ATTITUDE AND USE OF SMART TECHNOLOGY IN KNOWLEDGE SHARING AMONG LIBRARY PERSONNEL IN ACADEMIC LIBRARIES IN OYO STATE, NIGERIA

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Abstract

This study examined the attitude and use of smart technology in knowledge sharing among library personnel in academic libraries in Oyo state, Nigeria. Academic libraries are established to meet the varying curricular and information needs of users of the institution. Access to physical facilities in libraries is threatened by the outpour of information revolution and ICT. This paper advocates the use of smart technologies by academic libraries to meet the information needs of their users irrespective of their geographic location. Smart technologies can be used in library services such as in collection development, cataloguing and classification, circulation, reference services and other library activities. Smart technology is also used to access social media platforms such as Facebook, Twitter, Google, WhatsApp, E-mail, YouTube, and other platforms to share knowledge and other information online. However, despite the enormous potentials of smart technology in academic library services, there are some problems associated with its use and these include high cost, poor internet connectivity, erratic power supply and so on. The study recommended that government should allocate huge fund to academic libraries, ensure massive internet access and connectivity, provide steady power supply in the academic libraries amongst others.

Keywords: Academic library, Knowledge sharing and Smart Technology

Introduction

The emerging of technology in the 21st century might be advantage for business, industries, government, academic institutions and libraries as well. Library has improved its facilities and services for not being just the keeper for books. Changing landscape on how activities or operations been done give some impact to the organization outcomes and targets. This will be the challenge for some organization in order to stay relevant. Libraries as the custodian of information and resources really need to be parallel with the development of technology today. The implementation of digital format to library resources is the current trend that libraries must take into consideration as users might want to access easily and remotely. With current widely used gadgets such as smart phones and tablets, more information could be accessed anywhere at any time. The development of information technology is another one challenge in most libraries. Nowadays, most of organizational operations and processes are depending on the use of IT devices such as computers, internet, Wi-Fi connections etc. In context of library environment, the

rise of technology is believed to be started from the publication technology where library publish information sources and monograph.

In this century, the element of marketing and promoting library resources plays a vital role in delivering solutions to meet user's needs. External marketing such as e-newsletters, e-mails, and paper publications were used to promote membership benefits to members (Madden, 2008). The use of social media and interactive website help libraries to reach for its users. The up-to-date information could be blast out to users.

Research Question

1. What are the available smart technology tools for knowledge sharing among library personnel in academic libraries in Oyo state?

2. What is the frequency of use of smart technology tools among library personnel in academic libraries in Oyo state, Nigeria?

3. What is the attitude of library personnel on the use of smart technology tools for knowledge sharing in academic libraries in Oyo state, Nigeria?

4. What are the challenges of use of smart technology tools for knowledge sharing among library personnel in Oyo state, Nigeria?

Literature Review

Smart Technology

Bower (2019) defines smart technology as a technology that uses artificial intelligence, machine learning, and large-data processing to bring cognitive knowledge to items that were previously considered inanimate. Poslad (2009) had explained that smart technology is an electronic device, generally connected to other devices or networks via various wireless protocols, such as Bluetooth, Zigbee, Wi-Fi, LiFi, 3G, 4G network which can operate interactively and autonomously to some extent. In this study, smart devices are all modern artefacts that are made smart with computing power and linked to the Internet to form the Internet of Things (IoT). They range from small

devices to wearable asset tracking devices that can be deployed to library services such as acquisition, circulation, cataloguing, reference services and other library operations. Using sensors, smart devices capture physical data such as light, temperature, presence and deliver the data to be analyzed and used. Such applications have a minimal collection of physical components and can be used irrespective of geographic location. They often come in different types, since they usually consist of a hardware layer (including a radio transmitting signals), a network layer (through which devices communicate with each other), and an application layer (through which end-user' order receives).

Smart Technology in Academic library

Different types of smart technologies used in academic libraries are computer system, computer accessories, cellphone or smartphone and other communication devices including video conferencing devices, projector, scanner, printer, photocopying machines, digitizing machines, Microsoft printers, radio-electronic copiers and others. Some smart electronic devices such as Easy-to-Read-Books, Assistive Listening Systems and others that can support the deaf or the physically challenged in academic libraries are decoder machines with builtin telephones that convert the electronic signals of a closed caption video system into words written on a screen along with the video images for the hearing-impaired library.

Moreover, the smart technologies academic libraries use to improve personal and interpersonal community interactions within Nigeria and other countries are mobile phone computers, handsets, cell phones, cellular phones. Mobile phones have various apps and can be used for personal, interpersonal, community and intergroup contact personally. To meet the information needs of users, the academic library can use mobile phones and computers to reach their users wherever they are. First point of call of the library user is the library catalogue either physical or electronic. When the user finds online resources of his choice in the libraries via his smart phone, laptop or

desktop, the user can access all the information he or she needs that are available online. Equally through Twitter, Facebook, Whatsapp, Gmail and other social media handles, the library can go into advocacy provided they are embedded in the library and tertiary institution websites.

Academic library users could use smart technology to access social media such as in Facebook to quickly track current awareness services in academic libraries even without visiting the library physically. They could also use twitter apps for reference services, whatsapp for lending and preservation services, and skype for video conferencing and virtual meeting. Odu and Omini (2017) argued that academic libraries in Nigeria are now sharing information resources, particularly in COVID-19, to accelerate work operations and foster cooperation between nations, states.

The Smart Technologies Used for Effective Service Delivery in Libraries

To access academic library tools and facilities in the COVID-19 era, the use of Twitter, WhatsApp, Facebook, Email and other mobile devices includes the provision of wi-fi network to access it. Accordingly, academic libraries in Nigeria are responding to the modern digital world. It has become imperative due to developments such as the growth of electronic guidance, globalization, the demand for knowledge of people, access to social media and public networks everywhere (Ogbebor, 2013). The Federal Government would have access to many online services in 2012, including electronic databases, CD-ROMs, open access journals, and e-books, wired and wireless networks power desktop computers (Bassy & Odu, 2015). Through this development, library users are able to access the resources and services available in the library remotely via the library website, using the appropriate access points to support their users in this pandemic period. Most libraries in Nigeria are still in their teething stage.

With the use of smart technologies in academic libraries, it is now easier for library users to access library services remotely through their laptops, desktops, mobile phones with Internet connectivity from the comfort of their homes during the pandemic lockdown. With the twitter, short communication bursts from one-on-one conversations into small news programs library users can tune in whenever news or information updates occur. Feedback can also flow in from library users in reaction to information on twitter.

In academic library services such as circulation, reference services, exhibition, Selective Dissemination of Information (SDI), can be carried out with the smart technology. Odeh and Akpokurerie (2011) informed that an automated system facilitates the procurement process for ordering materials, receiving and preparing an invoice. Smart technologies can also be used in control services in the registration of new users, charging and discharging systems. Odeh and Akpokurerie (2011) pointed out that the automated system handles with great ease and speed these processes of registration of new users, charging and discharging of system. Such systems are often used to produce and classify the sum for users automatically, by increasing them on overdue notice. Smart technologies are also used in indexing, bibliographic services and document delivery.

Equally with the smart technology, the library management can interact with their users, book vendors, publishers and the general public through social media platforms such as Facebook, Gmail, Whatsapp to send and receive orders as and when due. Publishers and vendors can also send feedback on what information resources they have. Through this same media, approval for requests can also be conveyed. The Facebook platform is a popular social media platform among library users. It is useful for document delivery. Health information about COVID-19 cases around the globe, can be disseminated via Facebook. Reference librarians can provide answer to reference queries without interacting with the user physically. It has helped the librarians interact with each other irrespective of geographic location.

Methodology

Descriptive survey method was employed for the study. 114 library personnel were randomly sampled from five

(5) academic libraries in Oyo state, Nigeria comprising of Ajayi Crowther University Library, Oyo; Atiba University Library, Oyo; Federal College of Education (Special) Library, Oyo; Federal School of Surveying Library, Oyo; and Lead City University Library, Ibadan. Questionnaire was used to elicit responses from the respondents, using five-point likert scale, Strongly Agreed (SA) = 5, Agreed (A) = 4, Undecided (UD) = 3, Disagreed (D) = 2 and Strongly Disagreed (SD) = 1 and All Times (AT) = 5, Most Times (MT) = 4, Sometimes (ST) = 3, Few Times (FT) = 2 and Never (NV) = 1. A descriptive method of data analysis of simple statistical tools with frequency count, percentage, mean and standard deviation was used.

Result and Discussion

This section presents the result of the findings in a tabular form.

Table 1: Gender distribution of the respondents

Gender	Frequency
Male	70 (61.4%)
Female	44 (38.6%)
Total	**114 (100%)**

Table 1 shows the gender distribution of the respondents. It was revealed that 70 (61.4%) of the respondents were male while 38.6% were female. This indicates that there were more male participants in the study than the female.

Table 2: Age distribution of the respondents

Age range	Frequency
20 – 29 years	3 (2.6%)
30 – 39 years	44 (38.6%)
40 – 49 years	33 (28.9%)
50 – 59 years	32 (28.1%)
>= 60 years	2 (1.8%)
Total	**114 (100%)**

Table 2 above shows the age distribution of the respondents. It was showed from the table that the age range of 30 – 39 years had the highest participants of 44 (38.6%) followed by 40 – 49 years and 50 – 59 years with

respondents 33 (28.9%) and 32 (28.1%) respectively. The least age range respondents are >= 60 years and 20 – 29 years with respondents 2 (1.8%) and 3 (2.6%) respectively. The table revealed that the libraries under study had much of their personnel under abled and energetic age range of 30 – 39 years.

Table 3: Educational qualification of the respondents

Educational qualifications	Frequency
Ph.D	4 (3.5%)
MLIS/M.Sc/M.Ed	45 (39.5%)
BLIS/B.Sc/B.Ed	58 (50.8%)
Diploma	5 (4.4%)
SSCE	2 (1.8%)
Total	**114 (100%)**

Table 3 revealed the educational qualification of the respondents. The table indicates that 58 (50.8%) of the respondents had BLIS degree or its equivalent while 45 (39.5%) respondents bagged MLIS or its equivalent. The table also indicated that 4.4% of the participants had diploma in library study while 3.5% and 1.8% participants had Ph.D and SSCE respectively. This showed that more than 50% of the participants had at least BLIS or its equivalent which implies that the library personnel under reveal are highly intellectual.

Table 4: Working experience of the respondents

Working experience	Frequency
0 – 4 years	12 (10.5%)
5 – 9 years	18 (15.8%)
10 – 14 years	39 (34.2%)
15 – 19 years	26 (22.8%)
20 – 24 years	5 (4.4%)
25 – 29 years	14 (12.3%)
>= 30 years	0 (0%)
Total	**114 (100%)**

Table 4 above revealed the working experience of the respondents. The table showed that 39 (34.2%) of the respondents had working experience of 10 – 14 years, 26 (22.8%) of the respondents had working experience of 15

– 19 years while 15.8% of the participants have worked for 5 – 9 years. 14 (12.3%) of the library personnel had working experience of 25 – 29 years and those who have worked for 0 – 4 years constitute 10.5% of the participants. The result of this table implies that 34.2% of the total participants have worked for more than a decade in their respective libraries.

Table 5: Designation of the respondents

Designation	Frequency
Professionals	57 (50.0%)
Para-professionals	31 (27.2%)
Non-professionals	26 (22.8%)
Total	**114 (100%)**

Table 5 indicates the designation of the respondents. It was showed from the table that 57 (50.0%) of the respondents are professionals (librarians), 31 (27.2%) are para-professionals (library officers) while 26 (22.8%) are non-professional (supportive staff). The table indicated that 50.0% of the participants are professionals (librarians) who participates both in administrative and professional responsibilities.

Table 6: Libraries of the respondents

Libraries	Frequency
Ajayi Crowther University, Oyo	28 (24.6%)
Atiba University, Oyo	6 (5.3%)
Federal College of Education (Special), Oyo	34 (29.8%)
Federal School of Surveying, Oyo	19 (16.6%)
Lead City University, Ibadan	27 (23.7%)
Total	**114 (100%)**

Table 6 showed the academic libraries that the respondents are attached to. It revealed that 34 (29.8%) of the respondents are from Federal College of Education (Special), Oyo; 28 (24.6%) are attached to Ajayi Crowther University, Oyo; while 27 (23.7%) of the participants are attached to Lead City University, Ibadan. Also, 19 (16.6%) of the respondents are attached to Federal School of Surveying, Oyo and 6 (5.3%) are attached to Atiba University, Oyo. This indicates that the larger participants of the study are from Federal College of Education (Special), Oyo while Atiba University had the least participants.

Table 7: Availability of smart technological tools

ITEMS	SA	A	UD	D	SD	Mean	S.D
My library shares official information via email.	20(17.5%)	59(51.8%)	12(10.5)	11(9.6)	12(10.5)	3.56	1.20
We use google-meet application for conferences and seminars in my library.	15(13.2%)	48(42.1%)	13(11.4%)	32(28.1%)	6(5.3%)	3.30	1.17
My library has facebook/whatsapp/twitter account through which public information are shared.	25(21.9%)	71(62.3%)	3(2.6%)	9(7.9%)	6(5.3%)	3.88	1.01
Every section of my library has a desktop/laptop for easy information storage and sharing.	46(40.4%)	47(41.2%)	2(1.8%)	14(12.3%)	5(4.4%)	4.01	1.15
Urgent and important information are communicated via memo.	43(37.7%)	56(49.1%)	3(2.6%)	9(7.9%)	3(2.6%)	4.11	.98
We have a database for student's records in our library.	26(22.8%)	46(40.4%)	6(5.3%)	30(26.3%)	6(5.3%)	3.49	1.25
Most of the conferences and seminars my library have organised are done online.	15(13.2%)	25(21.9%)	9(7.9%)	59(51.9%)	6(5.3%)	2.86	1.21
Library users are communicated on the available resources, books loan and library uses electronically.	26(22.8%)	51(44.7%)	11(9.6%)	26(22.8%)	0(0%)	3.68	1.07
Average mean						**3.61**	**1.13**

Table 8 reveals the availability of smart technology tools in the study area. The table had an average mean of 3.61, which shows that most of the technology on checked were claimed available. However, it was showed from the findings that important and urgent information meant for library personnel were communicated by the use of memo (x = 4.11). The table also revealed that most sections of the academic libraries had at least a desktop or laptop for easy information storage and sharing (x = 4.01). The table further showed that majority of the participants admitted that their libraries have facebook/whatsapp/twitter account through which public information are shared (x = 3.88). On the contrary, some of the respondents admitted that their libraries have neither organised nor participated on online conferences, seminars and

workshops (x = 2.86). It can be deduced from the table that only a few of the academic libraries in Oyo state have smart technology tools in their libraries and even the few that have were not utilised by their personnel.

Table 8: Frequency of use of smart technological tools

ITEMS	AT	MT	ST	FT	NV	Mean	S.D
Computer system for sharing information?	29(25.4%)	50(43.9%)	20(17.5)	6(5.3%)	9(7.9%)	3.73	1.14
Email to communicate staff?	21(18.4%)	28(24.6%)	42(36.8%)	5(4.4%)	18(15.8%)	3.25	1.27
Online conferences and seminars?	23(20.2%)	12(10.5%)	51(44.7%)	9(7.9%)	19(16.7%)	3.10	1.29
Student's database?	17(14.9%)	36(31.6%)	25(21.9%)	17(14.9%)	19(16.7%)	3.13	1.31
Memo to communicate staff?	39(34.2%)	46(40.4%)	26(22.8%)	0(0%)	3(2.6%)	4.04	.90
Smart phones for knowledge sharing?	39(34.2%)	37(32.5%)	23(20.2%)	6(5.3%)	9(7.9%)	3.80	1.20
Facebook/whatsapp/twitter for public information?	33(28.9%)	47(41.2%)	16(14.0%)	15(13.2%)	3(2.6%)	3.81	1.08
Average mean						3.55	1.17

Note: AT = All Times, MT = Most Times, ST = Sometimes, FT = Few Times, NV = Never

Table 8 reflects the frequency of use of smart technological tools in academic libraries in Oyo state, Nigeria. The table had an average mean of 3.55 which shows that most of the smart technology itemised are frequently used in academic libraries in Oyo state, Nigeria. The table indicated frequent use of memo in communicating library personnel (x = 4.04). It was also identified from the table that there were frequent use of Facebook/whatsapp/twitter for public information (x = 3.81), smart phones for knowledge sharing (x = 3.80) and use of computer systems for information sharing (x = 3.73). However, the academic libraries under study had least use of online conferences, seminars and workshops (x = 3.10). This implies that most of the academic libraries in Oyo state have not migrated to the use of smart technology tools in sharing knowledge and information.

Table 9: Library personnel's attitude on the use of smart technology tools

ITEMS	SA	A	UD	D	SD	Mean	S.D
Smart technological tools are complex for my liking.	0(0%)	28(24.6%)	6(5.3%)	69(60.5%)	11(9.6%)	2.45	.97
I navigate computer system applications perfectly.	23(20.2%)	69(60.5%)	0(0%)	22(19.3%)	0(0%)	3.82	.97
I do not really have time for computer or smart phone applications.	6(5.3%)	8(7.0%)	0(0%)	55(48.2%)	45(39.5%)	1.90	1.07
I lack adequate skill on the use of smart technological tools.	17(14.9%)	3(2.6%)	0(0%)	61(53.5%)	33(28.9%)	2.21	1.31
I prefer physical conferences and seminars to that of online.	9(7.9%)	40(35.1%)	5(4.4%)	54(47.4%)	6(5.3%)	2.93	1.17
I do not have any functioning email	3(2.6%)	3(2.6%)	3(2.6%)	56(49.1%)	49(43.0%)	1.73	.85
I do not check my email(s) often	3(2.6%)	12(10.5%)	0(0%)	49(43.0%)	50(43.9%)	1.85	1.04
I prefer being communicated via memo	14(12.3%)	32(28.1%)	6(5.3%)	51(44.7%)	11(9.6%)	2.89	1.27
Communicating library users online is more cumbersome than the manual processes.	9(7.9%)	26(22.8%)	3(2.6%)	54(47.4%)	22(19.3%)	2.53	1.26
Smart technological tools are complex for my liking.	3(2.6%)	12(10.5%)	0(0%)	49(43.0%)	50(43.9%)	2.45	.97
Average mean						2.48	1.09

Table 9 reveals the attitude of library personnel on the use of smart technology in academic libraries in Oyo state, Nigeria. The table had an average mean of 2.48, this indicates that the attitude of library personnel to the use of smart technology in sharing knowledge among academic libraries is not favourable. Majority of the library personnel examined confessed that they have skills of navigating computer system and other smart technologies perfectly (x = 3.82). Most of the library personnel understudied have phobia for online conferences or workshops and choices to attend physical conferences, workshops and seminars instead (x = 2.93). It can be deduced from the table that the respondents have built their choice of communication and knowledge sharing to memo and are adamant to the changes brought to academic libraries by smart technology tools and ICT.

Table 10: Challenges of smart technological tools

ITEMS	SA	A	UD	D	SD	Mean	S.D
There are few number of computer systems allocated to my section.	18(15.8%)	54(47.4%)	11(9.6%)	23(20.2%)	8(7.0%)	3.45	1.18
High cost of computer system/laptop.	22(19.3%)	56(49.1%)	9(7.9%)	27(23.7%)	0(0%)	3.64	1.05
High cost of internet subscription.	26(22.8%)	61(53.5%)	3(2.6%)	24(21.1%)	0(0%)	3.78	1.03
Internet fluctuation.	36(31.6%)	54(47.4%)	3(2.6%)	21(18.4%)	0(0%)	3.92	1.04
Erratic power supply.	53(46.5%)	40(35.1%)	3(2.6%)	18(15.8)	0(0%)	4.12	1.06
Cost of maintenance of electronic tools.	30(26.3%)	72(63.2%)	0(0%)	12(10.5%)	0(0%)	4.05	.83
Attitude of management.	54(47.4%)	36(31.6%)	21(18.4%)	3(2.6%)	0(0%)	3.58	1.04
Technological know-how.	20(17.5%)	53(46.5%)	14(12.3%)	27(23.7%)	0(0%)	3.29	1.05
Lack of readiness to adapt to smart technological tools.	7(6.1%)	60(52.6%)	9(7.9%)	35(30.7%)	3(2.6%)	3.23	1.07
There are few number of computer systems allocated to my section.	6(5.3%)	57(50.0%)	14(12.3%)	31(27.2%)	6(5.3%)	3.45	1.18
Average mean						3.65	1.05

Table 10 unveils the challenges encountered in the use of smart technology by library personnel in academic libraries in Oyo state, Nigeria and had an average mean of 3.65. The table showed that all the items enlisted were greatly accepted to form the major challenges facing the use of smart technology in academic libraries. However, erratic power supply (x = 4.12), cost of maintenance of electronic/technological tools (x = 4.05) and internet fluctuation (x = 3.92) had more impact than other challenges. The cost of purchase and maintenance, erratic power supply and internet fluctuation may have be the major factors many academic libraries in Oyo state have not been fully digitalised and adopted the use of smart technology tools.

Discussion of the Findings

RQ1: Available smart technology tools for knowledge sharing among library personnel in academic libraries in Oyo state, Nigeria.

The study identified some smart technology tools for knowledge sharing among library personnel in academic libraries in Oyo state to include smart phones, computer systems, laptops, desktops, scanner and other electronic resources which could help them access social media such as Twitter, Facebook, Whatsapp, Gmail, google-meet and other social media handles. However, most of the libraries examined negate the use of the smart technology tools and social media handles and embraced the tradition way of sharing knowledge and information using memos and other analogy means. This can be attested to the fact that most library personnel lack the needed technological skills or have phobia for their use. It could be traced to the managerial policy of the studied libraries on the use of smart technology tools or its availability. This study is in

contrast with the study of Odu and Omini (2017) who posed that academic libraries in Nigeria are now sharing knowledge and information resources, particularly in COVID-19, to accelerate work operations and foster cooperation between nations and states.

RQ2: Frequency of use of smart technology tools in knowledge sharing among academic libraries in Oyo state, Nigeria.

Table 8 revealed the frequency of use of smart technology tools among library personnel in academic libraries in Oyo state Nigeria. The table pointed that there is higher frequency of use of memo in knowledge or information sharing in the studied area than it is found on any of the technological tools. However, the study also identified that the library personnel uses their smart phones and computer systems in sharing knowledge via social media handles such as Facebook, whatsapp or twitter for public information. On rare occasions do the libraries in question uses smart technology in sharing knowledge via conferences, workshops, seminars or trainings. This finding is contrary to the findings of Kietzmann and Kristopher (2011) who posited that smart technology tools such computer systems and other electronic gadgets are interactive computer-mediated technologies that allow knowledge, ideas, career interests, and other forms of expression to be generated or shared through virtual communities and networks among librarians across academic libraries as often as possible.

RQ3: Attitude of library personnel on the use of smart technology tools for knowledge sharing in academic libraries in Oyo state, Nigeria.

The attitude of library personnel towards the use of smart technology tools for knowledge sharing was revealed in table 9. It was shown from the table that most of the academic library personnel examined have moderate skills for navigating computer systems, smart phones and other electronic resources. Most of the personnel also have functioning emails and interact with friends via social media platforms. It can however, be established from the

findings that the academic libraries under study are not automated, or at least, are not fully automated. In other words, the investigated libraries have not fully adopted the sole use of smart technology for knowledge and information sharing. This implies that most academic libraries in Oyo state, Nigeria do not engage in online conferences, seminars, workshops or trainings rather, attends physical conferences and other avenues that avail them knowledge sharing. Also, most internal communication are done through memos instead of using social media platforms such as Facebook, whatsapp, twitter, google-meet or emails.

RQ4: Challenges of use of smart technology in knowledge sharing in academic libraries in academic libraries in Oyo state, Nigeria

Table 10 revealed most of the challenges suffered in the use of smart technology tools in academic libraries in Oyo state, Nigeria. The findings showed that majority of the academic libraries surveyed complained mostly of erratic power supply ($\overline{X}$ = 4.12), cost of maintenance of electronic/technological tools ($\overline{X}$ = 4.05) and internet fluctuation ($\overline{X}$ = 3.92). Other setbacks include high cost of internet subscription ($\overline{X}$ =3.78) and managerial attitude of academic libraries ($\overline{X}$ =3.58). The aforementioned challenges identified in the table are capable of taking responsibility of the attitude and use of smart technology in the area under consideration. It is obvious that smart technology tools and use of social media platform for knowledge sharing cannot excel in areas where there is no supply of power, fluctuated or non-subscription of internet. Managerial attitude to the use of smart technology tools among library personnel is another factor that cannot be overemphasised. This findings is aligning with the findings of Butcher (2011) who noted that lack of managerial strategic policy formulation and lack of clear government support to advance the availability and usage of ICT tools present serious challenges for the successful use of smart technology in academic libraries in Nigeria.

Conclusion

In this 21st century, the use of smart technologies such as telephones, smart phones, computer systems, tablets, webcams, video text, etc can be used to share knowledge and information among library personnel. Academic libraries can explore the social media platforms such as the Twitter, Facebook, WhatsApp, Instagram, google-meet, webnar, etc to attend conferences, seminars, workshops and trainings. The use of the smart technology is imperative in the light of the safety protocols recommended by the World Health Organization among which is avoidance of physical distance, especially, in the recent time. However, despite the enormous advantages of in the use of smart technology, the academic library is faced with many challenges. These include paucity of funds, shortage of technical manpower, erratic power supply, poor Internet acces, and lackadaisical attitude of the management. Based on these challenges, recommendations were made to overcome these challenges.

Recommendation

Based on the findings of this study, the following recommendations were made:

1. The government should increase the financial allocation to academic libraries to facilitate and encourage the use of smart technology in library operations.

2. Academic libraries should also source for viable internally generated revenue (IGR) to supplement what the government provides.

3. Power supply should be adequately supplied to academic libraries. The library should have the inverter and the standby generator made available.

4. Suitable technical experts should be attached to the library on smart technology. There is need for training and retraining of library staff on the use of smart technology in libraries.

5. Library management should encourage library personnel to receive on-the-job training on the skills acquisition of smart technology.

6. The tertiary institution management should provide robust Internet access for use of smart technology in the library.

7. Librarians should make bold step to embrace the use of smart technology in the library.

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