved in the course of idea creation, technology development, manufacturing and marketing of a new products and manufacturing process. If innovation is understood as a course of idea production, it is therefore knowledge application and the successful exploitation of a new knowledge is the whole reason for innovation (Laeeque, 2014).Anyawu (2010) argued that innovation has to do with application of new ideas, a new idea is not meant to be dormant, but rather, there should be an opportunity for it to produce more fruits.

Njoku (2008) contended that innovation implies change, but not mere change which can occur on its own, or change brought about by man for the sake of it, without benefits. In other words, any change associated with innovation must be linked with either economic or social benefits to the organisation or the society at large. Rugman, Collinson and Hodgets (2006) broadly divided innovation into product, service and process development. The former to them refers to activities that influence the creation of a new product and services that customer wants or improvement to existing products/services for customer than those of rival forms. Ferguson (2012) on the other hand, categorised innovation that is applicable in library environment into product, process, marketing and organisational innovation. Product innovation has to do with a service or product that is new or significantly improved e.g. improving virtual enquiry service through the introduction of an instant messenger to propel enquiries. Process innovation can manifest in delivering a service that is cost effective. This can manifest in automating routine library work to save time and intensify quality.

However, Onuoha, et al (2015) stated that creativity and innovation recreates chances for librarians and reposition them to gain competitive benefits only if these opportunities are discovered. Chuniya and Jinmen (2011) posited that librarians must innovate in information and reference services provision to meet the client changing needs, the reason is because information demand of library clientele in the digital era has gone beyond documents delivery services but processing of information into products.

Innovation policy, though fashionable is often taken the wrong way; it is a supplement to technology and science policy, as frequently presented. Innovation - the application of all types of knowledge and anticipated economic and social outcomes is more extensive than science and technology, often merging technical, organisational, and other types of changes (Swain, 2011). The innovation system plays a vital role in obtaining, generating, espousing, and distributing knowledge, which is essential for success in the knowledge economy. The innovation system in any country consists of the system of rules, institutions and processes that distinguishes how the country obtains, generates, distributes, and uses knowledge (Dahlman and Utz, 2005).

Lajoie and Bridges (2014) stressed that the terms innovation and change are frequently made use as synonyms. An innovation, or change, is usually explained as any object, practice or idea, that is perceived to be new by an individual or the organisation either accepting or refusing it. Even though the idea has been around for a while is known to other organisations, it is still considered a change or innovation if it is new to the organisation considering it. Therefore, change or innovation in libraries and information centres has become imperative due to the technological upheaval and creative growth of electronic information recently (Swain, 2011).

Valentini and Triantafyllo (2015) and Ibegbulam and Jacinta(2016) averred that there are different ways through which librarians can adequately be exposed to innovative and creative skills in library and information science profession. Onuoha et al (2015) maintain that in this era of information communication technologies
(ICTs), librarians through various conferences, workshops and seminars organised by arms of the association such as Cataloguing and Classification Section and Library and Information Technology (IT) can learn new ways of improving library services to their patrons due to the availability of Internet facilities.

The Internet, which has caused remarkable change in librarianship, can similarly be used as opportunity for realising innovative and imaginative skills. An x-ray of library practices in Nigeria reveals that many innovations have been introduced. Zaid and Oyelude (2012), in their study using University of Lagos library and Kenneth Dike library, University of Ibadan, posited that the subsequent forms of creativity and innovation can be adopted: laptop loan services, incorporating web 2.0 tools for library operations, e-resources management services, electronic reservation services, provision of research tools, introduction of virtual library environment and making available 24 hours library services. All these innovations and creativities are owing to the Internet provision which has noticeably improved the phase of library professional work. The current economic recession that is confronting the Nation coupled with the incessant cut in library budget as being experienced in most of Nigerian Universities may not allow all the submission of Zaid and Oyelude to be fully implemented in Nigerian university libraries, for example, the issue of laptop loan services. However, some of their parameters suggested can be put in place, most especially, the application of web 2.0.

Swain (2011) argued that owing to dramatic improvements in the information society and the ICT sector, managers of libraries are interested not only in adapting to these extensive adjustment, but, more essentially in triggering innovative concepts from their personnel with a view to remain at the leading edge of knowledge other than ordinary passive spectators. Technology can be used creatively in the delivery of service through means of the mobile phone, for example, some libraries have accepted this device to send late reminders to customers for the late return of library materials (Ramjaun, 2008). Librarians have convincingly proven their capability to chief, manage and make use of innovative technologies by the introduction of CD-ROM databases, OPACs and Internet access into their libraries in the last few years (Malimoncono, 2012). Thus, it has become trendy to say of a new librarianship and of a new image of been first users of new technologies. Librarians therefore, are adapting to the use of the newest information handling and communication technologies.

The range and difficulty of challenges facing librarians and libraries today are unprecedented. Undoubtedly, the propagation of information technologies has made a major effect on libraries in the way they deliver their services and content as well as the arrangement of that very content, especially in the advanced nations where most libraries are moving towards digital collections or at the very slightest hybrid print and digital collections. In this society, there is also growing expectations of operators for quality, accurateness and instant reaction to their own needs. Ramjaun (2008) remarked that innovation in libraries is unavoidable owing to the subsequent causes: redefining procedures that boost the process of finding better and new means to make library collections and services more beneficial; applying new technologies to extend and improve library facilities to meet the needs of the user; creative association among libraries or between libraries and other institutions exploration of the libraries’ future; the introduction of new services or the retooling of traditional services leading to improved user experience; the discovery of unmet user needs; and incorporating the unsurpassed practices from foreign libraries wherever possible.

Tambwe (2016) averred that university libraries in Uganda are digitising books and issuing library resources in electronic format to the library patrons. Buwule and Mutula (2017) recommends that as part of innovation in the university libraries, librarians should take advantage of social networks to spur collaborative entrepreneurial and innovative services. Similarly, Johnson, Adams, Estrada and Freeman (2015) concluded that university libraries should no longer endeavor for market share but should endeavor to create new produces and services for the market. Vaughan (2013) examined innovation of technology in academic libraries. The result was founded on a study which was concluded by twenty-four directors of member libraries of the Association of Research Libraries. The result revealed that the impact of innovation on customers and its linking with the library’s mission ought to be deliberated before effecting it.

Furthermore, Swain (2011) maintained that for libraries to survive in these environments, librarians must be innovative. Innovation adventures change and offers libraries the means to handle the unstructured complications arising from changing environments. It is apparent that owing to the overflow of electronic information harmonising with the introduction of contemporary ICT devices, the information professionals frantically strive to revamp and re-engineer their techniques of services delivery to the users’ society by changing over traditional practices to electronic information systems and services through an innovative approach (Swain, 2011). Innovation therefore is knowledge application.

The need for innovation begins with idea conception. Speaking in the same direction, Ananiadou and Claro (2009), on the need for innovation and creativity, revealed that the improvements in the economy and society require that the educational system prepares young people with expertise, that allows them to benefit from the developing new form of socialisation and to actively influence to economic development of the nation. Innovation is creativity application that lead to the broad adoption of product, service or strategy (Kaya, Turan, and Aydin, 2015). If innovation is the application of creativity, the application of both creativity and innovation to library operations will help librarians in their quest to create knowledge.
V. Methodology

Descriptive survey of correlational type was used as research design. This is because it is wide in scope and permits data collection from large population that are spread over geographical area. The study was carried out in the 40 federal universities in Nigeria, which are located across all the six (6) geo-political zones in Nigeria. 654 librarians with at least a bachelor degree in library and information science formed the population of study and were enumerated. The instrument of data collection was questionnaire with the reliability coefficient of 0.75 based on Cronbach-alpha method. The Statistical Package for Social Sciences (SPSS) was used for the data analysis. Descriptive statistics presented in frequency count, mean and standard deviation was used to analyse research questions 1and 2. One-way Analysis of Variance (Anova) was used to test the hypothesis postulated in this study at 0.05 level of significance.

Presentation of result

Demographic profile of the respondents

Demographic characteristics of the respondents is presented in Table 1.

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Table 1: Demographic characteristics of the respondents

| Job Status          | Frequency | Percentage |
|---------------------|-----------|------------|
| Assistant Librarian | 109       | 21.0       |
| Librarian II        | 134       | 25.9       |
| Librarian I         | 111       | 21.4       |
| Senior Librarian    | 85        | 16.4       |
| Principal Librarian | 51        | 9.8        |
| Deputy Librarian    | 23        | 4.4        |
| University Librarian| 5         | 1.0        |

| Gender              | Frequency | Percentage |
|---------------------|-----------|------------|
| Male                | 306       | 59.1       |
| Female              | 212       | 40.9       |

| Marital Status | Frequency | Percentage |
|----------------|-----------|------------|
| Single         | 81        | 15.6       |
| Married        | 432       | 83.4       |
| Divorced       | 1         | 0.2        |
| Separated      | 1         | 0.2        |
| Widowed        | 3         | 0.6        |

| Age               | Frequency | Percentage |
|-------------------|-----------|------------|
| 20-29 years       | 22        | 4.2        |
| 30-39 years       | 225       | 43.4       |
| 40-49 years       | 153       | 29.5       |
| 50-59 years       | 97        | 18.7       |
| 60-69 years       | 21        | 4.1        |

| Highest Academic Qualification | Frequency | Percentage |
|---------------------------------|-----------|------------|
| Ph.D.                            | 70        | 13.5       |
| M.Phil                           | 29        | 5.6        |
| Master                           | 325       | 62.7       |
| Bachelor                        | 94        | 18.1       |
| HOW LONG HAVE YOU BEEN WORKING IN THIS LIBRARY | Frequency | Percentage |
| 1-9 years                        | 320       | 61.8       |
| 10-19 years                      | 117       | 22.6       |
| 20-29 years                      | 44        | 8.5        |
| 30-39 years                      | 36        | 6.9        |
| 40-49 years                      | 1         | 0.2        |

| Section                        | Frequency | Percentage |
|--------------------------------|-----------|------------|
| Management Unit                | 55        | 10.6       |
| Cataloguing/Classification Unit| 104       | 20.1       |
| Acquisition Unit               | 70        | 13.5       |
| Circulation Unit               | 85        | 16.4       |
| Reference Unit                 | 62        | 12.0       |
| Virtual Unit                   | 13        | 2.5        |
| Reprographic Unit              | 31        | 6.0        |
| IT & Computer Section Unit     | 41        | 7.9        |
| Serial Unit                    | 43        | 8.3        |
| Audio-Visual                    | 14        | 2.7        |

| Years of work experience | Frequency | Percentage |
|--------------------------|-----------|------------|
| 1-9 years                | 243       | 46.9       |
| 10-19 years              | 157       | 30.3       |
| 20-29 years              | 72        | 13.9       |
| 30-39 years              | 40        | 7.7        |
| 40-49 years              | 4         | 0.8        |
| 50 + years               | 2         | 0.4        |

Total: 518 (100.0)

Table 1 shows the demographic characteristics of the respondents. The job status that 134(25.9%) were Librarian II while 5(1.0%) were University Librarian. On gender, 306(59.1%) were males while 212(40.9%) were females. On marital status, 432(83.4%) were married, while 81(15.6%) were single. Age distribution of the respondents revealed that 225(43.4%) were 39 years were the majority while 214(1%) were 60-69 years were the minority. On academic qualification, 325(62.7%) had Master degree certificates while 29(5.6%) had MPhil degree certificates respectively.

Research Questions

The following research questions are raised in the study.

RQ1: What is the level of innovation by the librarians in federal universities in Nigeria?

The level of innovation of librarians is as presented in Table 3

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Table 2: Level of innovation by the librarians in federal universities in Nigeria

| Innovative behaviour of librarians | SD | D | A | SA | X | SD |
|-----------------------------------|----|---|---|----|---|----|
| I enjoy trying new ideas          | 19 | 26| 302| 171| 3.21| 0.70|
| I seek out new ways to do things  | 13 | 35| 309| 16 | 3.19| 0.67|
| The creation of new product/services in my library is based on the combined effort of librarians | 13 | 36| 310| 159| 3.19| 0.67|
| When an answer is not apparent, I often invent means for solving a problem | 20 | 39| 323| 136| 3.11| 0.69|
| Implementing new proposals are welcome in my library | 24 | 53| 302| 139| 3.07| 0.74|
| I always inject new services to my work schedule each day | 15 | 69| 315| 119| 3.04| 0.69|
| I am an innovative kind of person | 32 | 58| 285| 143| 3.04| 0.80|
| I frequently find myself doubtful of new ideas | 32 | 101| 201| 184| 3.04| 0.89|
| I like taking part in the leadership duties of the group I belong to | 31 | 84| 263| 140| 2.99| 0.82|
| I adjudge myself to be inventive and original in my thinking and performance | 28 | 79| 285| 126| 2.98| 0.78|
| I am open to new ideas            | 29 | 77| 289| 123| 2.98| 0.78|
Implementing my attention on focusing time on daily basis thinking about how new services can be implemented in my library.

I almost made new product/services myself although I had to use some kinds of assistance or help.

I hardly trust new ideas until vast majority of people around me accept them.

I spent more time on daily basis thinking about how new services can be implemented in my library.

I am generally apprehensive about accepting new ways of doing things.

I am usually one of the last people in my group to accept something new.

I find it exciting to be original in my thought and action.

I am challenged by unanswered questions.

I am an influential member of any group I belong.

I am generally careful about accommodating new ideas.

I spent more time on daily basis thinking about how new services can be implemented in my library.

Implementing new skills is perceived as too risky for me in the library and is resisted.

Other priorities prevent me from focusing my attention on implementing new ideas.

Weighted Mean = 2.89

Table 2 presents the level of innovation by the librarians in federal universities in Nigeria. Going by the test norm of innovation scale in Table 4 (See Appendix I), a score of 1–40, indicating low innovation, 41–80, moderate innovation and 81–120, high innovation of the respondents.

Since the overall mean score (X̄ = 86.60. SD =12.53) of the respondents falls within the interval 81–120, one can deduce that the innovation of the respondents is high. This was buttressed by the respondents claimed that they like trying new ideas; look for new ways to do things; creation of new product/services in their library is based on the combined effort of librarians; library management promotes implementing new ideas; they frequently improve methods for solving a problem when an answer is not apparent; implementing new proposals are welcome in my library; always inject new services to work schedule each day; they are inventive kind of person; and that they considered themselves to be creative and original in their thinking and behaviour among others.

RQ2: What are the marketing strategies employed by librarians to promote library products and services in the federal universities in Nigeria.

TABLE III
INNOVATION STRATEGIES USED IN MARKETING LIBRARY PRODUCTS AND SERVICES IN FEDERAL UNIVERSITIES IN NIGERIA

| S N | Techniques used in marketing | SD | D | A | SA | X̄ | S.D |
|-----|-------------------------------|----|---|---|----|-----|-----|
| 1   | Librarians should be properly dressed | 7  | 23 | 219 | 249 | 3.41 | 0.64 |
| 2   | Organising user education | 10 | 17 | 243 | 248 | 3.41 | 0.65 |
| 3   | Provision of electronic access to information | 8  | 18 | 253 | 239 | 3.40 | 0.63 |
| 4   | Use of leaflet and posters | 8  | 35 | 262 | 213 | 3.40 | 0.62 |
| 5   | Having representative in institutional functions | 10 | 20 | 248 | 240 | 3.39 | 0.66 |
| 6   | Advertising in print and electronic media | 8  | 17 | 259 | 234 | 3.39 | 0.63 |
| 7   | Increase interpersonal relationship between staff and users | 14 | 33 | 215 | 256 | 3.38 | 0.72 |
| 8   | One on one discussion with the users | 7  | 23 | 253 | 238 | 3.38 | 0.64 |
| 9   | Provision of suggestion boxes | 9  | 15 | 263 | 231 | 3.38 | 0.63 |
| 10  | Organising library week | 7  | 23 | 263 | 225 | 3.36 | 0.63 |
| 11  | Creating a library web page | 7  | 18 | 256 | 237 | 3.33 | 0.72 |
| 12  | Exhibitions and display of new arrivals | 13 | 39 | 232 | 234 | 3.32 | 0.73 |
| 13  | Requesting for contribution from users while making acquisitions | 16 | 34 | 243 | 225 | 3.31 | 0.73 |
| 14  | Sending personal letters to users through e-mail and text messages | 14 | 29 | 274 | 201 | 3.28 | 0.69 |
| 15  | Sending out brochure or flyers | 10 | 32 | 286 | 190 | 3.27 | 0.66 |

Weighted Mean = 3.36
Rational of the responses on the innovation strategies used in marketing library products and services to users in federal universities in Nigeria are as shown below:

Librarians should be properly dressed (\( \bar{x} = 3.41, SD = .64 \)) ranked highest by the mean score rating and was followed by organising user education (\( \bar{x} = 3.41, SD = .65 \)), provision of electronic access to information (\( \bar{x} = 3.40, SD = .63 \)), use of leaflet and posters (\( \bar{x} = 3.40, SD = .62 \)), having representative in institutional functions (\( \bar{x} = 3.39, SD = .63 \)), increase interpersonal relationship between staff and users (\( \bar{x} = 3.38, SD = .72 \)), one on one discussion with the users (\( \bar{x} = 3.38, SD = .64 \)), provision of suggestion boxes (\( \bar{x} = 3.38, SD = .63 \)), organising library week (\( \bar{x} = 3.36, SD = .63 \)), creating a library web page (\( \bar{x} = 3.36, SD = .63 \)), exhibitions and display of new arrivals (\( \bar{x} = 3.33, SD = .72 \)), requesting for contribution from users while making acquisitions (\( \bar{x} = 3.31, SD = .73 \)), sending personal letters to users through e-mail and text messages (\( \bar{x} = 3.28, SD = .69 \)) and sending out brochures or flyers (\( \bar{x} = 3.27, SD = .66 \)) respectively.

Hypothesis one: There is no significant difference in the innovation of librarians based on their Universities

### TABLE IV

| Source of variation | Sum of square | degrees of freedom | Mean square | F | P |
|---------------------|---------------|--------------------|-------------|---|---|
| Universities        | 12599.485     | 39                 | 323.064     | 2.250 | .000 |
| Error               | 68621.380     | 478                | 143.559     |    |    |
| Total               | 81220.865     | 517                |             |    |    |

Table 4 shows that there is a significant difference in the innovation of librarians by Universities (F = 2.250, P(0.00)<.05). Hence, there is a difference in the innovation of librarians by Universities i.e. the innovation of librarians varies from university to university in the study. The hypothesis is therefore rejected.

Furthermore, the significant difference of the innovation of library in federal universities was further tested with the use of parwise multiple comparisons See Appendix 11. Table 6 in the appendix II. It was revealed through the post hoc analysis that there was a significant difference in the innovation of librarians from ModibbbboAdama University of Technology, Yola and Usman Dan Fodio University, Sokoto (mean difference -12.19608). Similarly, significant difference exists between the innovation of librarians from the following universities; Federal University, Ndufu-Alike, Federal University of Technology, Owerri, Federal University, Kashire, Nigerian Police Academy, Federal University of Technology, Minna, Federal University, Lokoja, University of Jos, University of Ibadan, University of Lagos, Abubakar Tafawa Balewa University, Bauchi, Abadu Bello University, Zaria, University of Abuja and The National Open University of Nigeria.

Furthermore, there is significant difference in the innovation of librarians from Micheal Okpara University of Agriculture and Nigerian Police Academy, Federal University, Lokoja as well as Federal University Wukari. The comparison of the significant difference of the innovation of the librarians in the following federal universities was evident; Federal University Ndufu-Alie and University of Calabar, University of Benin, University of Agriculture, Markudi, University of Nigeria, Nsukka, Federal University Birin-Kebbi, Federal University Dutsin-Ma, Federal University of Petroleum Resources, Effurun, Usman Dan Fodio University, Sokoto and Nnamdi Azikwe University, Akwa.

In summary, the parwise multiple comparison of innovation shows that 39 out of 40 federal universities in Nigeria established a significant difference in the way librarians displayed their innovation. Therefore, the table established a significant difference in the innovation of librarians in the Federal University in Nigeria.

### VI. Discussion of Findings

The result on the level of innovation by the librarians indicate that greater percentage of them exhibits good innovation behaviours. The study found that librarians enjoy trying new ideas. Only few librarians declined this assertion. 90.7% of the respondents always seek out new ways to do thing in their library. The result corroborated the findings of a study in Nigeria by Onuoha, Anyawu, Ossai-Onah and Amaechi (2015) who remarked that innovation in librarianship is all about looking for new ways to improve library services. The study also found that innovation in library involved the combined effort of librarians to create new products and services. When new products and services are created, either by individual or through the combined effort of the librarians, the library management promotes the implementation of such ideas.

This is in support of the finding of Rowley (2011b) when he developed a model for innovation strategy in UK, he found innovative and creative team, leadership, effective design and management of innovation processes as part of strategies that enhanced the innovation of the librarians. Consistent with the finding of this study is the study by Leong and Anderson (2012) who studied how academic libraries in Australia attempted to enhance its pace of innovation. Their result showed that strategies implemented to achieve their goals are leadership development, cross unit work, specific purpose working group and the promotion of involvement in professional associations. Although the significant contribution of leadership development to the level of innovation by librarians was not reported. The level of innovation by librarians was further expanciated when 88.6% of the respondents claimed that they frequently improvise methods for solving problems even when the answer is not apparent; 85.1% avered that implementing new proposals are welcome in their library. The result further showed that the majority of the respondent possessed skills and expertise to create new products and services.

The result obtained in this study showed that out of the 518 librarians in the 40 federal universities in Nigeria, 360 (69.5%) had high level of innovation, 155(29.9%) had moderate level of innovation while 3(0.6%) had low level of innovation behaviours. The high level of innovation by librarians was revealed in the techniques they use in marketing library products and services. To make libraries especially academic libraries attractive to users, librarians have adopted proper dressing as part of the techniques. Librarians use tools of user education to promote the image of the library to the member of the faculty and students, and high premium is placed on provision of access to electronic information. Librarians now ensured that they
fully participated in institutional functions and they have increased their interpersonal relationship between staff and users. This finding is in agreement with the findings of Zaid and Oyelude (2012) when they surveyed the creativity and innovation in two Nigerian Academic libraries, they found that electronic resources management services and incorporation of web 2.0 tools in library, introduction of virtual environment and making available 24hours library services are parts of innovation introduced to the library. The study further corroborated the finding of Salami (2014) who maintained that marketing library services is a major innovation that have been introduced into the library in the recent years.

VII. Conclusion

The study concludes that the level of innovation of librarians in the federal universities in Nigeria is high. The strategies used in marketing library products and services by the librarians in federal universities in Nigeria include proper dressing by the librarians, organising user education, provision of electronic access to information, requesting for contribution from users while making acquisitions, sending personal letters to users through e-mail and text messages and sending out brochures or flyers. Although the study established a significant difference in the innovation of librarians, the study could not fully show the significant difference on the basis of the years of their establishment. Therefore, further study to unravel this is highly demanded.

VIII. Recommendations

Based on the findings of the study, the following recommendations are hereby made:

Research findings revealed a high level of innovation by the librarians in federal universities in Nigeria. Therefore, the Library Management of universities should increase the level of advocacy for fund from corporate organisations and philanthropists through which creative and innovative expertise by the librarians can be rewarded handsomely to encourage further creative and innovative performance among librarians in Nigeria.

Library managers of various universities should provide periodic in-house training programme on the importance of innovation in library environment so that more creative and innovative practices can be exhibited by the librarians.

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