INTELLECTUAL PROPERTY RIGHTS, ETHICS AND VALUES IN NIGERIA: A CRITICAL INVESTIGATION

Dr. Felix Chukwuma, Aguboshim¹ and Obiokafor, Ifeyinwa Nkemdilim²

¹Principal Lecturer, Department of Computer Science, Federal Polytechnic, Oko, Nigeria. Email: felixaguboshim@gmail.com
²Lecturer, Department of Computer Science, Anambra State Polytechnic, Mgbakwu, Nigeria. Email: ifykems@gmail.com

Abstract

Intellectual property (IP) right protection is of significant importance globally. However, Intellectual property rights (IPRs) protection in Nigeria has become ineffective partly because IP laws are not harmonized locally or internationally due to varied cultural backgrounds, and partly because there are no uniformity in the enforcement of IPRs, ethics and values to protect against IP theft, especially in Nigeria where IP theft or piracy is prevalent. This study highlights the challenges created by poor IP laws, ethics and values in Nigeria. It also unravels the challenges that militate against IPRs of creators and inventors in Nigeria. In this study, the authors explored a narrative review of prior research that focused on the theoretical underpinnings of vast works of literature that revealed significant information on challenges of IPRs that negatively affect the promotion of creative innovation by inventors, and strategies to close these gaps. The authors identified the benefits of IPRs protection and the challenges contributing to poor IPRs enforcement in Nigeria. Results show that IPRs, ethics and values are crippled by out-dated, non-sustainable or virtually non-existent policies, and anti-piracy system. Findings from this study may encourage proper awareness of IPRs, implications of IP theft, and effective enforcement of IPRs of creators and inventors in Nigeria.

Key words: Ethics; Intellectual Property; IP theft; Innovation; Rights; Values

Introduction

Intellectual property rights (IPRs) in research innovations can be defined as the right to assign the research results to its originator, not limited to time and space, and non-transferable (Sargolzaei&Fateme, 2017). Intellectual property is usually divided into two branches, namely: (i) "industrial property"; and (ii) copyright and the rights which neighbour upon copyright. Piquero (2005) simple defines intellectual Property (IP) as the creative ideas or innovations that result from intellectual activity and creation. In research novelties, two points of view can be deliberated for copyrights:(a) as incentives for creative production, and (b) as a product for the consumer, who seeks to use it for free or at a negligible cost While advanced countries are struggling to secure the first view, the evolving countries attempt to reach a second view to have access to the copyright easier and at a lower cost. According to the International Telecommunication Union (ITU), IPRs are legal rights designed to protect creations and inventions resulting from intellectual activity in education, industrial, scientific, literary, or artistic fields (ITU, 2017). Intellectual property rights usually give the originator or the creator exclusive use of their creation for a specified period of time.

In relation to IPR, information security has been defined from a several perspectives (Narain, Gupta, & Ojha, 2014), and with a holistic method that enlarges beyond the technical security (Perez, Branch, &Kuofie, 2014), to comprise the environment, the technology, ethics and values, and the people (Stallings & Brown, 2012; Taylor & Robinson, 2015). Noticeable amount of empirical researches, point to the fact that humans appear to be the most significant links to the information security of any organisation, and consistently constitute the highest risk to the information integrity and information security measures of any organisation (Stallings & Brown, 2012). This is because of the differences in behaviour, ethics, and values regarding the intent to perform security measures or administrative errors (Komatsu, Takagi, & Takemura, 2013). Information security is the procedure by which an establishment protects and secures systems, media, and facilities, policies, ethics, and values that process and maintain information. Key elements of any security program must address the confidentiality, integrity, and availability of the organisation resources: hardware, software, data, and communication lines and networks in relation to the organisational ethics and major ethical principles (Stallings & Brown, 2012).

Information security within the IPR has never been more essential than it is these days: not only in how it can protect and encourage research innovations by granting successful originators temporary monopoly power over their innovations data or systems, but how it can enhance secure information exchange between trusted partners. Universities and public research institutions through research innovations are the factories of the knowledge, economy growth, and job creation (Blakeney&Mengistie, 2011). This is because Innovation drives economic growth and job creation. The International Property Rights Index adopts a substantial correlation between the protection of private property rights and a nation's innovations and economic growth. It has also been observed that there is a remarkable causal relationship between Intellectual Property (IP), technology transfer and development (Neba, 2013).Therefore, protection of Intellectual Property (IP), through patents, trademarks and copyrights, good ethics and values, is critical to ensuring pursuit of innovation, economic growth, and technology transfer and job creation. Intellectual property rights are therefore the changing face of research innovations. As a crucial factor of national innovation systems, IPR systems are expected to play a catalytic role in motivating innovation and successful technology transfer from research and higher education institutions. However, the building capacity for IP policy formulation (in general) which includes building institutional (university/research institute) dimensions, as well capacity for IP policy formulation among government officials are farfetched. This is because technological capabilities are now more widely diffused and production more globalized, and concerns relating to inadequate enforcement of IPRs, in particular patents and trademarks, have increased.

As a result, information security and research innovations, especially in tertiary education in Nigeria, are tremendously challenged due to poor IP policies, ethics and values, inadequate enforcement of IPRs, inadequate awareness about copyright piracy and its ills. Researchers and innovators, especially in education, now find it difficult, if not impossible, to attain their ultimate goals or create added value through their work, knowledge, and ideas. Despite this, IPRs encourage researchers to engage in innovative activities by protecting their knowledge and open access to knowledge and technologies contributing to sustainable development. This is why World Intellectual Property Organization (WIPO) states that IP systems foster environments in which creativity and innovation can flourish(WIPO, 2017), this flourishing of creativity and innovation is hinged of good IP policies, ethics and values. The general idea is that IPR will give incentive to researchers and investors to devote time, effort, and money to work on innovations and then share their ideas with society. In return, creators get a monopoly or some other form of protection for their idea for a limited time span. The purpose is to maximize economic growth while balancing the social costs to a manageable level, and at the same time build a pool of knowledge and ideas that other researchers and scientist can make use of to take greater and faster strides in innovation.

Problem Statement

Appropriate IP policies, ethics, and value systems to monitor or empower IPRs and for assigning research results to its creator, within any time and space, are poorly implemented by the IP owners and Law enforcement agents in Nigeria. The general IT problem visible in this study, is the poor implementation and monitoring of IPRs, ethics, and values for information security, and research innovations in Nigeria. These are due to lack of monitoring ICT systems and establishment of ethical practices and policies. However, the specific IT problem is that some managers and stakeholders of organisations lack strategies, policies, laws, guidelines, and value systems for

monitoring and implementation of IPRs, ethics, and values for information security, and research innovations in Nigeria.

Literature Review

Intellectual Property (IP) according to Blakeney (2005) can be defined as those creations of the mind in relation to which the state or country confers upon individuals a statutory monopoly for a prescribed term to prevent their unauthorized exploitation. Intellectual property is usually divided into two branches: industrial property and copyright and the rights which neighbour upon copyright. Piquero (2005) simple defines Intellectual Property (IP) as the creative ideas or innovations that result from intellectual activity and creation. Nigeria is ranked among countries in Africa where Intellectual Property (IP) theft or piracy is prevalent. It was 82% in 2007, 83% in 2008, 83% in 2009, 82% in 2010 and 82% in 2011 (Business Software Alliance, 2011). According to the report, IP theft or piracy also blossoms in other African countries, including Zimbabwe (92%), Libya (90%), Algeria (84%), Cameroon (83%), Egypt (61%), Ivory Coast (81%), Kenya (78%), Mauritius (57%), Morocco (66%), Senegal (78%), Tunisia (74%), Zambia (82%); while South Africa (35%) had the least piracy rate (BSA, 2011). Theft or Piracy in this context include among others, IP distributed without authority, packaged to resemble the original as closely as possible; or copied or distributed without authority (Adedej, 2011a). According to World Intellectual Property Organization (WIPO), intellectual property included the rights relating to: literary, artistic and scientific works; performances of performing artists, and phonograms, broadcasts; inventions in all fields of human endeavour; scientific discoveries; industrial designs; trademarks, service marks, and commercial names and designations; protection against unfair competition; and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Several researchers have indicated possible reasons for IP theft. Some researchers claimed that the main obstacles to getting rid of IP theft or counterfeiting and piracy are not to be sought in the substantive law per see, rather in the legal means to recover the rights and penalties available (or not available) to stop and deter counterfeiting and piracy (Afolayan, 2020; Olubiyi, Adaji, & Adetula, 2020). Other maintained that IP thefts are due to the ineffectiveness of enforcement IP ethics, rights and value systems related toa lack of human resources, funding and practical experience in intellectual property enforcement of relevant officials, including the judiciary (Deep & Saradindu, 2017; Osunde, 2017), insufficient knowledge on the side of right holders and the general public, concerning their rights and remedies(Afolayan, 2020); and systemic problems resulting from insufficient national and international coordination, including a lack of transparency (Olubiyi, et al., 2020).Besides, the Trade-Related Aspects of Intellectual Property Rights

(TRIPS) agreement suggested some best practices related to national cooperation and coordination, including international cooperation, public awareness and cooperation, right holder cooperation, judicial enforcement, administrative enforcement, border control, criminal procedures, and right to information to help curtail the problem (Blakeney, 2005). Interestingly, the last best practice, "right to information" was pointed out as having good impact against counterfeiting and piracy because it allows the rights holder to identify the chain of distribution (Blakeney, 2005). This notwithstanding, other researchers are of the opinion that with the rise of new digital technologies and file-sharing networks, it has definitely become difficult, if not impossible for organisations or individuals to protect their intellectual property (IP). According to the FBI (2013), this is made even harder by the fact there is no uniformity in the enforcement of laws that are designed to protect against IP theft, especially in developing countries. Also, there are usually large organised crime syndicates behind the IP theft which makes it harder to curb.

There are a few techniques and technologies that are recommended to help protect IP data. However, no technique or method is completely foolproof (Bode, 2013). Hackers have proven their ability to eventually circumvent many safeguards. New protections are always being considered to better protect data. Digital data can usually be encrypted and rendered unbreakable without the appropriate key to unlock. Intrusion detection and prevention systems are also employed to prevent unauthorised access to organizations or individuals' IP networks. Appropriate access controls can be used to trace activity on a network in the event of a data breach. According to Stanley (2011), this is helpful when it comes to tracking down the culprit in any prosecution efforts especially when more security measure are built into smartphones often used to hold sensitive data. Despite the innovative plans by software developers and device manufacturers to better protect their IP, IP theft has been at a high rate and might continue to be an issue for years to come (Stanley, 2011). On the other hand, the entertainment industry (i.e. movie and music) has requested that they be allowed by law to use "ransomware" to protect their IP from illegal download and distribution by pirates. While Adedej (2011b), suggested the inclusion of malware within their files that would lock down the computer of any unauthorized person illegally downloading movies or music files, Adewopo (2008), gave an approval, adding that the only way to unlock the computer of such culprit would be to contact law enforcement for the password thus admitting that the culprit committed the illegal act and thus subjecting same to any penalties or fines. Furthermore, the entertainment industry also wants permission to be able to retrieve their IP from a hacker's network by any means necessary including destroying all information within a hacker's network as well as the network itself (Bode, 2013). However, other researchers are of the opinion

that this may be going too far because it might arise to cases where other innocent people's computers may be set up as bots that are part of the hackers network (Tade&Akinleye, 2012; Taylor, & Robinson, 2015). According to Tade and Akinleye (2012), it would not be fair if their computers are destroyed as a result of someone else's misdeeds.

In other research findings, Chaudhry, Zimmerman, Peters, and Cordell (2009) claimed that public awareness and cooperation with IP ethics and policies can improve the effectiveness of anti-counterfeiting tactics to preserve intellectual property rights. The authors argued that in order to deter counterfeit and piracy, a program can be implemented which will specifically manages the registration of all trademarks and patents in key markets, establishes a company-based enforcement team, monitors the growth of fakes through a central information repository, develops a multi-pronged action plan, and uses investigation to fights piracy in collaboration with local law enforcement (Chaudhry et al., 2009).For anti-piracy tactics to be effective, Appleyard (2015) in other hand suggested that some aspects should be acknowledged as lessons learned from the music industry such as changing consumer expectations, the negative impact of legal recourse, the pervasiveness of new technology, the de facto stalemate of piracy, and the importance of networks. Overall, technologies alone, will never be sufficient to curtail counterfeit and piracy(Carolan, 2016). The problem is already perceived as global phenomenon and therefore should be addressed as such. It will require a global cooperation and harmonization of laws and treaties to be able to find a sustainable solution (Coronado, 2013). As the first lesson learned from Appleyard (2015) highlighted it, consumer expectation are paramount especially with regard to technologies related techniques used to enforced copyrights laws. Properly put by Appleyard (2015), consumers do not have rights, they have expectations. Therefore these consumer expectations should be married in and effective manner with IPRs, ethics and values for sustainable enforcement of IPRs of creators and inventors in Nigeria.

Enablers of IPRs

Two major enablers of IPRs are; sustainable information and communication technology (ICT), and research database repository. ICT can be simply defined as the physical devices and infrastructures used for the collection, storage, processing, and disseminating of all forms and formats of data and information, and the required platforms or means for the transmission and disseminating of same (Oladimeji & Foltyn, 2018; Olise, 2010). Sustainable ICT is what defines sustainable research database repository (Oladimeji & Foltyn, 2018), and occupies a significant key position in leveraging sustainable IPRs (Olise, 2010). A significant relationship therefore exists between sustainable ICT and research database repository (Bennett, 2017).On the other hand, appropriate databases repositories are required to enforce

IPRs. Where sustainable ICT, with appropriate databases required to empower sustainable research database repository are not in place, sustainable IPRs will be farfetched. This is why effective IPRs is next to zero in Nigeria because ICT technological innovations, as enablers of sustainable research database repository and IP ethics, values, and policies are not respectfully adopted. The value placed on any technological innovation is measured by its adoption, embedded ethics, values, acceptance, and sustainability (Hoffman, Singh, & Prakash, 2015). Sustainable ICT therefore, plays an important role in sustainable research database repository and IPRs implementation (Oladimeji & Foltyn, 2018). This is because ICT is a major enabler of sustainable research database repository and IPRs (Toyo & Ejedafiru, 2016).

Basically, ICTs are driven by appropriate ethics, values and policies. There is so much technological failure around us because most technological innovations in Nigeria ignore ethics, values, and policies required to drive ICT and IPRs. For instance Traffic lights in Nigeria are not properly driven or implemented on sound ethics, values and policies. Hence they are not adequately or properly put to use. How can one run an automated traffic system without proper documentation of vehicles and of owners? Rather police and other touts are used to check traffic light offenders, when the same traffic light is embedded with a monitoring camera. What a waste of resources. The same is applicable to other establishments such as NRSC, Police, and Ministry of Justice etc. Our ICTs are not used because appropriate ethics, values and policies to drive them are not in place. *It therefore takes appropriate implementation of ethics, values, and policies to adopt or use technology, and to sustain it* (Ogutu, Okello, &Otieno, 2014).

However, corruption resulting from absence of relevant ethics, values, and policies appears to be the major hindrance to ICT required driving IPRs in Nigeria. Technology does not have attitude or designed to exhibit attitudinal behaviour. Computers and ICT innovations are not designed to have attitudes butare driven byethics, values, policies, programs and protocol. When ICT innovations are subjected and corrupted with human emotions, behaviour and thoughts, they become useless, unimpactful and their outputs nonsensical. This is because they operate without the required ethics, values and policies. We have witnessed abuse of ethics, values and policies where some so-called honorable men in the society break the traffic light and use the exit door for an entrance. This abuse is also visible in their use of personal vehicles with Government registration numbers even when they have left the office. For instance, some police man, soldiers and others, do not even need to renew their vehicle particulars because the so-called ICT in place has been subjected to attitude (without a functional ethics, values, and policies). This is a big slap on the face of technology and the major hindrances of maximal impact of ICT in Nigeria. However, ICT can be made to drive IPRs for sustainable information security and research innovations in Nigeria if appropriate ethics, values, and policies are perfectly put in place to expose corruption and drive ICT that enables IPRs.

Methodology

In this study, we adopted a narrative review methodology, where analysis and synthesis of different and related research findings are required to draw holistic interpretations or conclusions based on the reviewers' own experience, existing theories and models (Hill & Burrows, 2017). A narrative study approach is best suited for a descriptive or explanatory study (Bell, 2017), where results from such narrative studies are of qualitative rather than quantitative in nature (Scarnato, 2017). Narrative studies exhibit significant strengths in that they have ability to provide platforms for comprehension of diverse and numerous understanding around scholarly research findings, and the opportunity to make reflective practice and acknowledgement of researchers' views and knowledge (Scarnato, 2017).

Findings

Adopting appropriate and effective ethics, values, and policies to drive ICTs, that in turn, drives IPRs, are good innovations for creating patent and copyright monopolies, as well as other forms of intellectual property rights. Findings have shown that a country's optimal IPRs depend on its level of technological development, adoption and sustainability in anon-monotonic way (Stewart & Lacey, 2012). This points to the importance of appropriate ethics, values, and policies in driving technological innovations for sustainable IPRs in Nigeria. Chen and Puttitanun (2005) find out that lower IPRs encourage imitations or theft of foreign technologies, which reduces the market power of foreign innovations, and benefits domestic consumers. On the other hand, a developing country may also need to increase IPRs in order to encourage innovations by domestic consumers (Chen&Puttitanun, 2005). It was noted that innovation in a developing country increases with the protection of IPRs. Findings confirmed that relevant ICT ethics, values, and policies are empirical evidences of both the positive impact of IPRs on innovations in developing countries and the presence of a U-shaped relationship between IPRs and information security and research innovations for economic development.

Conclusion and Recommendations

A country's optimal IPRs depend on its level of technological development and sustainability. The level of technological development and sustainability however depend on sustainable ICT ethics, values and policies. IPRs impact on research innovations highly or lowly depending on the level of protective IPRs. As a developing country, Nigerian may have to increase IPRs in order to encourage innovations by domestic consumers. Nigeria should also develop an indigenous law that will address basic ICT ethics, values and policies on IPRs that will in turn positively address its economy and social cultural environment. The tight restrictions that digital content owners place on their products coupled with poor implementation of ICT ethics, values and policies have encouraged even more pirating and plagiarism. Reid (2012) explains that as the industry played hardball with violators, people became more adapt at illegally distributing IP content, and are morally comfortable with them in the absence of any legal alternative. In essence, the legal prosecution backfired and started more illicit distribution of protected material. Therefore, the most effective method for copyright holders to use in protecting their property is by offering it at competitive rates through distributors like Amazon, Apple, national and international journal bodies or other online services where probably, more effective ICT ethics, values, and policies are practiced.

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