ROLE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN THE LEGAL PROFESSION AND PRACTICE

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ABSTRACT

Information and communication technology (ICT) have become commonplace object in all aspect of life. For the last two decades the use of ICT has fundamentally changed the practice and procedures of nearly all forms of endeavour within business and governance. The aim of this research is to bring together the findings and the key points from a review of the present literature associated with ICT's role in the legal profession and practice. This review set out to classify and develop relevant strategies in national and international research and initiatives related to measuring and demonstrating the effective use of ICT. The legal profession is a very socially oriented activity and quality litigation has traditionally been associated with senior lawyers having practice so long in the profession. The use of ICT in the legal profession, practice and education lends itself to more student-centered learning settings. But with the world moving and rapidly into digital media and information, the role of ICT in the legal profession, practice and education is becoming very important and this importance will continue to grow and develop in the 21st century. It is recommended that heads of law firms should increase their level of funding towards enhanced participation in the ICT integration in Nigeria. Government should also provide enabling environment such as efficient and stable power in addition to relevant ICT policies to include lower tariff on all ICT equipment and accessories to boost ICT adaptation in Nigeria.

1.0 INTRODUCTION

Information communication technology (ICT) is an umbrella term that includes all technologies for the manipulation and communication of information. The work of legal practitioners involves a high level of documentation and information processing, storage, and retrieval. The information intensiveness of a lawyer's responsibility is such that tools and technologies that would speed up the documentation, management and information handling are not only important but professionally necessary. The value of accuracy, correctness, completeness, relevance and timeliness are characteristics of information which ICT system do generate to meet lawyer's information needs[1]The legal profession in Nigeria maintains a vital place in the society. After independence, its service has greatly affected and shaped the socio-economic and political system of the country by protecting the rights of individuals through formed legal institution[2]. This effect, which has increased with the resurrection of democracy in 1999, has also raised relevant questions about the need

[1]Jide. *O.,* Information Communication Technology (ICT) Use as a Predictor of Lawyers Productivity, http:// Unllib.unl.edu/LPP/Library Philosophy and Practice 2011, p.16

[2] Oko. O., Contemporary law in Nigeria, Journal of African Law, 38(20), (1994), pp.104-124 at p.166

for a more standardized legal education system that is suitable to the present context of the legal profession in Nigeria. Along with the development and effect of the legal profession, the legal information aspect in Nigeria has also seen considerable changes in the present generation; particularly with respect to the growth of regional legal electronic resources.[3]

The role of lawyer's in any society is essential. In the early days, before the coming of the Europeans, each community in Nigeria had its own system of rules and practices regulating human behavior. These were undocumented but known to all. Penalties which ranged from ostracism, payment of fines, and common law of England was introduced and customary law with some modifications was retained. It is the common law and customary law that have evolved into the court systems that are the Nigerian legal system.[4]

These changes have been ascribed to the competitive nature of legal practice as a result of the impact of ICT, the increasing complexity of legal information resources and the need for high quality legal services in such specialized areas as Oil and Gas law, Arbitration law, International law, Islamic law, etc[5].

The internet and word processor have opened up a wider world of showing drafts and collaboration through social science research network. As a singularly information dependent profession, the field of law would hardly escape the impact of the information age.[6]

ICTs have become within a very short time, one of the basic building blocks of modern society. Many countries now regard understanding ICT and mastering the basic skills and concepts of ICT as part of the core of education, alongside reading, writing and numeracy. However, there appears to be a misconception that ICTs generally refers to 'computers and computing related activities'. This is fortunately not the case, although computers and their application play a significant role in modern information management, other technologies and/or systems also comprise of the phenomenon that is commonly regarded as ICTs[7].

Near the end of the 1980s, it is stated that, the term 'computers' was replaced by 'IT' (information technology) signifying a shift of focus from computing technology to the capacity to store and retrieve information. This was followed by the introduction of the term 'ICT'[8] . According to a United Nations report ICTs cover Internet service provision, telecommunications equipment and services, information technology equipment and services, media and broadcasting, libraries and documentation centers, commercial information providers, network-based information services, and other related information and communication activities.

According to *UNESCO* information and communication technology (ICT) may be regarded as the combination of 'Informatics technology' with other related technology, specifically communication technology[9]. The various kinds of ICT products available and having relevance to education, such as teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling,

[3]Akoko,R.(2009),The Legal Profession Nation, Available @ http://thenationonlineng.net/web2/articles/12719/1/The-legal-profession-/Page1.html1 accessed on November 13, 2010, p.10

[4] Holdsworth. W., A history of English law, (London: Sweet & Maxwell Ltd, 1975), pp.16-34 at p.22

[5] Ibid

[6] ibid

[7] Daniels J.S., Information and Communication Technology in Education-A Curriculum for School and Programme for Teachers Development. (Paris: UNESCO, 2002) p.24

[8] Pelgrum.W.J., Law, N. "ICT in Education around the World: Trends, Problems and Prospects ", (UNESCO-International Institute for Educational Planning, 2003) p.60 Available @ www.worldcatlibraries.org/wcpa/ow/02d077080fcf32210a19afeb4da09e526.html accessed on (2014)

[9]UNESCO Information and Communication Technology in Education-A Curriculum for Schools and Programme for Teacher Development, (Paris: UNESCO, 2002) p. 74

interactive voice response system, audiocassettes and CD ROMs etc have been used in education for different purposes[10].

Unfortunately, the impact of ICT though is very visiable in the outside world especially the US, Europe and Asia, but here in most of Black Africa and especially in Nigeria is very modest if one would not say slow and specifically in the legal profession.

This research will first examine the evolution and application of the ICT, second ICT in the legal education and third the impact of ICT on the legal profession and practice.

2.0 THE EVOLUTION AND APPLICATION OF THE ICT

The evolution of the application of ICT in the field of career information and guidance can be divided into four phases. The first was the mainframe phase, from the mid-1960s to the late 1970s. A number of computer-aided guidance systems were developed which demonstrated the potential of ICT. But the costs of direct interaction with the computer meant that the only systems which proved widely practicable in cost terms were based on batch processing. The static nature of this process and the feedback delays limited the implementation of such systems[11].

The second was the microcomputer phase, from the early 1980s to the mid-1990s. The advent of the microcomputer made interactive usage much more economical, and also made it easier to develop and market limited software packages; its attractiveness grew as more powerful versions of the personal computer were developed. The result was a substantial growth in the number of computer-aided guidance systems, and in the extent of their usage. By the 1990s it was difficult to find a guidance service in any developed country which did not make use of such systems.[12]

The third was the web phase, in the late 1990s. The advent of the Internet meant that instead of free-standing systems located in career guidance centers, websites could be developed which individuals could access instantly from a wide variety of sites, including their homes. The ease of developing such websites produced a massive increase in their number; the ease of interconnecting them meant that they no longer needed to be viewed as discrete entities. Rather than perceiving ICT solely as a service from external suppliers, guidance services began to develop their own websites.[13]

The fourth is the digital phase, which we are now entering. The hitherto separate "analogue streams" of the computer, the television and the telephone are merging into an integrated "digital river"[14]. Individuals are now able to access the Internet not only through their personal computers but also through their televisions and mobile phones. Greatly enhanced bandwidth will shortly enhance its speed and its capacity for transmitting video and audio as well as text.

Across these four phases, three key trends can be discerned. The first is increased accessibility. Whereas initially ICT-based career guidance and information services were available only at a select number of technically-equipped service locations, they are now available not only in most guidance services but also in a vast

[10] Sharma R., Barriers in Using Technology for Education in Developing Countries, IEEE0-7803-7724-9103.Singapore schools, Computers & Education Vol.41, No(1)(2003) ,pp. 49-63 at p.50

[11] Watts. A.G., The Role of ICT in an Integrated Career Information and Guidance System. A paper prepared for an OECD review of policies for information, guidance and counseling services Commissioned jointly by the European Commission and OECD. National institute for Careers Education and Counseling, United Kingdom, November (2001) pp.3-5 at p.4

[12] Ibid

[13] Ibid

[14] Cunningham. P & Froschl. F., Electronic Business Revolution, (Springer, Berlin, 1999) p.6

range of other locations – homes, workplaces, community locations. The second is increased interactivity. In the early stages, resources were developed as separate systems, offering only limited interactivity with users. Now, they are highly interactive not only with users but also with each other and across inter-media boundaries. The third is much more diffused origination. Whereas the initial computer-aided guidance systems were developed by large organisations with substantial resources at their disposal, anyone can now develop their own website. This has led to much stronger private-sector activity in this area, which in turn has implications for public policy[15].

The 1990s was the decade of computer communications and information access, particularly with the popularity and accessibility of internet-based services such as electronic mail and the World Wide Web (WWW). At the same time the CD-ROM became the standard for distributing packaged software (replacing the floppy disk). As a result educators became more focused on the use of the technology to improve student learning as a rationale for investment. Any discussion about the use of computer systems in schools is built upon an understanding of the link between schools, learning and computer technology. When the potential use of computers in schools was first mooted, the predominant conception was that students would be 'taught' by computers[16] .

In a sense it was considered that the computer would 'take over' the teacher's job in much the same way as a robot computer may take over a welder's job.

This is refered to as "a rather grim image" where "a small child sits alone with a computer"[17]. However, the use of information and communication technologies in the educative process has been divided into two broad categories: ICTs for Education and ICTs in Education. ICTs for education refers to the development of information and communications technology specifically for teaching/learning purposes, while the ICTs in education involves the adoption of general components of information and communication technologies learning process[18].

Existing European ICT-based resources in the field of career information and guidance have been classified by Offer[19], in relation to the *DOTS* model developed by *Law & Watts[20],* self awareness; opportunity awareness; decision learning; and transition learning.

Resources concerned with self awareness are designed to help users to assess themselves and to develop a profile in terms which can be related to learning and work opportunities. These resources range from simple-self assessment questionnaires to psychometric tests; they also include more open-ended "brainstorming" approaches[21].

Resources concerned with opportunity awareness include databases of learning and/or work opportunities, with a menu of search criteria which enable users to find data relevant to their needs. The databases may cover: education/training institutions or courses; occupations, employers, or job vacancies; voluntary-work opportunities; and information on how to become self-employed. Some include relevant labour-market

[15] A.G. Watts, op.cit. p.5

[16] Mevarech, A. R., & Light, P. H. Peer-based interaction at the computer: Looking backward, looking forward, Learning and Interaction at the computer, Vol. (1992), pp.275-280 p.279

[17] Collis, B. Using information technology to create new educational situations (Paris: UNESCO International Congress on Education and Informatics, 1989)p. 19.

[18] Syed. N., . An Effective use of ICT for Education and Leraning by Drawing on Worldwide Knowledge, Research, and Experience: ICT as a change Agent for Education(A Literature Review 2013) Avialable : www.mff.org/pnbs/ME158.pdf p. 8

[19] Offer. M., A Review of the Use of Computer-Assisted Guidance and the Internet in Europe, National Centre for Guidance in Education,(Dublin.1997) pp 4-7 at p.6

[20] Law. B. & Watts, A.G.(1977), Schools, Careers and Community, Charch Information Office,(LONDON 1977) pp. 8-9 at p.7

[21] Ibid

information on supply and demand. There are also some examples of work simulations which enable users to explore particular occupational areas in an experiential way[22].

Resources concerned with decision learning include matching systems which enable users to relate their personal profiles to relevant learning or work opportunities. The outcome is a list of the opportunities which match the profile most closely. Also included here are content-free decision-making resources designed to help users to explore options in a systematic way, balancing the desirability of particular options against the perceived probability of achieving them[23].

Finally, resources concerned with transition learning are concerned with helping users to implement their decisions. These may include support in developing action plans, preparing curricula vitae, completing application forms, and preparing for selection interviews; it may also include help in securing funding for learning opportunities or for becoming self-employed[24].

From a policy perspective, it is important to recognise the range of these applications. Policy interventions are often confined to a limited sub-set of this range - databases, for example. Many separate packages and websites cover only one or two of these features; some, however, cover more. In the days of computer-aided guidance systems on mainframes and microcomputers, there was a debate about the relative merits of mini systems, each addressing particular guidance functions, and of maxi systems which attempted to cover as many as possible of these functions and to facilitate "cross- pathing" between them (prominent examples of maxi systems included DISCOVER and SIGI in the USA, CHOICES in Canada, and PROSPECT (HE) in the UK). Some argued that a plurality of "mini" systems encouraged diversity and choice, enabling users to select the mix of such systems which met their needs; others that maxi systems enabled users to move seamlessly between different functions, avoiding semantic discrepancies and conceptual discontinuities, and modeling the full scope and complexity of the career decision-making process [25] The advent of the Internet reframed this argument, by making it possible for websites to build quasi-maxi systems on what *Offer* [26] termed a "*Lego*" model – piece by piece, sometimes through links to other sites.

2.1 Electronic legal education

The field of education has been affected by ICTs, which have undoubtedly affected teaching, learning, and research.[27] A great deal of research has proven the benefits to the quality of education[28]. ICTs have the potential to innovate, accelerate, enrich, and deepen skills, to motivate and engage students, to help relate school experience to work practices, create economic viability for tomorrow's workers, as well as strengthening teaching and helping schools change.[29] As *Jhurree*[30] states, much has

[22] Ibid
[23] Ibid
[24] A.G.Watts op.cit. p.5
[25] Jackson,C. "The Case for Diversity in Computer-aided Careers Guidance Systems: a Response to Watts", British Journal of Guidance and Counselling,Vol.21,(1993)pp.189-195 p.192
[26] Offer (1997),op.cit. p.7
[27] Yusuf,M.O. Information and communication education: Analyzing the Nigerian national policy for information technology. International Education Journal Vol.6 No.(3),(2005) pp;316-321, p.318
[28] Al-Ansari. H (2006). Internet use by the faculty members of Kuwait University. The Electronic Library Vol.24, No(6),(2006) pp;791-803 p.799
[29]Davis, N.E.,& Tearle,P. A core curriculum for telematics in teacher training. (1999) p. 10. Available: www.ex.ac.uk/telematics.T3/corecurr/tteach98.htm
[30]Jhurree, V. (2005)" Technology Integration in Education in Developing Countries: Guidelines to Policy Makers" International Education Journal [Electronic], Vol. 6, No 4, (2005) pp. 467-483. Available: http:ehlt.flinders.edu.au/education/iej/articles/v6n4/jhurree/paper.pdf

been said and reported about the impact of technology, especially computers, in education. Initially computers were used to teach computer programming but the development of the microprocessor in the early 1970s saw the introduction of affordable microcomputers into schools at a rapid rate. Computers and applications of technology became more pervasive in society which led to a concern about the need for computing skills in everyday life. *Hepp,*[31] claim in their paper "Technology in Schools: Education, ICT and the Knowledge Society" that ICTs have been utilized in education ever since their inception, but they have not always been massively present.

Although at that time computers have not been fully integrated in the learning of traditional subject matter, the commonly accepted rhetoric that education systems would need to prepare citizens for lifelong learning in an information society boosted interest in ICTs [32].

Electronic legal education involves the use of information, communication and instructional technologies to enhance students learning of law and to provide law teachers with environments and tools for teaching law[33].

Since the beginning of the Eighties these types of technologies were introduce d in legal education at Law schools and Law faculties in Europe. The first applications in this field were databanks of statutes and precedents; soon to be followed by computer assisted instructional programs[34].

Although these materials are available, they are not widely used in legal educa tion. The situation in the Netherlands is that the available applications are either only used at the faculties that produced them or not used at all. With the fast growth of the Internet many Law schools and Law faculties are moving their education and training into the web environment. The web environment enables a more integrated approach of using the technologies in legal education. It also enables teachers to assemble, store and use materials for teaching law.[35]

More importantly, it may open new ways of teaching and learning law, for example, by providing students with an environment in which they can manage legal information and legal knowledge for their personal and professional use.

With the introduction of Electronic Learning Environments (ELO's) at the Law Faculties in the Netherlands, started around 1996, there is a growing demand for electronic materials for learning the law. There are new opportunities for using existing applications and designing new electronic materials[36].

To transform these expectations and possibilities into electronic materials for the effective and efficient learning of law requires a principled and structured design approach. The design of these materials should be based on research outcomes[37].

[31] Hepp, K.P., Hinostroza, S.E., Laval, M.E., Rehbein, L.F."Technology in Schools: Education, ICT and the Knowledge Society "OECD.(2004). Available: www1.worldbank.org/education/pdf/ICTreport oct04a.pdf.

[32] Pelgrum, W.J., Law, N. (2003) "ICT in Education around the World: trends, Problems and Prospects" UNESCO-International Institute for Educational Planning(2003). Available: www.worldcatlibraries.org/wcpa/ow/02d077080fcf3210a19afeb4da09e526.html p.2

[33] Antoinette J. M., ICT in Legal Education , SPECIAL ISSUE: TRANSNATIONALIZING LEGAL EDUCATION (2014) p 5. Available: www.leibnizcenter.org/munt

[34] Ibid

[35]Antoinette J. M., (2014) op.cit, p 9.

[36]Ibid

[37] Ibid

However, the research field of developing electronic materials for effectively and efficiently learning law is still in its infancy. Main reason for this is the fact that Law s chools and Law faculties approach the development of instructional materials as teach ing and not as research. Another reason is that the design of electronic materials for le arning the law is by definition interdisciplinary and requires a close relation with both legal research and instructional research[38].

Then there is the main difference between the Anglo-Americal legal system and the Continental legal system that makes the sharing of materials hard, blocking the formation of an international research community. [39]

Finally, the few researchers in this area work rather isolated because there is no common research community. There is a need for a forum for researchers and developers of electronic materials for learning the law to define the research agenda, to be able to share research outcomes and electronic materials and to be able to apply research outcomes from relating fields such as Artificial Intelligence (AI) & Law and AI & Education to prevent re-inventing the wheel[40].

3.0 THE ROLE AND IMPACT OF ICT ON THE LEGAL PROFESSION AND PRACTICE

Computers affect almost all regular activities of lawyers, because it enhances accuracy, efficiency and good record keeping.

Ekundayo and Oyebode[41], pointed out that, the services of lawyers are needed in almost all human endeavors such as banks, insurance, companies, government institution etc.

Omekwu[42] posited that computers in a lawyer's office are useful for the performance of the following functions to check and input information and ensure correctness and completeness sort information into designed sequence, store data for future reference and use. Refer lawyers to previously stored information, carry out calculation functions, analyze and summarize data. Based on the three major functions above computers in lawyers offices could be applied in many area of law practice such as litigation, advocacy, criminal law, commercial law, environmental law, insurance, etc.

Omekwu[43], also indicated that, the use of digital technology has led to migration of lawyer's instrument of trade to electronics formats. Judicial decisions and all other sources of information germane to the work of lawyers are now available in electronic format. Many of these materials can be accessed online. Many legal scholars, researchers and judicial officers have all discussed how these developments will impact on legal practice now and in future.

Eke[44] wrote that ICT is impacting different sectors of Nigerian economy, especially in legal profession. Due to the importance of ICT in the development of Nigerian legal system, there is a paradigm shift from acquisition of print information resources to electronic resources in law libraries. For instance, availability of the Internet or related computer network (such as Local Area Network) can provide quick

[38] Ibid
[39] Ibid
[40] Ibid
[41] Ekundayo. A , Hints on legal practices, (2nd ed.) Nigerian Institute of legal practice, Law series 5, (45)(1995) pp.33-45 p. Oyelude A. Law and nation building: selected essays. CEPAR Publication Lagos,(2005) pp. 44-47 p. 45
[42] Omekwu, C.O, Legal issues on electronic commerce, International Business law Vol 26, No 4(2003) pp 64-78, p. 70
[43] Omekwu, C.O., Information technology fundamentals for lawyers. Paper presented at staff seminar of NALS. Oct. (2004), pp 1-28, p.16
[44] Eke, F.M. (2006). Information and Communication Technologies (ICTs) awareness and use by academic staff of tertiary institutions in Imo state, Nigerian Library and information science Trends. Journal of NLA Imo State Vol 4 No 1-2, (2006).pp 20-26, p.22

access to relevant legal information in electronic format in law libraries than is manually possible. Hence, effective adoption and use of ICT in law libraries will be immensely beneficial for sustainable development in Nigeria by ensuring that relevant and current information is made available for legal practice for enhanced productivity. *Katsh*[45], had written on the emerging generation of digital lawyers and on how to re-orient the legal practitioner to cyber space.

Azinge[46], identified five key areas of IT relevance to lawyers but in our research we found out there are more then five that could be identified. The main points are summarized below;

i. internet access
ii. Electronic Communication
iii. Documentation
iv. Litigation support service
v. Legal research
vi. Management
vii. Electronic discovery
viii. Solicitation
ix. Law office operations
x. Computers and court operations

Internet Access

Internet access to judicial decisions with basic IT facilities like a personal computer, a dial-up or wireless connectivity. A lawyer can now access judicial decisions of the Supreme Court of Nigeria, and all the House of Lord Judgments. The same is applicable to the judgments of many U.S. Courts. Online legal databases like Lexis/Nexis and Westlaw are already a practical experience of legal professionals in developed countries[47].

Electronic Communication

Electronic Communication: Digital technology provides the platform for lawyers to:

- Transmit and receive messages from clients, colleagues and the court system.
- Gain access to the internal know-how of the institutional memory of a law firm.
- Provide access to information on specific subject matters[48].

Documentation

Documentation is a cardinal aspect of the legal institution responsibilities. The legal process is undoubtedly documentation-intensive. Whether in drafting agreements for clients or legislative drafting or litigations, preparing writs or even judges writing their judgments[49].

Litigation support service

Litigation support service. Information technology is relevant to the lawyers' management and control of the diverse documents which they have to master in order

[45] Katsh,E. Digital lawyers: orienting the legal professionals to cyberspace. University of Pittsburg law review Vol 55, No 4(1994),pp1141-1175, p.1165
[46] Azinge, E. Information technology and legal practice. Paper presented to the Practice and Procedure course of the Nigerian Institute of Advanced Legal Studies, University of Lagos campus, Akoka, (2002), p.10
[47] Jide. O.,(2013) Op. cit. p.3
[48] Ibid
[49] Ibid

to advance and prepare their clients' case. It relates to efficient use of IT systems for the efficient storage and speedy retrieval of such documentation[50].

- IT system allows a lawyer to work on many documents simultaneously while at the same time downloading materials from the internet. He can copy and paste one document to another or from one section of document to another.
- ICT is also relevant in the area of basic text retrieval, use of CD-ROM systems and quicker and more qualitative service to clients and cooperation between counsel, clients, courts and law investigation and enforcement institutions.

Legal research

One of the most important use of computer in the legal profession is conducting legal research. Many legal projects require extensive legal research, including references to previous decided cases. Traditionally, printed volume of case laws require attorneys to read through keyword indexes and find relevant cases. Now, online databases such as LexisNexis and Westlaw make the process of searching for case laws, legal forms and treaties much easier[51].

Management

The increased use of computer in the legal workspace 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 Abacus Law frequently is used to track billable hours resulting in more precise time accounting by attorneys and saving to clients who are able to track the attorney's work to the minute[52].

Electronic Discovery

Computers have changed the handling of legal discovery projects. Discovery is the process by which opposing parties to a law suite 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 shift through thousands of paper documents looking for the 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[53].

Solicitation

Increasingly, attorneys use computers and the internet to obtain new clients. Many attorney websites provide valuable general information such as explanations of rights and 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.

However, it is worthy to mention that ICT use in developing countries has been hindered by many problems which include; insufficient fund allocation, inadequate manpower requirement, power outages, prohibitive cost of importation of hardware,

[50] Okoko. R., (2009),op.cit, p 3
[51] Ibid
[52] Ibid
[53] Jide. O., (2013) Op. cit. p.3

software and the accessories of ICT, conservatism on the part of management and unfavorable government policies. Others include; lukewarm attitude towards alleviating the sufferings of academic institutions by the government, lack of training culture in ICT skills, inadequate infrastructures such as personal computers and communication facilities. *Ogunleye*[54]*,* ICT has become an important field for all information professionals. This is because of its relevance and application to tasks in libraries and information centers. He further explained that the major application of ICT to information professionals is in the areas of networking, online searching, CD-ROM technology, library automation and the Internet.

Also *Odunewu and Olashore*[55]*,* reported that information and communication technologies have been dominant in information provision, processing and handling. Through the use of Internet a user is able to access through ICT bibliographic and full text information in several millions document descriptors used for describing the documents needed.

Another measure of lawyer's productivity would be firm's profitability per employee per hour worked. This measure would allow one to measure the effects of technology on productivity in real terms. In Nigeria, only few lawyers bill by the hour but look into variables in charging their clients, e.g., the nature of case, likelihood of speedy execution, position and wealth status of person in involved, environment (location) of the case, etc. However, there should be a consensus on how productivity should be measured. The bedrock of this study is the application of ICT which is an input that could enhance work productivity of the legal practitioner[56].

Law Office Operations

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. This impact has proven sufficiently important to be the focus of books[57] and specialized journals.[58] These publications offer advice and inspiration (and, one cannot avoid surmising, pervasive advertising) about the ways in which law firms can employ information technology. Because larger firms seem to have embraced such technology earlier in time,[59] articles tend to emphasize how more modest offices can do the same thing. For example, a lawyer from a Denver firm described a two-month trial that two of the firm's attorneys had handled in Los Angeles. "With an Internet connection and some printers, they were able to work as

[54] Ogunleye. G., Automation of Federal university libraries in Nigeria: a state of the art. African Journal of library and information Science, Vol. 8, No (1)(1997),pp 71-79, p.73

[55] Odunewu I. & Olashore B., The Internet and Information Retrieval: Current Trend in Library and Information Science. Essay in Honour of Late O.K. Odusanya. B.I.B Press Nig. Ltd.(2009).pp 230-237, p.232

[56] Jide. O., (2013)Op.cit. p.3

[57] Thomas J. O., THE AUTOMATED LAW FIRM: A COMPELETE GUIDE TO SOFTWARE AND SYSTEM (4th ed. 2000). This book is supplemented annually and was first published in 1994, cited by Richard L. Marcus, in THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? In Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4 (2008) p 7

[58] Law Office Computing, for e.g., began publication in 1990. The magazine's mission statement champion its "specific, legal technology focus" Law Office Computing-Mission Statement, http://www.lawofficecomputing com/EDC/about_us/mission_statement.php(last visited Apr.11,2008). cited, by Richard l. M., (2008)

[59]Gurmark. S., An Empirical Study of the Use of IT by Small and Large Legal Firms in the UK. 2002(1) J. Info. L. & TECH, http:/www2.warwick.ac.uk/fac/soc/law/elj/jilt/2002_1/singh("The large companies-being led by the top 30 law firms_are advanced in their understandingof the IT issues and are therefore in position to compete strategically." **Cited in** Richard L. M., (2008) in THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? in Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4

if they were in Denver," he rhapsodized; "I think it drove home the point that IT eliminated the physical boundaries for the attorneys."[60]

Certainly change has occurred rapidly on this front. Ten years ago, it was big news that the *San Francisco* firm *Orrick, Herrington & Sutcliffe* had a website and that the site was getting 5000 hits a week.[61] By 2006, an estimated four million people per month used the Internet to search for law-related services, and the number was expected to hit seven million per month by the end of 2007 Compared to 1996, law firms "are now armed with full arsenals of on-the-road productivity devices." "Firms are thinking not just about remote access, but about universal access as well. It is not enough that attorneys are able to communicate around the clock; they now want complete and fully secure office capabilities." dramatic use of technology is possible. Five years ago, *Orrick* announced that it would move much of its back-office support staff from the *San Francisco Bay Area* to *Charleston, West Virginia,* and it claims that since then, it has saved $20 million from this move. *Baker & McKenzie* has relocated much of its back-office operation to *Manila*. The *London*-based law firm *Clifford Chance* has relocated significant parts of its back-office operations to *India*. Beyond that, legal outsourcing to India and other places is expected to expand enormously. Law firms are even using online video clips to attract associates[62].

Collectively, these developments have substantially changed the way lawyers and other law firm employees go about their jobs. These developments mirror those in the corporate workplace, where there is growing concern about the impact of a existence for employees. But it is not clear that all, or even most, law firms are embracing the full potential of computerized communication. Some law firms resist off shoring because they emphasize the significance of having an "integrated service." Email, in particular, has produced headaches for law firms. In part, this is due to problems of confidentiality. Beyond confidentiality, the problem of volume has become increasingly acute. However, these are not problems specific to corporate law firms.[63] Consider the Ninth Circuit's comments in a 2005 case about whether responses to an online questionnaire from a law firm seeking information from "potential class "new" about the case is attorneys trolling for clients on the internet and obtaining there the kind of detailed information from large numbers of people that used to be provided only when a potential client physically came into the lawyer's office. Two things had to happen to bring this about: the change in law in the 1970s that permitted attorney advertising, and the sufficiently widespread use of the internet, within the past five or ten years, that makes internet advertising worthwhile[64].

At present it is not possible to predict the overall effect of these changes. Part of the pressure for law firms to change comes from clients, who increasingly insist

[60] Stephen M. T., Techsetters: Rothgerber,Johnson & Lyons, LAW OFF. COMPUTINF, Dec./Jan. (2006),pp 10,11. **Cited by** Richard d L. Marcus, in THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? in Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4 (2008) p 7.

[61] This Week in Recorder History: Stories from the Week of July9-15, RECORDER(S.F), July 9, 2007, at p 4. Cited by Richard. L. M.,THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? in Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4 (2008) p 7.

[62] Karen D., Law Firms Go a Bit Hollywood to Recruit the YouTube Generation, N.Y. Times, Sept. 28, 2007, at C6, Sheri Qualters, Law Firms Post Online Video Clips to Attract Associates, RECORDER(S.F.). Jan 23, 2007, at 3 cited by Richard d L. Marcus, in THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? in Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4 (2008) p 7.

[63] Ibid

[64] Richard L. Marcus. THE IMPACT OF COMPUTERS ON THE LEGAL PROFESSION: EVOLUTION OR REVOLUTION? in Northwestern University School of law, Northwestern University Law Review. Vol. 102, No.4 (2008) p 7

that law firms adopt certain types of IT arrangements, including e-billing and corporate client access to the law firm's information systems. Although this sort of outcome might have been foreseeable, other effects might be surprising. For example, the adoption of e-billing not only permits corporate clients to keep tabs on overstaffing and determine whether partners are doing work more appropriate for associates, but it also permits them to police firms' adherence to other client objectives. One is diversity; at least some clients use e-billing data to monitor the diversity of the attorneys assigned to work on their matters. Already, then, computers have had some effects in law firm activities that might not have been foreseen; predicting further effects is perilous[65].

Computers and Court Operations

In the U.S, Europe, Asia and some advanced African countries like South Africa, 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 filing has become effectively universal in U.S federal courts. 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 courts over the internet. by way of contrast, a 2006 report about filing in New York state courts said during the previous year, some 86,000 cases were eligible for electronic filing in that system, but only a small fraction were actually e-filed. In some California state courts, however, online filing is becoming mandatory. in the same vein, there is some indication that private judging systems are beginning to embrace electronic filing as well[66].

From the lawyer's perspective, the immediate impact of the 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 5pm deadline for hard-copy filing in the clerk's office is automatically extended till midnight." As a law firm support staff employee explained, the impact of e-filing meant a major shift in the responsibilities of law support staff: "Because all attorneys push any deadline, we accepted the fact that our office hours had to be increased by seven hours." But (as with brinkmanship on court deadlines) relying too heavily on electronic filing can produce disastrous results. In one case, a lawyer argued that because her last minute filing was foiled by a slow electronic connection, it should be treated as having been accomplished at the time she logged on to file a bankruptcy petition rather than when the filing was actually completed considerably later. The court rejected the argument, and as a result, the filing was too late to stop the foreclosure sale of the client's home.[67]

From court's perspectives, e-filing offers the promise of saving space on storage – not an insignificant consideration in a time of shrinking court budget. 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

[65]Ibid

[66]Ibid

[67] Caher, supra note 49("Problems occurring in counsel's office, such as proof internet connection or a hardware problem will not excuse a debtor's untimely filing…It is incumbent on the debtor to show that the clerk's office was subject to a computer system failure " (quoting in re Stands, 328 B.R. 614, 619(Bankr. N.D.N.Y. 2005) Cited by Richard L. Marcus (2007) op.cit.7

Hurricane *Katrina,* e-filing enabled lawyers to get up and running more rapidly than otherwise would have been the case.[68]

The advent of e-filing has also meant the material filed in the court can be accessed online by the public. Historically; American court files have always been technically open to 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 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 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[69].

This enhanced access has not been a uniform blessing. As one observer put it in 2000, "the potential ability to access and download electronic court filings via the internet would make finding and disseminating sensitive personal information about litigants about as easy as flipping on a light switch and more convenient and less costly than physical retrieval at the court house." In Cincinnati, for example, the decision by the clerk of the court house to put the county court records online produced a very vigorous reaction[70].

CONCLUSION:

The role of ICT in guidance can be seen in three ways; as a *tool*, as an *alternative*, as an *agent* of change . Policy makers have often tended to view it in the first two guises; either as a supplement to existing service or a potential substitute for such services. But the wider emergence of websites and help lines as form of technically mediated service delivery means that the potential of ICT as an agent of change paralleling the transformations in many other service sectors is now far greater than before. It is this that now provides the main policy challenge.

The relevance of ICT adoption and use in the various law firms for effective efficient and speedy administration of justice in Lagos State, Nigeria need not to be over emphasized. The practice of legal profession in Nigeria is a challenging one and quick access to and retrieval of appropriate legal information by judges, lawyers, researchers etc in the emerging digital age require effective adoption and use of ICT in the law firms.

The findings of the study have revealed that, Lagos state law firms are currently making progress towards participating in the global adoption and use of ICT.

The adoption and use of ICTs in education have a positive impact of teaching, learning, and research. ICT can affect the delivery of education and enable wider access to the same. In addition, it will increase flexibility so that learners can access the education regardless of time and geographical barriers. It can influence the way

[68] See DeBenedictis, supra note 44 (reporting that the Orange County Superior Court saves $150,000 a year in storage space by requiring electronic filing for its complex litigation court). Cited by Richard L. Marcus (2007) op.cit. p.7

[69] Compare the following description of German access practices. Case records in civil cases in Germany are not open to the public either before or after judgement, only with the consent of the parties involved or by order of the chief judge of the court up on showing good reason. Cited by Richard L. Marcus (2007

[70]Carolyn Elefant, How Much Privacy Do Litigants Deserve in E- Filing ? , Legal Times, Oct. 9th 2000, at p. 29, see also Andy Seldeon. The Hidden Hazards of E-Filing: Sophisticated Searches of Public Records Can Spur Identity Fraud, LAW TECH. NEWS, Aug. 2002, at p.16. Cited by Richard L. Marcus (2007). Op. ct.

students are taught and how they learn. It would provide the rich the rich environment and motivation for teaching learning process which seems to have a profound impact on the learning in education by offering new possibilities for learners and teachers. These possibilities can have an impact on student performance and an impact on student performance and achievement. Similarly wider availability of best practices and best course material in education which can be shared by means of ICT can foster better teaching and improved academic achievement of students. The overall literature suggests that successful ICT integration in education.

Reforming legal higher education involves organization aspects as well as on learning and instruction. We focus on the learning and instruction part of education and also make a restriction for institutionalized learning and instruction, that is, learning and instruction that takes place within the context of a school or university. Instruction should aim at enhancing effective and efficient learning, that is acquisition of knowledge and skills in the field or subject area at stake. Instruction involves presentation of learning materials and presentation of support in processing these materials. Technology can be used in instruction to support both the presentation and the processing of learning materials. The HYPATIA research program describes a methodology for principled and structured design of electronic materials for learning the law effectively and efficiently.

Certainly the computer has produced significant changes in the legal profession. We are told that changes in IT will change the law itself.

Due to the computer, law office operations have changed remarkably. And discovery seems significantly transformed. But many of the most significant possible effects on legal practice seem not to have occurred. Computer programs are not yet supplanting lawyers in the provision of legal advice to clients. Law schools have not gone online and abandoned their bricks and mortar operation. Trials have not gone online, with jurors deliberating by chat room (*where jury system exist in the legal system*).

Yet there is a substantial argument that the transformation of commercial law firm aided but not caused by the computer looms as something far closer to a revolutionary force in legal practice, although it is a somewhat drawn out revolution.

The uniqueness of this study is that it has served to provide a link between skills training in legal education and its practical application in the actual context of legal practice in Nigeria. Findings from the study have indicated the need for legal education to facilitate the development of job specific skills for the workplace and to encourage specialization in legal practice.

RECOMMANDATION

The paper recommends

i. Effective human capacity building and user education programme for sustainable use of ICT in Black Africa and developing countries law firms.
ii. Heads of law firms should increase their level of funding towards enhanced participation in the ICT integration in Nigeria.
iii. The Nigeria government should provide enabling environment such as efficient and stable power supply in addition to relevant ICT policies to include lower tariff on all ICT, equipments accessories to boots ICT adoption and use in Nigeria.

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