

Access and Use of Electronic Information Resources as a Viable Option in the Period of Economic Recession and Poverty Alleviation in Nigeria: A Practical Approach

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Abstract:

Purpose: This paper takes a practical approach to discuss steps involved in searching for and accessing EIR, and storing it locally on personal digital devices for immediate and future use.

Methodology/Approach: The approach used for this study is exploratory. Four objectives were set to guide the study. Using evidence from related literatures for creating conceptual background, practical steps to take in developing and managing a robust personal e-library localized on digital devices such as laptops, smart phones and Tablets at affordable price were discussed. Also, E-book readers/ e-library mobile applications like Aldiko, Pocket Book and Calibre were explored, while some websites and electronic databases to download free e-books and journals were equally suggested.

Findings: The paper revealed the strengths of electronic information resources in tackling poverty; and as an affordable means of accessing needed information in this hard economic period. It also identified some e-book reader Apps and software for smart-phones and PC respectively and pointed out sources where e-books could be downloaded at a cheaper price or for free.

Implication: The economic recession currently experienced in Nigeria is affecting both the government and individuals; and we all respond by cutting costs or reduce our spending as applicable. Accessing information, especially, from print media (books and journals which are mostly imported materials) is more expensive than it used to be, due to high foreign exchange rate. Using Electronic Information Resources (EIR), therefore, is potent in tackling the issue of excessive cost and also to improve efficiency due to its numerous strengths.

Originality/Value: The paper recommends among others that libraries and individuals should embrace the acquisition, access and use of EIR, as it is relatively cheaper in this economic hard time.

Keywords: Access, Economic Recession, Poverty Alleviation, Electronic Information Resources, E-Book Reader, User studies, Nigeria

Paper type: Conceptual

Introduction

Nigerian economy is in recession and many people are living below the poverty line. Inflation rate is high, and the same for exchange rate. From government to individuals, everybody feels the breeze of recession that is blowing on the economic skin of the Country. As a reactive measure, we tend to reduce our spending or look for cheaper alternatives, so as to retain some cash. One of the many commodities we spend money upon is information. We buy books, journals and newspapers to gain access to information that aid planning, decision making, reduction of uncertainty level, complete a given task or simply for amusement.

Information is very important and having access to the right one on timely basis and using it can

make the difference between success and failure (Olurayi, 2013). Thus, information is very important to every facet of human endeavors: security, education, health, business, sports etc. Information is recorded on different media such as print, electronic, tape and microform for permanence of storage and portability. Creating information, making it readily available for use, seeking and accessing it, sharing and preserving it for future use (especially printed sources which are mostly common) are usually expensive.

Therefore, in this period of economic recession (characterized by high inflation rate and soaring price of commodities), the use of electronic information (EIR) is inevitable as one of the

means of reducing costs of accessing necessary information. This is achievable because of numerous strengths that EIR exhibits over printed resources (in terms of affordability of costs and ease of access). Whether through personally developed e-library or institutional libraries/electronic databases, accessing and using EIR is relatively cheaper and cost effective compared to printed sources which are mostly imported products. Hence, there is the need to identify practical steps involved in developing and managing a robust and tailor-made personal e-library localized on digital devices (smart-phones, laptops, etc)

Objectives

This paper aims at achieving the following objectives:

- To establish the strengths of electronic information resources in tackling poverty; and as an affordable means of accessing needed information in this hard economic period.
- To identify some e-book reader Apps and software for smart-phones and PC respectively.

information in the right quantity and quality.

- To point out sources where e-books could be downloaded at a cheaper price or for free.
- To discuss the practical approach to searching for and downloading e-books.

As indicated by the United Nations (2016) report, about 62.6% of the 170 million Nigerian populations live below the global and national poverty line of \$1.90 per day. Similarly, Nigerian economy is in recession, with inflation rate soaring to 18.72 in January 2017 (National Bureau of Statistics, 2017) and GDP on continuous nose-diving from 5.94 in January 2015 to -1.3 in January 2017. Thus the need for this study on economic recession and poverty alleviation in Nigeria: electronic information resources to the rescue so as to determine how this can help.

The recession period is mostly characterized by increasing price of commodities and soaring foreign exchange with reduced cash flow. Therefore, both government agencies and individuals respond by adjusting spending patterns to save more money to expend on other necessary areas.



Figure 1: Nigeria Annual GDP Growth Rate Jan. 2014 – Jan. 2017

Electronic Information Resources

Information is needed for various purposes by users, and we tend to seek from credible, easily accessible, accurate, current, timely and most importantly affordable sources. Information is recorded on different media (such as print, microform or electronic). Information recorded in electronic format is known as EIR. EIR are information resources that are created by and/ or can be manipulated and maintained by computer

peripherals. This is in line with Sukula (2010) definition of EIR as “an information resource that is maintained in electronic or computerized format and may be accessed, searched and retrieved via electronic networks or other electronic data processing technologies”.

To access and use EIR, the use of smart-phones or computer is involved. The use of smart phones and gadgets is on the increase. Data from

Liu (2015) “*Worldwide Internet and Mobile Users*” ranked Nigeria in the 17th position in a global ranking of countries with the highest number of smart-phone users. Nigeria was reported to have 23.1 million smart-phones in 2015, which is expected to increase to 34 million by 2018, while Adepetun (2016) equally states that smart-phone penetration in the country has hit 30%.

Smart phones could be used to access and share electronic information resources in text, video, audio or multimedia formats in a relatively economical and convenient means more than printed formats. This will robustly reduce costs and help to alleviate poverty in this period of recessed economy.

Types of EIR

EIR is multifarious in nature, and there are certain parameters that could be used in classifying them. These are: (a) content of the material, (b) format of the material, and (c) according to how the material is created.

Type of EIR according to content

- e-books
- e-journals
- e- references
- electronic databases
- Audio Visuals
- Musicals
- Electronic Chats/images
- Web pages etc

Type of EIR according to format

- pdf, epub, txt, Kindle, jpg, mpeg etc
- App books (these kinds of e-book are installed as apps on Android, Windows or iPhone and are accessible on the home screen of the device) and may come with read aloud features.

Type of EIR according to how they were created

- **Born digital:** These are EIR that are originally created as digital contents, available and accessible via electronic means only in formats such as web pages, HTML , txt, pdf, jpg, epub etc.
- **Digitized:** These are materials created in versions or formats other than digital (printed or physical objects), but are converted to digital formats through the

use of dedicated document, book or object scanners.

Strengths of EIR

EIR exhibits a myriad of advantages and opportunities for users in this period of economic recession, more than what printed resources may offer. These strengths and opportunities include:

- **Relative cheap cost:** Foreign exchange is soaring, with a dollar exchanged at about ₦420 as at 1st March, 2017. According to Olurayi (2013), many libraries in Nigeria face financial difficulties due to economic problems. Buying a textbook or subscribing to printed learned journals which in most cases are foreign materials is grossly expensive, and many libraries consider cancelling or reducing their subscriptions because of this (University of Washington, 2014). However, to reduce the cost of accessing credible information in this period of recessed economy, EIR proves to be the best. To download or access EIR is relatively cheaper compared to print resources. All that is needed is Internet connectivity (through wi-fi or data subscription) which is considered cheaper (1 megabyte < ₦1). It costs little MB to search for and download good books (textbooks and fictions) and journals, cheaper than buying printed books (imagine having a searchable and interactive Nigerian Constitution in both pdf /app format on your device for a price of ₦2/2mg). What ordinarily costs over a thousand naira in print format.

It is also cheaper for libraries to subscribe to e-journals and databases and stock e-books than buying/ subscribing to printed books and journals in this period of economic recession. A print newspaper cost an average of N200 per copy. Meanwhile, with a data subscription of ₦200 worth, you would be able to have 24/7 access and read as many as possible, newspapers with an advantage of getting news updates on timely basis, more than what printed Newspapers will offer. One

major advantage of this to the library is that it does not only reduce greatly the cost of periodicals subscription, but also increases the quantity of available copies (Anonymous, 2017), and facilitate simultaneous and multiple accessibility of resources without having to wait for other users (Aggarwal, 2012).

- **Easy to search (especially retrospectively):** It facilitates searching for an article from different sources thereby reducing cost and time. In-text search and searching for past issues or articles also becomes easier by using EIR. You can equally link to other sites or resources directly from one EIR to another.
- **Removal of geographical boundaries:** EIR could be remotely accessible 24/7 from any location, especially when physical libraries are not within the reach or observing public holidays. Using EIR means that you don't need to drive to or physically be at your library before you can access any needed information. Online request could also be made to the library, and needed information are sent in electronic format through an electronic medium dedicated for such. Example of this is the "Ask the Librarian" service offered by the Library of Congress, America at www.loc.gov. You can also log in to the Library's e-portal or database to access/download needed information from JSTORE (Journal Storage), AGORA (Access to Global Online Research in Agriculture) or any similar electronic database or read online at www.loc.gov, or www.questia.com. Similarly, you can also search the Internet and download freely from the comfort of your home or office unto your device or share from your friend, thereby eliminating the cost of transportation to physically use the library.
- **Large volume of resources:** There is no limit to the quantity of EIR you can possess, without having to worry about physical storage space or cost of constructing/ buying wooden/metal shelves. All that is required is sufficient device memory. You can also create an account at *DropBox* or *GoogleDrive* to use as a backup.

- **Information sharing:** It is cheaper and easier to share electronic information. You can share e-books and e-journals with your friends without worrying about when to get them back, because you retain the original while sending copies to your friends. You can also send it remotely through the use of the Internet.
- **Long-term preservation:** EIRs also offer long-term preservation of the materials without having to worry about the usual wear and tear, mutilation or theft usually associated with printed resources, thereby eliminating cost of frequent replacement of the materials due to any of the afore-mentioned factors. The implication of this is that libraries and individuals can save money to expend on other important things.
- **Added value:** With EIR, it is possible to bookmark, highlight or even add notes to e-book pages without worrying about defacing or mutilating the materials.

According to Olorunsola, Adeleke and Adeniran (2010), employers of today have expectations by types of libraries. Most libraries demand that all employees possess knowledge of Information and Communication Technology (ICT), proficiency in electronic database, sound knowledge of e-library and a host of other qualities. Looking at these expectations generally, the issue of ICT and use of electronic resources appear central and germane to the library profession and library clientele. Patrons must therefore keep up with the constant changes and innovations in the library so as to operate successfully in the world, especially now that there is serious economic downturn in Nigeria.

Requirements for accessing/ downloading EIR

To access or download e-resources, you will need:

- A smart gadget that runs Android, iOS or Windows;
- An Internet connectivity;
- Some Mobile Applications (like Quick Office, E-Book Reader apps like Aldiko, Pocket Book, Adobe Reader, Calibre etc);
- Little knowledge of the use of mobile phones and the Internet; and

- Memory space on your device (internal or external)

Examples of e-book reader apps/ Software

- Aldiko
- AIReader
- Bookari Book Reader
- Pocket Book Reader
- Universal Book Reader
- iBooks (for I-Phone)
- Kindle for Windows
- Nook for Windows
- Sumatra for Windows
- Calibre E-Book Reader for Windows
- Ice cream ebook reader for Windows, etc

Some websites that offer free download of e-books/ journal

E-books and e-journals could be accessible from different sources. You can search for App books through Google PlayStore or similar App stores. EIRs in *pdf*, *epub*, *txt* and similar formats could be downloaded on the Internet by searching with Google Search Engine or similar Search Engines.

Some websites that offer free download of useful books include:

- <http://www.e-booksdirectory.com>;
- <http://www.bookboon.com>;
- <http://www.freebookspot.es>;
- www.manybook.net;
- www.getfreebook.com;
- www.freecomputerbooks.com;
- www.onlinefreebook.net;
- www.ebooklobby.com;
- <http://en.wikibooks.org>; and
- www.free-ebooks.net

Other websites that could offer free download of useful journals include:

- <https://doaj.org> (Directory of Open Access journals)
- www.ajol.info (African Journals Online)

Similarly, local and foreign news could be accessed online free of charge through online news portals such as:

- Premium Times: www.premiumtimes.ng.com;
- The Punch: www.punchng.com;
- Nigerian Tribune: tribuneonlineng.com/ ;
- Nairaland Forum: www.nairaland.com/ ;
- Naij: www.naij.com ;
- Sahara Reporters: saharareporters.com/ ;
- Alaroye: www.alaroyeonline.com/ ;
- Vanguard: www.vanguardngr.com/ ;
- Leadership: www.leadership.ng ;
- The Sun: sunnewsonline.com/ ;
- The Guardian: m.guardian.ng/ ;
- The Nation: thenationonlineng.net ;
- Tell Magazine: www.tell.ng;
- The News: thenewsnigeria.com.ng/ ;
- Business Day: <https://www.businessdayonline.com/> ;
- Financial Times: <https://www.ft.com/> ; and
- Complete Sports: www.completesportsnigeria.com/ ;

Suggested Tips on the Use of EIR

Step 1: Open any of the App Stores on your mobile device (smart-phone, tablet or i-pads) running on Android, iOS or Windows. If you are using PC or laptops, you can download an e-book reader (application software) for any version of Windows.



Fig. 2: Some major App Stores logos

Step 2: Search for "e-book apps", "book reader" or "mobile library apps" as in Fig.3. Select the desired one by clicking on it and follow the prompts to download it. This paper uses Android

Operating System as example, because it is considered to be widely used globally according to InternationalData Corporation (2016).

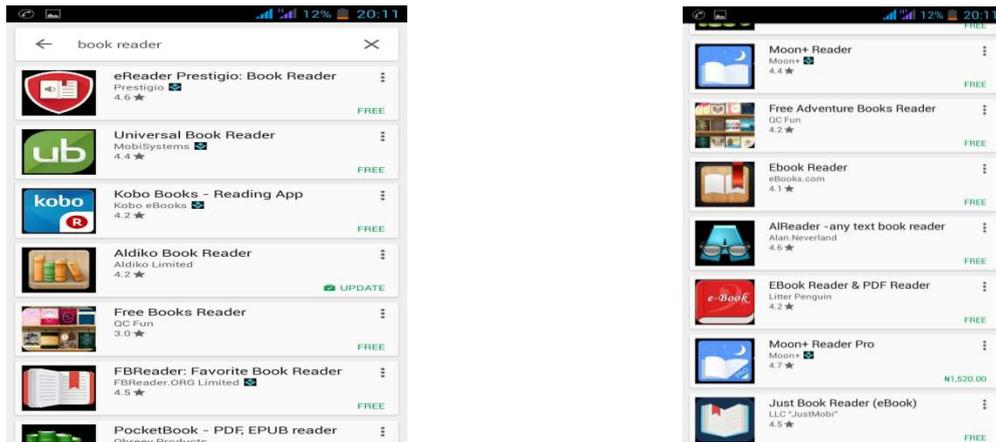


Figure 3: Search results for book reader on Android smart phone

Step 3: Download the selected App. Remember to set your device under the “Phone Settings” to allow Installation of Apps not manufactured by Google (if Android) or your device’s

manufacturer. This paper focuses on Aldiko book reader (Android) and Calibre (for computers) -being a free App and software respectively.

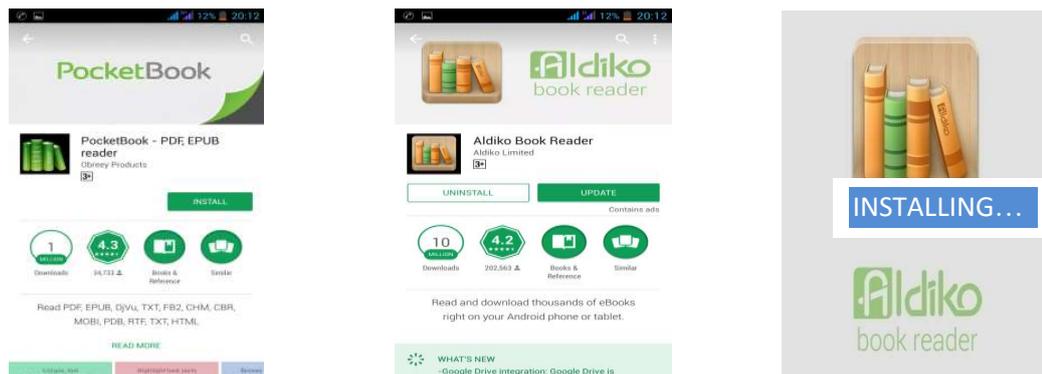


Fig. 4: Downloading and Installing Apps from Google Play Store

Step 4: After completing the Installation process, open/ run the Aldiko Application for configuration. You should have a screen as in Figure 5. You can complete the set up by logging in with your Facebook or Google

account. You can ignore this and click “Skip” to start using immediately. The aim of logging in is to be able to download books from Aldiko bookstore. Aldiko may come with some pre-installed free e-books mostly novels.

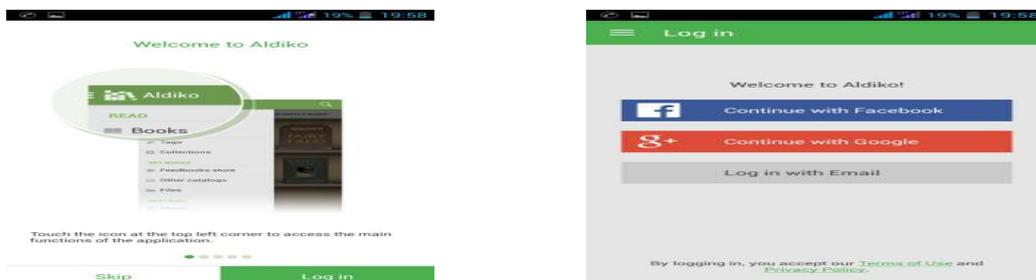


Fig. 5: Configuring the downloaded App

Step 5: Search for e-books to add to your new mobile libraries. Pocket Books will automatically add any file with .pdf extension to the shelf, while you have to manually add each

needed ones to Aldiko. Exit the already installed App. Open you internet browser like Opera, Firefox to search for e-books. You can search using the Google Search or any other related Search Engine. You can also search for App e-

books from Play Store or App Store depending on your device.

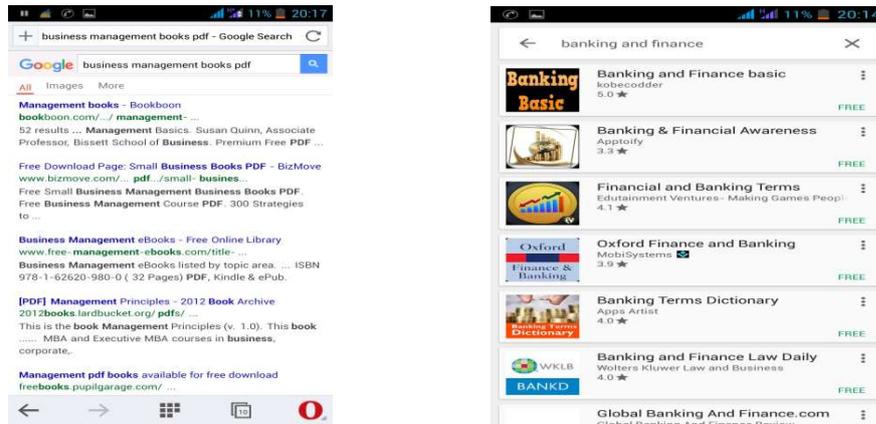


Fig. 6: E-book search through Google search Engine and Google play Store (App e-book)

Step Six: After locating the desired information material, click on it and follow the prompts to download it. Download the selected book and save or install as applicable. If you download app book, you install and open to use just like the usual App from your device homepage. If you download e-books in *pdf* or similar format, it will save on “Download” folder on the selected device memory (Internal or SD Card).

Step Seven: After launching the Aldiko on your device, you will see a virtual book shelf that holds all your book titles. To add downloaded e-books to the e-book app (Aldiko), open the Aldiko App, and click on the “Setting” icon on the top left corner as in Figure 7. Select “Files” and go to “Download” folder, select any of the downloaded e-books and add to the “Library”. The books will be added to the shelf as shown below.

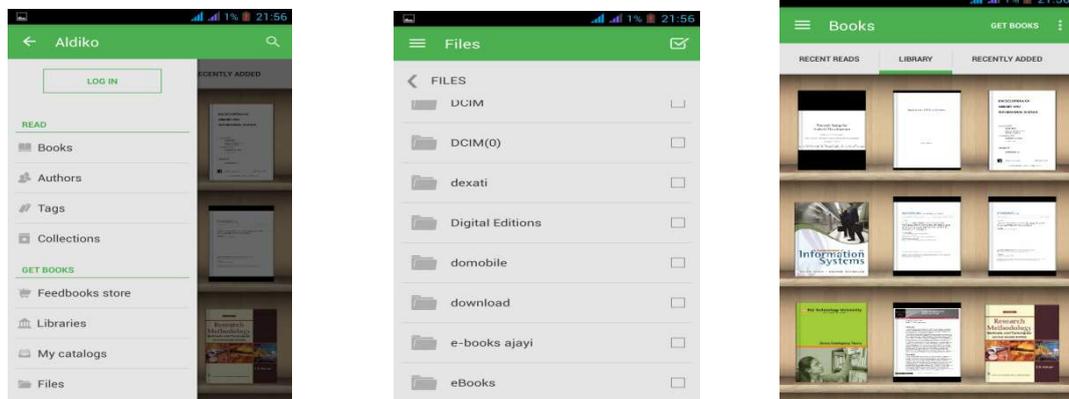


Fig. 7: Adding books to Aldikovirtualshelf

Step 8: Click on any book you want to read from the Aldiko virtual shelf, it will open as in Fig. 8. You can navigate through the pages by touching the left and right sides of the screen. You can also run through other menus to

familiarize yourself with their functions and how to use them. You can click on the menus to access the Table of Contents, highlights, bookmarks, or access more settings.

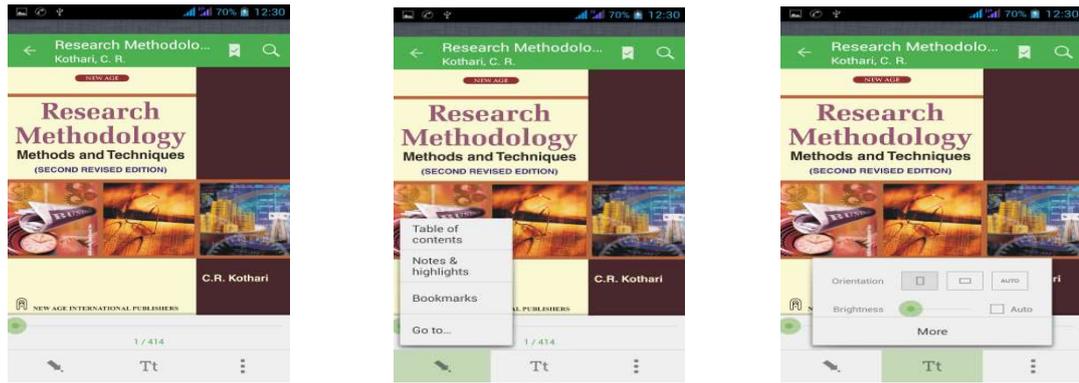


Fig. 8: Aldiko menu and tools

Step 9: You can endlessly repeat Steps 5-8 to search for and add more books to your newly developed e-Library. You can also share the books with your friends and colleagues through Bluetooth or Flash Share, or transfer through USB from PC or Laptop.

Searching for e-journals

Searching for e-journals is not totally different from the processes involved in searching for and downloading books. You can search for e-journals directly using search engines, or visit e-journals websites directly and download from its database.

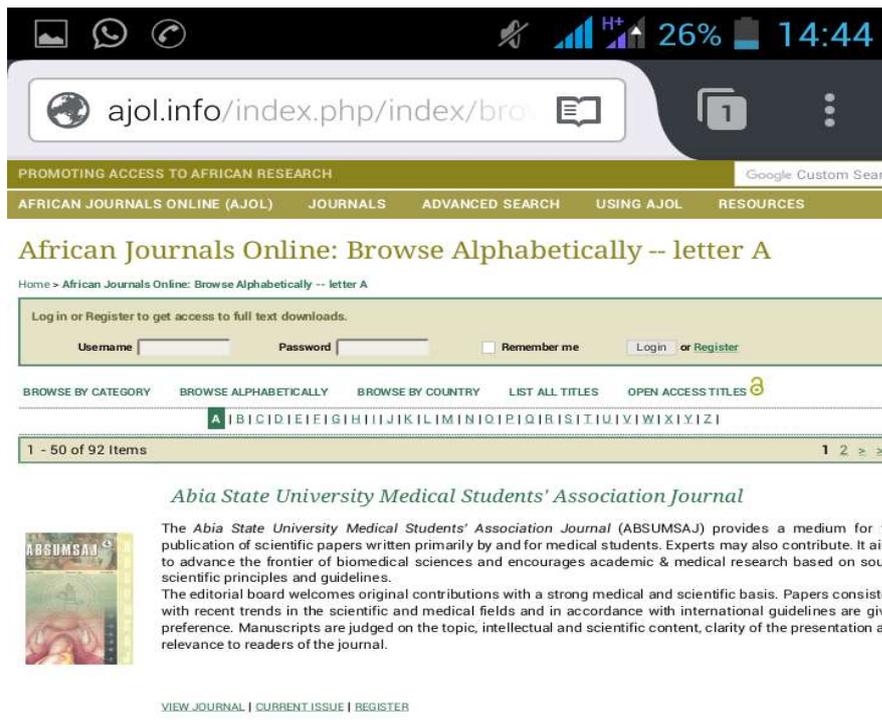


Fig. 9: Homepage of African Journals Online at www.ajol.info

Calibre for Windows

Calibre is e-book reader/digital library software that works on PC's and runs on many Windows version, like Windows XP, Vista, Windows 7 and 8 etc. Calibre is an open source (free) software specifically designed for organizing e-library system.

To download Calibre Library, connect your PC to the Internet and search for Calibre installation software or visit [www.calibre-](http://www.calibre-ebook.com/download-windows)

[ebook.com/download-windows](http://www.calibre-ebook.com/download-windows) directly.

Download the desired version of the software and install it on your PC.

You can add books directly from your computer memory or download from many online book stores like Amazon, Barnes and Nobles etc. You can also search for e-books using any of the popular search engines like Google, just as earlier explained above; and add it to the Calibre Library after downloading.

To add book directly from your PC, Click the “Add Books” icon at the top left corner, and

select the location where the e-books are available on your Computer.



Figure 10: Calibre Library Interface

Conclusion

It has been established that electronic information resources are very potent in tackling economic hardship, as it is relatively cheaper than printed sources and equally easy to access and share with other users. This is because the price of data subscription to download electronic resources is relatively cheaper, compared to buying printed materials. It costs little megabytes to download good books/ journals. The EIR offers you quick, inexpensive/ free, comfortable, instant/ timely, portable, multifarious, secured, round-the –clock, and remote access to necessary information.

It is easier to access a lot with less cost as geographical boundary is removed. You can download from the comfort of your home or office. You can also request for electronic resources from online library databases. One major merit of using EIR or developing your personal e-library is that it enables you to greatly reduce the cost of accessing information; and it is also tailor-made, i.e. you only add what you need to your “Library” and can easily access it on the go and round-the-clock

Recommendations

In view of the foregoing, to alleviate poverty in Nigeria, the use of EIR and the followings are recommended:

1. As a means of unlimited access to affordable and timely information, the World Wide Web and other emerging

technologies could be considered for professional information handling.

2. Users must be familiar, proficient and conversant with the sources of EIR online so as to maximize its use.
3. Use the institution's liaison officer to find out about your information needs. The library is always open and inviting.
4. New entrants at the use of EIR must exercise patience, with persistent practice, the process that seems cumbersome and frustrating becomes easier to explore.
5. Be cautious about copyright and ethical issues affecting downloading, usage and sharing of EIR. This is necessary so that users do not run afoul of the copyright law.
6. Libraries must make it a point of duty to enlighten their users on the use of EIR and also provide improved access to them. This will draw more users to the library.

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