

Digitized Legal Information Resources: Author's Safeguard, Users Dilemma and the Library Option in Nigeria

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Abstract

This paper sought to examine the merits and demerits of the technological advancement of the 21st Century which has enabled the quick and instant access to digitized legal information resources. It also highlights the strategies authors/producers of these resources adopt to control unauthorized reproduction of their work. These anti-piracy measures impinge on the accessibility and availability of these electronic resources. The paper also explored the various steps Nigerian law libraries can take to enhance the usage of these materials. Challenges before Nigerian law libraries as well as strategies they can adopt to overcome these challenges were also discussed

Keywords: Law library, Legal information Resources, Digitization

1. Introduction

Digitization is the vogue in most libraries across the globe. It is also the most prevalent issue facing modern law libraries in Nigeria. In a digital library, resources are stored and made available in electronic forms, and the services of the library are also made available electronically [1]. Digitization is the process of transforming analog (print) material into binary electronic (digital) form especially for storage and use in a computer [2]. Technological advancement of the 21st century has really revolutionised the medium of library resources and the quality of service delivery. Benefits include an increase in access to material, enhanced quality of access, expanded search and browsing options, a decrease in some costs, improved preservation and less use of physical storage space [3]. Galileo Initiative [4] added that with digitization users can view the materials from any computer connected to the internet any time of the day. Librarians can also build 'virtual collections' made up of related materials that are physically separated between repositories. Digitized materials can also be used in new and exciting ways for research and instruction when combined with the communications facilities of the internet.

DeGracia [3] however stated that there are some crucial factors which ought to be considered when converting information material to digital. These challenges involve the evaluation of hardware and software, adhering to copyright law, preventing unauthorized duplication of items, preparing material for the actual digitization process, creation and storage of newly required metadata and training staff to deal with digital items. All of these challenges result in the expenditure of significant time, money and human resources. Despite these challenges, when you put information and technology into the right hands, you **Author'/Producer's Safeguard Strategies**

In a bid to safeguard or exercise some level of reasonable control over digitized information placed at the public domain, an author/creator or publisher may decide to adopt any of the following anti-piracy measures:

Use of Activation Code

Access to information stored in many databases in law can only be allowed when the user has subscribed to that database and given the activation code. The activation code is the permission legally assigned to a database subscriber to freely unlock the information stored in a database. Usually, this comes in the form of a username and password. Sometimes a copyright agreement is signed before this access is allowed. This is a safeguard measure involving storing the files in a retrieval system and placing at the root of the storage system and authentication system requiring a username and a password. This is to prevent unauthorized users from having direct access to the files. The username and password can be changed from time to time to prevent a username and password being guessed.

Another method of ensuring that this method of securing digital file is guaranteed is to make sure that the characters used as username and password are of different cases (combination of alphabets and figures) and the authentication method case sensitive. Username and password technique however has some drawback. Depending on how strong or sophisticated the framing of the username and password is, hackers can penetrate this security measure. Similarly wherea subscriber forgets his username or password, it can prevent access. The use of username and password on a shared computer without logging out is also a security risk.

Read Only

An author may decide to grant only restricted access to a digital file. In such case, the user is allowed only to read the document but not allowed to download, copy or print. For documents that are short and concise, the user

may resort to manual copying (handwritten) otherwise this method of securing digital file restricts access.

Portable Document Format

PDF is a file format that has captured all the elements of a printed document as an electronic image that one can view, navigate, print or forward to someone else. PDF files are created using Adobe Acrobat, Acrobat Capture or similar products [5]. The essence of saving a digital file in a PDF format is to ensure that the integrity of the file is retained. The text in the document cannot be edited. Recent Microsoft Office 2010 can directly convert a word document to a PDF document. To view and use the files, the user needs the free Acrobat Reader which he can easily download. The Acrobat Reader once downloaded starts automatically whenever the PDF file is being used. A major drawback of this safeguard measure is that with improved technology, a PDF file may be opened and the content of the document tampered with.

Single User Mode

Access to some legal databases is programmed on a single user mode. By this arrangement, access can only be granted per person on a single computer. Such access is not transferable to another computer even when you have the CD containing the document.

Restricted Access

Reputable journal sites like the JSTOR, Emerald and a host of others prevent access to their database except to their subscribers. The best a non-subscriber could get is access to the abstract of journal articles in the database. The resultant effect is frustration and non-availability of valuable information that would have enhanced and enriched legal research.

Encryption of Documents

Encryption is the locking up or securing of a digital file such that it is only machine (computer) readable and not human readable. When you encrypt a document, you see characters that cannot be understood by ordinary human. Encrypted materials appears as characters and numbers mumbled together that cannot be understood but they actually mean something to the person that ran the encryption or knows the character sequences used in the encryption. Depending on the level of encryption and method of encryption, only the native computer used for the encryption can decrypt the document. Even if the document is copied to another computer that has the same encryption system, it might not be decrypted depending on the circumstances.

A major drawback of this safeguard measure is that the key to the encryption can be forgotten or lost. However if one knows the algorithm (character placement) he can actually decode the password. Another major drawback is dictionary brute forcing. This is a method always favored by hackers. What they do is that they use software that generates random characters sometimes depending on the sophistication of the software and the clock speed of the computer being used. These packages can generate up to 1000 characters in a second and match each character against the password used in the encryption, thereby increasing the chances of decrypting the encrypted file. Data integrity change is another method used in decrypting an encrypted document. An attempt made to decrypt the file renders the integrity of the file to null - meaning the original human readable format will now be destroyed.

Lock Out

Lock out is yet another measure designed by authors to prevent unauthorized access to their work. In this method, several attempts at unlocking a secured file will lock out the culprit for a period of time (some minutes, hours, a day or for a week) to frustrate the individual involved in the crime. That specified time must elapse before another attempt at unlocking the data is allowed.

2. Expensive Printing/ Reproduction Option

Some database producers like the Hein Online, Westlaw, Lexis Nexis programmed their web-based documents in such a way that the reproduction of the online resources is not cost effective. Majority of the texts and journal issues run into hundreds of pages. The printing option is very laborious, expensive and time consuming. For instance, the 2013 Harvard Law Review is more than 1, 700 pages while Yale Law Journal 2011/2012 is 2, 424 pages. Each page is programmed to open one at a time such that the entire journal issue cannot be viewed at a glance. To view the entire pages of the journal issue in order to copy or print will take a lot of internet bandwidth, IT skill, human and material resources.

3. The Library Option

Every strategy designed by the author/creator to maintain some level of control over his creative output has limitation over the use of such material. Generally, when a user has no free access to information required for research, frustration sets in and this may affect the quality of research being generated. The nature of availability of online resources is such that it cuts across geographic location. It is pertinent to note that although technological advancement has greatly influenced the production and availability of information, most of the service providers are private persons. Their aim in the provision of such information infrastructure is to make

profit. This is contrary to the goal of modern library which is service-oriented.

According to Omeje [6], the availability of information sources in libraries can be viewed from four different dimensions namely physical, bibliographical, intellectual and online availability. The physical availability is concerned with the presence of the information sources in the library. Bibliographic availability refers to the presence of references as contained in the indexes, abstracts, bibliographies and other reference sources. The material may or may not be present in the library. What the library need do is to create a link to the source document. Intellectual availability warrants the presence of individuals (library staff) with the knowledge of the information or other relevant sources of getting the information which the user requires [7]. While online availability implies the presence of the required information sources on the internet and to a greater extent the presence of information and communication infrastructure in the library for enhanced access to the sources. Since the modern law library is service-oriented and for it to remain relevant in the information age, it has to integrate itself into the present day information infrastructure. This means that wherever the information sources are located, the library should create a link to its users. Nigerian law libraries should act as both provider and facilitator of online information. This suggests that the law library would therefore need:

- Internet Access with robust bandwidth
- Subscription to online legal databases such as Lexis Nexis, Westlaw, Hein Online, Legalpedia, Law Pavilion etc. Such subscription should be renewed on a regular basis.
- Regular ICT training for both the law library staff and the users. Such training will equip them to master the necessary IT skills needed to access information from the online resources.
- Digitization of indigenous resources such as Nigerian laws, law reports, textbooks, these, dissertation, newspapers etc.
- Adequate arrangement to download and store online resources for use even as offline resources. Hence the need to employ external storage devices likes CD, DVD, external hard disk etc.
- Provision of alternative power supply such as the UPS, inverter, high voltage generator.
- Printing and binding of captured online resources. Industrial printer is needed for such projects.
- Technical support staff- Professional IT personnel are needed in the project. Such professionals include programmers, computer engineers, and computer analyst. These categories of IT personnel will also handle the software design, maintenance of the hardware component and the entire e-library project.
- Website management: Nigerian law libraries should go into website management. When Nigerian law libraries create and maintain a functional website which will be managed by competent web administrators, it will enhance the availability and adequate use of web-based resources.
- Collaboration with existing database providers. Part of the bargain would be to have a user-friendly version of their online resources. This will reduce cost and time spent, thereby improving access and availability.
- Collaborative acquisition/resource sharing arrangement. Provision of comprehensive online resources in the face of prevailing economic melt-down is practically not possible in Nigeria of today. Nigerian law libraries should go into collaborative acquisition and sharing of resources to minimize cost, save time and human resources. This collaborative effort can be conceived at the Nigerian Association of Law Libraries level. Presently, NALL is the professional umbrella overseeing the activities of law libraries in Nigeria.
- Legislative backing: The enabling legal environment to procure and manage the online resources in Nigeria is still lacking. Cybercrime is still an international menace which various countries of the world are grappling with. Many countries have enacted intellectual property laws. At the international level, technological advancement in China still pose a threat to having a unified law on cybercrime and intellectual property rights. The resultant effect is monopoly of database licensing. Ordinarily, monopoly does not encourage competition. As soon as many organizations are involved in database production and services, it will minimize the cost of production and services.

4. Challenges Before Nigerian Law Libraries

In the midst of these prevailing circumstances, Nigerian law libraries would have problem in the following:

- Paucity of funds
- Lack of Technical know-how
- Poor internet bandwidth
- Epileptic power supply
- Monopoly of database licensing
- Poor Local content
- No common platform for collaborative acquisition and research
- Poor legislative backing.

5. Conclusion

Digitization of information resources has changed both the medium and style of service delivery in law libraries across the globe. It has enabled quick and instant access to useful information in the legal profession irrespective of geographic location. It saves physical storage space and has generally enhanced legal research activities in the modern world.

However, library users and law librarians encounter undaunting challenges in the course of sourcing and usage of these electronic resources. These constraints are by-products of anti-piracy measures devised by the authors/producers of these information resources. Nigerian law libraries have a crucial role to play in order to enhance the accessibility and availability of these digitized materials.

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