

## **IT Oriented Academic Libraries As Drivers For Green Transformation, Educational, And National Development: Case Study Of The Federal Polytechnic Ilaro Library**

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### **ABSTRACT**

Information technology impacts on academic libraries have a role in driving the destiny of this nation in the provision of information that inform leadership on pertinent issues. Today, more than ever, the well-being of humanity and social equity is threatened as a result of the imbalance created by the economic system against the earth's capacity. IT oriented academic libraries have immense potential to position themselves as drivers of change in the strive for green transformation, educational, and national development. This paper uses the Federal Polytechnic Ilaro library to expound on the debate on the preparedness of IT oriented academic libraries to engage and pick momentum needed to be relevant to the cause of green transformation and national development. The library housed two hundred internet enabled systems and can accommodate four hundred users at once. The paper examined the Federal Polytechnic Ilaro library through the administration of questionnaire and simple method of analysis was used. 350 questionnaires was distributed but only 330 were retrieved, the outcome indicated the immense contribution of library towards green transformation, educational development, among others. However, challenges such as improper funding of the academic libraries ICTs, computer/information illiteracy, etc. has undermined its smooth running. This study thus opined that adequately funding to enable necessary infrastructure for knowledge acquisition and provision of services to promote green transformation, educational, and national development, among others should be seriously considered.

**Keywords:** Information Technology, Information and Communication Technology Academic Libraries, Green transformation, Education, National Development.

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### **1. INTRODUCTION**

The notion that technologies are as a force of “disruptive innovation” in the library sector has been discussed extensively in the academic literature and the wider press. Furthermore, the challenges and opportunities brought about by technological developments such as e-books and broadband Internet access in households with the added pressures from cuts to public services are well known. Many of these developments have called into question what the role of physical libraries is (or should be) in the twenty-first century.

For example, the concept of the “library without walls” (Weiss, 2004) has been mooted whereby patrons can utilize the services of the library irrespective of physical location (Bilandzic and Johnson, 2013). The dire predictions of the death of the physical library has not come to pass, however, and while visits to public libraries have declined, visits to academic libraries have remained steady.

Computing technology, communication technology, and mass storage technology are some of the areas of continuous development that reshape the way academic libraries access, retrieve, store, manipulate, and disseminate information to users. Every day, new subjects and disciplines evolve as the world faces new emerging challenges. Those who record the knowledge, history and the changes that are taking place adds new responsibilities on librarians and information repositories to adopt to the new paradigms. Not only in the way in which acquisition, organization and dissemination of information is done but also in the manipulation of the whole infrastructure, structures and skills in the new knowledge domains (Jane 2015).

With the paradigm shift in Academic Library Services through the advent of Information and Communication Technologies (ICTs), bore out of Information Technology (IT), the role and position of libraries has dramatically changed. Etim (2004) cited in Okon (2005) observes that the rapid pace of development in the field of information technology and the advent of networked information services have prompted a comprehensive review of the Library and Information Sciences (LIS) profession. The global trend is now characterized with a fundamental shift from traditional information environment to an e-environment where emphasis is placed more on the acquisition of e-resources such as e-books, e-journals as well as online databases. However, traditional library and information services and functions are still relevant.

The present-day academic library services is focusing more on the area of digital, virtual or libraries without borders all of which have transformed academic libraries and led to transition and transformation in the academic library environment. The transition and the transformation are accompanied with sophistication in the changing pattern in the information needs of users which is growing rapidly. Singh and Kaur (2009) observed that there is a paradigm shift from stand-alone libraries to library and information networks; from printed publications to digital documents; and from ownership to access. The transition according to them is as a result of the impact of ITs, the Internet and the web which is affecting all types of libraries.

Developments in ITs have now offered academic libraries an exciting and challenging opportunities that requires them to respond positively in all facets of their services and functions. Bringing relevant information to every doorsteps and offering updates on live changing information have been made easy through various e-libraries. Information is knowledge and knowledge is power. The level of growth and development of any individual or nation or system are largely associated with relevant information available to the individuals etc. The United Nations Development Programme

Report (2004) placed Nigeria among the poorest nations of the world in terms of human development. How did they arrive at this result, one may ask? According to the report, one criteria used in the assessment is knowledge, i.e. the level of adult literacy, Nigeria is only the giant of Africa in name and not in human development. Countries like the United States of America, Britain, France, Japan, and Germany etc are leading the world today because of what they know that other nations do not know and not because of what they have. Garfield (1979) explained that the developed countries use information as a basic resource to supplement national resources of matter and energy. According to him they spend a large portion of their nation’s resources on information system.

If information is so important to them that are already developed, what more do we need as a nation more than to invest in acquiring as such knowledge as we can in order to join the main stream of development and be able to compete with other developing nations of the world. Library is needed as a tool for the acquisitions of information and for knowledge delivery. It is the only major means to accede to information. Information that is not shared adequately cannot communicate the desired knowledge.

### **1.1 Statement of the Problem**

Every day, libraries and resource centres are confronted with handling emerging frontiers of new knowledge and disciplines which are forever evolving and developing. Getting to know that a new discipline or new subject area has been ‘born’ can be a daunting challenge for librarians who sometimes only discover that information entered a database without any determined or concerted effort on their part. A lot has been harnessed from the immense contribution of ITs into library services but that does not leave libraries from having major setbacks.

The question then is how prepared is the Federal Polytechnic Ilaro library to be able to capture information and emerging disciplines in the area of educational development and green transformation and be able to adapt to the pressing concerns of the users of the information. Users of environmental information are expanding from students and teaching staff to researchers, industrial consumers, business entities and executives, government departments, workers, policy and decision makers as well as other organizations such as small and medium enterprises (SMEs), and not to be left out are special interest groups such as women, minority groups and many others. At the same time, the discipline is expanding every day and encompassing in all other subject areas. These diversified users of information and the evolving nature of the discipline places maximum pressure on libraries to heed to the call for better facilities, services, tools and formats. The current holdings of the Federal Polytechnic Ilaro library mirrors the extent to which the Federal Polytechnic Ilaro understands the innate issues in the subject of green economy, educational, and national development. Understanding this narrative reveals its preparedness and the depth of its engagement with the subject and this is the discourse and problem statement of the paper.

### **1.2 Objectives of the Study**

Information technology oriented academic libraries have played tremendous roles in green transformation in Nigeria. Therefore, the study assessed the contributions of IT oriented academic libraries in educational and national development, citing the library, Federal Polytechnic Ilaro as the study area. Based on this, the primary goals and objectives of the paper are stated below:

1. To interrogate the Federal Polytechnic Ilaro library involvement in providing relevant and timely educative information on green economy, educational, and national development.
2. To interrogate the involvement of the Federal Polytechnic Ilaro library in education of their immediate environment and how it promotes green transformation.

### **1.3 Significance of the Study**

Information technology oriented academic libraries is an indispensable tool of green transformation, educational, and national development; the study will raise the appreciation of IT oriented academic libraries as a crucial tool in propagating and elevating green economy, educational and national development. This study will be a contribution to the body of literature in the area of the role of IT oriented academic libraries in breeding green economy, educational and national development, thereby constituting the empirical literature for future research in the subject area.

#### **1.4 Scope of the Study**

The scope of this study shall be limited to The Library, Federal Polytechnic, Ilaro, Ogun State and the study shall entail the information gathered from the selected Academic Library.

#### **1.5 Research Questions**

This study will provide solution to the following questions.

1. What are the roles of information technology oriented academic libraries in promoting green transformation, educational, and national development?
2. What are the challenges facing information technology oriented academic libraries in the face of promoting green transformation, educational, and national development?
3. What are the possible solution to the challenges facing information technology oriented academic libraries in the face of promoting green transformation, educational, and national development?

#### **1.6 Historical Background of the Library, Federal Polytechnic Ilaro**

The Federal Polytechnic Ilaro, was established by decree No33 of 25<sup>th</sup> July, 1979 with six other polytechnics. It took off on 1<sup>st</sup> June, 1979 in a private building called Bobado house owned by Chief J. Laditan, Opposite Egbado College, and now Yewa College Ilaro. Later on, the then Anglican Modern Secondary School, Ilaro, was released by Ogun State Government to serve as temporary site in November, 1979. The first set of students that were offered admission numbered one hundred and seventy five (175), were formally admitted on 15<sup>th</sup> November, 1979. The school moved to its permanent site along Oja-Odan road in 1983.

The Library though started from the inception of the school (1979) till date, but could not function properly for lack of staff and library equipment. However, the Rector then used the heads of departments to generate relevant list of books and in 1982, the library formally took off with the recruitment of professional librarians with about 4,000 volumes if books, 1,000 journal titles with initial sitting accommodation for over one hundred readers. Progressively, the library can conveniently sit four hundred users. The Information and Communication Technology (ICT) section of the library housed two hundred internet enabled computers. The section has been functioning for over five years now.

## **2. LITERATURE REVIEW**

Rapid advances in Information Technology in the past two decades have brought revolutionary changes in the concept, organization, functioning and management of library and information systems throughout the world. The modern technology has greatly improved the capabilities of managing this explosive growth of information effectively. Information technologies today are characterized by their very dynamic development and increasing complexity. Information technology application in academic library and information field has made remarkable progress in the world. Information Technology not only affects the technical services of academic libraries but also shapes the library services that are being offered to the public. Worldwide libraries have been exploring new technologies for providing better and faster access to vast information resources and efficient information services to their users. Information Technology has offered better solutions to achieve greater level of efficiency, productivity and excellent services in libraries (Cholin, 2005). The application and accessibility of IT facilitates the free flow of information, creative expression and effective management.

The major factors and challenges forced the libraries to adopt Information Technology such as Information explosion, Technological development, Provide efficient and effective services, Increased number of users,

Increased the expectations of the users, Online Information retrieval, Increase the commercial information providers , and Changes the nature of Information resources (E-Journals, CD-ROMs, and Online Databases etc.) (Davaranah, 2001).

Libraries are using the Information Technology in general and to automate a wide range of administrative and technical process, build databases, networks and provide better services to their users. The use of IT has become imperative for the efficient management of modern libraries. Library Automation is one of the major applications of IT in libraries. It is helped to change the libraries In-house activities (Acquisition, Cataloguing, Indexing, Serial control, Circulation etc.) from manual system to automation (Venkataraman, 1998). In 1980s, most of the libraries were computerized their in-house activities. Recently, libraries have to implement increasingly complex solutions that involve distributed networking and access to remote information resources. The use of IT in libraries has tremendously increased due to its enhanced user satisfaction, cost effectiveness, faster and simpler programs, rapid communicative interaction and easier operational procedures (Storey, 1995).

Effective use of IT in libraries increase efficiency in operations, eliminates repetitive nature of works, improves the quality and range of services, facilities easy and wider access to all kinds of information sources, facilitates faster information communication, increase moral and motivation of library staff, facilitates cooperation and resource sharing, save time, space, improves productivity and image of library (Venkataramana, 1998). The electronic resources that are available in libraries are an outcome of the advances in both computer technologies, including information storage and delivery mechanism, and software providing user friendly interfaces. In most of the libraries in the western countries, Online Public Access Catalogues (OPAC) have almost replaced card catalogues, offering enhanced search capabilities for accessing the collection of library. Many libraries also provide a web interface to their library and information system, often including direct links of electronic journals, books and internet resources (Cholin, 2005).

### **2.1 Educational Development via IT Oriented Academic Libraries**

Education is the process of developing an individual physically, spiritually, socially, mentally, emotionally and orally for the well-being of the individual and that of the society in which he belongs. Ifidon and Ifidon (2007) defined education as the process of training the mind, acquiring skills and developing a refined culture all of which prepares the citizenry to meet life challenges and teaches them how to solve problems. It is not mandatory that knowledge should be disseminated in the lecture room, it can be done anywhere, anytime, and any means. Libraries ensures lifelong education by providing various information resources. They also support education by providing supplementary textbooks, reference materials and even non-print materials. With the age of technologies, a lot have changed in regards to academic library usage. Users tends to have more interest in deriving information and materials in soft form, easy and safe to carry around than going to the library every day in order to gain access to the required information and materials.

The growth of information and the dependency on it have paved the way for the information society and subsequently the knowledge society. Information has always been prime factor for the development of society and is often regarded as a vital national resource. Information services try to meet this objective. Information has become important part of our lives and should be available when needed. Information services are generated using new tools and techniques to facilitate the right users to the right information (Khodeh and Dhar, 2002).

The implementation of information technology in the academic libraries has demanded new forms of library services to get more user satisfaction. Digital library service has evolved after the implementation of

IT in the library and information centers. Information technology has had a significant impact and has successfully changed the characteristics of information services being generated in academic libraries. The past two decades have seen great changes in academic library due to information technology. The technological advancement have made significant impact on the growth of education and unlocking of human potential.

Other areas of technological change for academic libraries include the use of mobile technologies and particular “smart” devices of different types, utilized by both students and faculty, such as iPads, Kindles, smartphones, or other mobile devices. In an information world of instant solvability of information problems with access to easy to use web search engines, social media and mobile technologies, and Wi-Fi access to the Internet, the expectation is that it is possible to find information for immediate use at anytime and anywhere with less need to be educated how to develop information skills and use quality-controlled information sources (Wilder, 2005). The pressure for libraries to keep up with not only new technologies but more profoundly with these expectations is immense. According to a survey of almost 35,000 8- to 16-year-olds, conducted by the National Literacy Trust, young people are now much more likely to prefer to read on a computer screen rather than a printed book or magazine (National Literacy Trust, 2013), which makes sense considering that 85 per cent have a mobile phone while only 73 per cent own books (Clark and Hawkins, 2010). Considering that these are the university students of tomorrow, it is clear that priorities for libraries are changing as students have preference for accessing information using different methods and approaches, which signify a change in reading habits.

Libraries are some of the most active users of social media, making services more participatory, and embracing openness and reaching a wider audience, allowing them to communicate and engage with its community in dialogue, which informs and helps develop its products and services, and how it operates. Social media tools can be used within this context for a number of different purposes. For example, services can create a strong presence and a modern image that could appeal to less frequent users of the physical buildings such as teenagers. Libraries can develop services online (for example, book discussion groups using blogs and wikis) and provide services and product updates on social media tools such as Twitter. Web 2.0 can also offer cost-effective solutions for the production of promotional and marketing material about services and materials available using services such as YouTube. Educational development doesn't get better with the introduction and proper implementation of information technology into the academic library setup.

## **2.2 IT Oriented Academic Library and Education for National Development**

As earlier pointed out, the numerous impacts of information technologies on academic libraries as it can positively propagate educational development among others. However, one of the key area that information technologies have positively impacted national development through academic library is via the progressive growth of its citizens through timely and prompt educative information delivery. Academic library fosters self-education and stimulates education growth. Any effective and qualitative education depends on the library for its teaching, learning, research, consultation and expansion of knowledge. Similarly, Edom (2007) stated that effective use of library is the bedrock of academic excellence. Thus, the library is the most important resource in the pursuit of the broad goals and objectives of any educational institution.

On the other hand, education is the most sociological tool for national development in any nation. It is on this platform that the Federal Republic of Nigeria (FRN) in her National Policy on Education stated that:

Education shall continue to be highly rated in the national development plans because education is the most important instrument of change; any fundamental change in the intellectual and social outlook of any society has to be proceeded by an educational revolution (FRN, 2004)

Through education, people's minds think positively and by extension, they can take care of themselves and also a nation's resources can be harnessed. Education as a long-term investment guarantees a nation its bright future. The technological advancement in the world today is attributed to education, thus any country yearning for national development must accord education a priority. Any nation that is intellectually bankrupt will certainly be socially, politically and economically bankrupt. Qualitative and functional education enhances individuals' ability to survive in the contemporary society and fosters sustainable socio-economic development. Ifidon and Ifidon (2007), demonstrated that the principal actors in the education industry are teachers, librarians, parents, youths, the government and society at large. They further stated that education is a tool for growth and development. Since no modern society can function without an intensive use of books and information and libraries guarantee improved information services and national development.

With the integration of information technology into the academic libraries, dissemination of information has been made easier and smooth. Therefore academic library and education are panacea for national development of any nation.

### **2.3 Challenges Faced by IT Oriented Academic Libraries**

Smooth sailing of information and communication technology in an academic library requires proper and efficient source of maintenance but several academic libraries in Nigeria are at a crossroads. This is because they are operating in an era of dwindling finances where resources (financial and materials) are not forthcoming. Nigerian academic libraries derive the greater part of their funds from the government (both Federal and State). Okiy (2005) notes that of all the different types of libraries in Nigeria, only university libraries have a clearly defined policy of funding, because they are allocated 10% of the recurrent annual budget of their parent institutions. However, it is regrettable that such monies are not forthcoming as most university administrators tend to flout that decision (Okiy, 2005; Yetunde, 2008).

Providing current awareness services to an ICT driven target academic community requires dynamic, innovative, timely and adequate communication technologies (Fatoki, 2005). However, most academic libraries in Nigeria are severely constrained by a number of factors that includes erratic internet services, lack of hardware and software and in most instances the non-availability of the said ICTs in most academic libraries. Other challenges faced in an academic library for efficient functionality of information and communication technology are:

- ❖ Digital and information divide
- ❖ Epileptic power supply at the library
- ❖ Computer /Information illiteracy
- ❖ Technological obsolescence
- ❖ Neglect of ICT resources
- ❖ Poor Policy guidelines
- ❖ Insufficient bandwidth
- ❖ Constant change of software and hardware
- ❖ Copyright and intellectual property rights management.
- ❖ Inadequate technical IT knowledge by library staffs

- ❖ Technological dependency as technology begets more technology

The cost of providing ICTs in Nigeria as compared with other African countries is very exorbitant and as already noted by Partnership for Higher Education in Africa (2006) bandwidth rates are usually higher in Africa than in the developed countries. As a result of this, many academic libraries work with very limited bandwidth which makes their servers slow and most time there is internet down time as a result of slow server. This impedes the services rendered by librarians. This usually results in non-installation of computer networks (LAN) in libraries, as well as no regular training programme.

#### **2.4 Solutions to the Challenges Faced by IT Oriented Academic Libraries**

In order to subdue the challenges discussed above and for Nigerian academic libraries to provide the desired information services to their respective communities, that will heighten the educational standard and thus positively impact national development, emphasis should shift towards:

- ❖ Academic libraries should explore more alternative sources of funding as over reliance on the government on monies that are not forthcoming may not provide the desired solutions.
- ❖ New initiatives are required in the form of consultancy services, marketing of information products as well as other income generating services.
- ❖ The need for the committees of polytechnic librarians, and their counterparts in universities and colleges to sensitize their respective institution's administrators on the central role of academic libraries in teaching, learning and research activities in academic communities.
- ❖ Improvement in ICTs such as the Internet, Intranet, hardware and software as well as Internet bandwidth.
- ❖ Availability of power supply at the library.
- ❖ More emphasis should be placed on the provision of online access and services such as OPAC, e-journals, e-books, and networked information services.
- ❖ Transformation of traditional libraries to digital libraries.
- ❖ Print on paper to digital information.
- ❖ Print journals to online or electronic journals.
- ❖ Improvement in ICT training for academic librarians



### 3. METHODOLOGY

The research was carried out among the staff and students of the Federal Polytechnic, Ilaro. This research study is to measure the contributions of Information Technology (IT) oriented academic libraries towards green transformation, educational, and national development as perceived by the Federal Polytechnic, Ilaro Library users. The study has a total sample of 330 from 350 questionnaires issued, among them 150 staff and 200 students. The samples were randomly selected from out of the regular users of the Federal Polytechnic, Ilaro library. The advantage of a random sampling method is that the results can be analyzed staff-wise and student-wise, drawing certain conclusions from each category of respondents. Out of the 350 questionnaires distributed, 150 questionnaires were distributed among the staff and 200 questionnaires distributed among students. But received 180 responses from the students (the rate of around 90%) out of the total 200 questionnaires. And received 140 responses from the students (the rate around 93.3%) out of the total 150 questionnaires. Out of the 350 questionnaires that was distributed, 91.7% were retrieved for the analysis. However, frequency tables and percentages are used to analyze the data retrieved.

**Table 1:** Frequency of individuals that acknowledged IT oriented academic libraries as drivers for green economy, educational, and national development.

Frequency	Total	Percentage
Yes to the Statement	300	90.9%
No to the Statement	30	9.1%
	330	100%

As per the Table-1, it is observed that 90.9% of the sample acknowledged IT oriented academic libraries as drivers for green economy, educational, and national development while 9.1% users is against the notion.

The statistical data (Table-1) has proved that IT oriented academic libraries are drivers for green economy, educational, and national development.

**Table 2:** Frequency of users in support that the library, Federal Polytechnic Ilaro promotes education of their immediate environment, green transformation, among others.

Frequency	Total	Percentage
Users in support	300	90.9%
Users against	30	9.1%
	330	100%

Table 2 shows that 90.9% of the users opined that the library, federal polytechnic Ilaro promotes education of their immediate environment, green transformation, among others while 9.1% opined against the notion.

**Table 3:** Does the challenges facing information technology oriented academic libraries in the face of promoting green transformation, educational, and national development enumerated below?

S/N	Challenges Facing IT Oriented Academic Libraries	Not Sure	No	Yes			
1	Improper funding of the academic libraries ICTs	50	15.1%	30	9.1%	250	75.8%
2	Computer /Information illiteracy	50	15.1%	30	9.1%	250	75.8%
3	Digital and information divide	26	7.9%	46	13.9%	258	78.2%
4	Neglect of ICT resources	36	10.9%	30	9.1%	264	80%
5	Technological obsolescence	19	5.8%	39	11.8%	272	82.4%
6	Insufficient bandwidth	15	4.6%	35	10.6%	280	84.8%
7	Inadequate technical IT knowledge by library staffs	19	5.8%	31	9.4%	280	84.8%
8	Epileptic power supply at the library	20	6.1%	30	9.1%	280	84.8%

From Table 3 above, it is observed that the respondents perceived the same challenges as opined in this study. With challenges such as with improper funding of the academic libraries ICTs, computer /information illiteracy, digital and information divide, and neglect of ICT resources having response rate of 75.8%, 75.8%, 78.2%, and 80% respectively.

The other challenges includes, technological obsolescence, insufficient bandwidth, inadequate technical IT knowledge by library staffs, epileptic power supply at the library having response rate of 82.4%, 84.8%, 84.8%, and 84.8% respectively. The high support rate indicates the need for immediate attention by the government and planning committee on allocation of funds and necessary aid to the academic library. However, the likely solutions to the above challenges was nevertheless stated in this study.

**Table 4:** Does the following enumerated points proffer solution to the challenges facing information technology oriented academic libraries in the face of promoting green transformation, educational, and national development?

S/N	Solution to Challenges Facing IT Oriented Academic Libraries	Not Sure	No	Yes
1	Academic libraries should explore more alternative sources of funding	15 4.6%	27 8.2%	288 87.3%
2	Improvement in ICTs such as the Internet, Intranet, hardware and software as well as Internet bandwidth	16 4.9%	30 9.1%	284 86.1%
3	Availability of power supply at the library	12 3.6%	26 7.9%	292 88.5%
4	More emphasis should be placed on the provision of online access and services such as OPAC, e-journals, etc.	13 3.9%	28 8.5%	289 87.6%
5	Transformation of traditional libraries to digital libraries	7 2.1%	25 7.6%	298 90.3%
6	Print on paper to digital information.	11 3.3%	31 9.4%	288 87.3%
7	Print journals to online or electronic journals	11 3.3%	29 8.8%	290 87.9%
8	Improvement in ICT training for academic librarians	11 3.3%	23 7%	296 89.7%

Table 4 indicates an absolute adoption of the enumerated solution towards solving the challenges facing information technology oriented academic libraries in the face of promoting green transformation, educational, and national development in Nigeria. The respondents opined that academic libraries should explore more alternative sources of funding, improvement in ICTs such as the internet, intranet, hardware and software as well as internet bandwidth, they also call for availability of power supply in the library, as well as laying emphasis on prioritizing online OPAC, e-journal, e-books, and networked information services. Furthermore, transformation of traditional libraries to digital libraries, print on paper to digital information, print journals to online or electronic journals, and improvement in ICT training for academic librarians all received a wide range of supports from the respondents.

#### 4. CONCLUSION

Academic libraries are using information technology to automate a wide range of administrative and technical processes, build databases, networks, and provide better services to their users. IT in libraries helps in performing operations and services efficiently. The application of IT and accessibility of IT facilitate the free flow of information, creative expression, and effective management. The current study has investigated the status of green transformation, educational, and national development via information technology in Federal Polytechnic Ilaro Library. The overall assessment of IT oriented academic library as drivers for green transformation, educational, and national development is moderate, indicating wide scope for improvement. Challenges such as improper funding of the academic libraries ICTs, computer/information illiteracy, technological obsolescence, insufficient bandwidth, and inadequate technical IT knowledge by library staffs, epileptic power supply at the library, among others, are the reasons why IT has not been properly functional in the academic library and tends to affect its contribution towards green transformation, educational, national development in Nigeria.

However, this study also proffer solution such as academic libraries should explore more alternative sources of funding, improvement in ICTs such as the internet, intranet, hardware and software as well as Internet bandwidth, as well as laying emphasis on prioritizing online OPAC, e-journal, e-books, and networked information services. Furthermore, transformation of traditional libraries to digital libraries, print on paper to digital information, print journals to online or electronic journals, and improvement in ICT training for academic librarians, among others are the notions pointed out in this study for serious consideration.

## 5. RECOMMENDATIONS

Digital revolution has dramatically changed the face of academic libraries and the paradigm shift have been of great impact on green transformation, educational, and national development in Nigeria. Nevertheless, some challenges bedeviling our academic libraries ICTs in the face of promoting green transformation, educational, and national development needs the following recommendations:

1. Government must realize the central role of academic libraries to educational and national development which requires provision of more funds for academic library development in the country.
2. Provision of stable power supply at the academic libraries in order to facilitates smooth running of the ICTs.
3. Provision of adequate IT equipment and other educational facilities in the academic libraries.
4. Training and Retraining of academic library staff on development concerning ITs.
5. Academic library should be made to acquire and store modern information technological resources while the librarian should master the art and science of the profession in their work environment.
6. The academic libraries should grow alongside information technology which has restructured the role of the library to creating access to information and knowledge irrespective of its location in the world through virtual nature of technology.
7. Recognizing the increasing rate and nature of information, academic libraries should be adequately funded to enable them provide necessary infrastructure for knowledge acquisition and provision of services to promote green transformation, educational, and national development.

## REFERENCES

1. Bilandzic M and Johnson D. 2013. Hybrid placemaking in the library: Designing digital technology to enhance users' on-site experience. *The Australian Library Journal*; 62 (4): 258-271.
2. Cholin, V.S. 2005. Study of the application of information technology for effective access to resources in Indian universities libraries. *The International Information & Library Review*, 37, 2005, p.189-197.
3. Clark, C and Hawkins L. 2010. Young People's Reading: The Importance of the Home Environment and Family Support. More Findings from Our National Survey. National Literacy Trust, <http://eric.ed.gov/?id=ED510272>, accessed 17 June 2016.
4. Davarpanah, M.R. 2001. Level of information technology application in Iranian university libraries. *Library Review*, 50(9) 2001, p.444-450.
5. Edom, B. O. 2007. The impact of user education on the use of university libraries in Nigeria. *Heartland Journal of Library and Information Science*, 1 (1).43-48.
6. Fatoki, O.C. 2005. Prospects of GSM technology for academic library services. *The Electronic Library*, 23(3), 266-273
7. FRN. 2004. National policy on education. Lagos: NERDC Press.
8. Garfield, E. 1979. *Journal of Information Science* Vol. 4:P 209 - 215.1979.
9. Ifidon, S.E. & Ifidon, E.I. 2007. New directions in African library management. Ibadan: Spectrum Books Ltd.
10. Jane Achieng. 2015. Preparedness of University Libraries as drivers for green transformation and sustainable development: the case of University of Nairobi Library, Kenya. Commons Attribution 3.0 Unported License: <http://creativecommons.org/licenses/by/3.0/>
11. Kjode, S and Dhar, U. 2002. Library services and functions in changing environment - An overview". *Indian Journal of Information, Library and Society*, 15(1&2), 2002. 24-29.
12. Okiy, R.B. 2005. Funding Nigerian Libraries in the 21st century: will funding from alternative sources suffice? *The Bottom Line: Managing Library Finances*, 18(2), 71-77.
13. Okon, H.I. 2005. Effective Communication and Smooth Administration of Academic Libraries in the 21st Century: A new Paradigm in Nigeria. *Library Philosophy and Practice*, 8(1)
14. Singh, J. and Kaur, T. 2009. Future of Academic Libraries in India: challenges and opportunities. A paper presented at the International Conference on Academic Libraries (ICAL) held at the University of Delhi, India. P. 52
15. Storey, C. 1995. The impact of information technology on management and organization: the case of Hong Kong Polytechnic University Library. *Library Management*, 16(2) 1995, p.22-33
16. UNDP. 2004. A compact among nations to end human poverty. Human development report. New York.2004.
17. Venkataraman, P. and Rao, Chandrasekhar. 1998. Impact of information technology on library operations and services. In B. Satyanarayana et al (Eds.). *Information technology: issues and trends*, v.1. New Delhi: Cosmo Publication, 1998, p.184-193.
18. Weise F. 2004. Being there: the library as place. *Journal of the Medical Library Association*; 92 (1): 6-13.
19. Wilder, S. 2005. Information literacy makes all the wrong assumptions. *The Chronicle Review*; 51 (18): 69-72.
20. Yetunde, Z.A. 2008. A study of internally generated revenue (IGR) by University Libraries in Nigeria. *Borno Library, Archival and Information Science Journal*, 7(1), 1-14