

 $\ \ \, \mathbb{O}$ 2019 IJSRCSEIT | Volume 5 | Issue 6 | ISSN : 2456-3307

DOI: 10.32628/CSEIT195642

Computers for Legal Professions in Nigeria - A Review

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ABSTRACT

Computer has revolutionized the way daily activities and operations are conducted. This is seen in the ease, speed and time with which activities were carried out. Business transactions are conducted faster, learning and teaching are richer, and generally the legal profession is better positioned. The legal profession is known for its conservatism and traditionalism which many believe must be preserved in order to maintain the prestige of the profession. However, computer technological advancement might have put a strain on this ideology. The wave of computer technological advancement and globalization which has swept through various aspects of the society has not left the profession in its path. Computer now plays a quintessential role in legal practice. It is becoming increasingly clear in Nigeria as well as a reality that computer technology is a prerequisite for effective and efficient legal practice. This paper examines the important role computer plays in legal education, law office and law court. Focus is given on how much computer technology has impacted legal profession in Nigeria. The challenges faced in the application of computer technology in these areas are quite colossal. Despite this, it is important for the legal profession to forge ahead in overcoming these challenges as the application of computer technology is not only the global trend but also the way forward.

Keywords: Computer, Legal Profession, Legal Databases, Electronic Casebook, Electronic Document Filing.

I. INTRODUCTION

The invention of computers is one such technological development which is formidable enough to mark turning point in the history of civilization. Today they affect humanity in more ways than can even be imagined. Computer technology has influenced all walks of life. These little machines have substantially changed the life style of most individuals and especially of professionals throughout the world. Computers make out many of the bills we receive, and the bank cheques as well. Computers help to regulate the flow of traffic on a busy city street, tell a supermarket manager when his stock of detergents is running low, and help a doctor make his diagnosis. Computers are creating a lot of jobs, eliminating a lot of jobs and changing the nature of many others. As a

matter of fact, computers are affecting the ways in which we think about the world, and the ways in which we think about ourselves. According to Jeanne (2015), the impacts of computers have been felt in all the legal profession, from legal education to government to the practice of law. Within courts, federal agencies and other executive bodies, the government has made technology an essential part of creating efficiency, promoting access to justice and easing monitoring, reporting, communicating and processing requirements. Law firms have quickly learned the competitive advantage of adding technically based services to their practices and meeting the expectations of their clients.

There is virtually no aspect of human activity that is not affected by technology. From the use of computers; to the use of telephones and also the internet, it is all about technology and its revolutionary way of changing the way humans conduct their activities. With computer, activities are conducted faster and there can also be overdependence on it. Technology plays vital roles in the daily routines and it also has significant impact on legal practice. Its impact on this key area cannot be overemphasized. Computer will continue to be a major instrument which influences legal practice in Nigeria and all over the world.

The legal profession ranks among the most noble, the most attractive and the most interesting of all professions all over the world. It is also one of the most competitive professions in the world. There is a perpetual increase in the number of people trying to come into the legal profession. The reason for this mass attraction is not far-fetched. Law is an essential element in any society. A knowledge of law increases one's understanding of public affairs (Peter, 2004).

This term paper focus towards exploring the significance and use of computers in the present day legal profession. The writer has endeavored to demonstrate as to how important is the use of computers in legal education and research, law office operations and law courts. Limiting the scope to the Nigerian legal profession, the contributions of computers were also considered. Finally, it considers the limitations or challenges of the computer in Nigerian legal profession and making some valuable recommendations to the identified issues.

II. METHODS AND MATERIAL

USE OF COMPUTERS IN LEGAL PROFESSIONS

Computers plays important roles in the affairs of the legal professions. The application of computers to legal professions is viewed in three overlapping ways which are discussed below:

Computers in Legal Education and Research

An American scholar Robert (1973) well known for his works on the topic of 'Computers in Law', has made the following observations on the use and significance of computers as research tools:

The computer captures the imagination of many researchers. It offers an opportunity to store vase quantities of data in a comparatively small space, the ability to search this data very rapidly and make selections therefrom and the ability to manipulate or "massage" the data to produce a result in a format particularly useful to the individual researcher. One of the advantages frequently touted for computerized legal research is the possibility of placing in to the computer's storage area or memory banks the full text of whatever document is someday to be retrieved. Computers have a very important role to play in modern legal education and research. Pearl (2001) said "Just as technology has revolutionized the way law is practiced, it increasingly has found its way into legal education in a variety of ways." The computers play the roles in the following ways:

Online Legal Research

One of the most important uses of computers in the legal profession is conducting legal research. Many legal projects require extensive legal research, including references to previously decided cases. Traditionally, companies such as West printed volumes of case law, requiring attorneys to read through keyword indexes to find relevant cases. Now, online legal databases such as LexisNexis and Westlaw make the process of searching for case law, legal forms and treatises much easier (Salvatore, 2018).

Word Processing

Computers particularly word processor software like Microsoft word has played a significant role in legal practice and education. Gone are the days of typewriters and stenographs. Inputting data, checking

for correctness, storing data and accessing previously filed data with the aid of computers seem to be the norm but this was not so previously.

Law schools have to generate a variety of written materials for students as well as for other academic purposes, such as for conferences, meetings, mootcourts, seminars and workshops, etc. Almost every law faculty has to supply to the students, the summaries of case law decided by the Supreme Courts, High Courts and tribunals, etc. These summaries are normally printed every year by the university press and the cost of printing is sometimes enormous. Every time the faculty has to pay the printing and composing charges to the press. However, on the other hand, if the text is once typed and stored in the memory of a computer, the required number of copies can be printed out every year. This is likely to be relatively much less time consuming as well as a much less expensive exercise in comparison to the printing business. Once we have a master print of the required document, it can be easily photocopied and distributed amongst the students. Similarly, students can also type and prepare their project reports, etc., on computer, provided the facility is available to them, too.

Gurjeet (1997) added that every researcher working for a post-graduate essay, a dissertation or thesis has to prepare a working bibliography. In normal practice, he writes down names of the references and bibliographical sources on plain pages or on reference card. Later on at the time of final report writing, the researcher has to arrange those cards bibliographical order and hand it over to the typist. If a single card is wrongly arranged, it is to be wrongly typed. Moreover, if a researcher is engaged in research on a topic on which literature appears quite frequently in the journals, articles, and newspaper, etc., he may have to update the text from time to time and obviously the entries in the bibliography would also change. The major problem arises when the dissertation or the thesis is at the typing stage and some significant case is decided by the higher judiciary or some relevant literature appears which a researcher finds absolutely important to incorporate in this study. If the researcher is working on a computer, he need not prepare any bibliographical cards, etc. Once bibliographical entries are put in to the computer's memory, they stay there forever. One can add, remove or make any type of modification in them without rewriting anything. In case any entry needs to be dropped at the last moment, one can remove it easily. Similarly, if any entry in case list or even in the text of the dissertation/thesis is to be made at the last stage, it can be made without any hassle. In this process, the computer will automatically adjust the new entry and the page sequence would not be disturbed at all. In addition, a researcher can make use of bibliographical sources even after he has submitted the dissertation/thesis, etc. If he wants to list some of the references for some article or research paper, etc., there is no need for re-typing them at all. The required reference can be selected and very easily copied on another computer file opened by him and the original bibliography stays there without any modification whatsoever. The same is applicable to entries in the list of, (i) cases, (ii) statutes and glossary of acronyms and abbreviations and even to the chapters, etc.

Law Teaching

Nowadays, computers are also being considered as valuable aids in law teaching. This constitute one of the ways in which computers can be of great help and utility in modern legal education. Slides of lecture notes, sample cases and case laws are prepared in presentation software by lecturers and are being projected to law students which makes lecture delivery more effective, flexible and convenient.

Computer Assisted Legal Research (CALR)

Computer Assisted Legal Research is a quintessential development in the profession. This has produced the famous research sites/services – Westlaw and Lexis.

They consist of a plethora of cases, statutes, judicial decisions and academic articles that are useful to both the lawyer and law student. They have become a must-have for every law faculty and firm as they enable enormous amount of relevant information to be accessed within seconds and easily. Such information in the past would have been available to the large firms and law faculties with the financial resources to have a huge library. Even where the right books are available, it takes a lot of time and many conduct more people to research. More disadvantageously, with such a large number of materials to consult, it may be that the important information is not gotten to or looked over in the process of being pressed for time.

Bernard (1996) assert that CALR can be traced to Professor John Horty, director of the University of Pittsburgh Law Center. He used punching machines to code all Pennsylvania public health laws and transferred same to a computer tape wherein users could search statutes by keywords which system was first demonstrated at the American Bar Association's Meeting 1960. Around the same time, the Ohio State Bar Association embarked on a project of creating CALR for Ohio lawyers which was later named the Ohio Bar Automated Research (OBAR). The aim was to create 'a non-indexed, full-text, on-line, interactive, computer-assisted legal research service' which still serves as the crux of Lexis and Westlaw till date. Data Corporation, which had developed a similar system for the Air Force, agreed with OBAR to modify its software to suit legal research and convert Ohio's statutes and case law into electronic form. With the expansion of and investment in the CALR project, it was subsequently turned into a subsidiary named Mead Data Central and renamed Lexis in 1972. Westlaw which originally comprised of headnotes when it went online in 1975 became a full-text database a year later.

Computer Assisted Legal Instruction (CALI)

Computer Assisted Legal Instruction (CALI) was developed in the 1960s by various professors notable among which is Professor Charles D. Kelso of the Indiana School of Law. It covered various legal topics and enabled the students answer one question before proceeding to the next. It was designed to be an individual tutorial to ensure active learning and encourage adequate understanding of the topic by the user. This workbook system of legal education has since been developed. Things took a more formal shape when the University of Minnesota Law School and Harvard Law School established the Center for Computer-Assisted Legal Instruction (CCALI) now known as CALI. The organization now consists of most US law schools. CALI now provides different types of exercises such as memory drills, tutorials, simulations which try to recreate real life scenarios and games. All of these are used to facilitate better understanding by students and supplement the class materials and discussions.

CALI is not limited to the United States as other developed countries have also employed it in their legal education. For instance, British and Irish Law schools established the British and Irish Legal Educational Technology Association (BILETA). CAI is found in other jurisdictions like Canada and Australia. CALI has advantages in that it makes learning more interesting and enjoyable for the students. It individualizes training hence enabling students learn at their own pace with self confidence in the fact that the answers are private and they are free from classroom pressures. The success of CALI has been attributed to the active learning process requiring students to enter responses and engage in a Socratic dialogue with the computer. Students can also repeat exercises to get a mastery of it before proceeding to the next level.

Electronic Casebooks

Electronic casebooks have also improved legal practice and education. They contain the contents of a hard copy casebook on a CD-ROM. The benefit of hypertext and electronic casebook (which by extension applies to all other technological advancements in legal education and practice) has been summarized as follows:

Hypertext electronic materials and casebooks can change the way students use core legal education material. Hypertext provides more than fast access to traditional legal materials; it permits students to associate related text tangibly by linking one idea to another across an entire casebook. Students can link material within one substantive course or across multiple substantive courses. This allows students to electronically build their own conceptual models of the law. . . . More importantly, each student's model of the law can be easily updated, changed, and rearranged after each class In the end, students have the core text of the casebook and an outline of the law with their own annotations of important discussions merged into an easily accessible, reusable, and searchable format (Richexd & Shiels, 1995).

The Internet

Omekwu (2004) confirms that the Internet has transformed and improved CALR, CALI and electronic casebook in great ways. Legal research can be more thorough and detailed with many more materials available and links to other relevant documents through the use of hypertext. Case laws are available online and lots of information accessed at the click of a mouse. The tools of trade of a lawyer are no longer books in the traditional sense; the lawyer's instrument is now migrating to electronic formats and the internet.

Managed Learning Environment or Systems (MLE or MLS)

Based on Camille (2009), Managed Learning Environment or Systems (MLE or MLS) have also had a huge impact on education and many law faculties/schools have employed it in teaching. These include Blackboard and WebCT. They provide a great platform for educating law students by improving teaching and learning. Through MLS communication between law teachers and the students is improved and effective. Assignments can be given and submitted, group discussions conducted and group or individual mails sent to registered students or tutor. Announcements can be made to students with a guarantee that everyone is notified immediately. Lecturers can also share lecture materials including audios, videos and presentations. Unlike the use of the traditional blackboard, students can have access to these materials at all times and also view their assignments or group works from time to time. The wide use of course management systems and CALI programs indicate that legal education has crossed a threshold in the use of electronic technology in the classroom.

Paul and Muntjewerff (2002), added that there are coaching programs that help students to understand various branches and key principles of law better as well as train them to solve legal problems. Coaching systems are computer programs that not only enable students acquire skills in applying knowledge in a domain but also assess them and correct the student's performance. Most CAIs are coaching systems. They require the user to perform a task which is compared to the required outcome and where there is any deviation from this, it corrects the errors of the user. An example is Prosa used at the faculty of Law, University of Amsterdam though which students learn to solve administrative law problems by applying statutes. An evaluation carried out revealed that Prosa-trained students had improved case-solving skills compared to other students (Muntjewerff, 2001).

Another instance is the virtual/simulated practice environment used to train lawyers at the Glasgow Graduate School of Law, University of Strathclyde. It consists of a fictional town, Ardcalloch, and a number of virtual legal firms, within which students practice in groups of four. Each firm completed a number of projects in PI, Conveyancing and Private Client (wills, trusts, executries). The projects were assessed as part of the teaching and learning environment within the course.

Technology has made it possible for law faculties to have an online repository of their thesis. This makes previous research work available to students and serves as a guideline as well as launch pad in their research. An online repository ensures that previous research works are not just allowed to gather dust in libraries but that they are put into effective use. It also reduces the possibility of students carrying out shallow research and overreliance on antiquated published works in their research (Miano & Maurice, 2013).

Law Office Operations

Richard (2008) stated that "when the first personal computer appeared in a law office, the practice of law underwent a profound change," "the professional lives of lawyers (not to mention their personal lives) have been fundamentally and forever altered by the introduction of a new medium-the Internet" and "for many, it is difficult to imagine practicing law for even one day without using the Internet in some form." When one walks in to a lawyer's office, one is greeted with hundreds of books which contain an enormous amount of information, on the facts and judgments of cases decided by all the High Courts and the Supreme Courts. It is too much to expect that anybody could, or rather would, try to read all these books. This is perhaps out of question. As a matter of fact, these books are reference materials. When faced with a particular type of proposition, lawyers hunt through these books trying to find some case that had similar

facts and was decided by some court. One can well imagine the effort and energy required for such an exercise sifting through those mountains of information in search of something that hopes does exist.

Law firms now have desktops, laptops and other technology devices for speedy legal service delivery and lawyers have been making use of them in their day to day chamber work. One need only think of word processing to appreciate the importance of computers to the operation of law offices. But word processing, along with the use of Westlaw and Lexis, has been going on in law offices for more than thirty years, and the pervasive importance of computers for legal practice extends far beyond word processing and research activities (Law Office Computing, 2008).

Computers have tremendous impact in law firm in the following ways:

Case Management Software

The increased use of computers in the legal workplace has changed the way firms are managed. For example, client case tracking traditionally was done using a large calendar; cases now are tracked electronically, which makes the danger of a missed court date or filing deadline less likely. Meanwhile, software such as AbacusLaw frequently is used to track billable hours, resulting in more precise time accounting by attorneys and savings to clients, who are able to track the attorney's work to the minute. A lot of software are also developing to suit the needs of the lawyer in his practice thus increasing his productivity such as accounting and financial management software, legal calendar software, billing software, case management and conflict management software that track any conflict of interests between the clients of a law firm and potential clients (Jonathan, 2008). Patent and trademarks filing are also made easier with the aid of computer software that generates templates with the

use of information input into it. Cases are assembled into different parts of the law like criminal procedure, torts and land law. Expectedly, if one has a case on hand, one could just look for what will help one's case through software.

Artificial Intelligence

Blair (2014) stated that while technology is growing at an exponential rate, technology relating to lawyering or the provision of legal services is slow. This is not surprising as lawyers have an obligation to their clients to act in a professional manner and ensure that the services they offer achieve the desired outcome. Hence most lawyers prefer to stick to what they know to work and are averse to taking the risks involved in the recent technology involved in the provision of legal services with the aid of Artificial Intelligence (AI).

Artificial Intelligence has been defined by Merriam Webster as an area of computer science that deals with giving machines the ability to seem like they have human intelligence' and 'the power of a machine to copy intelligent human behavior'. Increasingly, there are tasks which were previously done exclusively by lawyers which are now being done by a machine. One of such is e-discovery which uses intelligent algorithms to find information based on the keywords and concepts agreed upon by the litigating parties. E-discovery increases the lawyer's productivity as much more documents or information can be accessed within a shorter period of time and with much less manpower.

Electronic Discovery

Computers have changed the handling of legal discovery projects. Discovery is the process by which opposing parties to a lawsuit exchange relevant information such as police reports, financial documents and witness testimony. Traditionally, discovered items were provided as photocopied documents. In many cases, attorneys and support

staff had to manually organize and sift through thousands of paper documents looking for relevant information. In electronic discovery, important legal documents are scanned and stored in computer systems. In addition to making document exchanges easier, electronic discovery lets attorneys organize and examine the documents much faster and more effectively.

Legal Marketing Online

Increasingly, attorneys use computers and the Internet to obtain new clients. Many attorney websites provide valuable general information such as explanations of legal rights and the legal process. Some websites allow a potential client to directly email or chat with an attorney before scheduling a consultation. Lawyers also use social networking platforms to communicate with current and prospective clients.

Richard and Kimbro (2013) wrote that law firms also use websites and blogs to improve their practice and expand the scope of their clientele. Through this media, they are able to contribute to legal education by writing commentaries and articles on judicial decisions and various legal concepts. It also makes it easy for clients to contact lawyers with the right specialization and skills that meet their requirement.

Client Portal Technology

Client portal technology has also influenced legal practice. This refers to a situation where clients have a secure web space (client portal) accessed through password on the firm's website. With the aid of this platform, they are able to communicate with their lawyers, share documents and information and also track the progress of their matter.

Document Assembly Tools

Document assembly tools such as HotDocs and DealBuilder are becoming more common in law firms as well. These prompt the lawyer to enter

information on the facts and issues involved in a matter and uses document templates to prepare legal documents that can be edited by lawyers. These documents could include complex legal contracts, wills and codicils. Some governments such as the Flemish and Dutch governments have employed similar software in legislative drafting for statutes (Moens, 2006).

Video Conferencing and Social Media

Video conferencing bridges the physical distance that could have hindered communication. It is useful in setting up meetings, making negotiations and giving lectures. Lawyers can now join online legal communities through which they can network, exchange ideas and get advice from other colleagues. The internet has made this benefit available to all not just those in large firms. Social media and other platforms such as Facebook, Twitter, LinkedIn, Instagram, Google+, and YouTube are essential to lawyers in networking and communication.

Communication via Email

Most modern law firms use email more than fax, which used to be the quickest way to send a letter. Law firm emails combined with smart phones mean that attorneys always have access to their communications and can stay on top of their cases.

Computers For Law Courts

Computers also play an important role in the administration of justice in law courts. Speaking of the use of modern technology in the public administration of justice, the former Chief Justice of India, R.S. Pathak had observed that the customary mechanisms and the tools adopted by the judicial process as well as by legal profession were old and relatively slow to change. According to U.S. Courts (2006), as law office operations have changed markedly due to computers, so have the operations of courts. As in law offices, word processing is crucial to courts. But electronic

filing is probably the major development computers have had on court operations.

Electronic Document Filing

Salvatore (2018) stated that all U.S. federal courts and many state courts now use the internet for all their case filings. Attorneys need computers to access these online portals, where they can file lawsuits and any documents they need to file within that lawsuit. Some jurisdictions will not permit licensed attorneys to file by paper. More than thirty-one million cases are on the federal filing system, and more than 320,000 attorneys and others have filed documents in federal court over the Internet.

From the lawyer's perspective, the immediate impact of this change is the (slightly) more flexible deadline for submitting documents to courts. As one lawyer put it, "I love e-filing. It makes it so easy." Another explained that "the 5 p.m. deadline for hard-copy filing in the clerk's office is automatically extended to midnight." As a law firm support staff employee explained, the impact of e-filing meant a major shift in the responsibilities of law firm support staff: "Because all attorneys push any deadline, we accepted the fact that our office hours had to be increased by seven hours" (Betsy, 2004).

From courts' perspectives, e-filing offers the promise of saving space on storage not an insignificant consideration in a time of shrinking court budgets. It can also eliminate or greatly reduce the likelihood that court files will turn up "lost" when needed, even protecting against permanent destruction of court files because backup services are available to reconstruct files in the event of a catastrophe. For example, after the dislocation of the court system in New Orleans caused by the aftermath of Hurricane Katrina, e-filing enabled lawyers to get up and running more rapidly than otherwise would have been the case (John 2006). Richard (2006) assert that the advent of e-filing has also meant that material filed in court can be accessed

online by the public and historically speaking Carl (2004) confirms that American court files have always been technically open to the public. Although this public access is not unique, it is different from the systems in some other countries. In theory, anyone could look up anything in court records, but as a practical matter public access was limited. One could only look at the records by going to the courthouse, and then only one case at a time. Online access has changed that by making it possible for anyone with access to the Internet to access court records at any time and to search the records in a way unavailable even to those who did visit the courthouse (Peter, 2004).

Analyzing Court Evidence

After deciding to bring the court into the action, the key to making a good case is the problem of massing and reviewing a large scale. Once again, computer can be supported. Once the evidence is collected, it should be possible to use computer to diagnose the logic and stability of evidence. Actually, because of the use of logic, the area of jurimetrics, lends itself very well to the use of computer. It is possible in complex cases, the use of computer to sift and sort information in the correctness of time sequences, particularly it is used where cases are drag over many months with the massive amount of the evidence.

Text Creation, Storage and Retrieval

According to Laws of Pakistan (2019), MS word is the most frequently used in text creation. It is used by both lawyers and judges in law. Lawyers used this software to write an application. If the lawyer do mistake in typing, he/she can correct his work very easily without waste of paper. Document can edited very easily and typed words can be saved in computer for later use. They can create multiple copies of documents digitally without any cost. They can share their documents easily.

In addition, Judges can write their decision in this software. They can write very long decision without any cost. Suppose a judge write 50 pages decision, he need 50 pages to write decision. With the use of computer technology, he can write his decision without any cost. If the typing speed is good he can write his decision very quickly. If he do mistake in his decision he can correct it without wasting his time and writing without full decision again. This software saves the Judges time and the judgment typed can be stored for later use. When need be, this judgment can be retrieved easily. Courts have websites people can read judgments at home with ease and convenience.

Recording of Court Proceeding

In many countries courts proceedings were recorded by judge and magistrate. In some jurisdiction, court records the proceeding using the stenographic machine and later produced a record of proceedings. In other jurisdiction recording by tape recorder and the record later being transcribed into a type record. New development voice recognition technologies are being tested. It is now possible on audio recording allowing Judge to listen to the portion which he wants. The record would be converted into hard copy format by using e-version. The judges hear the previous recording and then continue the proceeding. The advantage of technology is that it is easy to maneuver whether it is text, voice and image.

With the use of computer the pace of proceedings may be speed up. The quality of record is increased and it is far more accurate. The trial and appeal of the case is solved faster. The Judges are free from the task of record proceedings, they pay more attention to the case and they heard the case very accurately.

III. COMPUTERS IN NIGERIAN LEGAL PROFESSION

Computer has revolutionized the way law is practiced and thus, by necessity, the way it is taught and learned. Increasingly, legal educators have determined that proficiency in computer technology is one of the essential lawyering skills required to prepare students for law practice (Olubiyi, Olaniyan & Odiaka, 2015). In Nigeria, policy on adoption of ICT was initiated in 1999, when the civilian government came to power. The hard truth is that computer in legal practice has come to stay. It makes legal practice so much more convenient. There is no doubt that in terms of human capital, the Nigerian legal profession scores high, it is in the non-human aspect that our legal profession falls far short of what obtains in the United Kingdom. For instance, our legal profession is still "paper based," few of our lawyers are computer-literate. Very few offices are connected to the internet and mot research is done manually (Ozekhome, 2013). Computer technologies have been able to find application in the legal profession through the following ways:

The Internet

Nigeria. In effect, the professional lives of lawyers have been fundamentally and forever altered by the introduction of a new medium - the internet. For many, it is difficult to imagine practicing law for even one day without using the internet in some form. Okon and Bassey (2008) stated that globalization driven by communication technology is having a phenomenal impact on acquisition of legal, and other relevant learning, teaching and research materials in law libraries across the country. Through computer communication technology, lawyers and students can have access to current court proceedings, cases and law reports anywhere, any time and in any form in the country. There is no doubt that the integration of computer into the practice of law is of much benefit to

The introduction of computer communication technology has revolutionized legal profession in

the profession in Nigeria in the 21st century. ICT is a remarkable tool for providing comprehensive, current and timely legal services to the citizens. The relevance of computer services adoption and utilization in Nigerian legal system for effective and efficient service delivery is a contributory factor to sustainable development in Nigeria (Nwabueze & Orioko, 2011). It makes electronic transaction possible. Judges and lawyers can access legal information world over. Law students can look up judicial and statutory authorities in the internet. Lawyers and judges now use internet and its multi- media component to access materials from all over the world.

Indeed, computer technology has far reaching effect in the learning and practice of law. It entails useful tools, allowing the use of massive legal information retrieval systems, and of increasing benefit to lawyers in the context of the preparation of documents, administration, accounting and conveyancing and in terms of decision support (Kanyisola, 2004).

Video Conferencing

It was Bamadu (2015) who wrote that video conferencing and telecommunications might enable the conduct of certain court hearings and other legally oriented meetings without all the parties assembling in one physical location. A virtual hearing is one where people do not meet face to face but information technology reproduces many of the features of such meetings. Video conferencing holds a lot of promise in teaching and research, especially for the injection of international and comparative flavor in the curricula as it will enable guest speakers from long distances share resources. It could create a global classroom for students from several institutions to participate in the same course, through bilateral and multilateral arrangements. This medium holds even more promise for students and academics in Nigeria to share resources with their colleagues in other jurisdictions without having to travel and facilitate better

understanding of the various legal models and standards which exist elsewhere (Martins Library).

E-Handbook

One of the ways technology has affected legal education is the use of the e-handbook by the Nigerian Law School. The e-handbook consists of brief summaries on each course to be taken by students, statutes and case law encrypted on a CD-ROM. With this, students can have access to the entire course content for the duration of the program with easy reference to other relevant materials through the hyperlink feature.

LawPavilion

LawPavilion is another landmark in the application of computer to legal research. It was developed by Grace InfoTech Ltd (GIT) and focuses on providing technology related to legal services in Nigeria. The focus is essentially to automate legal services in the country. Other CALR such as LexisNexis and Westlaw are based on statutes, case law and journals of foreign jurisdictions. LawPavilion is however developed to be suitable for the needs of the Nigerian lawyer, law teacher and student. It is a Nigerian electronic law report and research software for use by judges, LawPavilion makes magistrates and lawyers. conducting legal research easier than ever before. It helps legal practitioners search for authorities on any subject and get result in seconds, rather than the traditional days (even weeks) of manual search. This puts at your fingertips, an e-library of over 9,000 ebooks of Law Reports (both Supreme Court and Court of Appeal from 1970 till date), a 43-years consolidated index and law-digest of over 70,000 issues covering all areas of law, selected Laws of the Federation, 48-hour law reporting system with automatic updates, amongst other features. Other services offered by Law Pavilion include a case management system for law firms and court management system.

NBA Facebook Group

Nigerian Bar Association (NBA) Facebook group is a public group where members could connect and interact with each other. Amongst other uses, the group has become a platform where lawyers ask their colleagues for opinions on legal matters and receive well researched responses from experienced colleagues. This was all possible with the introduction of computer technology.

Challenges to The Effective Utilization of Computer Technology in Nigerian Legal Profession

Despite the huge benefits conferred by the use of technology in legal education and practice, there are some challenges that make the effective utilization of computer technology in the Nigerian legal profession seem impossible. The first challenge is:

Limited/Slow Internet

The non-availability of fast high speed internet adversely affects the use of ICT in legal education, research and practice. A large proportion of the Nigerian populace has access to internet through the four major telecommunication companies (MTN, Globacom, Airtel and Etisalat). While this has allowed a larger number of people to have internet access, it is unarguable that the internet services provided are unreliable and slow. This discourages the end user as well as makes it sometimes impossible to perform some tasks which require high speed internet. Some mobile networks are also unavailable or not good in certain locations. The high cost of internet service must also be taken into consideration. All these impede the influence technology has in the Nigerian legal profession.

Lack of Technology Culture

The lack of internet or technology culture among law teachers and their students on the one hand and lawyers and their clients on the other hand is a major challenge. While many advanced jurisdictions have been able to inculcate the technology/internet culture,

Nigeria lags behind a great deal in this respect. Many law teachers, students and lawyers are still in the analogue and paper world; unwilling to change or adapt to the sweeping technology culture. This could be due to sheer conservatism or a general distrust for the internet and technology (Jonathan, 2008).

High Cost of Computers

The high cost of technology may also be responsible for the low response to it in Nigeria. A high amount of capital needs to be invested if a law firm or faculty is to be technology compliant. Not only do computers and other ICT devices or hardware need to be purchased but a constant upgrade and maintenance will also be required from time to time. Majority of the law firms are however sole proprietorships which cannot afford such capital intensive investment (Coker, 2015). The same problem also applies to law faculties since there are no sufficient funds allocated by the government for the education sector (Owoeye, 2015). Most law faculties within the country do not have adequate computers, projectors or internet connectivity within the classroom. quality online legal research is not usually free. Money is required to subscribe to CALR sites such as Westlaw, LexisNexis and Nigeria's LawPavilion. Academic journals also require subscription fees whether individual or institutional which many law faculties and firms cannot afford.

Inadequate Power Supply

Furthermore, almost all technological devices require electricity to work effectively. However, a fundamental problem in the Nigerian society is inadequate or a crippled power supply. The situation is worse in some areas where there is no power supply for weeks or months or none at all. Where there is no constant and uninterrupted power supply to law firms and faculties, maximizing technology cannot be achievable. The use of other alternative sources of power such as generators, inverters and solar panels

add a huge amount to the already expensive cost of using technology.

Plagiarism

A major challenge law teachers contend with in the use of internet by law students is that of plagiarism. The internet and technology makes it easy for students to plagiarize the works of others by simply copying and pasting information found on the internet as theirs. The situation could be worse where students collect the soft copies of someone's thesis and merely effect a change of personal information and institution while presenting same as their own research work. The fact that technology and internet makes plagiarism easier is uncontestable.

Lesser Jobs by Lawyers

One of the consequences of the impact of the technology/internet is the availability of many legal templates online at little or no costs to potential or actual clients. Machine is fast replacing human efforts in the provision of certain legal services particularly with the employment of Artificial Intelligence (AI) technology. The implication of this is that lawyers will be getting lesser jobs, especially when it comes to agreements and procedures such as e-discovery. This portends a major problem for legal practice in Nigeria since the profession is already battling with ambulance-chasing and charge-and-bail lawyers. Worst still are the making of legal documents with a 'red seal' by certain road-side typists at ridiculously low prices. A lot of young lawyers are already out of gainful employment. To have machines replace lawyer's work would make the situation worse. Therefore, it is apparent that it is time for lawyers to begin to carve a niche for themselves in order not to lose out. Lawyers must begin to focus on areas of 'lawyering' where they are indispensable and are irreplaceable by machines.

Lack of Courtroom Technology

Most courts in Nigeria lack the necessary courtroom technology. While it is a good development that electronic evidence such as videos are now acceptable in courts, more needs to be done (Evidence Act, 2011). The courts need to be technology savvy and judges as well as other judicial support staff should be trained in this regard. Until this is achieved, we cannot enjoy advanced roles of technology such as e-discovery.

Lack of CALR designed for Nigeria

The lack of CALR that is designed for Nigeria is also a major challenge impeding legal research in the country. The famous CALR providers such as Westlaw and LexisNexis contain case law and academic journals that are designed for jurisdictions such as the United States and United Kingdom. Nigeria needs to have a CALR designed for its jurisdiction that can contain case law and academic journals or articles written on the jurisdiction. The only CALR service focused on the jurisdiction at the moment is LawPavilion which is designed to provide Nigerian case law and precedents. More is needed in this area to encourage more e-journals and online case reporting in order to enrich legal research.

IV. RECOMMENDATIONS

Given the significant challenges preventing the enormous benefits of computer technology to be felt in the legal profession in Nigeria, some important steps must be taken to avert this situation.

Awareness Creation

First, users of computer technology in the legal profession must be made aware of the benefits of computer to them. This is a solution to the challenge of lack of internet or technology culture among law teachers, law students, lawyers and their clients. Law faculties and colleges should organize educational seminars/sessions on the benefits of technology to law students and law teachers. Experts in the use of

internet to access law related content can be brought to educate law students and their teachers on how to access those contents and how best to make use of them. Lawyers must go on conferences and seminars regularly. These outings will expose them to the latest developments in the legal profession through the use of technology. Lawyers can then organize some sessions for their clients especially on how best their clients can make use of technology to access their facilities.

Investing in Legal Computer Technology

High cost of technology is a major impediment to the use of computer technology. This impediment can be dealt with if the Nigerian government invests more in computers. The government can invest in legal technology particularly by creating a special fund for the use of technology in law. This could be funded via public-private partnerships. To address the difficulty of law firms obtaining credit facilities from banks, the Nigerian Bar Association can assist, particularly the small firms, in gaining access to funds to help undertake the cost of using the internet/technology in their firms. This can be achieved by negotiating a favourable agreement on behalf of such firms.

Legal Databases

Legal databases are important in the legal profession. In order to deal with the cost of gaining access to it by law faculties and colleges, universities can ask corporate organizations or philanthropists to sponsor legal database projects in their respective law faculties and colleges. This will reduce the burden of the law faculties and colleges paying heavily for subscriptions to access these databases. Likewise, law firms can resort to loans from banks to finance their database projects.

Quality Internet by ISPs

Government must ensure that internet service providers provide quality services to the populace generally. Once this is done, the legal profession can also benefit from improved services from internet service providers. The Federal Government on behalf of the populace must also hold internet service providers accountable for services they provide. Licenses must be issued to the providers who can provide the best services and where such providers default, the necessary sanctions should be meted out to those providers.

Supply of Adequate Electricity

The Nigerian government must also find a lasting solution to the issue of electricity supply to the nation especially universities and law firms. An emergency summit of stakeholders in the power industry is hereby recommended. This summit should look into the challenges and solutions to the issue of electricity supply to the nation. It must go a step further in effectively implementing the recommendations made from such a summit.

Plagiarism Detection Software

The issue of plagiarism in our law colleges and faculties must also be tackled. The use of plagiarism detection software can be introduced into the university system. This software would detect cases of plagiarism in research work submitted by students for grading. A good example of this kind of software is 'Turnitin,' 'Plagiarismchecker,' or 'Copyscape'. The use of these software is not a new development as many academic journals also check for plagiarism in any paper submitted to them for publication.

The challenge of plagiarism can also be addressed by law teachers engaging in activities that will indicate that a student indeed carried out a research work. One of such is conducting an oral defence/viva. It is also suggested that legal research as a compulsory course should be introduced into the law curriculum. This will ensure that law students are taught how to undertake quality legal research. It is also not out of place for law teachers and lawyers (new wigs

especially) to go on professional training on legal research. This move will help them to update their knowledge and enhance their legal research skills.

Procurement of Courtroom Technology

The government must equip our courts with the necessary courtroom technology. Inadequate funding should not be a problem for the courts. Thus, it is recommended that a separate fund be created by the government for the judiciary which will take care of the technology needs of the judiciary. The funds will be used towards equipping the courts with necessary modern technology which will help the courts in providing better services especially when it comes to administration of cases. The fund can also be used to train judges and judiciary staff on how to utilize the courtroom gadgets effectively.

Development of Nigerian CALR

Lastly, it is recommended that universities and law schools collaborate with software developers and businesses along this line in order to create software, e-books and other technology that will be adapted and suited to the Nigerian legal environment and meet the required needs.

V. CONCLUSION

Computers have been having significant impacts on legal professions especially in more advanced jurisdictions. The use of CALR and CAI testify to this fact. E-discovery is undertaken in some jurisdictions and AI is employed in achieving this. There are also many legal software adapted to help lawyers in delivering more effectively their legal services to clients. Nigeria's entry into the application of computer technology in the legal profession may be quite recent yet technology has since then been essential to legal education and practice. Nigerian lawyers and teachers are making the most of the internet and computers. More recently, law faculties are using LMS and LawPavilion, a CALR site is helping

lawyers to undertake research at a much faster pace and effectively.

Although there are challenges to the implementation of computer technology in the Nigerian legal profession, the benefits outweigh them. The current set of law students and young lawyers are more comfortable with technology and make use of it in their day to day dealings. The future generation of lawyers and law students will be even more at home with computers and be able to achieve greater things with same. Therefore computer technology has come to stay and will continually advance with each passing day. It is therefore essential that Nigerian lawyers and law teachers embrace same and consider how to maximize computer technology to advance legal profession.

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Cite this article as:

Jemimah N., Oye N. D, "Computers for Legal Professions In Nigeria - A Review", International Journal of Scientific Research in Computer Science, Engineering and Information Technology (IJSRCSEIT), ISSN: 2456-3307, Volume 5 Issue 6, pp. 268-284, November-December 2019.

Journal URL: http://ijsrcseit.com/CSEIT195642