Prospects and Challenges of Information and Communication Technology in Intellectual Property Management in Nigeria

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ABSTRACT

The article sought to find out the prospects and challenges of using Information and Communication Technology in the management of intellectual property. It explains the meaning office as well as x-rays the various concepts of intellectual property and the challenges the use of information and communication technology in intellectual property management offers. The article concludes by stating that government should liaise with intellectual property owners and other relevant bodies for the reformation of the intellectual property laws and policies. Strategies were made on how to ameliorate these challenges.

Keywords: Intellectual Property, ICT (Information Communication Technology)

Introduction

Information Communication and Technology (ICT) is often used as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information (Wikipedia 2014). The term ICT is also used to refer to the convergence of audio-visual and telephone networks through a single cabling or link system. It is generally accepted that ICT application affects the nature of an intellectual property management, invention, quality and lifespan of creative work. The prospect of ICT has become more crucial as IT changes intellectual property works from the manual method to electronic method of operation. According to Ojedokun (2006) ICT capabilities are used to store, manipulate, access, analyze and communicate intellectual property data more quickly than was possible in pre-computer times. It has particularly captured the attention of many publishers and intellectual property creators and owners. It is important to state that publishers, intellectual property owners and creators are supposed to be information intense like other information professionals and managers.

The use of ICT in intellectual property management enables the processing of intellectual property to be fast, cheap, easily accessible and useful. Intellectual property management leads to the creation of national wealth and can also lead to the establishment of various industries, which will create employment (Zulu 2008). It also provides the creators the benefit of economic rewards, while the public receives the benefit of literature, music and other creative works that might not otherwise be created or disseminated.

Ogiegbaen and Iyamu (2005), as cited in Enugu and Etudor (2007) described ICT as all the uses of digital technology that already exist to help individuals, creators, businesses and organizations use information and create information. Also Ikediashi and Obiekea (2012) described ICT as the integration of telecommunications, computers, middleware as well as necessary software, storage and audiovisual system, which enable users to create, access, store, transmit and manipulate information. ICT comprises all the uses of digital technology that already exist and is used by individuals, creators and intellectual property owners who create their inventions, literally works; musical work; design and symbols for the society to use. ICT technologies are products and processes used for handling intellectual property work.

Zulu (2008) defines intellectual property (IP) as creations of the mind, such as inventions; literally and symbols, names and images used in commerce (WIPO 2014). It further stated that intellectual property is protected in law by for example patents, copyright and trademarks which enable people to earn recognition or financial benefit from what they invent or create.

According to Cornell University Law School (2014) intellectual property is any product of the human intellect that the law protects from unauthorized use by others. It further reported that the ownership of intellectual property inherently creates a limited monopoly in the protected property. Intellectual property is divided into four namely, patent, copyright, trademark and trade secrets. Wikipedia (2014) also opined that intellectual property (IP) rights are legally

recognized exclusive rights to creations of the mind. It further stated that under intellectual property laws, owners are granted certain exclusive rights to a variety of intangible assets such as musical, and artistic works; discoveries and inventions: word phrase symbols and design.

Prospects of ICT in Intellectual Property Management

- ICT have certain characteristics and advantages that make them excellent tools for processing intellectual property data into information. They include reduction of error in data and information, increase in the accuracy of work, reduction of tedious job and giving fast access to information.

- With the help of ICT the creator or one person at a computer workstation does the origination and production of information materials instead of different groups of actors coming together to produce the information for months using the manual process.

- ICT as a tool enhancing creativity effectiveness in intellectual property creation and creativity depends on how the methods and materials involved are able to stimulate. Motivate and reinforce the intellectual property owner's natural creative attitude to work. When an intellectual property owner exposes his work to tools that involve old and new experience that has to do with one sense organ at a time, the work speeds up easily. It enhances creativity and divergent thinking.

- ICT makes intellectual property works distribution/dissemination easier, with wider coverage, and language is no barrier

- It eases long distances in intellectual property business transactions and dealings. It makes the transaction speedy and timely.

- It ensures that intellectual property works, owners/creators receive wide exposure.

- New ICTs have the potential of getting vast amount of intellectual property works information to the society in a more timely and comprehensive manner.

- ICT is used to intellectual property to ensure multiple and remote access to the same document to the different people located in different places (Zulu 2008).

- ICT is very essential to the intellectual property works (owners) because the use of ICT activate the sense of sight, hearing and creative ability, (Etanga and Etudor 2007).

- Information exchange by electronic means has revitalized the role of accessing intellectual property works in providing literally materials, music and invention assistance to the society.

Challenges of ICT in Intellectual Property Management

- Computer literacy or lack of awareness on the importance of ICT in intellectual property work is perceived as contributing negatively to the intellectual property right. Zulu (2008) observed that some of the intellectual property owners still use manual operations to get their work done.

High Cost of ICT Facilities

- The ICT facilities are very expensive that not all the owners of IP will be able to purchase it. The cost of computer and it accessories are high. Even the cost of associated peripherals like printers, scanners, monitors, modem, extra drives are beyond the reach of average citizens (Efangs and Etudor 2007).

- **Lack of technical manpower/trained personnel.** There are no-well trained personnel to take care of the repairs and servicing of the ICT facilities. Experts are lacking in the field. (Zulu, 2008).

- **Epileptic power supply:** This factor makes it difficult for the intellectual property owners to use the facilities when needed.

- **Limitation of ICT facilities and Understanding ICT facilities:** The ICT facilities use by the intellectual property owners are all imported from outside the country. Most of them are outdated or scrap facilities ICT facilities like software and hardware as well as telecommunication facilities are all purchased outside the country. The available facilities like bandwidth tele-density are a times low and inaccessible (Zulu, 2008).

- **Problem of effective cyber laws and policy:** There is strong ICT law and policies to protect the materials on the internet. Government appreciated and approved ICT facilities for intellectual property owners to use without enough policies and cyber laws to protect their works and right. Iro (2000) as cited in Etanga and Etudor (2007) posited that faulty policies did hasten in society's structural and functional failure

Conclusions

There is no doubt that ICT is rapidly transforming the content of intellectual property worldwide. Most IP works are being converted into CD-ROMs database or accessed directly on line". Zulu (2008) stated that the challenges posed by ICTs such as underdeveloped ICT facilities, inadequate facilities, problems of effective cyber laws and policies required the reformation of the intellect property right (IPR) management regimes in tune with the changed technological environment. He further posited that the policy legal, administrative and regulatory framework that was designed for the management of IPR in the Pre-ICT era has been rendered inadequate in the digital era. A stitch in time saves nine, the earlier the better, for delay is like melting ice (Uzoigwe 2004). Intellectual property owners and

government must rise up to the challenges for the reformation of the intellectual property laws and policies.

Recommendations:

For Nigeria, the importance of stepping up efforts to ensure that all intellectual property owners have adequate ICT facilities to enhance access by all intellectual property creators or owners and societies is very important. The government needs to do more to introduce ICT into the whole society as soon as possible. For the use of ICT by intellectual property creators or owners to be effective in Nigeria reliable software, hand wares and computers should be readily available to all sections of the society.

On problems of cyber laws and policies, the government of Nigeria should largely contribute to reduce the problems that accrue to this by enacting relevant and enabling laws and policies. Intellectual property owners on their own could also help to alleviate the problems by having policies and laws that integrate ICTs to improve the IP owners ICT usage. It will also help and make the IP owners to be computer literate through learning the basic skills needed in their lives of talent.

References

Cornell University Law School (2014). *Intellectual Property.* www.law.cornell.edu/wex/inteual Retrieved 16th April, 2013.

Echezona, R. I. (2007). The Role of Libraries in Information Dissemination for Conflict Resolution, Peace, Promotion and Reconciliation. *Africa Journal of Library and Information Science* 17 (2): 143151.

Etanga, S. I. & Etudor E. E. (2007) Prospects and Problems of Information and Communication. Technology in Distance Education in Nigeria Library Link-^4 *Journal of Library and Information Science,* 5 (2): 23-30.

Ikediashi and Obiekea, I. (2012). Technology and Creative Behavior among Nigeria School Children; *National Journal of Educational Studies.,* 1 (1): 17-25.

Mutual, S. M. (2007) ICT Integration in Botswana Secondary Schools. Digital Divide Factors and Implications for Information Literacy. *African Journal of Library and Information Science,* 17(2): 125-134.

Ogiegbaen, S. & Iyamu, E. O. (2005). ICT in Nigerian Schools Problems and Prospects. *Educational technology and Society,* 8(1): 104-112.

Ugwegbulam, C. and Obi, K.(2012) Use of ICT in the evaluation of some Senior Secondary School Mathematics. *National Journal of Educational Studies* 1(1).

Uzoigwe, C. U. (2004) Information Technology in Libraries: The Nigerian Case. A paper Presented at the Annual Conference/General Meeting of the NLA Enugu State Chapter, held at the State Central Library, Enugu. 20 - 22, November.

Wikipedia (2014) Intellectual Property Retrieved from en.wikipedia.org/wiki/.

WIPO (2014). *What is Intellectual Property*? www.wipo.ht/about-IP\en\

Zulu, Saul F. C (2008) Intellectual Property Right in the Digital Age; Information and Knowledge Management in the Digital Age: Concepts, Technologies and African perspectives, Ibadan: Third World Information Services Limited.