



Information Technology and Print Digitization: Implications on Copyright Laws

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ABSTRACT

This paper looks at copyright and digitization of print literary materials for academic purposes. It was revealed that despite the exceptions to copyrights law, interpreting fair use for reproduced print materials in digitalised form is very difficult because of the inherent nature of digitalised materials which is self reproducible and distributable with no limitation. The only solution found for academic institutions was digitalising materials already in public domain or grey resources of institutions. It was also the opinion that digitalising government documents would be easier compared to materials whose copyright are privately owned. In conclusion, it was recommended that institutions should digitalise their grey print resources and materials in the public domain, seek permission from government establishment and get licence to digitalise print resources owed by private persons.

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Introduction

The influence of Information Technology is felt in all spheres of life, especially in education, as it has brought in new paradigm of learning (Hussain & Safdar, 2008). There are now students on distance education who use and access electronic contents of their institutional library. They also communicate with their lecturers and with each other, while their course contents are shared online. These categories of learners get involved in COP (Communities of Practice) where information from people in the same profession with them is shared (Wenger-Trayner & Etinne, 2015). Thus information becomes marketable resource while organisations that hold such information have their public image enhanced, thereby putting them on higher competitive edge above their rivals (Porter & Millar, 2016; Massy & Zemsky, 2016).

According to Massy and Zemsky, competitive intelligence is practised among academic institutions as a base for academic programs, because of the invaluable nature of information. The information resource held by them is a marketable tool, accessible for purpose of competition. The higher their competitive edge, the better their chances of attractions. Thus information becomes the marketing tool for image making and invaluable learning. As a result, institutions that are able to market and make themselves visible through the services they provide are able to enhance learning, gain accreditation by relevant bodies and attract students. Therefore the dictates of Ranganathan's laws (Bhatt, 2011) on books are realised through the application of technology.

Ranganathan's law (Bhatt, 2011) dictates that: books are for use, that every reader has his/her own book, that every book has its reader, that the time of the reader must be saved and that the library is a growing organism. These dictates are brought to reality in the light of features attached to digitalised books. The features of visibility on internet environment, easy access, transferability and

transformability. As a result, books meant for different categories of users can be accessed with no stress just by touching or clicking keyboards. Furthermore, users' time is saved through self service carried out by users while libraries and information centres become growing organism by consistently changing with the flow of technology (Ogba, 2016). However this becomes a difficult thing if books are not visible and accessible. This visibility becomes possible only through digitalisation or digitization.

It is one thing for a material to be digitized and another for it to be accessible. The hallmark of library services and Ranganathan's law is the possibility of access given to every user of material. Therefore digitized materials are to be made accessible in order to fit in well with Ranganathan's laws. Some libraries fill in the space for digitised contents by subscribing to databases, thus they pay and get digital contents online. However, such contents do not represent the complete resources available in a library, thereby denying their virtual users their right of access to contents which are on print. Whether this right could be enforced based on right to information becomes an issue to be researched on. However, many libraries are uncomfortable in digitizing their print contents because of foreseen negative odds attached to it (Standford, 2015). Therefore they find it easy subscribing to databases and savour the feeling that they apply information technology in learning.

Information technology is defined as the use of all forms of computers, storage, and networking and other physical devices and infrastructures for the purpose of creating, processing, storing, securing, exchanging and sharing all forms of electronic data. To digitize contents using information technology therefore means applying information technology into conversion of data from print to digital, in order to make it accessible through computers (Garth, 2014; WordReference.com, 2006).

It is however one thing to have the requisite technology for digitization and another to have the needed licence and permission to digitize information materials.

It is in the light of this, that this paper explores the copyright issues involved in digitizing academic print contents in order to see if there is solution for academic libraries. Facets looked at in this study are: copyright provisions, licences, and permissions that affect digitization of print resources, issues involved in digitizing print resources without copyright protection and exceptions to permissions to digitize print materials. In conclusion, recommendations are provided.

Copy right provisions, licences, and permissions that affect digitization of print resources

World Intellectual Property Organisation [WIPO] (2016) defines copyright as a legal right given to authors or creators of original works for their literary and artistic works. Copyright is defined for the purpose of this work as the protection given legally to authors of original works who have their original works fixed in an expressive form in which they could be copied, by preventing their creation from being used in any form, for any purpose without permission and licensing from the original author (Jackson State University, 2016; ITDC, 2005). Copyright covers artistic, music and literary works. This study would focus only on literary works of scholarship.

Literary works are intellectual works expressed in written words, numbers or symbols in any medium; but not audio visuals (Business Dictionary.com, 2016). In this era of digital publication, differentiation has been made between print literary works and digital works. This paper focuses on print literature and its reproduction into digital literature. Dictionary.com (2016) defines print resources as production of a text, picture or any other information through the use of ink on paper, or plates and blocks or putting any sort of image on paper. Reference.com (2016) defines it as paper publication made public in the form of textbook, journals, newspaper or any other. These definitions differentiate print publication from manuscript. But this is not to say that print publication does not include manuscript, it is only a matter of typology and terminology.

According to Leland and Moore (2007), Porter and Millar (2016), Massy and Zemsky (2016), Otubelu (2011) and Pena-Bandalaria (2007), digitized contents of institution showcase their strengths in scholarship and their ability to support academic programs. While libraries would want to digitise their contents, studies have shown that only few libraries in developed countries have digitized their library holdings. In Nigeria, libraries pay subscription fee for databases in order to have electronic contents (Oyewusi & Oyeboade, 2009; Urhiewhu, Okeke & Nwafor, 2015). In Urhiewhu, Okeke and Nwafor, the electronic contents available in academic libraries investigated are: electronic (e) conference papers, e—newsletters, e-reference materials, e-projects, e-journals, e-seminar papers, e-books, e-dissertations and subscribed databases. These are mainly grey resources of institutions and subscribed databases. Thus institutions are selective in digitizing contents. This could be because of copyright issues involved in digitizing print materials.

Digitization is the act of using information technology in converting data from print to digital, in order to make it accessible through the use of computers (Garth, 2014; WordReference.com, 2006).

Conversion itself is transformation; it is changing a thing from one form to another (Merriam- Webster dictionary, 2016). Therefore, it is reproductive and derivational; thus an issue that invokes copyright provisions.

According to the definition of copyright law, an original owner or creator has inherently attached to him/her and her expressed work, the exclusive right to reproduce a work into copies, to distribute such works, to communicate the work to the public in any form or medium, to make translations or adaptations and to make the work available on the internet (World Intellectual Property [WIPO], 2016; Electronic Frontier Foundation, 2016; Omoba, 2009). Such sacred rights are more advanced in this age of technology because of the ease in multiple file sharing, file downloading and distribution. Actions that deny original owner or creators the benefits that would have accrued from their creations runs contrary to copyright laws (Omoba, 2009).

In line with this, Bassek (2003) and Legal Protection of Digital Information (2016) have asserted that the copyright status of a book determines the possibility of its digitization with no legal hassles. Though this is not to say that materials with no copyright attachment have no protection, The Berne agreement has specified that it is no longer necessary to attach copyright inscription to books in order to give them protection. Thus the legal right status of a book does not connote its registration but could mean its lifespan.

According to Standford (2015) and World Intellectual Property Organisation [WIPO], (2016), all forms of reproduction or conversion not carried out by the original owner or his transferee runs contrary to copyright law. In line with this, WIPO has stated that a textbook or literary material has multiple copyright protections. The contents, diagrams, and designs have separate copyright attached to them. Thus no piece of a material can be removed and adapted to any work without permission. This becomes an issue for institutional libraries and faculties that might want to provide digital materials for teaching.

In Ratiff (2016), a difficult issue was encountered by teachers who wanted to share teaching materials in a network environment. The issue became the inclusion of some contents like diagrams, pictures and video clips in the materials. Despite the fact that the teaching materials are for academic purpose, the fact that it was going to be shared on the internet with inclusion of copyrighted materials became issues of concern. Bask (2003) have asserted that print materials even when digitized do not lose the copyright protection on their print contents. Thus materials which in their print nature are protected by copyright have the same requisite protection even when they are digitized. However while the exclusive nature of copyright abound, getting permission to use copyrighted materials become another issue.

Issues involved in digitizing print resources without copyright protection

Omoba (2016) asserts that copyright provides ways that information can be used, accessed, transferred, reproduced; in order to protect the interest of authors and creators, their creations or intellectual products. Copyright law is the exclusive right given to creators of musical, artistic or literary works, which are in their original forms and are fixed in a definite medium in which they could be used. The usage in this aspect is what incurs protection. Lavoie and Dempsey (2009), Ratiff (2016) and WIPO (2016); have differentiated

varieties of print resources and usage for the purpose of digitization.

According to WIPO (2016), Lavoie and Dempsey (2009), there are works which are already in the public domain. These materials even in their print nature would not be boldly written "Public domain". Therefore it is left for the person who intends to digitize to find out the existence in age of published and unpublished work. However since copyright provisions differ in different countries, countries in which such materials were published should be noted in order to understand the copyright provisions, on age of its full term. Rowe (2002) has stated that although materials in the public domain require no permission that precautions need to be taken after digitizing them in order to avoid unlimited reproduction. Looking at the age range for materials to enter public domain, it would be said that mainly historical books or records of archival purposes could be digitised with no hassles. This is because materials which enter public domain are those that have lived the full term specified in copyright provisions. For published works, the full life age of the author and on his or her death, additional 70 years (Basek, 2003); while for unpublished materials, the full life age of the author and on his or her death, 50 years in addition. Although the 1978 revision has provided 120 years from the date an original work was created (Rowe, 2002). Nigerian copyright act provides that materials with no known author, a 70 years rule would have to run its full term before such materials enter public domain (Nigerian Copyright Act, 1988).

Apart from works in public domain, some government works are excluded from copyright control (WIPO, 2016). This could be because of their public nature or because by their nature, rights have been transferred or deemed inherently transferred from the author to the government (Rowe, 2002). Whichever way, getting permission from government to use its material for educational purposes is a straightforward matter. Court holdings are other materials with no copyright attached to them; and thus could be digitised with no permission gotten. However, to make such digitised contents authoritative, their contents would necessarily come from the court. In line with this, it is the opinion that after their publication, the publishers hold a right over their designs and production name. Furthermore, digitised court holdings that are not citable are not of much use. This is because there are recognised law reports in countries which could be cited in courts of law. Therefore, any institution that decides to digitize certain holdings of courts would have to do it without attaching the name of already existing law reports to it. The problem however is that their digitised nature could only be relevant for scholarship and not for citation in court.

Therefore, published materials by their nature pose difficulty for the purpose of scholarship. More so, copyright is attached to a work in whatever form it could be transformed to; whether in published or unpublished nature (Basek, 2003). As a result, Ratiff (2016), in explaining the difficulty teachers experience in providing course materials in a network environment gives the impression that scholarship is being limited rather than enhanced by copyright laws.

WIPO (2016) has stated that there are multiple copyright attached to a work. Each part of a work, its contents, diagrams, designs and every other distinct part has its own copyright protection. Although fair use could be an exception to copyright if materials are for non profit and educational

purposes, however the use and quantity taken would have to be fair and must not affect the market value of such material (Basek, 2003). This would be ideally impossible for a digitised material because of the inherent feature of multiple distributions attached to it. However, where a teaching material that contains part of adapted print or electronic resource is not distributed but merely used for teaching, then there could be no effect (DMCA as cited in Ratiff, 2016).

Although section 108 of the US Copyright Act (cited in Basek, 2003) has asserted that academic libraries could digitize three copies of unpublished works; and that such digitised works must be guided against usage outside the library, "usage outside the library" could mean that they would not be copied or distributed as any form of distribution, whether in the library or not is instant wide distribution since it cannot be monitored. Therefore libraries, to effect this, would have to apply software to control usage. However, the interpretation of 3 copies is confusing as it is not known if 3 copies means 3 copies of all unpublished works in the library holdings; or 3 copies only of a single unpublished work. It is assumed that it would be the former.

Article 10 of WIPO Copyright treaty (WIPO Summary of the WIPO Copyright Treaty, 1996) and Article 9(2) of Berne Convention (Legal Information Institute, 1971) have provided exceptions to copyright protection. It is not known if this transforms to digital print resources. However Basek (2003) states that work still retain their copyright protection even in digital environment. This means that exceptions to copyright could extend to digitize print materials. If this be so, modifications should be provided as digital environment inherently has features of file sharing and rapid reproduction of materials that would make usage unfair. Although, the anti circumvention provision of the Digital Millennium Copyright Act (DMCA) allows libraries to make copies for the purpose of archiving them (Schwabach, 2014). The fact that they are being archived means they could be monitored and reproduction could be limited. Apart from this, digitization of any sort would require permissions from copyright holders.

According to Basek (2003), Lavoie and Dempsey (2009), Ratiff (2016) and Schwabach (2014); there are issues regarding who should give license and permission to digitize. Copyright naturally resides with the original author of a work (Jackson State University, 2016). However where by agreement, an author transfers his or her right to a publisher, then copyright resides with such publisher and such publisher as well wields power to use the copyrighted document as was stated in their agreement (Basek, 2003; Lavoie & Dempsey, 2009). Although there seems to be limitation with regard to moral right of the author which still resides with him or her even after transfer (Standeford, 2015). In Basek (2003), differentiation was made between transfer of rights to a book with that of an electronic one, and it was found by the Supreme Court that rights over a print book does not transcend to rights on digitized contents of such books, except if an agreement refers to it expressly. Thus, where there is an agreement over print material, licence over it resides with the publishers. However in its digitised form, license still resides with the author.

For government publication, it has been stated by Rowe (2002), that copyright resides with the government because of the assignment of copyrights normally attached during the contract period of a work.

The same thing is also applicable for organisational materials, copyright would reside with such organisation because of assignment of copyright attached to contract for such study. For publications of this sort, it is always easy to seek for permission since it is clear where to seek it from. For individuals, permission could be sought sometimes by reaching out straight to the author, or a group that provides licence on behalf of authors. In Lavoie and Dempsey (2009), a group which represents the holders of copyright provided such licence. However most times, it is difficult to locate who to get copyright permission from. In some circumstances, some materials could be orphan and so getting licence could become an issue since there is nobody to be contacted (Lavoie & Dempsey, 2009). In this sort of situation, the directive in Schwabach(2014) on abandonware should be followed. According to Schwabach, they are to be assumed to be dangerous as their owners could suddenly show interest in them and claim damages where a use was carried out without permission. Many of such uses are carried out on the internet without the permission of owners, such users also are not aware of copyright laws and possibility of litigation.

According to Basek (2003), Electronic Frontier Foundation (2016), Jackson (2016) and Standeford (2015); file sharing, scanned copies of print resources posted on the internet or attached to a letter or photographs snapped and sent on the internet are already digitized. Their presence on the internet also gives them wide distribution. Though photographs are part of visual resources however they have features that could make them included in literary materials. Features like ability to clarify literary work. Such materials when posted on the internet without expressed permission of owners already have contravened copyright law.

Exceptions to licenses and permissions to digitize print materials

Exceptions to getting permission and licenses for transformation into digital form are guided under Article 9(2) of the Berne Convention. This provision also allows countries to provide exceptions to copyright provisions. These exceptions are on fair use, materials in the public domain and grey resources of institutions.

Materials already in the public domain

Materials of historical nature published before 1923 are already in the public domain. Public domain materials are those materials that have outlived the copyright protection given to them by their countries. Thus such materials are open for anyone to use as deemed fit.

Fair use: Fair use are exceptions given for obtaining permission from owners of copyrights when a use relates to educational, reporting and critic of materials protected under copyright. According to Basek (2003), the consideration of a use as fair incorporates the nature of the copyrighted work, the quantity of the portion used, the motive behind the use; whether for commercial purpose or for non-profit educational purposes and effect it would have on the potential market for the original work. This was the same provision in Article 9(2) of Berne convention and Article 10 of WIPO copyright treaty.

Though it could be said that a work when reproduced for educational purposes could be protected under fair use, however it cannot be said that it is the same thing when it is digitized. This is because the potential environment of use is different. In one, there is the assurance that it would not be distributed but in the other, there is the potential for it to be

distributed with limited restriction. Thus, even though, there could be a need to digitize for educational purposes, such digitization should still come with strict restriction which entails that it cannot be copied, or transferred. Furthermore, it should be done in such a way that it would always be in the library portal. Despite this, it should still be advised that permission be sought for.

According to Rowe (2002), fair use for materials being used in digital environment is difficult as the nature of digitized contents in them makes them inherently unfair to be used. In *Random House Inc v. Roseth Books LLC*, a new agreement was entered into between the authors and publishing company for their books to be published in electronic form; this is despite the earlier agreement they had for their manuscripts to be published in “book form”; meaning that “book form” was differentiated between print and digital forms. This could mean that the interpretation of fair use for print resources might not be the same for digitized resources, since digitization provides materials a form for reproduction with no limit. This has been confirmed in Lavoie (2009), where it was stated that digitizing print books without permission runs contrary to copyright law.

According to Standeford (2015), digitizing a photograph, either by making it stand alone or attaching it to a written paper is not covered by fair use because fair use does not cover derivative works. A derivative work is a work that provides original work based on an incorporated copyrighted work (Basek, 2003). This infringes on the right of privacy normally given to privately commissioned photographs and films (Omoba, 2009). Fair use interpretation has always incorporated reproduction that would not affect negatively the economic benefit the original owner would have gotten. Besides, privacy is a fundamental human right that must be protected. For the purpose of academics, DMCA (Digital Millennium Copyright Act) provides that such contents, if to be used, must only end at the classroom and not go beyond it. Thus there must not be distribution of any sort by the teacher. In the light of these, a way out for digitalisation of print contents is provided below.

Recommendations on digitising and averting copyright infringement

1. Dates of publication should be checked to know if books intended to be digitized are already in the public domain; and if they are, then there is no need for permission.
2. Dates in which books enter public domain in different countries of publication should be known in order to be guided well.
3. The provisions of copyright law with respect to exceptions in the country of publication should be known.
4. Librarians and lecturers should seek permission for any content or diagram to be attached to online educational material. Where it is merely for teaching and no permission is received; then distribution should not be allowed.
5. The publishers of books intended to be digitized for academic purposes should be known and where they are organisational or governmental, then getting licence is simplified.
6. Groups representing authors should first be contacted and if there is any commission responsible for copyright issues in any country, they should as well be contacted for direction regarding permission for materials from private persons.
7. Academic libraries should convert some of their theses and dissertations including grey resources of their host establishment into digital form.

Although for theses, there should be an agreement between the library and students whose materials have been selected for digitization, there should also be limitations to usage in order to avoid them from being reproduced.

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