

# From Guttenberg To Zuckerberg Publishing And Copyright Law In The Internet Era: Problems And Prospects

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*Abstract: The history and development of communication, printing and publishing has no doubt come a long way. These developments have grown from one stage to the other - the earliest stage, characterised by the early form of printing found in caves, to the age of the Egyptian papyrus and hieroglyphics. The above stages interestingly were followed by the novel Guttenberg's printed type technology (era) impelled by industrial revolution in Europe – this was apparently a major paradigm shift in the publishing and printing industry. Few years away from “Guttenberg's” age, arrived another major shift in the printing and publishing industry, this time precipitated by the revolutionary power of computer technology (the Zuckerberg's era). As would be expected, such areas like the copyright law, which remains an essential part of printing and publishing business admittedly, witnessed corresponding, but peculiar changes. The paper therefore takes a conceptual and critical look at the different eras of the publishing and printing industry (the old and the new), and carefully explores not only the avalanches of transformations witnessed therein; but the challenges and prospects accompanying the divides. It consequently argues that in other to protect the right of authors and publishers, especially in the “borderless” internet publishing era, sensitive areas, should, as a matter of urgency be looked into - this is with the view to addressing not only the problems associated with publishing and the new technology but also accompanying challenges witnessed by the copyright law as this will encourage not only authors, but creativity in general and by so doing protect inventive efforts of individuals. The author anchors his argument on Social Disorganizations theory.*

**Keywords: Guterberg, Zuckerberg, Copyright, Internet, Problems, Prospect.**

## I. INTRODUCTION

Njaka (2003, p. 1) citing Entwistle (1990), observes, “The story of the modern world is basically the story of communication – the art of sharing ideas.” According to this scholar, “The first steps in communication were the development of language, writing and printing – the multiplication of written words.” These steps primarily set the stage for what followed, as man's efforts to bring in another dimension of development in the communication world increased. Printing was the principal vehicle for the conveyance of ideas before the advent of electronic media. It to a very large extent engendered the growth of publishing which penetrated and made mark in almost every sphere of human endeavour. One therefore cannot imagine today's civilization without printing and publishing technology. Interestingly, Johannes Gutenberg's introduction of the movable type in the early 14<sup>th</sup> century brought even more renaissance in printing and publishing business – this was before the arrival of other medium of communication like: the radio, cinema and television. From this period of Guttenberg's technology, which provided the platform on which printing and publishing flourished, to the period of “Mark Zuckerberg” (the internet era), which brought in plethora of changes in printing and publishing business, a wide number of areas has witnessed a large number of radical revolutions, one of such areas is the “copyright” law; this revolution is both in the international and local climes. Against the above submissions, scholars alike have raised a number of questions on issues in the issue of intellectual property of the

creators and publishing. Some of such questions bother on the following: “What are the emerging problems and or challenges that has affected the issue of copyright law in the present period of internet revolution? Is there still hope for publishers and printers and authors of creative works who the copyright law is supposed to protect in an era where online publishing has thrown the gate that protects intellectual works open? What about the right of the authors? To what extent are these rights presently maintained? What have really changed and been changed in an era that internet technology seems to have pervaded the world of publishing? The above challenges form the bulk of issues that this paper intends to address.

## A. CONCEPTUAL CLARIFICATION AND ANALYSIS

### a. FROM “GUTTENBERG” TO “ZUCKERBERG”: TRANSITION FROM THE OLD TO THE NEW

The business of printing has been around for quite a number of years. Daniel (2012, p.22) argues that “people have been publishing information for thousands of years” Although it might be a bit difficult to possibly illustrate every innovation in printing and publishing technology since the pre-historic man painted on the cave walls, there is, however, no doubt that there are recorded pieces of information on the history of printing and publishing – this history, Ajibola (2000, p.40) notes: “runs from the pre-historic period to the present day technological era” Also commenting on the evolution of printing technology, Daniel (2012, p.122) argues that “the first printed materials were seen around 30, 00 BC. These materials were seen in cave walls; which became the first medium where ancient humans drew rhinoceroses in *Chauvet* cave, France.” The drawings in the cave represented the earliest known drawings in the history of man. By 4009 B.C, Egyptians were known to have introduced the first “*hieroglyphics*” inscribed on pottery jars and deposited in tombs (Okunna, 2012, p.203). It was also noted that these markers identified the dead (Britannica 2000). In 3300 BC, the *cuneiform*, a combination of writing systems sprouted in Mesopotamia region – representing an era in printing technology. The system used pictographs and documents which were written on clay tablets; but with a *stylus* (Ndolo, 2010). The pictograph stage was followed by the *Rosetta* stone, which was cut in three languages, the *hieroglyphics*, *Egyptian demotic* and *Greek*. Translators were able to use the Greek inscription to decipher the hieroglyphics in the 18th century; more than a millennium after, these writings were out of use. A major development occurred in the history of printing when in 105 AD - the Chinese invented paper. It was this invention that engendered such advancement like the *Diamond sutra* in 868 AD – the Sutra is a scroll of Buddhist text created through the woodblock printing. These materials were found in China in the 1900’s and remain one of the earliest books found with an exact date (Ndolo, 2012). In 1456, during the period of industrial revolution in Europe, another remarkable development was recorded in the history of printing publishing - Johannes Guttenberg, a German, introduced the movable type. This was one technology that helped immensely in the printing

bible (Ndolo, 2010). Interestingly, the publication of the bible came along with other innovations. More so, Guttenberg’s discovery gradually made books, which were costly before its arrival less expensive to produce. It is on record that early printed books were created before 1501 in Europe; these books were known as *incunables* or *incunabula* (Eisenstein 1980). Furthermore, the entrance of the movable type enabled other forms of publishing besides books. Harper (2000, p.134) notes that “in 1690, the first English - American newspaper appeared, this was followed by the first general interest magazine in 1731 and Thomas Pain’s anonymously printed *Common Sense Newspaper* that sold about 1000 copies in three months.

These above developments were followed by other popular publications like: *The Penny Press*, *National Geographic Readers Digest*, *The New Yorkers*, *Playboy*, *Rolling Stone* etc.

However, over the years, the landscape gradually began to witness change with the introduction of the computer in the 1970’s (Harnett, 2010). In the year 1993, a landmark invention was made by the IBM, when they introduced the first Smartphone, while Research in Motion released the Blackberry in 2002 (Harper, 2004). Subsequently, the introduction of the mobile phone technology engendered the emergence of such social media sites like: Facebook, Twitter, Whatsapp etc. At this point, bloggers rose to prominence and printing technology started witnessing new trends. Ukwueze (2009, p.23) argues that “more than just letters to the editor, the contemporary social media in its borderless nature gave voices to the voiceless” In 2007, Apple released the iPhone and Google announced the Android technology, while Amazon debuts the kindle. Print-on-demand at this point gains traction, allowing books to be printed online. According to Publishers weekly, (2010), “with the new technology, self - published titles rose to 764000, more than twice what it was in the traditional era.” These technological advancements no doubt changed the publishing landscape. Commenting on the transition from the old to the new era of publishing technology, Daniel (2014, p.123) comments:

Today, publishing and printing is very different from what the process used in Guttenberg’s workshop. By modern standards, Guttenberg’s printing process may seem slow and tedious, compositors then put types together by hand and a skilled compositor could assemble only 2000 characters or letters in an hour. But today, a computer can arrange the same number or more in about two seconds. In the present era, more words are being printed, every second than were printed every year during the 15<sup>th</sup> and 16<sup>th</sup> century. Interestingly as technology evolved, inventors adapted to the new technologies to revolutionize printing.

While these changes were visible in the international climes, back home in Nigeria, the changes were as well visible. Referring the transformations as “the Guttenberg and Zuckerberg” shifts, Njaka (2003, p.3) reports that:

From 1846, when the first printing press was established in Nigeria by Hope Waddell of the United Presbyterian Church of the Scotland and 1859 when the first newspaper *Iwe Irohin Fun Awon Ara Egba Ati Yoruba* was born, to the

present internet era, the printing technology has no doubt, gone through a period of changes.

## II. COPYRIGHT LAW: AN OLD LAW IN A NEW ERA

It might be instructive to note that an inextricable link exists between printing, publishing and copyright law. In other to explain this relationship lucidly, Njaka (2003, p. 27) reveals that “printing and publishing depends fundamentally on copyright, to this end, publishers will always do everything possible to protect the copyright of the author, illustrator or other publishers” The publisher also, will always be vigilant for cases of unlicensed reproduction. Irrespective of the efforts of individuals and copyright agencies to protect artistic works and author’s right, there have always been the challenges of copyright infringement, even before the borderless internet era. What the above submission presupposes is that in the internet era, where there seems to be little or no gate-keeping, the challenges of copyright seemingly would be much. Illegal copyright according to Uvioghara (1991, p. 78) covers the following areas:

- ✓ Photocopy and tape recording often by educational institution.
- ✓ Plagiarism, which is the instance of taking and using someone else’s ideas , words etc as if they were one’s own
- ✓ Wholesale reproduction and sale of entire volume of books by pirate companies the world over.

At this point, it might be essential to understand what copyright is all about, as it will help situate the study in the appropriate contextual and theoretical perspective. What is copyright then?

Copyright is the right granted to an individual against an unauthorized copying or reproduction of intellectual creation or work. It is the guarantee to the author that he has the legal right to prevent the use of his intellectual or creative material. In other words, it is the legal method of securing publishing rights to printed matters (Njaka, 2003). This right interestingly is extended to the status of Anne of 1709; the first statue on copyright in England which was specifically aimed at arresting the growing practice whereby printers, booksellers and other persons frequently take the liberty of printing, reprinting and publishing or causing to be printed, reprinted or published other people’s creative materials, books and other writings without the consent of the authors or proprietors of such books and writings (Uvioghara 1991, p.1)

The copyright legislation, according to Ike (2009, p. 23) “began with series of bilateral agreement between countries anxious to encourage international dissemination of the works of the minds of their nationals, while at the same time protecting the author’s rights.” Later, in 1886, an international convention treaty on Copyright was adopted. This treaty was particularly for protection of literary and artistic works of member States. The ten countries which adopted and signed the treaty signed themselves into a union in what is referred today as “Berne Union”. It was resolved at the convention to protect the rights of authors of literary and artistic works within the member countries. The conveners also set up an office or arm called the World Intellectual Property

Organisation (WIPO), which began to oversee the issues of intellectual property. Copyright may apply to a wide range of creative, intellectual or artistic forms or works, specifics usually vary by jurisdiction, but can include: poems, theses, fictional character and other literary works. It can also include motion pictures, choreography, musical compositions, sound recordings, paintings, drawings, sculptural works, photographs, computer software, radio and television broadcast and graphic and industrial designs (Stim, 2017). Copyright does not cover ideas or information themselves, but only the form or manner in which they are expressed (Stokes, 2001, p.49). Furthermore, it is important that a work must meet minimal standards of originality in other to qualify for copyright and this right expires after a period of time. It is crucial to note that “copyright law recognizes the right of an author based on whether the work is actually an original creation, rather than based on whether it is unique.” Two authors can own a particular creative work, however, this is strictly based on the evidence that the works were coincidental and neither was copied from the other (Astra, 2014). Copyright is observed in all countries where the Berne Convention standards apply. Copyright is also automatic and needs not to be obtained through official registration with any government office. Once an idea has been reduced to a tangible form, for example by securing it in a fixed medium (such as drawing, book, photograph or a computer file) the copyright holder is entitled to enforce his or her exclusive rights (Berne Convention). Nevertheless, while registration isn’t needed to exercise copyright, in jurisdiction where the law provides for registration, it serves as a *prima facie evidence* of valid copyright and enables the copy right holder to seek statutory damages and attorney’s fees (Anderson, 2013). In the USA, registering after infringement only enables one to receive actual damages and lost profits. Nevertheless, over the years, the terms of the convention have continued to go through amendments to accommodate the modern scientific and technological developments (Nwosu & Odugwu, 2016).

### A. NIGERIA AND THE COPYRIGHT LAW

In Nigeria the operative law is the “Copyright Decree of 1988.” As the name implies, the decree was promulgated as decree 47 of December 1988 by the military government in power at that time (Njaka, 2003, p.28). The decree, Unobuagha (2009, p; 33) reports, “lists six types of works which shall be eligible to Copyright to include: literary works, musical works, artistic works, cinematograph films, sound recordings and broadcast materials.” To provide the basis for monitoring the movement of copyright works, printers, producers and manufacturers of works in which copyrights subsist are required to keep a register of all works produced by supplying information on the name, the author and the title of the work, the year of production and the quantity of work produced. Any person who fails to keep the records or makes false entry in the register shall be liable to a fine not exceeding ten thousand naira (N10, 000). Section 14 (1) of the same copyright decree in Nigeria lists some actions which will constitute infringement on copyright in Nigeria to include:

- ✓ Doing or causing any other persons to do an act which is controlled by copyright
- ✓ Importing into Nigeria, otherwise than for private or domestic use any article in respects of which copyright is infringed.
- ✓ Exhibiting in public any article in respect of which copyright is infringed.
- ✓ Distributing by way of trade, offering for sale or hire any article in respect of which copyright is infringed
- ✓ Making or having in possession, plates, master tapes, machine, equipment or contrivances used in makings infringing copies of a work. Owners of printing, photocopying or dubbing equipment who allows their equipment to be used in infringing copies of works are guilty of copyright infringement.
- ✓ Performing or causing to perform for the purpose of trade or business any work in which copyright subsists.

There are penalties involved for breaching the copyright law. According to Ike (1991, p.1)

The decree distinguishes the person responsible for producing the infringing copies by having them produced locally or by importing them or by having the equipment used in producing them. And the person, who sells, hires out offers for sale, distributes infringing copies or who has them in his private or domestic use. For the producer, if found guilty, the penalty; a fine not exceeding N1000 for every infringing copy or a term of imprisonment not exceeding 5 years, for the hawkers, if found guilty, the penalty is N100 for each infringing copy or a jail term not exceeding two years or both.

Sadly, Nwogu (2014, p.15) laments that:

In Nigeria, a law like copyright does not impose maximum fine as penalty would imply that the offender would be paying a substantial amount of money where he deals in large quantities of the infringing work, where however, the offender deals in few quantities such as a rental club that has just two copies of an infringing work or a production plant that has just one machine or plate, the amount of fine would sure, be too small to be a deterrent.

Evidently, if copyright law has this type of challenge in the traditional era, there apparently would be more challenges that the author would face in an era where the internet has created platforms that has made infringement on the authors right much more easier (Nwokeocha, 2012). Against the above argument that Olabiyi (2014, p.30) insists that "in other to curb this challenge, imposing stricter terms of imprisonment would be a better penalty to deter infringers." He notes, for instance that in *NCC v. Ali A, Bala*, the accused was sentenced to pay only N100 (one hundred naira) fine or face only three months imprisonment. Similarly, in *NCC v. Nwali Sunday*, the accused was sentenced to pay only N300 (three hundred naira fine)

Also, the copyright does not prohibit all copying or replication, in the United States, the fair use doctrine, codified by the Copyright Act of 1976, 17 (107), permits some copying without the permission of the copyright holder or payment to the same. Although the status does not clearly define fair use, but gives four non-exclusive factors to consider in fair use analysis. These factors include: (1.) the purpose and character of one's use (2) the nature of copyright work (3) what amount and proportion of whole work was taken and (4) the effect of

the use upon the potential market for or value of the copyrighted work (Nwokeocha, 2012). Regrettably, Olabiyi (2014, p.123) argues that "this doctrine has been abused, in Nigeria and in the new technology driven era of publishing" Okiyi (2005, p.66) throws more light on the above argument as he puts it this way: "What is fair in one technological dispensation might not be what is fair in another" In other words, that which worked in the "Guttenberg" era might really not work in the "Zuckerberg" dispensation. Against the above view, there apparently arises an urgent need to strike a balance. This leads us to the issue of publishing, the Copyright law and the internet. Here the co-penetration that exists between the variables is critically explored.

## B. PUBLISHING AND COPYRIGHT LAW IN THE INTERNET (DIGITAL ERA) ERA: CRITICAL REVIEW OF THE PRESENT

The internet no doubt, came with wide range of innovations in different areas of man's endeavour, publishing companies around the world, as well had a share of the challenge. Xiaoping (2015, p.1) comments on the above this way:

In the 21<sup>st</sup> century, the publishing and printing industry rushed into the new era of internet; among the challenges of the industry is the arrival of the new digital technology. However, irrespective of these challenges it is certain that it is the digital technology that will drive the future development of the publishing technology.

It is clear therefore, from the foregoing that irrespective of the fact that digitalization has brought quite a number of challenges to the publishing industry, it at the same time, set a platform that essentially would precipitate development in the field. Looking closely at the above challenges in relation to the copyright law, particularly in the internet era, Swett & Crawford (2010, p.1) "the borderless nature of the internet encourages gross violation of copyright laws. This challenge somewhat subjects owners of creative works to violation of their rights and at the end of the day discourages the quest for creativity and invention in the publishing industries"

## C. INFRINGEMENT OF COPYRIGHT ON THE CYBER

The advent of internet almost certainly precipitated awful infringement of copyright materials (Swett & Crawford 2010, p.1). This challenge to some extent led to what Lawrence (2015, p.123) refers to as the "Copy and paste functionality" The practice Swett et al reports, "makes it simple to lift digitized information – whether text, photographs, video or music from a website or other digital source and copy it in full to another location." Aside from this problem, the internet also raises a lot of legal issues which has continued engender scholarly discourses in recent time: Who is responsible for copyrighted materials published online, The Internet Service Providers or subscribers? Do copyright laws apply to e-mails? Is a message board or blog host responsible for copyrighted contents posted by contributors? Irrespective of the fact that some of these issues has been addressed lately by copyright laws, Swett & Crawford (2015) argue that there are yet a large number of unsettled issues that arise in the area of copyright

infringement and publishing as technology advances. It might also be informative to note that in the recent time, social network websites such as MySpace and the video sharing network site like: YouTube have been targeted in a very large copyright infringement suits. The universal Music Group filed a copyright infringement suit against MySpace for allowing users to upload and download songs and music videos. UMG sought damages of \$150, per song video pasted, claiming that millions of songs and videos on MySpace pages may infringe its copyright (Swatt & Ccrawford, 2015), these challenges have become common in the music industry, particularly in the internet era. Furthermore "Copyright is all about protecting original works of authorship that are fixed in tangible form or mediums of expression which can be perceived, reproduced or otherwise communicated either directly or with the aid of a machine or device" By including the words "with the aid of a machine or device" it means that the author also intends to include the copyright in the digital environment, but at the present time, artistic and literary works are being fixed in electronic devices with the aid of machines (Ronan, Martin & Lionel 2010). For example, such things like software programmes, poems, articles and journals. Burgunder (2007) notes clearly "that there are principles that guide the copyright protection" These principles which apply in the in the traditional publishing industry presumably holds in the digital environment. What this means is that the same way copyright is protected in the in traditional environment, is the way it is treated in the cyber space. However, the extent that these principles hold on digital world has remained a point of discourse. Do the principles really work and hold on digital environment? If they do, why the large online breach of authors copyrights? Ahmad (2009, p.33) emphasises the above challenge this way:

As a medium the internet allows a person to access a large amount of information and copy the same information in the same space as it is displayed" This practice is a problem, as the rights of authors get violated through the medium of internet. Since its inception, copyright law has continued to somewhat respond to technological changes, although these technologies, like many other innovations are both promising and potentially harmful to various parties interested in the use of and exploitation of works of authorship; from books and music to films and web pages

The following technological activities to some extent pose challenges to the publishing and copyright law in the internet era: file swapping, downloading, uploading, browsing, copying and pasting, mirroring etc (Burgunder, 2007).

#### *a. FILE SWAPPING*

This is also referred to as peer-to-peer-file-sharing; it means the transmission of digital files from one computer to another by the use of internet. This practice is sometimes regarded as the network of personal computers each of which acts as both client and server, so that each can file and e-mail directly with every other computer on the network (Cark & Peters 2006; Sahrma, 2011). In some countries, the most applicable file swapping websites are: Mega upload, Media fire, File stube, Pirate bay, Hot foil, Torrents, Mp3 Skull etc. Sadly, it is through these sites that literary and artistic works

of people and organizations are shared (www.freedictionary.com). The question at this point is to what extent are these challenges being addressed?

#### *b. DOWNLOADING*

This simply means receiving information from another computer by the use of modem. This practice is mainly affecting the music and publishing industry. There have been many claims for copyright infringements through illegal downloading of works of authors in so many parts of the world (Magalla, 2015). One question that quickly comes to mind here is: "as these works are indiscriminately downloaded, do the owners, if truth be told, give permission for such downloads? Sadly, Magadalla (2015, p.30) reports, that; "Most times, it can be either the owner of websites or the subscribers of the sites that make such works available to the public without the permission of the owner – in an era where the copyright of individuals are totally abused on the internet without a corresponding legal action to compensate the owners, the original essence of copyright which is to encourage people to remain creative would thus be gradually eroded. This type of challenge to large extent has changed and redefined the art of printing and publishing in the internet era, completely affecting the issue of copyright law (Magadalla, 2015)

#### *c. UPLOADING*

In the aspect of downloading we found out that a person receives information, this is quite different from uploading, whereby a person instead of receiving information sends it from file from another computer employing the use of modem. Many of the web 2.0 blog owners upload so many things in their computer. It is transmission in the other direction, from one, usually smaller computer to another computer. From an internet user's point of view, uploading is simply sending a file to computer that is set up to receive it (Magadalla 2015, p.30). Sadly, it is through these facilities that copyright infringements are carried out on the author or organization in the digital age.

#### *d. BLOGS*

The blog is another way that that the digital or internet era has distorted the publishing industry. It has brought about changes in the way copyright issues are handled. Sometimes, the materials infringed upon can be pictures, articles books and other things which might obtain intellectual property rights such as copyright. For instance commenting on the situation in Tanzania, Magadalla (2015, p.30) reports that

Many academics have joined many sites which also deal with academic works, for example academic.edu. These sites provide opportunities for these academics to upload their works. However, it came to be noticed that some of the papers are not well presented in terms of acknowledging the source of information.

The above situation Nwaka (2009, p. 33) quickly notes "renders copyright protection useless" Similar thing also apply to pictures music and videos online. This explains the reason

publishing organizations today are careful with who they publish in the digital era to avoid the challenges of being sued for copyright infringement (Nelson, 2015),

*e. MIRRORING*

This is the act of improving services for users by replicating a web site across various servers all over the world. This practice makes available the critical information to users at all times (Vermut, 1997). A mirror is an exact copy of a data set. In the internet, a mirror site is most commonly used to provide multiple sources of the same information. When information is obtained from the site anywhere in the world through these mirrored sites, then copyright infringement could be available. Good examples of mirroring sites are: Wikileaks, Sourceforge and Torrents. In 2010, Torrents was accused of copyright infringement and received a threat that it will be closed down (Sharma, 2011).

*f. COPYING AND PASTING*

This is the most form of copyright infringement through the digital medium. Here the person who violates the copyright of the author copies and pastes on another environment. Pasting in this instance means to insert a text, graphics or a data into a document. This also affects such work of arts like music, songs etc. When those two terms, copying and pasting are combined, it simply means to reproduce and insert a particular work of art or creative work without the permission of the owner. This practice became worse in the internet era what we conceptually refer to as the "Zuckerberg era" when people started having limitless access to publishing sites. This unfortunately has remained a big challenge to the academic world; it has much more in the digital era increased the problem of plagiarism, especially among the students and lecturers alike. Providing a clear example, Magadalla (2015, p.33 notes:

**D. PUBLISHING AND COPYRIGHT IN THE INTERNET ERA: PROBLEMS, THE PROSPECTS**

It is incontestable that with the growth of the internet, issues of intellectual property protection have remained a subject for discourse. Daniel (2008, p.20) notes, in support of the above view that "the increased use of the internet would mean a greater challenge to the publishing industry and the copyright law" This position is demonstrated in a number of cases in point which lends credence to the above submission. The copyright law seems to be the most potent instrument presently available in tackling the challenges of infringement of the originators right on the internet (James, 1999). The arrival of digitalization and its attendant challenges has affected this area; however, countries have correspondingly carried out different amendments to meet with the identified challenges. With these amendments, it appears the challenges, including the problems of copyright in the digital technology period would be contained with as developments gradually unfold. One of the basic copyright issues in the internet is determining the border between private use and public use (James, 1999). Reproduction for public use can only be done

with the right holder's permission, whereas a fair dealing for the purpose of private use, research, criticism or review is allowed by the law. This distinction, James (1999, p.5) contends "gets eroded with the ability of an individual to transmit over the internet, any copyright work to myriads of users simultaneously from the privacy of his or her home and the users being able to download simultaneously a perfect copy of material transmitted in their homes" Fading away of this thin line that divide the public and private territories, James (1999) strongly argues, "calls for new set of norms in the printing and copyright industry"

Furthermore, the Internet has on the other hand changed some of the traditional practices. James (2000, p.18) notes that

With the advent of the industrial revolution and the age of mass production publishers of books and music have made their entry. There became such a presence that writers could not think of a world without them, the Internet however, provided a medium which removed the middle man between a writer and his reader.

The above view clearly suggests that irrespective of the acknowledged challenges that are prevalent in the publishing industry and the copyright law in the internet era, there nevertheless, seems to be prospects. This submission is evidenced in the fact that today, the author can put his or her work on the Internet and the reader can access it directly" concurring with the above view, Nelson (2009, p.331) notes that "if printing press had given birth to publishing industry, the Internet has empowered every writer to be his/her publisher. This above seems to have sounded a warning bell, if not provide death knell for publishing industry." This, hence, raises a question whether making a work available on the internet is 'publication' or not –another issue for discourse. Whether communication over the Internet is 'communication to the public' is still an unsettled issue.

In addition, distribution right constitutes another problem, like in most copyright laws around the world; the distribution right gets exhausted with the first sale (James, 1999). But in the recent time, a student can freely sell a second-hand textbook or a library can circulate among its members, books it purchased. In the Internet, this right of reproduction presents certain fundamental problems. This arises out of the basic nature of Internet transmission. Reproduction takes place at every stage of transmission. Temporary copying (known as caching) is an essential part of the transmission process through Internet without which messages cannot travel through the networks and reach their destinations. Even when a user only wants to browse through, temporary copying takes place on the user's computer. Coverage of the temporary reproductions was a hotly debated issue in the World Intellectual Property Organization (WIPO) Diplomatic Conference of December 1996 and still remained inconclusive. Case laws are yet to clarify whether the reproductions taking place in the Internet communications come under the purview of the right of reproduction given by the law and until that is done, opinions will vary on temporary reproduction and permanent reproduction and on the legality of the temporary reproduction. It will be interesting to see whether the courts will introduce the concept of economic relevance of a reproduction to bring it within the purview of the right of reproduction granted by the Copyright Act. The

above has remained one of the fundamental challenges witnessed in the publishing industry with the introduction of digital technology.

Similarly, another issue from the angle of copyright enforcement in the digital era is that of "liability." For one, there is the issue of liability for acts that take place in the course of transmission of a legal copy of a work. This issue, as already mentioned, depends a lot on the interpretation that the judiciary takes of various rights given by the law. In case the judiciary takes the view that reproduction, etc., that occur in transit are violation of a copyright, then questions will arise as to "fixation of liability." Who is to be held responsible? The party who dispatches the work or the party who receives it or the Internet service provider? (James 2009) The answer will not be easy to find out. The point in this issue is whether an Internet service provider is to be held liable for the copyright infringement made by a subscriber even though he is not aware of the subscriber's action.

Based on the foregoing, it becomes clear that the array of challenges the Internet pose for Intellectual property right protection makes one wonder whether copyright laws would be sufficient to meet the challenge at hand –in the Zuckerberg era. While there abound evidence that the advent of technology has somewhat changed a lot in the publishing industry and the right of the owners, Soldatenko (2013, p.1) looks at the scenario from a different perspective. He argues that "irrespective of the challenges, posed by the digital era in publishing and copyright industry, there somewhat, seems to be some gains that the technological change heralds for the society: Hear her argument:

In the recent past, it was incredibly complicated for authors to navigate book publishing, printing houses, registration fees and other obstacles. Now, all it takes to publish is just typing text in a publishing program. The new wave of Indian authors has raised plenty of complaints, of course. Some people believe that now every single 'hack writer' can become an author. However, it's obvious that these thoughts stem from a fear of losing personal status, an inability to accept innovations, and other fears that stem from human defense mechanisms. There's no intellectual property sphere will undergo a similar revolution. There's just no question that technology is worlds ahead from legislation. It's just up to society to acknowledge this reality and move forward. We have to provide new opportunities to content creators to distribute their work. If we don't, we're permitting artificial barriers to content creation, the production of intellectual property rights, and distribution independently. Creators have a right to select their terms of sale and use, and the value of their product.

Furthermore, research has shown presently that there is continuous effort to match these challenges with solutions (WIPO, 2000). What this presupposes is that there still appears to be hope in the future. This hope is to some extent anchored on the fact that the following efforts are ongoing to address the issue:

✓ The United States has passed the Digital Millennium Copyright Act, which prohibits the production or sales of devices designed to evade technological measures for limiting reproduction of, and access to copyright works.

This is a development in the right direction and Africans should follow soothe and not left out in such progress.

- ✓ Furthermore, in March of 2000, the European Council adopted a Directive paving the way for the ratification of the WIPO Copyright Treaty. The European Council legislation confidently states that the implementation of the WIPO agreement "will help to ensure a balanced level of protection for works and other subject matter, while allowing the public access to material available via networks."
- ✓ Again the Australian government has also passed legislative changes to strengthen its copyright laws to account for new technological advances. Introduced in 1999 and in force as of March 4, 2001, the Copyright Amendment (Digital Agenda) Act 2007 strengthens Australian copyright law by outlawing devices and software that would bypass encryption and other security technology (Australian Copyright Council, 2000). This is a great effort
- ✓ Interestingly, there also seems to be ongoing ratifications on digital agenda amendments and copyright amendments to align the copyright issues with the prevailing technological advancement.
- ✓ The above are ongoing efforts put in by major organizations and policy makers to address the challenge of publishing and copyright laws in the Internet era – it evidently shows that there are prospects for the future.

#### E. THEORETICAL FRAMEWORK

The Social Disorganisation Theory is considered apt in creating a theoretical framework for this study. Samuelson (2010) argues that technological innovations have long been recognized by sociologists as catalysts for transgressive or deviant behavior (Pfohl, 1994). For example in the 1920s Nels Anderson, Ernest Burgess, Ruth Shonle Cavan, Edward Franklin Frazier, Everett Hughes, Roderick D. McKenzie, George Herbert Mead, Robert E. Park, Walter C. Reckless, Edwin Sutherland, W. I. Thomas, who made up the Chicago School speculated that rapid technological change damages web of societal normative controls, which results in normative dissensus and social disorganization. Over a short time, these theorists argued that the natural by product of social disorganization is deviance – people break the rules, over a long term, deviance is re-classified as normative "normative competition" which in their view, ultimately pushes the society towards re-organisation around new norms (Pfohl, 1994). In the contest where the works of authors are massively replicated without permission using technological apparatuses, Social Disorganization Theory might suggest that the significant advances in Information Technology, particularly with respect to computer networks infrastructure developments, the creation of standards and protocols, and improvement in digitization at scale, disrupts the functionality credibility and relevance of existing copyright rules governing how intellectual and creative works are created, shared and disseminated. The possibility inherent in digitization at scale fundamentally alters the context of institutional sense-making and decision making around copyright issues.

### III. CONCLUSION AND RECOMMENDATIONS

From the foregoing, it is quite clear that introduction of digital technology has brought wide range of changes in different areas and fields of endeavour, certainly, one of the areas that has witnessed the changes is the publishing industry. As a result of this, the copyright law, which is one of the intellectual property rights that aims at ensuring sufficient protection for the author or content creators also has witnessed quite number of challenges, but changes. Irrespective of these problems though, there seems to be a plethora of adaptations and revolutionary efforts brought to bear by WIPO and other different bodies, in different countries; this is with the aim of correcting, and as it were, situating the present era of publishing and the author's right to enjoy his/her work within the present digital framework. Nonetheless, other adaptations will also be needed to ensure that the important public purposes embodied in copyright law, such as providing public access to a wide range of information, are fulfilled.

In the light of the above, it is the position of this paper that certain important and sensitive areas are looked into, with the view of addressing the problem of copyright in the internet era. This is so important because a better understanding is needed of the public's perception and behavior concerning copyright law as it concerns the digital period. To this end, it becomes quite germane to embark on more research and data collection in order to develop a better understanding of what type of digital copying people think are permissible, what they regard as infringements and what they regard as falling into murky ill-defined areas.

In addition, legal, economic and public policies research should be undertaken to help determine the extent to which fair use and other exceptions and limitations should apply in the digital environment and or demonstrate the need for additional protections, any additional actions that may be needed to adapt the law, educate the masses about it, or enforce the law. In addition, right holders might consider using technical protection services to help manage their digital intellectual property, but should not forget the fact that there is a cost involved. Again, it may be sensible for right holders to consider withholdings high-value, long-lived commercial products from digital networks such as the Internet, while protected by the copyright because the risk and consequences of someone capturing the bits for redistribution are just enormous. It might also be important to note that some digital information may be distributed more securely using the physical substrates rather than computer networks.

Most importantly, more research works should be embarked on this, especially in African countries, where the penetration of the internet is still minimal. Such researches should focus on the present stage of copyright law in the Internet environment and what needs to be done to upgrade it. Nigeria should not be an exception in these research efforts

Finally the Nigerian Copyright Commission (NCC), the official body that is responsible for protecting the author's creative right should brace up; they should look deeply into the present level of challenges faced by intellectual property owners in the digital era and work towards coming with better policies of protecting the right owners.

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