UNIVERSITY OF NAIROBI
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COPYRIGHT IN THE DIGITAL AGE: AN ASSESSMENT OF KENYA'S LEGAL AND INSTITUTIONAL FRAMEWORK FOR THE PROTECTION AND ENFORCEMENT OF COPYRIGHT

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DECLARATION

I declare that *Copyright in the Digital Age: An Assessment of Kenya's Legal and Institutional Framework for the Protection and Enforcement of Copyright* is my original work and has not been submitted for a degree in any other learning university.

Signed at Nairobi on ,

_____

WILLIAM OYANGE AUMA.

This Thesis has been submitted for examination with my approval as University supervisor.

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Abbreviations and Acronyms

ACA	Anti-Counterfeit Agency
BASCAP	Business Action to Stop Counterfeiting and Piracy
BBS	Bulletin Board System
BPO	Business Process Outsourcing
BSD	Broadcast Signal Distributor
CAK	Communications Authority of Kenya
CAS	Copyright Alert System
CBRT	Caller Ring-Back Tones
CC	Creative Commons
ccTLD	Country Code Top-Level Domain
CD	Compact Disc
CMI	Copyright Management Information
CMO	Collective Management Organization
DAT	Digital Audio Tape
DMCA	Digital Millennium Copyright Act
DRMs	Digital Rights Management Information
DVD	Digital Versatile Disc
FOSS	Free and Open Source Software
FTA	Free-to-air
GDP	Gross Domestic Product
ICT	Information and Communications Technology
IP	Internet Protocol
ISPs	Internet Service Providers
ISRC	International Standard Recording Code
KAMP	Kenya Association of Music Producers
KECOBO	Kenya Copyright Board
KENIC	Kenya Network Information Centre

KOPIKEN	Reproduction Rights Society of Kenya
KP&TC	Kenya Posts and Telecommunications Corporation
LDCs	Least Developed Countries
MCSK	Music Copyright Society of Kenya
NGOs	Non-governmental Organisations
No.	Number
OECD	Organisation for Economic Co-operation and Development
P2P	Peer-to-Peer
PRiSK	Performers' Rights Society of Kenya
TEACH	Technology, Education and Copyright Harmonization Act
TPMs	Technological Protection Measures
TRIPS	Agreement on Trade Related Aspects of Intellectual Property Rights
UGC	User-Generated Content
UK	United Kingdom
USA	United States of America
VOD	Video on Demand
VPN	Virtual Private Network
WCT	WIPO Copyright Treaty
WIPO	World Intellectual Property Organization
WPPT	WIPO Performances and Phonograms Treaty
WTO	World Trade Organization

List of Statutes

Kenya

Anti-Counterfeit Act, No. 13 of 2008 (Revised Edition 2012)

Constitution of the Republic of Kenya, 2010

Copyright Act, No. 21 of 2001 (Revised Edition 2009)

Kenya Information and Communications Act, 1998 (Revised Edition 2009)

Statute Law (Miscellaneous Amendments) Act, 2012

Statute Law (Miscellaneous Amendments) Act, 2014

United States of America

Copyright Act of 1976, Title 17 of the United States Code

Digital Millennium Copyright Act of 1998, Title 17 of the United States Code

Technology, Education and Copyright Harmonization (TEACH) Act of 2002, Title 17 of the United States Code

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List of Cases

Kenya

Bernsoft Interactive & 2 Others v. Communications Authority & 9 Others Petition No. 600 of 2014

Communications Commission of Kenya & 5 Others v. Royal Media Services Limited & 5 Others Petition No. 14, 14A, 14B and 14C (Consolidated) of 2014, [2014] eKLR

David Kasika & 4 Others v. Music Copyright Society of Kenya and Another [2016] eKLR

Faulu Kenya Deposit Taking Microfinance Limited v. Safaricom Limited [2012] eKLR

John Boniface Maina v. Safaricom Limited Civil Suit 808 of 2010 [2013] eKLR

Mercy Munee Kingoo & Another v. Safaricom Limited & Another [2016] eKLR

Nonny Gathoni Njenga & Another v. Catherine Masitsa & 2 Others [2015] eKLR

Republic v. Kenya Association of Music Producers (KAMP) & 3 others Ex- Parte Pubs, Entertainment and Restaurants Association of Kenya (PERAK) [2014] eKLR

Canada

Canadian Wireless Telecommunications Association v. Society of Composers, Authors and Music Publishers of Canada 2008 FCA 6, [2008] 3 F.C.R. 539

Entertainment Software Association v. Society of Composers, Authors and Music Publishers of Canada [2012] 2 SCR 231

United States of America

A&M Records, Inc. v. Napster, Inc. 114 F Supp 2d 896 (ND Cal. 2000), 239 F 3d 1004 (9th Cir. 2001)

Cable v. Agence Fr. Presse 728 F. Supp. 2d 977 (N.D. Ill. 2010)

CoStar Group Inc. v. Loop-Net Inc. 373 F 3d 544 (4th Cir. 2004)

Getaped.com v. Cangemi 188 F.Supp.2d 398 (S.D.N.Y. 2002)

Lenz v. Universal Music Corp. 572 F. Supp. 2d 1150 (N.D. Cal. 2008)

Playboy Enterprises, Inc. v. Frena 839 F Supp 1552 (MD Fla. 1993)

Religious Technology Center v. Netcom On-Line Communications Services, Inc. 907 F Supp 1361 (ND Cal. 1995).

Rogers v. The Better Business Bureau of Metropolitan Houston, Inc. Civil Action No. H-10-3741, (S.D. Tex. 2012)

Shropshire v. Canning 2011 WL 90136 (N.D. Cal. 2011)

Sony Corp. of America v. Universal City Studios, Inc. 464 U.S. 417 (1984)

Abstract

The exponential growth of internet access and use coupled with the ever-increasing uptake of digital technologies have presented new and unique challenges to creative industries globally. Copyrighted works can now be converted easily to digital forms; perfect digital copies of works can be reproduced and transmitted through digital networks at minimal cost without the authorization of the works' copyright owners. This situation has triggered a global epidemic of online piracy of every category of copyrighted works. Even in jurisdictions where internet access remains costly, online piracy is the ultimate source for an informal ecosystem of unauthorized physical distribution networks for pirated works.

On the other hand, the internet and similar digital networks present new opportunities for copyright owners to distribute and communicate their works; as well as opportunities for governments to facilitate cost-effective avenues for access to knowledge and education through digital networks.

This study investigates whether or not Kenya's current legal and institutional framework for the protection and enforcement of copyright can sufficiently serve its purpose in the digital environment. Starting with a general assessment of the challenges and opportunities posed by digital technologies and digital networks on the creative industries, this study assesses whether Kenya's legal and institutional framework is up to speed with the challenges and opportunities of the digital age.

The findings of this study reveal that although the framework has gone through some reforms to improve it, there is a need to further strengthen the framework to ensure the protection of copyrighted works in the digital environment; and to leverage the advantages of digital spaces to facilitate and promote access to knowledge.

CHAPTER 1: INTRODUCTION

1.1 Background

Like most of its African counterparts, Kenya is embracing the Digital Revolution mainly through two agents - the internet and mobile phone technology.[1] This phenomenon has spurred significant developments in nearly every aspect of the country's socio-economic and cultural profile.[2] The ever-expanding access to and use of digital technologies and the internet[3] have opened up opportunities for new economic ventures in various industries, improved the activities and services performed by the public sector, facilitated access to vast amounts of information and encouraged the creation of vibrant online communities that defy geographical boundaries.[4]

With regard to the creative industries, the Digital Age has ushered in both fascinating opportunities and complex challenges in equal measure. These industries produce a range of literary, musical and artistic works that are original, and base the works' commercial viability on their protection by copyright law which grant creators or right-holders certain exclusive rights for a finite duration.[5] These rights consist of the exclusive rights to reproduce, distribute, publicly perform, broadcast, and otherwise communicate a work to the public; in addition to moral rights to protect an author's reputational interests.[6]

Digital networks such as the Internet create opportunities for creative industries to expand the market for their products on a global scale and to reduce the costs of production and distribution by making available digital copies of their works on online platforms. However, these networks also enable the reproduction and distribution of unauthorized copies of those works by users who

[1] World Bank, *World Development Report 2016: Digital Dividends* (The World Bank 2016) <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/01/13/090224b08405ea05/2_0/Rendered/PDF/World0developm0000digital0dividends.pdf> accessed 18 January 2016.
[2] ibid.
[3] Communications Authority of Kenya, 'Quarterly Sector Statistics Report; Second Quarter of the Financial Year 2015/16' (CAK 2016) <http://ca.go.ke/images/downloads/STATISTICS/Quarterly%20Sector%20Statistics%20Report%20for%20Second%20Quarter%20FY%202015-2016%20(October-December%202015)%20Final.pdf> accessed 10 April 2016.
[4] World Bank (n 1).
[5] Lionel Bently and Brad Sherman, *Intellectual Property Law* (4th ed, Oxford University Press 2014) 31; Paul Goldstein and P Bernt Hugenholtz, *International Copyright: Principles, Law and Practice* (2nd ed, Oxford University Press 2010) 4–5.
[6] Bently and Sherman (n 5) 140–177.

can easily cushion themselves from possible sanctions by operating anonymously.[7] These attributes of the internet, combined with its culture of freely sharing content and the lack of awareness by ordinary users of the legal implications of their activities,[8] have triggered a global surge in digital piracy at such high levels that have negatively impacted copyright-based industries' revenues and called to question the adequacy of traditional copyright doctrines.[9]

Piracy levels in Kenya have been reported to be as high as 98% for musical works[10] and 83% for business software,[11] also severely affecting other copyrighted works such as books,[12] films, television series and photographic works.[13] Pirate DVD shops, which re-distribute unauthorized copies of audio-visual works sourced from the internet, have become a central feature of the informal economy of nearly every urban centre in the country, highlighting the separate problem of lack of legitimate distribution avenues that supply copyrighted works at appropriate price points.[14] This situation has created a dilemma for stakeholders in copyright-based industries who are currently caught between vigorously policing Internet users to prevent copyright infringement and developing alternative business models to work around the piracy problem.[15]

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[7] Eric Schlachter, 'The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet' (1997) 12 Berkeley Technology Law Journal 15.

[8] ibid.

[9] Peter K Yu, 'P2P and the Future of Private Copying' (2005) 76 University of Colorado Law Review <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=578568> accessed 17 October 2015.

[10] Dickson Nyariki and others, 'The Economic Contribution of Copyright-Based Industries in Kenya' (WIPO 2009) <http://www.wipo.int/copyright/en/performance/pdf/econ_contribution_cr_ke.pdf> accessed 16 December 2014.

[11] Business Action to Stop Counterfeiting and Piracy and Kenya Anti-Counterfeit Agency, 'Promoting and Protecting Intellectual Property in Kenya' (International Chamber of Commerce 2013) <http://www.iccwbo.org/Data/Documents/Bascap/International-engagement-and-advocacy/Country-Initiatives/Kenya/Value-of-IP-in-Kenya/> accessed 15 April 2015.

[12] Michela Wrong, 'A Letter from Michela Wrong - It's Our Time to Eat.' (*Storymoja*, 20 September 2010) <http://storymojaafrica.wordpress.com/archives-20092010/politics/a-letter-from-michela-wrong-its-our-time-to-eat/> accessed 5 October 2015.

[13] Vincent Matinde, 'Photography Theft Growing in Kenya amid Greater Connectivity' (*IT Web Africa*, 6 May 2014) <http://www.itwebafrica.com/ict-and-governance/256-kenya/232846-photography-theft-growing-in-kenya-amid-greater-connectivity> accessed 5 March 2015.

[14] &Innovation Consulting, 'Competing With Piracy: Understanding and Redefining Consumer Perception of Value in Developing Markets' <http://www.slideshare.net/And_Innovation/competing-with-piracy-can-video-on-demand-beat-pirated?from_action=save> accessed 9 October 2015.

[15] Amal Mohamed, 'Economics of the Kenyan Music Industry' (*UP Nairobi*, 29 May 2014) <http://www.upnairobi.com/dt_portfolio/kenyan-music-industry/> accessed 20 October 2015.

From the preceding observations, it appears that the legal and institutional framework for the protection and enforcement of copyright as provided for by the Copyright Act[16] has not been sufficiently shaped to deal with the challenges posed by digital technology and the internet. There is evidence of the existence of several lacunas in the framework that need to be addressed and viable solutions provided. The liability for online copyright infringement with regard to internet service providers (ISPs) and other internet intermediaries is an emergent issue that is yet to be addressed by the Copyright Act or any other related legislation. The rights, limitations, and exceptions provided for under the Copyright Act are in need of review to assess their effectiveness in the digital era. Enforcement, funding and expertise challenges also continue to persist.

1.2 Statement of the Problem

The proliferation of access and use of digital technologies and the internet in Kenya is a reality that presents various complex challenges to the protection and enforcement of copyright. This study seeks to identify these challenges and assess whether the legal and institutional framework currently in place offers sufficient protection and enforcement solutions that are specifically suited to the realities and challenges of the digital age.

The problem and issues arising therefrom are approached through the specific research questions enumerated in the next section.

1.3 Research Questions

This study seeks to address the following questions:

1. Does the current legal and institutional framework in place provide adequate solutions to the challenges posed by digital technology and the proliferation of internet access and use?

[16] Part III to VI of the Copyright Act 2001, Chapter 130 Laws of Kenya.

2. What can Kenya learn from the experiences of the USA's Digital Millennium Copyright Act (DMCA) to create a more effective legal and institutional framework?

1.4 Research Objectives

The main objective of this study is to evaluate the adequacy and effectiveness of Kenya's copyright law as the country embraces the realities and challenges of the digital age. The specific objectives in this regard are namely:

1. To examine the current legal and institutional framework for the protection and enforcement of copyright, with specific focus on the digital environment.

2. To identify the gaps in the legal and institutional framework that hinder its effectiveness in protecting and enforcing copyright for works in digital form and distributed on the internet.

3. To identify key provisions in the USA's DMCA that may offer possible solutions to address the gaps in Kenya's legal and institutional framework.

1.5 Hypotheses and Assumptions

This study is premised on the hypothesis that the current legal and institutional framework in Kenya is not adequate for the protection and enforcement of copyright on the internet and does not provide sufficient solutions to deal with the challenges posed by the digital revolution.

This hypothesis is based on the following assumptions:

1. The high levels of online piracy reported by various scholars and stakeholders points to the strong possibility of gaps in the legal and institutional framework for the protection and enforcement of copyright in the digital environment.

2. The vigorous and constantly evolving process of developing legislative and policy solutions for copyright protection and enforcement in the USA may be crucial in providing guidance and lessons on how to address the shortcomings in Kenya's legal and institutional framework.

1.6 Theoretical Framework of the Study

This study considers four theoretical justifications for intellectual property: the labour theory, the utilitarian theory, the personhood theory and the social planning theory.[17] The labour theory originates from the writings of John Locke, particularly his *Second Treatise of Government*.[18] Locke's labour theory confers on a person who labours upon resources that are either unowned or held in common a natural right to the fruits of his or her labour, recognizing the transformation and added value of the finished product resulting from the mixing of the labour with the unused resources.[19] According to Locke, the acquisition of property rights in this manner is limited to "where there is enough, and as good, left in common for others"[20] after the appropriation of resources has been made.

However, critics of the labour theory argue that its application to intellectual property becomes problematic upon closer inspection of the very elements constituting the theory. Fischer argues that it is uncertain whether the theory provides support for any intellectual property rights as it does not specifically define "intellectual labour" and the resources "held in common" that are mixed in order to produce intellectual products.[21] It also does not address the extent of the property right to the fruits of intellectual labour, thereby presenting a problem of proportionality.[22] There also may be cases in which intellectual labour does not give rise to a

[17] William Fischer, 'Theories of Intellectual Property' in Stephen Munzer (ed), *New Essays in Legal and Political Theory of Property* (2001) at 1 – 5 <http://www.law.harvard.edu/faculty/tfisher/iptheory.html> accessed 5 October 2014.
[18] John Locke, *Second Treatise of Government* (CB Macpherson ed, 1st ed, Hackett Publishing 1980).
[19] Fischer (n 17) 3.
[20] Locke (n 18) Section 27.
[21] Fischer (n 17) 17.
[22] ibid 19 – 20.

property right in the intangible created such as works produced in the course of a creator's employment.[23]

The utilitarian theory centres on the maximization of the net social welfare through the law which ensures the maximum benefit for the maximum members of society.[24] The pursuit of this utility through intellectual property requires lawmakers to strike an optimal balance between stimulating the creation of intellectual works through exclusive rights for limited durations and ensuring the public enjoyment of those creations.[25] Jeremy Bentham also points out the need to offset the differentiated costs borne by creators and imitators,[26] a factor justifying the need for the protection of copyright in the digital environment where perfect unauthorized copies can be produced and efficiently distributed at minimal costs. The theory's proponents argue that this incentive is vital to ensuring that creators continue to produce more works and to profit from them.[27]

The personhood theory tends to be attributed to the philosophers Hegel and Kant who, as Spence argues, were particularly concerned with notions of personal autonomy and truthful representation of the publisher as speaking on behalf of the author.[28] The theory argues that the act of creation entails the inalienable embodiment of the creator's personality in his or her work and therefore it is essential that the creator has control over the work.[29] This theory has informed the development of the moral rights of an author prominent in Continental jurisdictions,[30] but can only justify intellectual property in a limited range of situations and has proven to be problematic in emerging issues in the digital copyright debate, particularly user-generated content such as remixes or fan-fiction.[31]

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[23] Michael Spence, *Intellectual Property* (Oxford University Press 2007) 147 – 149.
[24] Fischer (n 17) 1.
[25] ibid.
[26] Peter Menell, 'Intellectual Property: General Theories' in Gerrit de Geest and Boudewijn Bouckaert (eds), *Encyclopedia of Law and Economics, Vol. 1: The History and Methodology of Law and Economics* (Edward Elgar Publishing 2000) 131.
[27] Jeanne C Fromer, 'Expressive Incentives in Intellectual Property' [2012] Virginia Law Review 1745.
[28] Spence (n 23) 149 – 152.
[29] ibid 149.
[30] Menell (n 26) 158 – 159.
[31] Anupam Chander and Madhavi Sunder, 'Everyone's a Superhero: A Cultural Theory of "Mary Sue" Fan Fiction as Fair Use' [2007] California Law Review 597.

The social planning theory, stemming from the writings of Jefferson and Marx, approaches intellectual property in a similar manner to the utilitarian theory save for placing emphasis on "a desirable society" rather than "utility" or "social welfare".[32] The theory envisions an intellectual property regime focused on the creation of a desirable culture balancing the incentives for creators to continue producing more works and the incentive to disseminate those works for the benefit of all members of society.[33]

This study adopts both the utilitarian and social planning theories as they are instrumental in informing the appropriate policy towards the protection and enforcement of copyright in the digital environment. Copyright law should be able to put in place incentives that address the differentiated costs incurred by creators and internet users who distribute unauthorized copies of their works with ease and at minimal costs. This incentive should be balanced with the social benefits and opportunities of taking advantage of digital technologies to promote access to knowledge and information in a cost-effective manner and in favour of marginalized segments of society such as persons with disabilities.

1.7 Literature Review

The question of how best to protect and enforce copyright in the digital environment remains a global problem that is constantly evolving due to the adoption of various technologies by creative industries in the production and distribution of their products, the evolution of markets, and changes in consumer behaviour. The literature on this question overwhelmingly addresses the issue in the context of technologically advanced and economically developed countries. Very little of the literature considers the unique circumstances of emerging and less developed economies that are interested not only in accelerating the growth of their fledgling creative industries but also improving access to information and knowledge through technology.

Manuel Castells' comprehensive study of what came to be known as the Digital Revolution in his book *The Rise of the Network Society* serves as a useful background that contextualizes the

[32] Fischer (n 17) 4.
[33] ibid 4 – 5.

information-based and technology-centric Digital Age currently being experienced.[34] He maps out the progression of the Digital Revolution beginning with the technological advancements in computing and telecommunications taking place largely in the US throughout the 1970s and 1980s; followed by the widespread adoption of personal computers and the internet in the 1990s which transformed the global economy into one centred on information and technology.[35]

Michael Tyler, Janice Hughes and Helena Renfrew's study of the Kenyan telecommunications sector in the late 1980s and 1990s,[36] as well as Mureithi Muriuki's more recent consideration of Kenya's rapid growth in internet adoption, [37] provide ample evidence of Kenya's Digital Revolution. These studies trace the path of Kenya's telecommunications sector from heavy regulation and monopolization by the government to its current liberalized state characterised by a rapid growth in Internet adoption through mobile phone technology. The Communications Authority of Kenya Quarterly Sector Statistics Reports[38] present a consistent trend of increasing Internet users each year since it began documenting data communications use in 2008, with internet users in Kenya estimated to be 35.5 million, a penetration level driven by the uptake of internet-enabled mobile phones.[39]

While the Digital Age has opened up opportunities for the creative industries to maximize their products, it has also introduced several challenges to protecting and enforcing copyright. These challenges originate in the very nature of the means by which information exists on and is distributed through digital networks; and the norms and attitudes of users of these networks seeming to clash with the restrictive objectives of copyright. Schaltcher's seminal study of the attributes of the Internet which pose a threat on copyright is just as descriptive of other digital networks.[40] He identifies the ease of unauthorized copying of copyrighted material at minimal

[34] Manuel Castells, *The Rise of the Network Society* (2nd ed, Wiley-Blackwell 2010) Chapter 1.
[35] ibid.
[36] Michael Tyler, Janice Hughes and Helena Renfrew, 'Kenya: Facing the Challenges of an Open Economy' in Eli M Noam (ed), *Telecommunications in Africa* (Oxford University Press 1999).
[37] Mureithi Muriuki, 'The Internet Journey for Kenya: The Interplay of Disruptive Innovation and Entrepreneurship in Fueling Rapid Growth' in Bitange Ndemo and Tim Weiss (eds), *Digital Kenya: An Entrepreneurial Revolution in the Making* (Palgrave Macmillan UK 2016).
[38] Communications Authority of Kenya, 'Statistics' <http://www.ca.go.ke/index.php/statistics> accessed 12 March 2016.
[39] Communications Authority of Kenya, 'Quarterly Sector Statistics Report; Second Quarter of the Financial Year 2015/16' (n 3) 20–25.
[40] Schlachter (n 7).

costs without loss of quality, increasing anonymity of users, ignorance of users of the harm of their activities, and a culture of unfettered sharing of resources which conditions users to expect intellectual property for free.[41] Other researchers have also pointed to moral disengagement by users from their infringing actions due to how digital networks trigger an "anthropological constant to accumulate 'things';[42] as well as a generational failure to pass down norms regarding cultural products.[43]

Kenya's creative industries are already experiencing these challenges. The International Intellectual Property Alliance found Kenya to have the highest piracy rate in Africa at 83% as of 2006.[44] Nyariki et al. estimate that 98% of the revenue from Kenyan musical works is earned by pirates,[45] while the Business Software Alliance estimates that as of 2013, 78% of software sold in Kenya was pirated.[46] The increased use of digital technology is also fuelling the piracy of books, translation to losses by the publishing industry estimated to amount to Kshs. 2 billion annually.[47]

With regard to how these challenges manifest themselves in Kenya, Joe Karaganis' study of media piracy in emerging economies[48] reveals that despite a high internet penetration rate, the main access point for pirated content by ordinary consumers is through unauthorized copies of content in physical media. The pirated physical media is supplied by an informal distribution network of DVD shops whose owners are perceived as entrepreneurs rather than infringers.[49] Karaganis' study suggests that lack of adequate distribution of globally consumed content at

[41] ibid.
[42] Alexander Peukert, 'Why Do "Good People" Disregard Copyright on the Internet?', *Criminal Enforcement: A Blessing or A Curse for Intellectual Property?* (Edward Elgar Publishing 2010) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1660319> accessed 15 April 2015.
[43] Yu (n 9) 756–763.
[44] International Intellectual Property Alliance, '2006 Special 301 Report: Special Mention - Kenya' (Office of the US Trade Representative) <http://www.iipa.com/special301_TOCs/2006_SPEC301_TOC.html> accessed 9 October 2015.
[45] Nyariki and others (n 10) 85.
[46] Business Software Alliance, 'The Compliance Gap: BSA Global Software Survey' (2014) 9 <http://globalstudy.bsa.org/2013/downloads/studies/2013GlobalSurvey_Study_en.pdf> accessed 17 April 2015.
[47] Kenya Copyright Board, 'The Scourge of Piracy' [2011] *Copyright News, Issue 3* 5 <http://www.copyright.go.ke/awareness-creation.html?download=2:copyright-news-issue-3> accessed 23 September 2015.
[48] Joe Karaganis, 'Rethinking Piracy', *Media Piracy in Emerging Economies* (Social Science Research Council 2011).
[49] Terry Flew, 'Copyright Laws and Developing Countries' (*ARC Centre of Excellence for Creative Industries and Innovation*, 4 September 2013) <http://www.cci.edu.au/node/1603> accessed 22 October 2015.

reasonable price levels could be among the significant forces driving media piracy in emerging economies. A survey on copyright awareness conducted by the Kenya Copyright Board (KECOBO) and Mdundo, an online music distribution platform, found that a majority of the respondents sourced all types of media from the internet and were aware that these media are protected by copyright.[50] 73% of the respondents did not restrict themselves to foreign music and films but also downloaded Kenyan content; and around the same proportion would not download pirated material if content was cheaply and easily available.[51] However, the fact that all the respondents of this survey were content providers (and therefore copyright owners) as opposed to active consumers on the Mdundo platform elicits caution in conflating these findings with the attitudes of everyday Kenyans. There is a sharp contrast in attitude present in other findings of the same survey, such as the finding that a majority of respondents viewed the offence of piracy as more serious than theft, burglary, and fraud.[52]

A study of media consumption habits of Kenyan consumers by &Innovation Consulting found that pirated content in DVDs was the primary means of video content consumption in urban areas and that informal DVD shops and even formal establishments found in malls openly advertise their pirated goods for sale; and that there is little evidence of active policing, creating a perception that their activities are legal.[53] Riaga[54] and Konstantaras[55] further argue that ignoring the informal distribution of foreign video content has had a demonstrably negative effect on content produced by the Kenyan creative industries in terms of consumer preferences and pricing of content.

The literature on Kenyan consumer behaviour as well as their awareness of and attitudes towards copyright thus reveals that there are shortfalls in the legal and institutional responses to the

[50] 'KECOBO Copyright Survey Report' (KECOBO / Mdundo 2016) 9–10 <http://www.copyright.go.ke/downloads/send/5-copyright-news-magazine-survey/60-kecobo-copyright-survey-report.html> accessed 14 September 2016.
[51] ibid 18, 22.
[52] ibid 12.
[53] &Innovation Consulting (n 14) 2.
[54] Odipo Riaga, 'Pirated Hollywood Movies Is the Biggest Threat to the Growth of Film Industry in Kenya' <http://www.kachwanya.com/2016/02/15/pirated-hollywood-movies-is-the-biggest-threat-to-the-growth-of-film-industry-in-kenya/> accessed 20 February 2016.
[55] Alexandros Konstantaras, 'Secrets About Piracy Revealed By Jitu Films Director' (*Actors.co.ke*, 23 January 2012) <http://www.actors.co.ke/en/mer/articledetail/127> accessed 1 October 2015.

informal distribution network for pirated content in Kenya. It also reveals that there are gaps in government and institutional policies concerning creative industries with regard to promoting awareness on copyright issues and facilitating the development of distribution mechanisms for legitimate content.

Literature on the effectiveness of Kenya's legal and institutional framework in facing the challenges posed by the digital age have largely been dealt with the question in two ways – either as a small subset of general studies of the framework; or as an assessment of a specific part of the framework within context of a sector of the creative or ICT industries. As a result, fully mapping out the shortfalls in the framework and how the shortfalls inter-relate across the various sectors of the creative industries is a difficult task; and studies of specific sectors are not fully fleshed out. Ouma and Sihanya, in their critique of access to knowledge in Kenya for example,[56] comprehensively identify shortfalls in the Copyright Act which impede access to knowledge in the digital environment, including restrictive exceptions and limitations. These exceptions and limitations not only affect access to knowledge and educational uses of works, but they also impede other everyday user activity such as the use of copyrighted works in user-generated content or the use of works in other sectors such as in broadcasting. Njengo provides a general analysis of the legal protection of music copyright in Kenya in which he considers the challenges posed by digital technology.[57] However, his analysis does not fully explore some developments brought about by technology that end up directly affecting the music industry such as the ambiguity of which right to attribute to certain uses, definitional challenges of certain technical terms, and the role of collecting societies in maximizing licensing for the use of works in the digital environment.

This study, therefore, adopts an approach of considering the framework within the context of the creative industries as a whole in order to identify where the gaps may have an effect across more

[56] Marisella Ouma and Ben Sihanya, 'Kenya' in Chris Armstrong and others (eds), *Access to Knowledge in Africa: The Role of Copyright* (UCT Press 2010) 83–121.

[57] James Mwangi Njengo, 'Analyzing the Legal Protection of Music Copyright in Kenya: A Project Submitted in Partial Fulfillment of the Requirements for the Award of Master of Laws Degree, LLM' (University of Nairobi 2014) <http://erepository.uonbi.ac.ke/bitstream/handle/11295/76956/Njengo_Analyzing%20the%20legal%20protection%20of%20music%20copyright%20in%20Kenya.pdf> accessed 12 December 2015.

than one sector and to comprehensively map out the reforms needed to make the framework fully digital-ready.

Another observation about the literature is that some researchers proceed from the notion that the relevant legislation for protecting and enforcing copyright in the digital environment are largely in place, with the main challenge being enforcement. This approach seems to be the cornerstone of Macharia's thesis on enforcement of copyright in the ICT era, for example.[58] Sihanya's chapter in the 2009 book *Intellectual Property in Kenya*, which concludes by asserting that the main problem for copyright holders in Kenya is not so much in the written law but the lack of enforcement,[59] is understandable as it was published just before internet adoption grew exponentially, and other developments in technology were realised. While enforcement remains a major challenge to the effectiveness of the framework generally, updating the relevant legislation to reflect the realities of the Digital Age has become equally indispensable. Ouma argues that the current form of the legislation as contained in the Copyright Act may have been overtaken by technological developments which affect copyright such as digital broadcasting, use of technologies to enhance access to works by persons with disabilities, digital licensing of works, the liability of internet service providers.[60] Elaborating on these gaps and identifying other gaps within the provisions of the core legislations that have been brought about by the Digital Revolution is one of the key endeavours of this study.

A significant number of researchers on Kenya's copyright framework seem to favour higher mandatory minimum sanctions for copyright infringement to act as a suitable deterrent against copyright infringement in digital networks.[61] They do not consider the limits of criminal-law

[58] Antony Macharia, 'Enforcement of Copyright in Information Communication Technology (ICT) Era: How Effective? A Thesis Submitted in Partial Fulfilment of the Requirements of the Degree of Master of Laws (LL.M) of the University of Nairobi' (University of Nairobi 2015) 65 <https://erepository.uonbi.ac.ke/bitstream/handle/11295/94077/Macharia%2c%20Antony%20M_Enforcement%20of%20copyright%20in%20information%20communication%20technology%20%28ICT%29%20era%2c%20how%20effective.pdf> accessed 2 January 2016.

[59] Ben Sihanya, 'Copyright in E-Commerce and the Music Industry in Kenya' in Moni Wekesa and Ben Sihanya (eds), *Intellectual Property Rights in Kenya* (Konrad Adenauer Stiftung : SportsLink 2009) 172.

[60] Marisella Ouma, 'Copyright in the Digital Environment' [2012] *Copyright News, Issue 5* 3–6 <http://www.copyright.go.ke/awareness-creation.html?download=37:2012-issue-5-copyright-in-the-digital-environment> accessed 23 September 2015.

[61] Macharia (n 58) 71; Njengo (n 57) 86–87; Business Action to Stop Counterfeiting and Piracy and Kenya Anti-Counterfeit Agency (n 11) 19–20.

based solutions which would require stricter levels of proof for success, leading to a more time-consuming and costly mechanism; as well as the negative effect increased criminal sanctions would have on a public that already has a skewed perception of intellectual property rights within digital networks. [62] Further, highly publicized criminal enforcement measures which mete out severe sanctions to infringers do not seem to lead to substantial decrease in infringement in digital networks, but at most serve as a deterrent to a few users for a short period.[63]

With regard to the liability of internet intermediaries, studies by Cominos,[64] as well as Munyua, Githaiga and Kapiyo,[65] reveal the complete absence of a legal or institutional framework determining the extent of the liability of internet service providers for their users' infringement of copyright and other online activities such as defamation, hate speech and terrorism. Using the draft ISP liability laws published by KECOBO as a starting point,[66] this study further explores the specific improvements in Kenya's current copyright law needed to sufficiently map out the role of internet intermediaries in copyright protection and enforcement in digital networks. This study also explores how the regulation framework for Kenya-based websites and .ke domain names as provided in the Kenya Information and Communications Act (KICA) can be expanded to include roles for relevant communications regulators in the enforcement of internet intermediary liability laws.

Nzomo's study of the legal and institutional framework for the collective administration of copyright[67] robustly problematizes the gaps in the legal and institutional framework within the

[62] Christophe Geiger, 'The Rise of Criminal Enforcement of Intellectual Property Rights . . . and Its Failure in the Context of Copyright Infringements on the Internet', *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014) 128–132.
[63] ibid 133–134.
[64] Alex Cominos, 'The Liability of Internet Intermediaries in Nigeria, Kenya, South Africa and Uganda: An Uncertain Terrain' <http://www.apc.org/en/system/files/READY%20-%20Intermediary%20Liability%20in%20Africa_FINAL.pdf> accessed 15 April 2015.
[65] Alice Munyua, Grace Githaiga and Victor Kapiyo, 'Intermediary Liability in Kenya' (Kenya ICT Action Network 2012) <http://gb1.apc.org/fr/system/files/Intermediary_Liability_in_Kenya.pdf> accessed 15 October 2015.
[66] Edward Sigei, 'Proposed Amendments to Provide Web Blocking Measures in Cases Of Copyright Infringement Online' *Copyright News* <http://www.copyright.go.ke/awareness-creation.html?download=64:issue-18-photography-image-rights> accessed 25 January 2016.
[67] Victor Nzomo, 'Collective Management of Copyright and Related Rights in Kenya: Towards An Effective Legal Framework for Regulation of Collecting Societies. A Research Project Submitted in Partial Fulfilment of the Requirements of Master of Laws, School of Law, University of Nairobi.' (University of Nairobi 2014) Chapters 3–5 <http://erepository.uonbi.ac.ke:8080/xmlui/bitstream/handle/11295/77538/Nzomo_Collective%20management%20of%20copyright%20and%20related%20rights%20in%20Kenya.pdf?sequence=1> accessed 18 September 2015.

context of the core provisions providing for regulation of collective management organizations (CMOs) and the licensing and supervisory role of KECOBO. However, changes in how content consumption and developments in technology are emergent features of the Digital Age which also have a direct impact on the collective administration of copyright. Bently and Sherman have observed that due to these changes, "collecting societies have been seen to be ill-equipped to offer solutions to users who want to use a range of different types of work, of varying levels of obscurity, in low-value activities."[68] This study aims to consider how consumption of content through various digital platforms have expanded the licensing options that should be co-opted into the collective management system; and how the use of content monitoring technologies can make the system more efficient.

Recent court cases have also emerged as indicators of the perception of the legal and institutional framework from the point of view of copyright owners and other stakeholders in the creative industries. *Bernsoft Interactive & 2 Others v. Communications Authority of Kenya & 9 Others*,[69] a constitutional petition by music industry stakeholders seeking to compel internet service providers to block websites that illegally distribute their works further points to the need to address the role of internet intermediaries in protection and enforcement of copyrighted material in digital networks. *Mercy Munee Kingoo & Another v. Safaricom Limited & Another*,[70] in which the plaintiffs successfully challenged the equitable remuneration mechanism for sound recordings and audio-visual works through collecting societies under Section 30A of the Copyright Act, provides cursory evidence of, at least, a shortfall in public participation when developing reforms to the copyright law and, at most, a preference among stakeholders for a mechanism to opt out of the collective management system either fully or for certain specific uses that can easily be monitored using digital technology.

There also seems to be a lack of sector-specific studies which concentrate on copyright in the broadcasting sector where key technological developments have taken place in the form of

[68] Bently and Sherman (n 5) 310.
[69] Petition No. 600 of 2014; Victor Nzomo, 'Test Case on Liability for Online Copyright Infringement: Music Industry Players Sue ISPs, Telcos and Government' <https://ipkenya.wordpress.com/2014/12/15/test-case-on-liability-for-online-copyright-infringement-music-industry-players-sue-isps-telcos-and-government/> accessed 18 September 2015.
[70] [2016] eKLR.

Kenya's switch from analogue to digital television broadcasting in 2015, and related legislation contained in KICA and the Kenya Information and Communications (Broadcasting) Regulations 2009. These developments bring in two elements of broadcasting directly affecting copyright law, namely re-broadcasting of the content of free-to-air (FTA) channels under the "must carry" rule, and the introduction of digital set-top boxes with personal video recorder (PVR) and time-shifting capabilities.[71] A reading of the legislation and the policy documents concerning the migration to digital broadcasting[72] reveals no consideration of the implications of these developments on copyright. This study, therefore, aims to explore the possible solutions for creating a connection between the realities of digital broadcasting and securing the rights of broadcasters within the legal and institutional framework for copyright.

1.8 Justification of the Study

The literature reviewed reveals the challenges posed by digital technology and the internet on copyright law. For Kenya's copyright-based industries to achieve meaningful growth and for the country to effectively participate in the global knowledge economy, it is crucial to develop copyright laws that strike a balance between providing sufficient protection of copyright in the digital realm and acting in the public interest by putting in place provisions encouraging access to knowledge and the free flow of information.

Literature addressing the effectiveness of the legal and institutional framework for the protection and enforcement of copyright has not fully explored several areas within the framework, such as the liability of internet intermediaries. The literature reviewed has also highlighted other gaps

[71] Communications Authority of Kenya, 'Minimum Specifications for DVB-T2 Digital Set Top Boxes for the Kenyan Market' <http://www.ca.go.ke/images/downloads/TypeApproval/specifications/DVB=T2%20MINIMUM%20TECHNICAL%20SPECIFICATIONS%20JULY%202015.pdf> accessed 10 June 2016.

[72] ICT Authority, 'The Kenya National ICT Masterplan 2013/14 – 2017/18' <http://www.ict.go.ke/wp-content/uploads/2016/04/The-National-ICT-Masterplan.pdf> accessed 27 September 2015; Ministry of Information Communications and Technology, 'Ministerial Communications and Technology Strategic Plan 2013 - 2017' <http://www.ict.go.ke/wp-content/uploads/2016/04/MinistryStrategic.pdf> accessed 27 September 2015; Ministry of Sports, Culture and the Arts, 'ICT Strategic Plan 2013 - 2017' <http://www.sportsculture.go.ke/index.php/2015-03-09-09-37-44/category/4-publications?download=4:mosca-draft-ict-strategy> accessed 27 September 2015.

which have only recently emerged with developments in technology, such as digital broadcasting and the expanded opportunities for collective management of works used in digital networks.

This study identifies and addresses the shortcomings of Kenya's legal and institutional framework for the protection of copyright with specific focus on works in a digital form and distributed on the internet. It studies the framework put in place by a leading jurisdiction and approaches they have taken to deal with the challenges posed by the digital revolution in order to obtain insights on how to improve Kenya's legal and institutional framework.

1.9 Research Methodology

The author undertook a doctrinal analysis of core, subsidiary and related legislation providing for the protection and enforcement of copyright in the digital environment through a desk study. The legislation studied included the Constitution of Kenya 2010, the Copyright Act 2001, the Kenya Information and Communication Act 2009, and the Anti-Counterfeit Act. Relevant government policy documents such as the Ministry of Sports, Culture and the Arts ICT Strategic Plan, the Ministry of Information, Communications and Technology Strategic Plan, the National Music Policy and the National Broadband Strategy were also be studied.

In addition, the study relied on other secondary sources such as case reports, speech transcripts, textbooks, journal articles, periodicals, newspaper and magazine articles, market research insight papers, and other relevant articles and documents obtained physically from various libraries or the internet.

The study also undertook a comparative study to obtain insights on the best approaches to take in further improving Kenya's legal and institutional framework. The jurisdiction chosen for this particular comparative study was the United States (US), and the study concentrated on the Digital Millennium Copyright Act (DMCA) 1998.

There are several reasons why the US currently makes for a suitable subject for the comparative study. Firstly, the US is a leading exporter of cultural product and a major contributor to the development and adoption of new technologies affecting the creative industries, leading to a

robust legislative framework which keeps abreast of technological changes; thereby having the potential to provide good benchmarks to guide reforms to Kenya's framework. Secondly, both Kenya and the US adopt a common law conceptualization of copyright, and a utilitarian motivation to incentivize creativity. Finally, the ideal potential comparators for Kenya based on economic status and the development stage of its creative industries, South Africa and Nigeria, are also currently reforming their laws to meet the challenges of the Digital Age using the US as a benchmark.[73] It is, therefore, better to rely on the tried and tested framework that the US has developed, keeping in mind Kenya's interests.

1.10 Limitations

Lack of recent data from sources other than studies by right-holder organizations who may have a vested interest in presenting biased findings presents a significant limitation to this study, particularly on findings to do with piracy levels, estimated losses by copyright-based industries and the nature of involvement of internet intermediaries.

1.11 Chapter Breakdown

This study comprises of five chapters. Chapter 1 provides an introductory background to the study and presents the problem surrounding the adequacy of Kenya's legal and institutional framework for the protection and enforcement of copyright in the digital environment, forming the basis of the study's research questions, objectives, and hypotheses. This chapter also lays the theoretical framework behind the study and reviews literature from various sources to provide an insight into the continuing scholarly discussions on digital copyright and the challenges posed by the digital networks.

[73] Jeremy Speres, 'HOT OFF THE PRESS: SA Copyright Amendment Bill Published for Comment' <http://afro-ip.blogspot.com/2015/07/hot-off-press-sa-copyright-amendment.html> accessed 19 August 2016; Dugie Standeford, 'Nigeria Prepares To Revamp Its Copyright System For The Digital Age' <http://www.ip-watch.org/2015/11/22/nigeria-prepares-to-revamp-its-copyright-system-for-the-digital-age/> accessed 19 August 2016.

Chapter 2 maps out the general concepts in copyright, and elaborates on the study's reference to the overlapping concepts of the creative, cultural and copyright-based industries. The chapter also provides an overview of the Digital Age and the Digital Revolution, as well as the unique manner in which they have manifested in Kenya. Based on this background, this chapter proceeds to elaborate on the opportunities and challenges posed by the Digital Age on the protection and enforcement of copyright.

Chapter 3 explores the shortcomings of Kenya's legal and institutional framework in addressing the challenges posed by digital technologies as identified in Chapter 2. The chapter analyses the legislative and policy gaps as well as institutional and enforcement challenges hindering the effective protection and enforcement of copyright in digital form and on the internet.

Chapter 4 studies the experiences of the USA in developing solutions to the challenges posed by the digital age on copyright. The specific focus of the comparative study undertaken in this chapter is the USA's Digital Millennium Copyright Act (DMCA) as a leading, tried and tested legislative response.

Chapter 5 is a summary of the study's finding and recommendations for developing a more effective legal and institutional framework that can sufficiently address the challenges posed by the digital age.

CHAPTER 2: COPYRIGHT IN THE DIGITAL AGE

2.1 Introduction

This chapter seeks to explore the challenges faced by copyright law through the ever-expanding use of copyrighted material in digital forms, and the use and transmission of copyrighted material through digital networks such as the internet. This discussion will lay the groundwork for identifying and addressing the gaps in Kenya's legal and institutional framework for the protection of copyright in the Digital Age in subsequent chapters. The chapter will begin with highlighting the general concepts of copyright law and proceed with a discussion on creative or copyright-based industries and the challenges posed by the Digital Age on protection and enforcement of copyright. Finally, it will examine these challenges within the context of Kenya's rapid growth in the use of digital technologies, exponential internet penetration and advancements in digital broadcasting.

2.2 An Introduction to Copyright

Copyright is an area of intellectual property law regulating the creation and exploitation of certain types of cultural, informational and entertainment goods such as books, films, songs and computer programs.[74] This specified range of goods protected by copyright is referred to as "works" in the copyright laws of various jurisdictions, including Kenya's Copyright Act, 2001. The legal categories of works protected under Kenya's copyright law are literary works, musical works, artistic works, audiovisual works, sound recordings, and broadcasts.[75] A distinction is made between authorial works (created by authors such as books, music, art or films) and entrepreneurial works (created by entrepreneurs and derive from authorial works, such as sound recordings, broadcasts and cable programmes).[76] Upon the creation of a particular work, its protection under copyright arises automatically and usually for the benefit of the author upon

[74] Bently and Sherman (n 5) 31; William Cornish, David Llewelyn and Tanya Aplin, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (8th ed, Sweet & Maxwell 2013) 8.
[75] Copyright Act, 2001, Section 22(1).
[76] Bently and Sherman (n 5) 32, 117.

whom certain rights are vested for a specified duration.[77] Some of these rights include the right to copy the work; perform the work in public; to translate the work; or to distribute the work.

Copyright does not protect ideas or discoveries, it protects the expression of ideas - a principle referred to as the idea-expression dichotomy. In addition, a work must fulfil certain requirements to be protected under copyright. Authorial works must fulfil the requirement of originality, meaning that the author must have exercised the requisite intellectual effort in producing the work.[78] Computer generated works could be considered original if found that a human would have to exercise considerable skill, labour and effort to create the same work.[79] Authorial works must also be recorded in a material form, whether in writing or any other method including embodying the work in an electronic form. Certain works may be excluded from protection for public policy reasons, the nature of which is dependent on the prevailing social and cultural concerns of the relevant jurisdiction.[80]

Under copyright, rights holders are granted certain economic rights including the right to control the reproduction, distribution, communication to the public or broadcasting of the work.[81] In Continental legal systems based on a romantic view of the author as an "isolated creative genius" who inalienably imparts his or her personality upon the work created,[82] authors are also granted certain moral rights which include the right of attribution and the right to object to the derogatory treatment of a work in terms of additions, alterations, deletions and adaptations.

Several defences to copyright infringement exist, mainly for the purpose of balancing the interests of right holders and other rights, freedoms and interests for the benefit of the public. These defences take the form of exceptions and limitations to the rights conferred to copyright owners. Kenya's Copyright Act allows for carrying out the protected activities by way of fair dealing for the purposes of scientific research, private use, criticism or review, or the reporting of current events subject to acknowledgement of the source.[83]

[77] ibid 31; Cornish, Llewelyn and Aplin (n 74) 8–9.
[78] Bently and Sherman (n 5) 93–94.
[79] ibid 117.
[80] ibid 122–123.
[81] Copyright Act (n 75), Sections 26-29.
[82] Bently and Sherman (n 5) 274.
[83] Copyright Act (n 75), Section 26(1) (a).

The adoption of digital technologies by both creative industries and consumers has had a significant impact on copyright regimes. Emergent issues such as access to information for the public at large and access to information for persons with disabilities have become more pronounced. The extent of authors' rights to control derivative works is becoming increasingly questioned as transformative uses of works such as remixing and fan-fiction become an integral component of popular culture and social media.[84] Automated processes integral to the working of certain digital technologies such as web caching, as well as the practical need for making copies of works in digital forms either as a backup or for later consumption, are other developments requiring adequate consideration by copyright regimes.

The advancements in digital technologies and the use of digital networks such as the internet have presented several opportunities and challenges for creative industries and copyright regimes, as discussed in more detail below.

2.3 The Digital Revolution in the Creative Economy

2.3.1 Overview of the Creative Industries

The creative industries have been defined as "those industries which have their origin in individual creativity, skill, and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property."[85] They are the "industrial components of the economy in which creativity is the input and content or intellectual property is the output."[86] The creative industries are generally understood to comprise the core sectors of advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio; as well as research and development.[87]

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[84] Chander and Sunder (n 31).

[85] UK Department of Culture, Media and Sport, 'Creative Industries Mapping Document 2001' (DCMS 2001) 5 <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/183544/2001part1-foreword2001.pdf> accessed 12 September 2016.

[86] Jason Potts and Stuart Cunningham, 'Four Models of the Creative Industries' (2008) 14 International Journal of Cultural Policy 233.

[87] UK Department of Culture, Media and Sport (n 85) 5; John Howkins, *The Creative Economy: How People Make Money from Ideas* (Penguin Group 2013) Chapter 3.

The methodology of mapping the extent of the creative industries has evolved to a multi-dimensional "trident" approach which not only considers those directly employed in the core sectors of the creative industries but also includes those in support and management occupations within the creative industries, as well as creative occupations embedded within the broader economy.[88]

While the creative industries may produce content that is the subject of various forms of intellectual property such as patents or trademarks, the bulk of the goods produced by these industries fall within the subject matter of copyright. A further classification of cultural or copyright-based industries as a subset of creative industries is, therefore, necessary. Cultural industries are involved the "creation, production and commercialisation of the products of human creativity, which are copied and reproduced by industrial processes and worldwide mass distribution."[89] They generally comprise printing; publishing and multimedia; audiovisual, phonographic and cinematographic productions; crafts; and design. This study's reference to creative industries applies to cultural industries and specifically applies to copyright-based industries, that is, economic activities based on the creation, management, use and trade in original creations expressed in tangible form and protected by copyright.[90]

2.3.2 Overview of the Digital Age and the Digital Economy

The Digital Age (or the Information Age) is a term used to refer to the current era in human civilization characterized by a shift from a global economy and society formerly driven by industrialization to one driven by access and control of information that is primarily in digital forms. Just as the Industrial Age was ushered in by technological developments in machines and the rise of the factory system, the Digital Age was sparked by the Digital Revolution towards the end of the twentieth century.[91]

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[88] Peter Higgs and Stuart Cunningham, 'Creative Industries Mapping: Where Have We Come from and Where Are We Going?' (2008) 1 Creative Industries Journal 7.

[89] Hendrick van der Pol, 'Key Role of Cultural and Creative Industries in the Economy' (UNESCO Institute for Statistics 2007) 2 <https://www.oecd.org/site/worldforum06/38703999.pdf> accessed 12 September 2016.

[90] Nyariki and others (n 10) 32.

[91] Castells (n 34) 28–38.

Manuel Castells contends that the true starting point for the Digital Revolution is when a new technological paradigm organized around information technologies began to emerge in the 1970s as major technological advancements in and convergences between micro-electronics, computers, and telecommunications were made.[92] These events were followed by the development of single-chip computers with significant processing power from the 1980s, and then a shift in computing based on centralized data storage and processing to networking technologies as well as the global diffusion of cellular technology in the 1990s.[93] The other significant catalyst for the Digital Revolution was the creation and development of the internet, starting with the first computer network called ARPANET developed by the US Defense Department and various research centres in 1969.[94] ARPANET later evolved into NSFNET in 1990 and what later became the original building blocks for the Internet; followed by the development of the TCP/IP protocol as the basic communication language of the Internet and the HTTP protocol using the Uniform Resource Locator (URL) as a standard addressing system to locate resources on the internet.[95]

Other technological advancements emerged as the potential of the internet was harnessed further from the 1990s. These advancements continue to be refined and further developed to this very day. The diffusion of personal computers which exponentially increase their computing power and information storage capabilities and the improvements in communication over this digital network and constant development of computer programs and applications that perform various tasks have had a profound impact on nearly every aspect of human life. E-mails, instant messaging and social media have revolutionized communication and facilitated an unprecedented flow of information of information and knowledge. This connectivity has led to the creation of online communities that defy geographical boundaries. More importantly, it has had a significant effect on the priorities and conceptualization of the global economy, transforming it to one centred on information and technology.

As the infrastructure of economies continues to rely more and more on digital technologies and these technologies are adopted in every realm of human activity at an accelerating pace, new

[92] ibid 39–45.
[93] ibid.
[94] ibid 45–51.
[95] ibid.

socio-technical and techno-economic paradigms begin to form.[96] The main indicators of such a new paradigm are technologies that act on information; the pervasiveness of effects of new technologies; the increasing complexity and flexibility in the interaction between technologies; and the convergence of specific technologies into a highly integrated system.[97]

The techno-economic paradigm currently being experienced is increasingly being referred as the "digital economy" given that it has emerged as having distinctly different components from what makes up a traditional economy. The most significant technological trends driving the digital economy today include e-commerce, Big Data, cloud computing, social interaction technologies, the Internet of Things, and artificial intelligence.[98] E-commerce entails the distributing, buying, selling, marketing, and servicing of products or services over digital networks.[99] Big Data involves the identification, processing, and analysis of data to glean business insights used to improve efficiency, production, sales, and marketing while cloud computing includes remote data storage, retrieval, processing and analysis solutions.[100] Social interaction technologies are various technologies that facilitate the activities of business that have become socialized such as social media networks, blogs, wikis, and e-Portfolios.[101] The Internet of Things involves the communication between machines through cloud computing and networks of data-gathering sensors,[102] while and artificial intelligence is the science and engineering of making intelligent machines.[103]

Like every other sector of the traditional economy, industries based on intellectual property have had to embrace the Digital Age due to the significant opportunities the exploitation of digital technology offers for growth and due to its characteristic of spurring innovation which, by

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[96] ibid 69.
[97] ibid 69–76.
[98] Kachina Shaw, 'What Makes Up the Digital Economy - TechBytes Blog' (*Webopedia*, 16 September 2015) <http://www.webopedia.com/Blog/the-digital-economy.html> accessed 27 September 2016.
[99] Sihanya, 'Copyright in E-Commerce and the Music Industry in Kenya' (n 59) 133–136.
[100] Shaw (n 98).
[101] Teófilo Redondo, 'The Digital Economy: Social Interaction Technologies – an Overview' (2015) 3 International Journal of Interactive Multimedia and Artificial Intelligence 17.
[102] Daniel Burrus, 'The Internet of Things Is Far Bigger Than Anyone Realizes' (*WIRED*, 21 November 2014) <https://www.wired.com/insights/2014/11/the-internet-of-things-bigger/> accessed 27 September 2016; Daniel Burrus, 'The Internet of Things Is Far Bigger Than Anyone Realizes (Part 2)' (*WIRED*, 26 November 2014) <https://www.wired.com/insights/2014/11/iot-bigger-than-anyone-realizes-part-2/> accessed 27 September 2016.
[103] John McCarthy, 'What Is Artificial Intelligence?' (*Stanford University*, 12 November 2007) <http://www-formal.stanford.edu/jmc/whatisai/> accessed 10 June 2016.

complementary coincidence, is the ultimate *raison d'être* of intellectual property rights.[104] The subsequent sections of this chapter will explore the various opportunities and challenges that the Digital Age presents to copyright-based industries and copyright law generally, and also within the context of Kenya's copyright-based industries and its framework for protecting and enforcing copyright.

2.3.3 Opportunities and Challenges Posed by the Digital Age

The first impact digital technology has on copyrighted works is the digitization process whereby the essential elements that make up works protected by copyright (sounds, images, text and audiovisual material) can be converted into digital forms. Secondly, the digital forms of these works can be copied, stored, transmitted and distributed over digital networks such as the internet and mobile telephony networks. Digitization presents an opportunity for creators and rights holders of works to distribute or license their works for various uses over these digital networks. Predictably, this has led to the emergence of numerous online marketplaces for the sale of digital forms of copyrighted material such as Amazon, eBay, iTunes, Google Play Store and Steam.

These avenues for e-commerce have also come to represent a unique selling and value proposition for creators of copyright content who aim to distribute their material in the most cost-effective manner. The advantages of exploiting copyrighted material through an e-commerce model over physical sales are numerous. First, since the works are in digital forms that can be perfectly reproduced from a single copy, production costs are low compared to having to manufacture physical copies.[105] Second, the works are made accessible to a global market without the costs related to the distribution of physical copies and entry into markets.[106] Third, digital transactions eliminate paperwork and instead easily provides a wealth of data for analysis that can provide insights for improving marketing strategies and for making business

[104] Ian Hargreaves, 'Digital Opportunity: Review of Intellectual Property and Growth' (2011) 10–11 <http://autoblog.leslibres.org/autoblogs/creativecommonsorgweblog_6f7623748a4b5ddd872fd8c2fcd53404e0e69a8a/media/16ae12ee.ipreview-finalreport.pdf> accessed 15 May 2015.

[105] Ethan Lieber and Chad Syverson, 'Online versus Offline Competition' in Martin Peitz and Joel Waldfogel (eds), *The Oxford Handbook of the Digital Economy* (Oxford University Press 2012) 200–205.

[106] Sihanya, 'Copyright in E-Commerce and the Music Industry in Kenya' (n 59) 135.

decisions.[107] On the demand side, consumers can easily search through products online, compare prices and make decisions based on previous consumers' feedback and conveniently conduct transactions at the click of a button.[108] These factors have contributed to a progressive global shift from physical to digital sales of cultural goods and services, especially in recorded music sales.[109]

Digital technologies and networks have also introduced several avenues for the licensed use of the copyrighted material. Several digital performance and transmission uses have emerged that are subject to blanket licenses administered by collecting societies or individually negotiated licenses. These digital uses cover works used in services such as webcasts and podcasts; music streaming services like SoundCloud, Spotify, Deezer, or Tidal; video-on-demand (VOD) services like Netflix, Hulu, YouTube Red or Amazon Prime; and e-book rental services like BookRenter or Chegg. Digital licensing opportunities are becoming more and more relevant due to a global consumer preference for consuming digital media through streaming other than making actual purchases, a trend driven by the increasing availability and affordability of broadband Internet as well as the diffusion of internet-enabled devices.[110]

Digital technology not only expands the opportunities for licensing copyrighted material, it also has the potential to facilitate an expeditious and efficient licensing system. A centralized system through which works can be easily licensed through direct negotiations with creators' or their agents; or through standard terms and conditions offered through collecting societies can reduce the clearing costs borne by rights users in identifying right holders and securing licenses. Such modernized systems would also allow for greater efficiency, transparency, accountability and equity in the collective administration of copyright. Copyright holders would be able to track and monitor the use of their works under blanket licenses, and to accurately quantify the proportion of royalties due to them. Such a system is much easier to implement in African jurisdictions

[107] ibid.
[108] ibid 135–136; Lieber and Syverson (n 105) 200–205.
[109] EY, 'Cultural Times: The First Global Map of Cultural and Creative Industries' (CISAC 2015) 24 <http://www.ey.com/Publication/vwLUAssets/ey-cultural-times-2015/$FILE/ey-cultural-times-2015.pdf> accessed 10 January 2016.
[110] Hargreaves (n 104) 28.

where rights in entrepreneurial works are not fragmented and shared in a complex manner between several collecting societies, as is the experience in the USA and EU countries.[111]

Unfortunately, the attributes of digital technology that make it attractive for copyright-based industries are the same ones that pose a great challenge to the protection of copyrighted materials in digital form. An unlimited number of unauthorized copies of works can easily be generated, distributed or transmitted across digital networks at minimal costs and without perceptible loss in quality. Improvements in communication capacity such as the increase in bandwidth capabilities and reduced cost of access to the internet means that unauthorized works could be instantaneously distributed to multiple locations thereby and disrupting the market for legitimate copies of works to the detriment of right holders.[112] This unfavourable scenario is currently playing out in the form a global explosion of illegal file sharing and unauthorized use of copyrighted material, affecting the sustainability of nearly every sector of the copyright-based industries.[113] This situation has been made worse by the development and adoption of peer-to-peer (P2P) file sharing networks, which facilitate the accessing of files located in the computers of users within the network. The ease of finding resources for understanding the workings of P2P file sharing and the lack of barriers to entry have made it a significant contributor to the rampant online piracy of copyrighted material.[114]

Users of digital networks have the ability to carry out infringing activities anonymously, leaving no trace of their activity that identifies the user directly or indirectly through the devices they use. They have access to a wide range of resources at their disposal to mask their activities such as anonymous remailers, virtual private network (VPN) services, seedboxes, encrypted web browsing software like Tor, and anonymity driven operating systems like Tails or Whonix.[115] While these resources may be useful in other areas of concern such as securing private data and

[111] Roya Ghafele and Benjamin Gibert, 'Counting the Costs of Collective Rights Management of Music Copyright in Europe' 11–12 <https://mpra.ub.uni-muenchen.de/34646/> accessed 10 June 2016.
[112] Schlachter (n 7); Barbara Cohen, 'A Proposed Regime for Copyright Protection on the Internet' (1996) 22 Brooklyn Journal of International Law 401, 401–414; World Intellectual Property Organization, *Intellectual Property on the Internet: A Survey of Issues* (WIPO 2002) 30.
[113] Hasshi Sudler, 'Effectiveness of Anti-Piracy Technology: Finding Appropriate Solutions for Evolving Online Piracy' (2013) 56 Business Horizons 149.
[114] Brett Robert Caraway, 'Survey of File-Sharing Culture' (2012) 6 International Journal of Communication 575.
[115] ibid 576; Schlachter (n 7) 20.

preventing unauthorized online surveillance, they significantly impede copyright protection and enforcement in digital networks.

The attitude and awareness of everyday users of digital networks towards copyright contribute to the high rate of online infringement. The perpetuation of an internet culture of free sharing of resources may have conditioned a significant portion of users to expect to obtain copyrighted material for free.[116] Some scholars point to much more complex rationales for this attitude amongst users. Alexander Peukert, for instance, asserts that many users have a disconnect in their understanding of rights in tangible and intangible property and that digital networks such as the Internet provide infrastructural support for an "anthropological constant to accumulate 'things' in the digital realm" thereby triggering moral disengagement from their infringing actions.[117] Peter Yu, on the other hand, cites another possible cause as being the lack of a reference point for Generation Y, arguably the majority of users and infringers on the internet, to learn appropriate online conduct from their elders who are mostly computer illiterate and unable to keep up with today's ever-changing technological space.[118]

The role of online service providers or internet intermediaries has become another issue of interest with respect to the facilitation of copyright infringement in digital networks. The OECD defines internet intermediaries as entities which "bring together or facilitate transactions between third parties on the Internet. They give access to, host, transmit and index content, products, and services originated by third parties on the Internet or provide Internet-based services to third parties."[119] Such entities include Internet access and service providers (ISPs), data processing and web hosting providers, domain name registrars, search engines and portals, internet payment systems, e-commerce intermediaries and participative networking platforms which include internet publishing and broadcasting platforms for user-generated content.[120]

Technological advancements and exponential growth in global internet use have transformed the role of internet intermediaries from neutral and passive conduits for the transmission of

[116] Schlachter (n 7).
[117] Peukert (n 42).
[118] Yu (n 9) 756–763.
[119] Karine Perset, 'The Economic and Social Role of Internet Intermediaries' (OECD 2010) 9 <http://www.oecd-ilibrary.org/science-and-technology/the-economic-and-social-role-of-internet-intermediaries_5kmh79zzs8vb-en> accessed 4 March 2016.
[120] ibid.

information into channels for a significant portion of human interaction, shaping how information and knowledge is exchanged and accessed.[121] There is an increasing trend of convergence of previously separate roles as seen in the merger of control over access, content, and users in a limited number of mega-platforms.[122] Intermediaries no longer just offer the infrastructure for the distribution and communication of content, they are increasingly also functioning as retailers of content.[123]

Copyright infringement may arise from the three main actions that an intermediary might do while carrying out its functions: copying, possession or transmission of information. To begin with, the technological intricacies of how intermediaries carry out these functions can prove problematic. Packet switching – where an intermediary receives information and sends fresh copies to the next host in the communication chain; or where it makes copies of a resource it has stored for display or other communication to a user upon request – is the process underlying every internet communications transaction today,[124] as well as a growing portion of mobile telephony transactions.[125] Even though the intermediary's software carries out these actions on the instructions of remote third parties, the creation of unauthorized copies by the intermediary may constitute an infringement of rights-holders' reproduction and distribution rights if applied strictly.[126]

Appreciating the nature of copyright infringement online, in which infinite unauthorized copies can be generated from a single act of infringement, rights-holders tend to identify internet intermediaries as the easiest targets for legal action due to several reasons. It may make more economic sense to target intermediaries with 'deep pockets' than to identify and sue numerous individual infringers acting in multiple jurisdictions.[127] Intermediaries are also capable of applying copyright enforcement in a cost-effective manner that could provide more effective

[121] Niva Elkin-Koren, 'After Twenty Years: Revisiting Copyright Liability of Online Intermediaries' in Susy Frankel and Daniel Gervais (eds), *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014) 39.
[122] ibid 40.
[123] ibid.
[124] Chris Reed, *Internet Law: Text and Materials* (2nd ed, Cambridge University Press 2004) 96.
[125] Carl J Weisman, *The Essential Guide to RF and Wireless* (2nd ed, Prentice Hall PTR 2002) 218–221.
[126] Reed (n 124) 96–97.
[127] ibid 89–90; Elkin-Koren (n 121) 31–33.

remedies and deterrents against infringement such as blocking access to websites with infringing content.[128]

When the question of internet intermediary liability for copyright infringement by individual users first came before the courts, intermediaries were held strictly liable for the mere hosting and transmission of infringing copies. In *Playboy Enterprises, Inc. v. Frena*,[129] it was held that the owner of a Bulletin Board System (BBS) was strictly liable for distributing infringing material which was uploaded and downloaded by users from the system. Copyright laws and jurisprudence have since moved away from the strict liability standard and now rely more on secondary liability which imposes liability where the intermediary actively encourages users to copy or distribute infringing material through its facilities, or where it has actual knowledge of the infringement and fails to take reasonable steps to prevent it.[130] In *Religious Technology Center v. Netcom On-Line Communications Services, Inc.*,[131] the court rejected the allegation that an ISP was strictly liable for the actions of its subscriber who had posted infringing material to a newsgroup. *CoStar Group Inc. v. Loop-Net Inc.*,[132] elaborating on this question, held that ISPs that provide internet access cannot be held liable for direct copyright infringement by simply owning a system that enabled users to make copies and that automated copying generated by computer systems lacked an aspect of volition or causation necessary to establish liability.

Courts have also confronted intermediary liability in cases concerning online file sharing networks, as illustrated by the landmark US case of *A&M Records, Inc. v. Napster, Inc.*[133] Napster offered a software and service, whereby it hosted a catalogue of files available on the computers of Napster users in centralized servers from which users could locate and download the listed files. The network became popular for use in illegally sharing music files, resulting in the firm being sued by affected copyright owners, alleging contributory and vicarious infringement by Napster. The Plaintiffs sought an injunction to stop the exchange of music files. Napster denied any liability for the infringement, arguing that it was only acting as a passive conduit functioning to facilitate the sharing of files chosen by its users. The Plaintiffs argued that

[128] Reed (n 124) 89–90; Elkin-Koren (n 121) 31–33.
[129] 839 F Supp 1552 (MD Fla. 1993).
[130] Reed (n 124) 100.
[131] 907 F Supp 1361 (ND Cal. 1995).
[132] 373 F 3d 544 (4th Cir. 2004).
[133] 114 F Supp 2d 896 (ND Cal. 2000), 239 F 3d 1004 (9th Cir. 2001).

Napster's policy for dealing with infringing activity upon notice by merely terminating a user's account instead of blocking the internet protocol (IP) address of infringing users amounted to wilful blindness and was not a reasonable preventative measure against infringement. The District Court, in agreement with the Plaintiffs' arguments, allowed the injunction and held that Napster could be held liable for contributory and vicarious copyright infringement. On appeal to the Ninth Circuit Court of Appeal, the determination of the District Court was upheld, and Napster was found to have both actual and constructive knowledge of the infringement. The court also rejected Napster defence of fair use on the part of their users, particularly on the claim that the users were sampling the works before making legal purchases and that other users were space-shifting, that is transferring the works from legally acquired media like CDs to be able to consume the music from their computers. The court held that the sampling defence failed as users were making permanent and complete use of the media and that the space shifting defence could not apply where the users were making the works available to other users.

Different legislative responses have been taken to deal with the liability of internet intermediaries. One approach is to enact an umbrella legislation that extends beyond copyright matters to other areas of concern such as online defamation, obscene content, and cybercrime. The other approach is to enact a legislation specific to copyright infringement, as preferred by the USA when they enacted the Digital Millennium Copyright Act, 1998. There is, however, a similarity in the content of both approaches since they both have the objective of providing intermediaries with some level of immunity or safe harbours from liability for the actions of third parties. These immunities are based on the role of intermediaries as a mere conduit providing access to a communication; caching of content to make communication more efficient; provision of information location tools that may inadvertently link to infringing content; and hosting of infringing content without actual knowledge of the status of the content.[134] These immunities are dependent on the intermediary not having knowledge of the infringing actions of their users, and their acting expeditiously to remove infringing content upon notice from copyright owners.[135]

Another emerging issue is that of computer-generated works for which there is no readily available author, as opposed to scenarios where an author makes use of a computer as a technical

[134] Bently and Sherman (n 5) 175.
[135] ibid.

aid while creating a work. Examples of such works are works created by translation software, the working of search engines, and the growing use of computer algorithms and natural language generators by media companies to create content.[136] The fact that these works lack an identifiable human author would disqualify these works in the standard test for originality as a requirement for its protection under copyright.[137] A possible solution, as has been applied by certain legislations such as the UK's Copyright Designs and Patent Act, would be to assign authorship to the person by whom the arrangements necessary for the creation of the work has been undertaken.[138] This approach is similar to the one used to define authorship in sound recordings and audio-visual works.[139] Even where the initial authorship problem can be resolved by either fictionalizing the author for convenience or removing the requirement of attribution to an author, other issues are bound to be grappled with including the extent of rights to be granted to those considered authors of the works, duration of protection, and determining joint ownership.[140]

2.3.4 The Digital Age and Copyright in the Kenyan Context

Kenya's embrace of the digital revolution began through the modernization and expansion of telecommunications services in the 1970s and 1980s. The sector was highly regulated and monopolized by the State through the Kenya Posts and Telecommunications Corporation (KP&TC).[141] While the technologies being rolled out during this period was primarily centred on fixed telephony, the infrastructure for other value added network services like telex and fax, as well as facilities for data communications, were also being developed.[142]

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[136] *See for example* Shelley Podolny, 'If an Algorithm Wrote This, How Would You Even Know?' *The New York Times* (7 March 2015) <http://www.nytimes.com/2015/03/08/opinion/sunday/if-an-algorithm-wrote-this-how-would-you-even-know.html> accessed 10 June 2016.
[137] Bently and Sherman (n 5) 116–117.
[138] ibid 127.
[139] Jani McCutcheon, 'Curing the Authorless Void: Protecting Computer-Generated Works Following IceTV and Phone Directories' (2013) 37 Melbourne University Law Review.
[140] ibid.
[141] Tyler, Hughes and Renfrew (n 36) 81–84.
[142] ibid 91–93.

The communications sector was partly liberalized in 1991, allowing for new entrants in the terminal equipment or customer premises equipment market.[143] There was also an emergence of private networks and closed use communication groups operated by private enterprises, NGOs and intergovernmental organizations.[144] This development triggered the introduction of several data-driven international value-added network services such as paging services, electronic mail, and the use of modems and leased lines through packet-switched data network known as Kenpac.[145]

The technological developments in the 1990s encouraged business enterprises to adopt technology in their activities. Some agricultural marketers and farmers were using online data links to obtain current prices for their goods; computerized reservation systems began to be used by players in the tourism industry, and electronic payments became part and parcel of the financial services industry.[146] Digital networks were also employed in educational and research institutions through facilities like the East and Southern African Network (ESANET) and the GreenNet conferencing system which was accessible from the University of Nairobi; as well as pilot email projects at the University of Nairobi and the Kenya Medical Research Institute.[147] As of 1994, data store-and-forward technology known as FidoNet provided the widest international data access point for bulletin boards and e-mails.[148]

The first major turning point in Kenya's digital revolution was the introduction of leased line connections capable of accessing the Internet in 1995.[149] This development triggered the entry of more than 10 Internet Service Providers (ISPs) which were managing approximately 5,000 accounts by the end of 1995.[150] By the end of 1998, the initial stages of Kenya's internet boom were underway with 600 dial-up lines in operation, in addition to the presence of 458 Internet hosts and 292 .ke domain names.[151] However, the Internet diffusion was impeded by the

[143] Bernard Sihanya, 'Infotainment and Cyberlaw in Africa: Regulatory Benchmarks for the Third Millenium' (2000) 10 Transnational Law & Contemporary Problems 583, 606.
[144] Tyler, Hughes and Renfrew (n 36) 87.
[145] ibid 91–93; Muriuki (n 37) 32.
[146] Tyler, Hughes and Renfrew (n 36) 99–106.
[147] ibid 105; Muriuki (n 37) 32.
[148] Tyler, Hughes and Renfrew (n 36) 106; Muriuki (n 37) 28.
[149] Muriuki (n 37) 33.
[150] ibid.
[151] ibid 37.

prevailing rigid regulatory environment and domination of the KP&TC. As a result, internet access was a costly affair available only to the majority through cyber cafés that were concentrated in urban areas.[152]

The second and arguably the most significant turning point came about through the entry of mobile telecommunications services companies and the arrival of fibre optic cable networks. The introduction of M-PESA, the now ubiquitous mobile money transfer system, in 2008 led to a steady increase in mobile phone penetration.[153] The fibre optic cable networks facilitated the spread of third-generation (3G) mobile technology and quickly began to become Kenyan's preferred internet access point as soon as affordable internet enabled mobile phones were successfully introduced to the market.[154]

The increased adoption of mobile devices with more capabilities in terms of internet connectivity and data processing as well as the falling cost of mobile internet bandwidth remain the main driving forces behind the exponential growth in internet access and use being witnessed today (Figure 1). The Communications Authority of Kenya reported that as of December 2015, the number of internet users in Kenya was estimated to have risen to 35.5 million, translating to an 82.6% penetration level.[155]

The positive implications of greater internet connectivity are evident in the improvement of government services through e-government facilities, the expansion of e-commerce and the positive economic and social impact on key sectors including financial services, education, health and agriculture.[156] A report by the McKinsey Global Institute found the internet's

[152] Mark Kaigwa, 'From Cyber Café to Smartphone: Kenya's Social Media Lens Zooms In on the Country and Out to the World' in Bitange Ndemo and Tim Weiss (eds), *Digital Kenya: An Entrepreneurial Revolution in the Making* (Palgrave Macmillan UK 2016) 188.

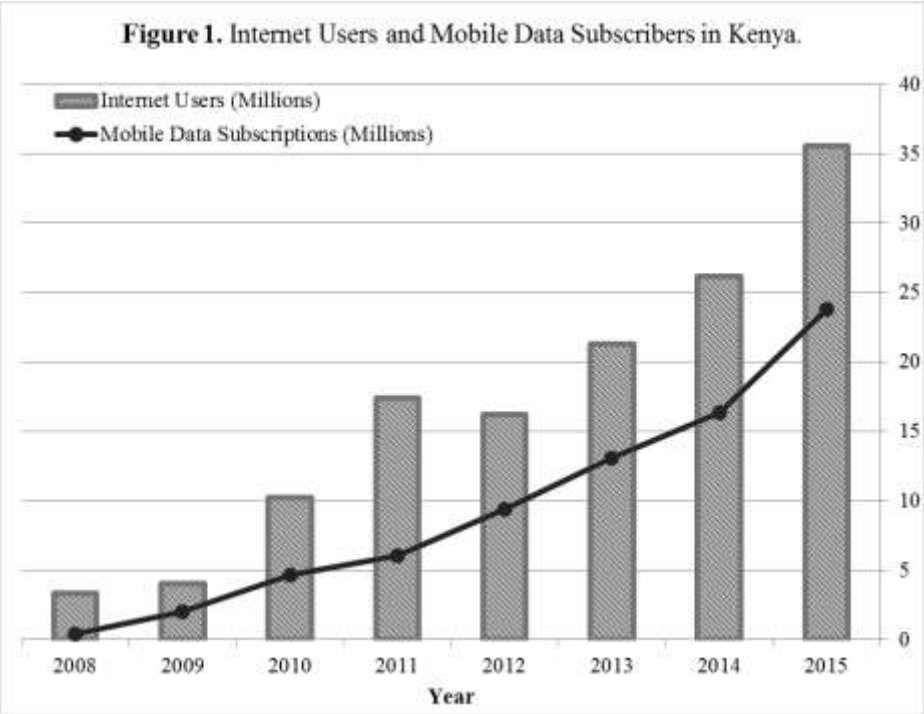
[153] William Jack and Tavneet Suri, 'Mobile Money: The Economics of M-PESA' (National Bureau of Economic Research 2011) 4–5 <http://www.nber.org/papers/w16721> accessed 12 October 2016.

[154] Kaigwa (n 152) 189.

[155] Communications Authority of Kenya, 'Quarterly Sector Statistics Report; Second Quarter of the Financial Year 2015/16' (n 3) 20–25.

[156] James Manyika and others, 'Lions Go Digital : The Internet's Transformative Potential in Africa' (McKinsey Global Institute 2013) 9 <http://www.mckinsey.com/~/media/mckinsey/dotcom/insights/high%20tech%20internet/lions%20go%20digital/mgi_lions_go_digital_full_report_nov2013.ashx> accessed 11 August 2015.

contribution to Kenya's overall economy to be at 2.9% of its Gross Domestic Product (GDP) as of November 2013, a level comparable to developed countries such as France and Germany.[157]



Adapted from Communications Authority of Kenya Quarterly Sector Statistics Reports,[158] this figure depicts the link between the growth in internet access and the diffusion of mobile internet users in Kenya. The vertical bars represent the number of internet users while the line represents the number of mobile data subscriptions.

Another important finding is that this contribution to the GDP is primarily driven by private consumption as opposed to other economies such as Morocco whose internet-contributed GDP is a trade surplus from its business process outsourcing (BPO) industry.[159] This implies that Kenya's consumption and exploitation of copyrighted material on the internet is higher than in

[157] ibid 56.
[158] Communications Authority of Kenya, 'Statistics' (n 38).
[159] Manyika and others (n 156) 4.

other African countries. Social networking, email, instant messaging and accessing music or videos are the most popular online activities among Kenyans.[160]

The copyright-based industries have benefitted from Kenya's exponential growth in internet penetration. Copyright-based industries were found to employ 62,131 people and contribute 5.32% of Kenya's GDP as of 2007, amounting to about Kshs. 85.21 billion.[161] These industries are making use of the opportunities provided by digital networks to promote their brands and expand the market for their works beyond the geographical confines of Kenya. Several online music distribution platforms[162] and video on demand (VOD) subscription services have emerged.[163] A majority of terrestrial radio and television stations have begun simulcasting their broadcasts through online streams on the internet. Digital book publishing is now a reality through various global and local online platforms.[164] Kenya's video and mobile game development industry is also experiencing significant growth.[165]

The convergence of communication services on other digital networks have also positively impacted the copyright-based industries. Value added services being offered through mobile telephony networks such as caller ringback tone (CBRT) services have provided another avenue for the commercial exploitation of copyrighted material. Progress has also been made in the

[160] ibid 57.

[161] Nyariki and others (n 10).

[162] Examples of Kenya-based online music distribution platforms include Waabeh (http://waabeh.com/), Mdundo (http://mdundo.com/), Mziiki (https://www.mziiki.com/) and A Kenyan Voice (http://www.akv.co.ke/). *See* Balancing Act Africa Issue No. 658, 'Music to the Ears – African Online Mobile Music Platforms Break out All over the Continent' (*Balancing Act Africa*, 7 June 2013) <http://www.balancingact-africa.com/news/en/issue-no-658/top-story/music-to-the-ears-af/en> accessed 20 January 2015.

[163] *See* Balancing Act Africa, 'Kenya's Buni TV Launches Its Buni+ Pay for Premium Subscription Service (VoD)' (*Balancing Act Africa*, 13 March 2014) <http://www.balancingact-africa.com/news/broadcast/issue-no175/top-story/kenya-s-buni-tv-laun/bc> accessed 20 December 2014; AFP, 'Netflix Becomes "Global TV Network" Now in Kenya' (*Daily Nation*, 7 January 2016) <http://www.nation.co.ke/lifestyle/Netflix-becomes-global-TV-network-now-in-kenya/-/1190/3023956/-/o5qqyk/-/index.html> accessed 11 January 2016; Lilian Ochieng', 'Liquid Telecom to Leverage Its Fibre in War on Streaming Titan' (*Daily Nation*, 4 February 2016) <http://www.nation.co.ke/business/Liquid-Telecom-to-leverage-its-fibre-in-war-titan-Netflix/-/996/3062550/-/yyoux3/-/index.html> accessed 9 February 2016.

[164] Njeri Wangari, 'E-Kitabu; Kenya's First EBook Store Launches at the Nairobi International Book Fair' (*Kenyan Poet*, 30 September 2012) <http://www.kenyanpoet.com/2012/09/30/e-kitabu-digital-book-store-launches-at-the-nairobi-book-fair/> accessed 22 December 2014.

[165] *See* iHub, *African Tech Bits Episode 3: Gaming in Kenya* (2014) <https://www.youtube.com/watch?v=_SvhF2FCDyQ&feature=youtu.be> accessed 4 October 2015; Richard Moss, 'Big Game: The Birth of Kenya's Games Industry' (*Polygon*, 3 July 2013) <http://www.polygon.com/features/2013/7/3/4483276/kenya-games-industry> accessed 4 October 2015.

broadcasting sector. Coordinated by the Communications Authority of Kenya, the country migrated from analogue television broadcasting to digital broadcasting in 2015 in compliance with an agreement by United Nations Member States under the auspices of the International Telecommunication Union to undertake an analogue to digital switchover by June 17, 2015.[166] The move to digital broadcasting has opened up the spectrum on the frequencies available to Kenya, enabling more broadcasters and other consumers to operate.[167] The process has also improved the quality of broadcasts and facilitated the introduction of value added features such as Electronic Program Guides and time shifting features.[168]

The immense difficulty of protecting and enforcing copyright on digital networks is already becoming apparent in Kenya. It is estimated that 98% of the total revenue of the Kenyan music industry is earned by pirates,[169] not only through the sale of bootleg CDs and DVDs but also through the unauthorized distribution and sharing of music files online. Growing equally rampant are cases of online book piracy, plagiarism, and the unauthorized use of photographs and other copyrighted material sourced from copyright owners' websites and social media accounts.[170] Piracy of popular television shows have had a direct economic effect on the television stations that air them.[171]

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[166] Michael M Ndonye, Josephine Khaemba and Phylis Bartoo, 'Digital Migration and the Battle of Terrestrial Titans in Kenya: Issues and Prospects' (2015) 2 International Research Journal of Engineering and Technology 2303 <https://www.irjet.net/archives/V2/i3/Irjet-v2i3375.pdf> accessed 12 October 2016.

[167] Wachira Maina, 'Digital Migration: The What and Why' (*Daily Nation*, 2 January 2015) <http://www.nation.co.ke/oped/Opinion/Digital-migration-The-what-and-why/440808-2601350-53bvhwz/index.html> accessed 12 October 2016.

[168] Ndonye, Khaemba and Bartoo (n 166) 2305–2306.

[169] Nyariki and others (n 10) 85.

[170] *See* Victor Nzomo, '"Sue, Baby, Sue!": Miguna's Peeling Back the Mask and the Digital Copyright Infringement Debate' (*IP Kenya*, 20 July 2012) <http://ipkenya.wordpress.com/2012/07/20/sue-baby-sue-migunas-peeling-back-the-mask-and-the-digital-copyright-infringement-debate/> accessed 5 October 2014; Victor Nzomo, 'Election Campaigns and Copyright Infringement' (*IP Kenya*, 5 January 2012) <https://ipkenya.wordpress.com/2012/01/05/election-campaigns-and-copyright-infringement/> accessed 22 December 2014; Michela Wrong, 'Adventures of a Book in Africa' (*Standpoint Magazine*, August 2009) <http://www.standpointmag.co.uk/node/1703/full> accessed 22 December 2014; Njeri Wangari, '10 Cases of Plagiarism in Kenya' (*Kenyan Poet*, 11 March 2014) <http://www.kenyanpoet.com/2014/03/11/10-cases-of-plagiarism-in-kenya/> accessed 11 December 2014; Njeri Wangari, 'Rampant Plagiarism of Kenyan Photographs Online' (*Kenyan Poet*, 10 February 2015) <http://www.kenyanpoet.com/2015/02/10/rampant-plagiarism-of-kenyan-photographs-online/> accessed 5 March 2015.

[171] Philip Mwaniki, 'Online Pirates Engage Local TV Stations in Battle of Dramas' (*Daily Nation*, 5 December 2009) <http://www.nation.co.ke/magazines/lifestyle/-/1214/817826/-/7altspz/-/index.html> accessed 22 December 2014.

The growth of the Kenyan film industry has been impeded, not only through the illegal distribution of their own content on the internet and pirated DVDs, but also through the widespread availability of and preference for pirated Hollywood titles that can be accessed for free on the internet or for a much cheaper price through an informal distribution network of pirated DVD shops found in almost every urban centre in the country.[172] The method of piracy is largely perceived by everyday consumers as "street-level entrepreneurship in the informal economy, or as resistance to transnational media and entertainment conglomerates" thereby using digital technologies to "exercise a 'power of the weak' against Western multinationals."[173] This has led to the plummeting of revenues for cinemas and legitimate movie rental businesses, eventually driving a majority of them out of business.[174] The International Intellectual Property Alliance reported Kenya as having the highest piracy rate in Africa at 83% as of 2006,[175] up from 78% in 2003.[176] With regard to business software, Business Software Alliance estimates that as of 2013, 78% of software sold in Kenya was pirated.[177]

The situation in Kenya is also reflective of the problem of incomplete globalization of media in which global media cultures and global marketing efforts outstrip nationally bounded, time-delayed distribution channels; and in which informal and unauthorised players such as "national" or language-specific peer-to-peer file sharing websites play a specialized role in providing local content to diasporic communities with limited access to content from their home countries[178], or providing subtitling or dubbing in local languages.[179]

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[172] *See* Riaga (n 54); Konstantaras (n 55).

[173] Flew (n 49).

[174] *See* Paul Wafula, 'Theatre to Close Shop as Sales Plunge' (*Business Daily*, 5 October 2010) <http://www.businessdailyafrica.com/Corporate-News/Theatre-to-close-shop-as-sales-plunge/-/539550/1026178/-/6c5g1jz/-/index.html> accessed 20 September 2015; Frankline Sunday, 'Piracy Eats Away Movie Rentals and Cinema Revenues' (*Business Daily*, 27 July 2010) <http://www.businessdailyafrica.com/Piracy-eats-away-movie-rentals-and-cinema-revenues/-/539444/965112/-/qf84kqz/-/index.html> accessed 1 October 2015.

[175] International Intellectual Property Alliance, '2006 Special 301 Report: Special Mention - Kenya' (Office of the US Trade Representative) <http://www.iipa.com/special301_TOCs/2006_SPEC301_TOC.html> accessed 9 October 2015.

[176] International Intellectual Property Alliance, '2003 Special 301 Report - Kenya' (Office of the US Trade Representative) <http://www.iipa.com/rbc/2003/2003SPEC301KENYA.pdf> accessed 9 October 2015.

[177] Business Software Alliance (n 46) 9.

[178] Karaganis (n 48) at 48.

[179] Stella Kabura, 'DJ Afro Movies Lead As Urban Kenya's Preferred Home Cinema Collection' (*TechMoran*, 4 August 2014) <http://techmoran.com/dj-afro-movies-lead-nairobis-prefered-home-cinema-collection/> accessed 11 October 2015.

Kenya's poorly developed online payments infrastructure, limited consumer awareness of online shopping platforms or mistrust of online payment systems and inadequate legitimate distribution channels for copyrighted material are other factors that encourage preference for accessing illegal copies of pirated materials on the internet.[180] Lack of awareness also affects owners of copyrighted materials, most of whom are not aware of their rights as creators or right-holders and the appropriate responses to online copyright infringement.[181]

While Kenya's legal framework for the protection and enforcement of copyright, primarily contained in the Copyright Act 2001, attempts to address some of the challenges presented by the Digital Age, it falls short in several important areas. Some of the technical terms relating to the use of digital technologies are not well defined exposing the framework to potential problems when determining whether certain rights apply, or the appropriate duration of those rights.

The response of the government to these challenges has been lacklustre at best. Several policy documents meant to provide a framework for stimulating growth and effectiveness of various sectors of the economy through digital technology have been published, namely the Kenya National ICT Masterplan;[182] the Ministry of Information, Communications and Technology Strategic Plan;[183] and the National Broadband Strategy.[184] These documents do not consider the role of the creative industries as a significant source of employment and their contribution to the country's GDP. No consideration is made of the opportunities and challenges posed on the creative industries by digital technology and digital networks. As a result, the policy documents merely recognise the general weakness of the legal framework for protecting and enforcing intellectual property rights but do not provide and policy interventions or legislative proposals to remedy the problem.

[180] *See* Manyika and others (n 156) at 47–48; Josephine Opar, 'Kenya's Film Distribution Problem' (*This Is Africa*, 19 June 2014) <http://thisisafrica.me/lifestyle/kenyas-film-distribution-problem/> accessed 28 October 2015.
[181] Cominos (n 64) 14.
[182] ICT Authority (n 72).
[183] Ministry of Information Communications and Technology (n 72).
[184] Ministry of Information Communications and Technology, 'National Broadband Strategy' <http://www.ca.go.ke/images//downloads/PUBLICATIONS/NATIONAL%20BROADBAND%20STRATEGY/National%20Broadband%20Strategy.pdf> accessed 27 September 2015.

These shortcomings are also exhibited in policy documents directly concerning the creative industries. The draft Ministry of Sports, Culture and the Arts ICT Strategic Plan[185] completely ignores promotion of creative industries and the protection of their content on digital networks as strategic areas for action. The National Music Policy[186] is the only policy document that attempts to address the concerns of creative industries in the digital environment. The policy recognizes the impact of digital technologies and the impact of online piracy on the music industry. Its policy statements suggest an intention by the government to minimize online piracy, to improve enforcement of copyright, and to modernize copyright licensing. However, it does not outline the specific means by which it will put these measures in place. The policy statements in the National Music Policy are still too vague to precipitate any real and targeted action by the government.

2.4 Conclusion

The Digital Age has ushered in various opportunities and challenges for copyright-based industries to grapple with. This chapter has explored how the challenges, in particular, are having a significantly negative effect on the exploitation of copyrighted material for the benefit of copyright owners. At the same time, advancements in digital technologies also provide the opportunities to open up markets for creative content, enhance the collective administration of copyright, and improve access to knowledge and information. It is imperative that the legal and institutional framework in place adequately meets these opportunities and challenges. The following chapter critiques the adequacy of Kenya's framework in this regard.

[185] Ministry of Sports, Culture and the Arts (n 72).

[186] Ministry of Sports, Culture and the Arts, 'National Music Policy' <http://musicinafrica.net/sites/default/files/national-music-policy-revised-26-february-2015.pdf> accessed 27 September 2015.

CHAPTER 3: KENYA'S LEGAL & INSTITUTIONAL FRAMEWORK FOR THE PROTECTION & ENFORCEMENT OF COPYRIGHT IN THE DIGITAL SPACE

3.1 Introduction

This chapter seeks to provide an analysis of Kenya's legal and institutional framework with particular emphasis on the adequacy of this framework in protecting and enforcing copyright on the Internet and other digital networks.

This chapter will analyse the main legislative provisions of the framework found in the Constitution and Copyright Act, 2001 as well as peripheral statutes such as the Anti-Counterfeit Act and the Kenya Information and Communication Act. The analysis of the institutional framework will include not only directly responsible agencies such as the Kenya Copyright Board, Copyright Tribunal, Police, Anti-Counterfeit Agency and the Judiciary, but also other potential actors with regulatory roles in the digital environment including the Communications Authority of Kenya and the Kenya Network Information Centre.

3.2 Legal Framework

3.2.1 Constitutional Provisions

The Constitution is the supreme law of Kenya and binds all persons and State organs at all levels of government.[187] Its promulgation in 2010 heralded a new constitutional dispensation with positive implications for the legal status of intellectual property. Intellectual property rights expressly recognized and protected under Article 40(5), which places an obligation on the State to support, promote and protect the intellectual property rights of the people of Kenya.

The implication of Article 40(5) is that inadequacies in support, promotion, and protection of intellectual property by the State organs and officers mandated to carry out this obligation can be contested before the High Court of Kenya within its jurisdiction to determine matters involving the violation of fundamental rights and freedoms and within its supervisory jurisdiction over any person, body or authority exercising a judicial or quasi-judicial function.[188] This provision is

[187] Constitution of Kenya, 2010, Article 2(1).
[188] ibid, Article 165.

proving to be a useful tool in contesting inadequate responses to the challenges posed on copyright protection and enforcement in digital networks by relevant state organs. An illustration of this is the on-going case of *Bernsoft Interactive & 2 Others v. Communications Authority of Kenya & 9 Others*,[189] a constitutional petition seeking declaratory orders that the State through its relevant organs – the Communications Authority of Kenya, the Kenya Copyright Board (KECOBO) and the Office of the Attorney General – has failed in its legal and constitutional obligations to protect the intellectual property rights of Kenyan rights-holders by not putting in place an adequate legal and policy response to rampant online copyright infringement.

Article 118 has the implication of requiring the legislative processes that effect changes or additions to statutes affecting intellectual property contain a credible element of public participation, more so targeting key stakeholders that are likely to be affected by the changes in relevant laws and their underlying policy. This requirement is threatening several new and well-meaning amendments to the Copyright Act relating to the right to equitable remuneration conferred on performers and producers of sound recordings and audio-visual works.[190]

3.2.2 Copyright Act Provisions

Kenya's copyright law has its roots in its status as a British Protectorate as from 1895 and eventually as a British colony from 1920.[191] Under the reception clause of the East African Order in Council 1897, English common law, doctrines of equity and statutes of general application became applicable in Kenya as sources of law.[192] This provision was later re-enacted under Section 3 of the Judicature Act, 1967. Among the statutes of general application were the 1911 and 1956 UK Copyright Acts which formed the substantial basis for Kenya's copyright law throughout colonial era, along with other English legislation and judicial precedents providing for procedural and evidentiary rules.[193]

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[189] Petition No. 600 of 2014; Nzomo, 'Test Case on Liability for Online Copyright Infringement' (n 69).
[190] Discussed in Section 3.2.2.4 below.
[191] Ben Sihanya, 'Copyright Law in Kenya' 1 <http://innovativelawyering.com/attachments/article/26/Copyright%20Law%20in%20Kenya%20-%20Prof%20Ben%20Sihanya.pdf> accessed 16 May 2016.
[192] ibid 2.
[193] ibid 3.

Kenya's first domestic Copyright Act was enacted in 1966. Since then, the Act has undergone several changes between 1975 and 2012. Among these changes[194] included the extension of authorship rights to authors of computer programmes in 1989;[195] refining provisions to do with the Competent Authority in 1992;[196] recognition of digital forms of works and wireless means of transmission of works in 1995;[197] and the extension of the protection of the Act to works belonging to nationals of state parties to the Berne Convention in 2000.[198] This study solely concentrates on the latest iteration of Kenya's copyright law framework, the Copyright Act, 2001, which introduced several provisions regarding the protection and enforcement of copyright in the digital space. The relevant provisions of the Act are discussed thematically below.

3.2.2.1 Definitions of Technical Terms

Section 2 of the Copyright Act is the interpretation clause, which contains the definitions of several technical terms. Some definitions are included for the purpose of further making the Act future-proof and digital-ready in the face of rapid technological changes. It includes suitable definitions of some key technical phrases such as "computer," "computer program," "copy," "electronic rights information" and "technical measure." However, some other definitions could pose some problems within a digital environment.

The Act defines a broadcast as "the transmission by wire or wireless means, of sounds or images or both or the representations thereof, in such a manner as to cause such images or sounds to be received by the public and includes transmission by satellite" whereas a communication to the public is defined as either "a live performance" or "a transmission to the public, other than a broadcast, of the images or sounds or both, of a work, performance or sound recording". These definitions are confusingly similar and give no guidance on how to distinguish either activity from the other. Based on the definitions provided, there is no guidance on which category to place digital transmission technologies such as webcasting and simulcasting, where digital media

[194] ibid 4–7.
[195] The Copyright (Amendment) Act, 1989, Act No. 14 of 1989.
[196] The Copyright (Amendment) Act, 1992, Act No. 11 of 1992.
[197] The Copyright (Amendment) Act, 1995, Act No. 9 of 1995.
[198] The Copyright (Amendment) Regulations; 2000 Legal Notice 125 of 2000.

is compressed and continuously transmitted either on-demand or at the same time as the broadcasting of identical media through traditional broadcasting methods.[199]

While the term "broadcast authority" would normally suggest a regulator of the broadcasting sector, but the Copyright Act uses it to mean "the Kenya Broadcasting Corporation established by the Kenya Broadcasting Corporation Act, or any other broadcaster authorized by or under any written law." The term "broadcasting organisation" is much more suitable for denoting an ordinary broadcaster licensed to operate within the country and less prone to misinterpreting provisions in which the term is used.

The terms "publish" or "publication" as one of the means by which a work qualifies for protection are not well defined under the Act, more so within the context of use of works in the digital environment. Section 2(2) (a) provides that a work is considered published only if copies of the work have been issued in sufficient quantities to satisfy the requirements of the public. This unclear and roundabout definition, which conservatively borrows from Article 3(3) of the Berne Convention,[200] is an incomplete guide to determining what constitutes publication generally and is even more problematic when considering whether works transmitted through digital networks such as the Internet have been published.[201]

With regard to works in which copyright is conferred not by virtue of nationality of the authors as provided by Section 23(1) but by their publication in Kenya as provided by Section 24(1) (b), the determination of publication is especially significant in determining whether copyright subsists in these work. For such works, the determination of publication thereby affects the

[199] Lucie Guibault and Roy Melzer, 'The Legal Protection of Broadcast Signals' [2004] IRIS plus 6 <http://www.ivir.nl/publicaties/download/768.pdf> accessed 18 May 2016.

[200] The provision adopts the wording of the first part of Article 3(3) of the Berne Convention ("…'published works' means works published with the consent of their authors, whatever may be the means of manufacture of the copies, provided that the availability of such copies has been such as to satisfy the reasonable requirements of the public, having regard to the nature of the work.") but ignores the second, probably contentious, part of the provision which deals with works transmitted through digital networks ("The performance of a dramatic, dramatico-musical, cinematographic or musical work, the public recitation of a literary work, the communication by wire or the broadcasting of literary or artistic works, the exhibition of a work of art and the construction of a work of architecture shall not constitute publication.").

[201] Brian Fitzgerald and others, 'Country of Origin and Internet Publication: Applying the Berne Convention in the Digital Age', *Copyright Perspectives: Past, Present and Prospect* (Springer 2015).

application of statutory damages[202] or fines and penalties[203] for infringement and also crucial in computing the term of protection.[204]

Without definitional clarity on the actual elements that constitute publication, Section 2(2) (a) is a disjointed provision that may prove more of a hindrance than a help in determining whether a work made available exclusively on the internet can be considered to have been published. The "sufficient quantities" element of the definition provided by Section 2(2) (a) would also be difficult to interpret for works available in digital networks where infinite copies can be derived from a single digital source. Conversely, Section 30A(4) of the Act introduced by the Statute Law (Miscellaneous Amendments) Act 2012 considers works made available through digital networks as published but only for the purposes of the equitable remuneration right of the use of sound recordings and audiovisual works. This provision leaves the Act's general position on the possibility of publication through digital networks unsettled.

3.2.2.2 Rights Involving Digital Transmission of Works

In recognition of new technological means of transmitting works in digital forms other than through broadcasting and as guided by the provision of the WIPO Internet Treaties, Section 26(1) of the Copyright Act recognizes the author's right to control the broadcasting and communication to the public of a whole or substantial portion of a work. While the two rights are drafted in a manner to suggest that they should be interpreted as separate rights, the definitions of the particular actions they are meant to protect offer little by way of distinction, or at least guidance. Apart from stating that a broadcast and communication to the public both involve some mode of transmission of works to the public, no additional clarification of the relationship between the two activities is offered.

The purpose of conferring these rights separately, in as much as they entail several common elements, is to prescribe special rules to determine when each of them occurs.[205] The corresponding provision for the broadcasting right in UK copyright law, for example, limits

[202] Copyright Act (n 75) Section 35.
[203] ibid, Section 38.
[204] ibid, Section 23(2).
[205] Bently and Sherman (n 5) 159.

broadcasts to transmissions carried out for simultaneous reception by members of the public in manner capable of being lawfully received by them and transmitted at a time determined solely by the person making the transmission for presentation to members of the public; with the exception of certain internet transmissions.[206]

As the recognition of the right of communication to the public can be said to be an implementation of the provisions of the WIPO Internet Treaties, the Copyright Act also fails to consider the right of making a work available to the public through electronic means in a manner that the public may access it at their own convenience as distinct from communication to the public. The WIPO Internet Treaties intended to bring out a distinction whereby communication presupposes transmission from a source to a recipient, a 'making available' involves the placing of a work in a location from which it can be accessed at will by the public.[207] However, the wording of the actual provision in the Treaties muddies the distinction.[208] Perhaps as a consequence of this, the Copyright Act does not include 'making available' as a distinct right on its own or within its definition of communication to the public.

Ironically, Section 30(1) (g) introduced by the Statute Law (Miscellaneous Amendments) Act 2012 recognizes a performer's right to control the making available to the public of his fixed performance through electronic means and for the consumption of the public at their convenience. There is no justification why authors cannot expressly enjoy a similar right under the Act.

A remedy for the Act's disjointed position on the rights of communication in public vis a vis the broadcasting right and making available right would involve either abandoning the distinctions and retaining a single right of communication to the public with a general definition that would also be applicable for actions amounting to broadcasts or making available; or alternatively, recognizing all three distinctive rights and clarifying the requirements for each right to apply.

[206] ibid 88–90; Copyright, Designs and Patents Act 1988, Section 6(1).
[207] ibid 163.
[208] Article 8 of the WIPO Copyright Treaty provides that "…authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, *including* the making available to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them." (Emphasis added).

3.2.2.3 Amendments via Statute Law (Miscellaneous Amendments) Act 2012

The Statute Law (Miscellaneous Amendments) Act 2012 contributed some provisions to the Copyright Act relevant to the protection and management of copyright in the digital environment, particularly in the area of performers' rights and the right to equitable remuneration. It amended Section 30(1) to include among rights conferred upon performers the right of making available of a fixation of a performance through electronic means for public access at their convenience. This right is applicable in interactive on-demand transmissions of works such as in video-on-demand and uploading of works on peer-to-peer (P2P) file sharing networks.[209] Further, it amended Sections 30(6) and added new subsections (7) and (8) which together had the effect of adding the exception of the making of a single copy of a fixed performance for personal use, subject to the payment of a levy on the equipment and blank media used in recording the performance. These amendments provide useful provisions which are alive to the common practice of generating backup copies of digital media for personal use, due to their relative ease of wear and tear or destruction.

The Statute Law (Miscellaneous Amendments) Act 2012 also added a new Section 30A which, for the purpose of recognizing the equitable remuneration right for performers and producers of sound recordings, imposes a compulsory licensing scheme for exploitation of sound recordings via broadcasting or other communication to the public including the making available of the recordings through digital means for public consumption at their convenience. For every instance of such use, the performer and the producer of the recording are paid a single equitable remuneration through their respective collective management organization (CMO). The remuneration is shared equally between the performer and the producer of the sound recording. However, both Section 30A and the definitions clause[210] are silent on whether new digital transmission technologies such as webcasting and simulcasting fall within the scope of the equitable remuneration right.

While the marginal note to Section 30A suggests that this compulsory licensing scheme also applies to the similar exploitation of audiovisual works, in line with the intentions of the Beijing

[209] Bently and Sherman (n 5) 163.
[210] Section 3.2.2.1 above.

Treaty on Audiovisual Performances, no clause of Section 30A makes any express reference to audiovisual works. Also, if the Section is truly intended to benefit performers and producers in the audiovisual sector, no CMO has been licensed to administer their rights in audiovisual works under Section 30A.

The extent of application of Section 30A to certain uses of works in the digital environment has already been tested through the case of *David Kasika & 4 Others v. Music Copyright Society of Kenya & Another*.[211] The petitioners in this case (composers and performers of musical and audiovisual works) challenged a license issued by the three existing CMOs for the exploitation of sound recordings in a caller ring-back tones (CRBT) service called Skiza Tunes owned by Safaricom, a leading mobile network operator. Skiza Tunes enables subscribers to select and download sound recordings and fixations of performances for use as ring-back tones to their phones.[212] The petitioners argued that this use constituted a private performance of the works and not a public performance governed by Section 30A that would require CMOs to collect royalties on their behalf. The court held the opposite view, citing two landmark Canadian cases - *Canadian Wireless Telecommunications Association v. Society of Composers, Authors and Music Publishers of Canada*[213] and *Entertainment Software Association v. Society of Composers, Authors and Music Publishers of Canada*.[214] In agreement with the Canadian decisions and adopting them to the facts of the case before it, the court held that the Skiza Tunes service offered members of the public the opportunity to download ring-back tones for their mobile phones thereby communicating the musical works contained in the ring-back tones to the public, a use within the ambit of Section 30A; and that it would be illogical to argue that the service constituted private performance simply because the transmissions are done one by one, and thus at different times.

Despite the spirit of Section 30A's pursuing of the equitable remuneration through CMOs being the need for a utilitarian strategy to enable performers and producers to benefit from the

[211] Petition No. 350 of 2015 [2016] eKLR.
[212] Safaricom Limited, 'Skiza FAQ' <http://skiza.com/wap2/common/safaricomhelp.ftl> accessed 20 May 2016.
[213] 2008 FCA 6, [2008] 3 F.C.R. 539.
[214] [2012] 2 SCR 231.

commercial exploitation of their works in the most cost-effective manner,[215] it has experienced a formidable attack against its applicability through the case of *Mercy Munee Kingoo & Another v. Safaricom Limited & Another*.[216] One of the central issues for determination in this constitutional petition was the petitioners' claim that the process for the introduction of Section 30A did not involve public participation and was unconstitutional, therefore voiding a license agreement between CMOs and Safaricom Limited for the collection of royalties from the Skiza Tunes CBRT service. The court agreed with the petitioners' argument that the process which saw the Statute Law (Miscellaneous Amendments) Bill 2012 introduced in Parliament and presented for presidential assent within three days would not have been sufficient to engage stakeholders in line with the constitutional principle of public participation. The court also held that provision of Section 30A requiring royalties to be paid only through the CMOs violated the petitioners' right to freedom of association since they had to join a CMO in order to receive royalties due to them. Based on this determination, the court held that Section 30A is unconstitutional and the Skiza Tunes license unlawful.

The *Mercy Munee* case has far-reaching implications, particularly with regard to future legislative changes to the current copyright regime and the manner in which certain rights are to be administered. First, it reinforces the requirement that all significant amendments to the copyright regime should ensure they properly comply with the principle of public participation before coming into force. Moreover, the case could be an indicator that a certain segment of the stakeholders in copyright-based industry would appreciate a mechanism through which they can either opt out of the entire regime of collective management of the communication to the public right granted under the Copyright Act or choose to privately negotiate and collect royalties licenses for certain uses falling with their communication to the public right. Digital uses of works in particular, such as in video-on-demand services; webcasting; or CRBT services, can be easily logged and monitored in a cost-effective manner. There may also exist right holders who may want to make their works available under open content licenses such as the Creative

[215] Nzomo, 'Collective Management of Copyright and Related Rights in Kenya: Towards An Effective Legal Framework for Regulation of Collecting Societies. A Research Project Submitted in Partial Fulfilment of the Requirements of Master of Laws, School of Law, University of Nairobi.' (n 67) 10–12.
[216] [2016] eKLR.

Commons (CC) licenses and find no means of circumventing the provisions of Section 30A.[217] Therefore, the possibility of a perception among these stakeholders that they can privately license and administer specific uses falling with these rights is not entirely unfounded.

If opting out of the collective administration of rights could prove more beneficial to these stakeholders, then such an opportunity could be facilitated to them within the legislation. Relevant considerations to be made in this regard could include the provision of a simplified procedure of opting out from the collective management system or excluding certain works or objects of related rights from the repertoire, and a reasonable period for the relevant CMO to remove the affected works from its repertoire.[218]

3.2.2.4 Exceptions and Limitations

The fair dealing doctrine as set out by Section 26(1) is potentially problematic because it does not provide any definition for the requirement of fairness[219] and thereby provides no guidance to courts on how to evaluate whether a use constitutes fair dealing as provided, for example, in the equivalent fair use doctrine set out in the US Copyright Act.[220] Without a formal interpretation of this provision, it becomes difficult for both users and copyright owners to make prior assessments on which uses fall within fair dealing, exposing both parties to unnecessary potential loss of time and resources in dispute resolution.

Section 26 also excludes the inclusion of two short passages of a literary or musical work in material used for educational purposes. This limitation is wholly inapplicable to the realities of the operations of educational institutions in Kenya which mostly rely on the preparation and

[217] COMMUNIA, 'COMMUNIA Policy Paper on the Directive Proposal on Collective Management of Copyright' <http://www.communia-association.org/wp-content/uploads/2013/01/communia_policy_paper_colsoc_directive.pdf> accessed 28 August 2016.

[218] ibid; Mihály Ficsor, 'Collective Management of Copyright and Related Rights at a Triple Crossroad: Should It Remain Voluntary or May It Be "Extended" or Made Mandatory' [2003] Copyright Bulletin 8–9 <http://bat8.inria.fr/~lang/orphan/documents/unesco/Ficsor+Eng.pdf> accessed 28 August 2016.

[219] Ouma and Sihanya (n 56) 92.

[220] 17 U.S.C., Section 107 (States four non-exclusive factors to consider in determining whether a particular use is fair, namely "1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for the copyrighted work.").

dissemination of course packs due to factors such as limited resources on the part of the students and institutions. A more realistic limitation alive to this realities and informed by a public interest objective of promoting access to knowledge would permit the inclusion of a more significant portion of the works or ideally permit the reproduction of whole works for educational purposes.[221]

The exceptions and limitations fail to take account of educational uses of works that would employ digital technologies, such uses forming a significant basis of e-learning and distance learning programs.[222] They are also silent on the needs of persons with sensory disabilities, a group that would particularly benefit from a provision permitting the conversion of works into specialized formats that are accessible to them such as Braille, audio or digital text.[223]

The exceptions and limitations clause does not consider certain new uses of works that have been introduced by recent technological advancements, key among them the migration from analogue to digital migration. The digital migration process[224] has introduced time-shifting technology as a central feature of broadcasts. Time shifting entails the private recording of broadcasts in a digital format to a storage device such as USB flash drive for viewing at a later time, through devices commonly referred to as digital video recorders (DVRs) or personal video recorders (PVRs). The Communications Authority of Kenya's specifications for the type approved set-top boxes to be used in receiving digital signals of television broadcasts includes PVR as an optional feature.[225] The majority of set-top boxes in the Kenyan market are bundled with the PVR function, essentially introducing the potential widespread recording of broadcasts contrary to Section 29 of the Copyright Act. While this time-shifting feature is likely to be used privately by ordinary users, it also has the effect of reducing the technological barrier for those who record broadcasts and compile unauthorized DVD copies on a commercial scale. Previously, the illegal DVD industry had to rely on expensive technology such as video capture cards to record broadcasts for their compilations. This disconnect between the infrastructure provided and the legal framework

[221] Ouma and Sihanya (n 56) 92.
[222] ibid 93.
[223] Denise Rosemary Nicholson, 'Copyright - Are People with Sensory-Disabilities Getting a Fair Deal?', *The Fourth Pan-Commonwealth Forum on Open Learning (PCF4).* (Commonwealth of Learning and the Caribbean Consortium 2006) <http://pcf4.dec.uwi.edu/viewpaper.php?id=379&print=1> accessed 10 May 2016.
[224] Discussed in Section 2.3.3 of Chapter 2 above.
[225] Communications Authority of Kenya, 'Minimum Specifications for DVB-T2 Digital Set Top Boxes for the Kenyan Market' (n 71).

should be bridged by providing for a defence of time-shifting of broadcasts restricted to private and domestic use.

The digital migration process also brought to the fore the issue of limitation of broadcasters' rights in the public interest. The rollover to digital broadcasting of television categorized the players in the sector into two categories: broadcasters who develop the broadcast content, and broadcast signal distributors (BSDs) who provide the infrastructure for the efficient digital transmission of the broadcasts. The legality of the arrangement was contested and settled in the case of *Communications Commission of Kenya & 5 Others v. Royal Media Services Limited & 5 Others*[226] (commonly referred to as the digital migration case) in which three free-to-air broadcasters contested the decision of the Communications Authority of Kenya to authorize licensed BSDs and Pay-TV broadcasters to transmit their broadcasts without their consent. This arrangement was in compliance with the "must carry" rule in Regulation 14(2)(b) and 16(2)(a) of the Kenya Communications(Broadcasting) Regulations, 2009, which compels BSDs to carry a prescribed minimum number of Kenyan broadcasting channels, as a precondition to retaining the license. The affected broadcasters argued that the BSDs and Pay-TV channels were re-broadcasting their content without their approval, an act amounting to copyright infringement. Relying on the Philippine Supreme Court decision of *ABS-CBN Broadcasting Corporation v. Philippine Multi-Media System, Inc. & 6 Others*[227] the Supreme Court held that the BSDs and Pay-TV channels' actions could not be construed as "rebroadcasting" under the definition provided under the Copyright Act, since they did not take any financial and editorial responsibility over the transmitted content; and because the content was delivered digitally without any interference from the BSDs. The Supreme Court also held that the "must carry" provisions imposed by the Regulations fell under fair dealing in the public interest as provided by Section 26 of the Copyright Act. The Supreme Court's somewhat self-contradictory approach of finding no infringement and then relying upon a defence for infringement has been criticized for not giving enough weight to the definitions of "broadcasting", "broadcasting authority" and

[226] Petition No. 14, 14A, 14B and 14C (Consolidated) of 2014, [2014] eKLR.
[227] G.R. No. 175769-70 (2009).

"rebroadcasting" under the Copyright Act, a plain reading of which would have led to the construction of the BSDs and Pay-TV channels' actions as rebroadcasting.[228]

The introduction of time-shifting through type approved devices as well as the issues brought up in the digital migration case revealed a lack of synergy between policymakers and institutions responsible for the administration of communications and those responsible for the administration of copyright. Ideally, the introduction of new laws and regulations in preparation for digital migration and other technological advancements in the communications sector should have been simultaneously accompanied by a corresponding assessment of the consequences of the laws and regulations vis-à-vis the Copyright Act. Resultantly, no tangible considerations were made to consider the possibility of enacting provisions in the Copyright Act catering for time-shifting and the "must carry" obligations of BSDs.

3.2.2.5 Amendments via Statute Law Miscellaneous (Amendments) Act 2014

The Statute Law Miscellaneous (Amendments) Act 2014 adds a new Section 33A which empowers the competent authority to grant a compulsory license for the publication, republication, performance or communication to the public of works where the right holder withholds consent for these uses unreasonably. These provisions are probably in response to the special provisions concerning developing countries contained in the Appendix to the Berne Convention for the Protection of Literary and Artistic Works. Under the Appendix to the Berne Convention, developing countries may subject the translation right and reproduction right to compulsory licenses on a work under certain stringent conditions and strictly for use in prescribed educational activities.[229] The utility of the Appendix to the needs of developing countries has been questioned,[230] with a majority of developing countries developing their own idiosyncratic solutions through exceptions and limitations clauses or compulsory licensing

[228] Edward Sigei, 'Digital Migration in Broadcasting and Copyright: The Supreme Court Direction' *Copyright News, Issue 15* 5 <http://www.copyright.go.ke/awareness-creation.html?download=50:copyright-news-issue-15> accessed 15 May 2015.
[229] Berne Convention, 1971 Paris Text, Appendix.
[230] *See* Alberto J Cerda Silva, 'Beyond the Unrealistic Solution for Development Provided by the Appendix of the Berne Convention on Copyright' (2012) 60 Journal of the Copyright Society of the USA 581, 598; Ndéné Ndiaye, 'The Berne Convention and Developing Countries' (1986) 11 Columbia-VLA Journal of Law & the Arts 47.

schemes that are similar to but more permissive than the provisions of the Appendix, mainly on public interest grounds.[231]

The provisions of Section 33A are a welcome supplement to the exclusion of the non-commercial reproduction right for educational or public interest purposes under Section 26(1) but fails to meet its objectives completely. This amendment represents an unexploited opportunity for licensing certain digital uses of works for the benefit of marginalised groups seeking better access to information and knowledge, such as persons with sensory disabilities. The compulsory license scheme would have also extended to the translation right and thereby catering for linguistic and cultural minorities on the fringes of information and knowledge access. Section 33A would be much more effective, for instance, if it also imposed a compulsory license on the conversion of works into specialised digital formats accessible to these marginalized groups such as braille; where right holders do not distribute these specialized formats in the Kenyan market and unreasonably refuse to allow the conversion of the works.

Despite the shortfalls in the exceptions and limitations clause, Section 26(4) provides adequate exceptions to the rights in computer programs by allowing for the making of copies to back up the program, for error correction, for testing suitability of use and any other purpose unrestricted by its license. Decompilation or conversion of the program to enable interoperability with other programs is also allowed under Section 26(5).

3.2.2.6 Technological Protection Measures and Digital Rights Management

The Copyright Act takes a rigid stance against circumvention of technological protection measures (TPMs) and the removal or alteration of digital rights information (DRMs) in works. Section 35(3) states that copyright is infringed by anyone who circumvents any technical measure designed to protect works; manufactures or distributes devices primarily designed to circumvent these technical measures; removes or alters any electronic rights management information; or distributes, imports, broadcasts or makes available to the public protected works from which electronic rights management information has been removed or altered without the authority of the right holder.

[231] Silva (n 230) 590–598.

While the provisions protecting DRMs are justifiable, the rigid protection of TPMs has the effect of severely limiting access to information in digital formats in the public interest. Section 35(3) renders TPM-protected works in digital formats such as e-books, journal articles, databases and other research materials unavailable to uses permitted by exceptions and limitations under Section 26. This restriction undermines the intentions of the exceptions and limitations clause which does not provide for the circumvention of TPMs to access works for educational and public interest uses. Users are therefore forced to utilize valuable resources in seeking permission of right holders to access works in digital formats or to obtain physical copies of the works, even if the intended use falls under the exceptions and limitations clause.[232]

Certain technical measures, particularly those that protect works made available online, have the capability of collecting or disseminating users' personal data reflecting their online activities without providing notice of such collection or dissemination and without giving users the option to restrict such collection of their personal information. In the interests of giving users control over their personal online data, circumvention of TPMs solely for the purpose of preventing the collection and dissemination of a user's personal online data should be permissible.

3.2.2.7 Authentication Devices

Section 36(1) of the Copyright Act requires every sound and audiovisual recording made available to the public by way of sale, lending or distribution in any other manner to the public for commercial purposes in Kenya to have affixed on it an authentication device prescribed by KECOBO. The device comes in the form of a physical barcode sticker. The mandatory language of this provision and its presumption that these works can only be sold or distributed through physical media is problematic, considering the availability of numerous digital publishing and distribution platforms available to rights-holders today. KECOBO has since phased out the stickers and replaced them with a managed database application, basing their decision on prohibitive manufacturing costs.[233] This development not only reinforces the redundancy of

[232] Ouma and Sihanya (n 56) 95.
[233] Kenya Copyright Board, 'Phase Out of the Physical Barcode Sticker' (*Kenya Copyright Board*, 10 August 2016) <http://www.copyright.go.ke/media-gallery/news-and-updates/290-phase-out-of-the-physical-barcode-sticker.html> accessed 12 August 2016.

Section 36 with respect to works distributed digitally but also calls to question the provision's applicability to works distributed through physical media.

3.2.2.8 Intermediary Liability

As communications and technological services in Kenya continue to converge, the role of internet intermediaries has become an issue to address urgently. There has been an emergence of several players in the sector who are not only involved in the provision of access to digital networks but also provide other related services such as hosting of data, hosting of websites, moderating social networks, and registration of domains. The unique nature of the growth of internet use in Kenya places mobile service providers in a significant role as intermediaries since mobile telephony is the main driver for Internet adoption in the country. These mobile service providers are also increasingly acting as retailers and aggregators of content as illustrated by *John Boniface Maina v. Safaricom Limited*[234] which concerned the unauthorized aggregation and transmission of musical works through a CRBT service owned by a leading mobile service provider.

At present, there is no legal framework defining the role of intermediaries in the digital environment in copyright protection and enforcement, as well as other activities of concern such as online defamation and cyber crime. No Kenyan law defines internet intermediaries or defines the limits of their liability for the actions of third party users or subscribers with regard to breaches of any right or commission of any offence, let alone copyright infringement. The closest the Kenyan legislature came to drafting such a law was the Electronic Transactions Bill, 2007 which was part of a raft of bills meant to improve on the outdated Kenya Communications Act, 1998. The Bill limited both civil and criminal liability for service providers where they acted as mere conduits, when providing hosting services, with respect to caching processes and where they used information location tools.[235] It also provided a notice and take-down procedure for addressing complaints of infringement of rights and their immunity for actions taken

[234] Civil Suit 808 of 2010 [2013] eKLR; Galgallo Fayo, 'Safaricom Reaches Sh15.5m Settlement with Musician' (*Business Daily*) <http://www.businessdailyafrica.com/Corporate-News/Safaricom-reaches-Sh15-5m-settlement-with-musician/539550-2304920-nm4rbhz/index.html> accessed 4 December 2015.
[235] Munyua, Githaiga and Kapiyo (n 65) 7.

following the notification of breaches.[236] The Bill failed to pass into law. Instead, a watered-down provision for electronic transactions without any reference to intermediary liability included in the Kenya Information and Communications Amendment Act, 2009 instead.[237]

The need for a legal framework governing intermediary liability with for copyright infringement in the digital environment is illustrated by the on-going case of *Bernsoft Interactive & 2 Others v. Communications Authority of Kenya & 9 Others*.[238] The case is a constitutional petition by music industry stakeholders seeking injunctive orders to compel the major internet service providers (ISPs) to block access to websites that transmit or distribute material that infringes copyright held by the petitioners. The petitioners are also seeking declaratory orders that the State, through its relevant organs – the Communications Authority, the Kenya Copyright Board (KECOBO) and the Office of the Attorney General, has failed in its legal and constitutional obligations to protect the intellectual property rights of Kenyan rights-holders.

In response, KECOBO is developing amendments to the Copyright Act with ISP liability provisions specifically for copyright infringement online.[239] The current form of the draft amendments limits ISPs' liability where they act as mere conduits, for the creation of cache copies, for material storage of infringing material without knowledge of the nature of the material, and for provision of information location tools that lead to resources containing infringing material without knowledge of the nature of the resources.

The draft amendments also provide for a notice and take-down procedure that is skewed in favour of rights-holders. The provision requires ISPs to disable access to the alleged infringing materials within 36 hours of receiving the take-down notice.[240] While there are penalties for falsely or maliciously lodging take-down notices, the take-down procedure itself is incomplete and not alive to the exclusions and limitations clause of the Copyright Act. It does not require ISPs to implement due process before applying enforcement measures or provide for the lodging and hearing of counter-arguments against take-down claims, ideally before KECOBO,

[236] ibid.
[237] Discussed in Section 3.2.3 below.
[238] Petition No. 600 of 2014; Nzomo, 'Test Case on Liability for Online Copyright Infringement' (n 69).
[239] Sigei, 'Proposed Amendments to Provide Web Blocking Measures in Cases Of Copyright Infringement Online' (n 66) 10–11.
[240] ibid.

Competent Authority or courts. This procedural gap, coupled with a provision providing ISPs with immunity for wrongful take-downs, is likely to lead to over-compliance and reckless enforcement at the expense of free flow of information and access to knowledge.[241] Further, these amendments will be made more effective through the strengthening and refining of other related provisions such as the fair dealing exclusion[242] and the position on online publication of works.[243]

3.2.2.9 Enforcement Mechanisms

The Copyright Act avails to rights-holders both civil and criminal remedies for copyright infringement. With respect to civil remedies, rights-holders may seek injunctions against further infringement, damages based on a reasonable royalty that would have been payable had the infringing act been licensed, account of profits, and delivery up or search and seizure of infringing material.[244] Anton Piller Orders may also be sought, where rights-holders have *prima facie* evidence of infringement, to secure the preservation of necessary documents, copies and other material to substantiate their cause of action further.[245] Search, seizure and forfeiture remedies can also be applied in the context of online infringement where rights-holders seek to seize the domain names and server resources of locally registered or locally hosted websites involved in extensive copyright infringement for commercial gain.[246]

Copyright infringement may also lead to criminal sanctions based on the rationale that copyright is not just a private good but also public good that provides tax revenue, incentivizes innovation and investment.[247] Criminal sanctions have also been viewed as a useful deterrent against piracy of copyrighted material. The TRIPs Agreement, which Kenya has ratified, also requires

[241] Elkin-Koren (n 121) 47–50; Ronald J Mann and Seth R Belzley, 'The Promise of Internet Intermediary Liability' (2005) 47 William and Mary Law Review 239, 269.
[242] Section 3.2.2.1 above.
[243] Section 3.2.2.4 above.
[244] Copyright Act (n 75), Section 35; Moni Wekesa and Bernard Sihanya, *Intellectual Property Rights in Kenya* (Konrad Adenauer Stiftung : SportsLink 2009) at 168 – 169.
[245] Copyright Act (n 75), Section 37.
[246] Business Action to Stop Counterfeiting and Piracy, 'Roles and Responsibilities of Intermediaries: Fighting Counterfeiting and Piracy in the Supply Chain' at 66 <http://www.iccwbo.org/Data/Documents/Bascap/International-engagement-and-advocacy/Roles-and-Responsibilities-of-Intermediaries-BASCAP-Report-2015---Low-Resolution/> accessed 15 May 2015.
[247] Wekesa and Sihanya (n 244) at 169 – 170.

minimum standards of criminal enforcement to be in place. Section 38 of the Copyright Act prescribes criminal sanctions that specifically target acts of infringement for commercial purposes. The manufacture and distribution of infringing copies or possession of any contrivance used or intended to be used in making infringing copies attracts a maximum fine of Kshs. 400,000/-, or imprisonment not exceeding two years, or both.[248] Repeat offenders risk a maximum fine of Kshs. 800,000/- or imprisonment not exceeding ten years, or both.[249] The sale, hire or trade in infringing copies as well as possession of infringing copies for non-personal use attracts a maximum fine of Kshs. 100,000/-, or imprisonment not exceeding two years, or both.[250] Infringement through the unauthorized public performance of a work attracts a maximum fine of Kshs. 500,000/- or imprisonment not exceeding four years, or both.[251] The provision penalizing unauthorized public performance does not specify whether it applies only to performances for commercial purposes. The illegal possession of a security device or any machine, instrument or contrivance intended to be used to produce or reproduce a security device is punishable by a fine not exceeding two million shillings or to imprisonment for a term not exceeding ten years, or to both.[252]

The extremely high levels of piracy in Kenya, only made worse by the explosive growth in access to and use of the internet, despite the existence of these criminal sanctions has led to proposals for deterrent minimum fines and penalties for copyright infringement.[253] However, there are also arguments questioning the utility of a costly, 'one size fits all' criminal enforcement regime centred on economic concepts such as penalizing infringement on a 'commercial scale' even where civil enforcement already addresses economic consequences. [254] Proponents for a differentiated framework for criminal enforcement of intellectual property generally, argue for criminal enforcement based on the level of social harm from the viewpoint of public interest, where the activities of individual infringers and those of organized criminal networks are not treated in a similar manner.[255] Minimum deterrent fines and penalties would

[248] Copyright Act (n 75), Section 38(4).
[249] ibid, Section 38(6).
[250] ibid, Section 38(5).
[251] ibid, Section 38(7).
[252] ibid, Section 36(8).
[253] Business Action to Stop Counterfeiting and Piracy and Kenya Anti-Counterfeit Agency (n 11) at 17.
[254] Geiger (n 62) at 128 – 132.
[255] ibid at 130 – 132.

significantly impede the judicial discretion required to make differentiations based on the nature and scale of the infringement.

Moreover, criminal sanctions against certain facets of online copyright infringement, especially peer-to-peer file sharing, has proved to be an inefficient and unsuccessful remedy that does not act as a deterrent to the infringing behaviour.[256] This enforcement failure stems from deeply rooted perceptions and attitudes by a majority of internet users – the internet's enabling environment for limitless accumulation which triggers moral disengagement from acts of infringement, the perception that illegal file-sharing is sharing of information, a disconnect in the understanding of rights in tangible and intangible property, and the lack of a generational reference on appropriate online conduct from elders, majority of whom have never been exposed to the internet and other such recent technological advancements.[257]

Criminal enforcement measures should therefore not only contain an element of judicial discretion in assessing the appropriate penalties for infringement, but also provide for guidelines that direct prosecutorial discretion in assessing whether to institute criminal proceedings. These guidelines may include priority targeting of prominent and notorious infringers, limiting criminal enforcement to circumstances where civil litigation would be futile or where criminal prosecution would be more beneficial, and the priority targeting of infringers that demonstrate an egregious disregard for copyright law.[258]

With sufficient political will and capacity, other innovative and more effective alternatives to criminal enforcement can be developed to target the almost insurmountable challenge of online piracy. The effective legalization of file-sharing and putting in place a compulsory licensing or levying mechanism to compensate rights-holders for the use of has been proposed as one such alternative.[259] This mechanism would involve imposing a levy on some aspect of the technology

[256] Peukert (n 42).
[257] ibid; Yu (n 9) at 756 – 763.
[258] *See* Benton Martin and Jeremiah Newhall, 'Criminal Copyright Enforcement Against Filesharing Services' (2013) 15 North Carolina Journal of Law and Technology 101, at 139 – 150 (discussing possible guidelines for criminal enforcement against file-sharing services).
[259] Glynn S Lunney, Jr., 'Copyright on the Internet: Consumer Copying and Collectives', *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014) at 303 – 311.

that enables file-sharing such as internet-enabled mobile phones, portable storage devices or internet access itself.[260]

3.2.3 Relevant provisions of the Kenya Information and Communications Act, 2009

The Kenya Information and Communications Act (KICA) first came into force in 1999 as the Kenya Communications Act (KCA), which repealed the Kenya Posts and Telecommunications Corporation Act. The KCA was enacted to provide a legal framework for the newly liberalized telecommunications sector, and to accommodate technological developments of internet adoption and a mushrooming infotainment industry.[261] The KCA transformed into the KICA in 2009 after a series of amendments were implemented through the Kenya Information and Communications (Amendment) Act, 2009. The amendments provided a framework for digital broadcasting and other advancements such as electronic transactions and geographical top-level domains.

While KICA was enacted to provide a future-proof framework for the information and communications sector, there was no appreciation of the corresponding impact of the new legislation and related regulations on the existing copyright law. The introduction of Part IVA to KICA and the Kenya Information and Communications (Broadcasting) Regulations 2009, paved the way for a digital broadcasting framework comprising of broadcasters and signal distributors. The framework required subscription-based or Pay-TV broadcasters to provide a minimum number of free-to-air (FTA) channels in what has come to be known as the "must-carry" rule.[262] Undertaking the "must-carry" provisions would entail the broadcasters re-broadcasting the FTA channels, an action they are restricted from without the approval of the broadcasts' owners as provided under Section 29 of the Copyright Act. Without measures to prevent exposure to liability, such an agreeing to the "must-carry "provisions as a condition for obtaining an FTA license or allowing for "must-carry" provisions as an exception to broadcasters' rights, the

[260] ibid.
[261] Sihanya, 'Infotainment and Cyberlaw in Africa' (n 143) 606–607.
[262] The Kenya Information and Communications (Broadcasting) Regulations 2009, Regulation 14(2) (b).

"must-carry" provisions became an otherwise avoidable matter of dispute during the digital migration process.[263]

Sections 83U to 84H of KICA contain several offences that relate to electronic data and electronic device. It is unclear how these offences would relate to the use of data and devices under the Copyright Act, particularly with regards to the exceptions and limitations. The offences of unauthorized access of computer data;[264] unauthorized modification of data held in a computer system;[265] tampering with computer source code, program, system or network;[266] and the possession of devices primarily used for these activities[267] could, in some circumstances, constitute allowable exceptions and limitations to the copyright in a computer program under Section 26(4) and 26(5) of the Copyright Act. This potential conflict suggests the need for standalone exceptions and limitations to the offences under KICA, as has been done with offence of re-programming a mobile phone under Sections 84G and 84H which are accompanied by an exception allowing these actions for personal technological pursuits and review purposes,[268] a provision resembling the fair dealing exception under Section 26(1) of the Copyright Act.

Section 83F and the Kenya Information and Communications (Electronic Certificate and Domain Name Administration) Regulations 2010 provide for the administration of domain names under the .ke country code top-level domain (ccTLD). These positions do not contemplate an enforcement or administrative role of the ccTLD administrator over .ke domain name registrars, .ke domain website hosts and their owners as potential intermediaries of online copyright infringement.[269]

In summary, KICA and its subsidiary legislation lack a proper cohesion with the Copyright Act on the areas where both legislations overlap. Just like the ICT policy documents, the 2009 amendments to KICA was a missed opportunity to synchronize the framework for information and communications technologies with corresponding concerns in intellectual property.

[263] Section 3.2.2.4 above.
[264] The Kenya Information and Communications Act, 2009 (KICA), Section 83U.
[265] ibid, Section 83X.
[266] ibid, Section 84C.
[267] ibid, Section 84A.
[268] ibid, Section 84I.
[269] Discussed in Section 3.3.6 below.

3.3 Institutional Framework

Copyright protection and enforcement in digital environments involve several institutions playing both individual and coordinated roles in day-to-day administration; awareness creation; enforcement; and dispute resolution. This section will analyse the effectiveness of each institution in carrying out assigned roles within the framework.

3.3.1 Kenya Copyright Board (KECOBO)

The Kenya Copyright Board (KECOBO) is the principal state agency responsible for the administration and enforcement of copyright and related rights, operating under the Office of the Attorney General and the Department of Justice.[270] Its core functions are overseeing the implementation of the recognized copyright-related laws and international legal instruments; licensing and supervising the activities of collective management organizations; devising promotion, introduction and training programs on copyright and related rights; review of legislation on copyright and related rights; enlightening and informing the public on copyright-related matters; maintaining an effective data bank on authors and their works; and the administering all matters of copyright and related rights.[271]

KECOBO's membership consists of a combination of legal experts, representatives of creative industry associations, and representatives of the Attorney-General, the police, and the Sports and Culture Ministry.[272] While this composition ideally guarantees a well-balanced representation of right-holders' interests and adequate government representation to guide policy and review of legislation, similar capacity is not given to the prosecution and enforcement staffing. KECOBO's legal and enforcement department consists eight copyright inspectors and five prosecutors[273] operating from a centralized location in Nairobi.[274] Such a meagre staffing cannot possibly

[270] KECOBO is established under Section 3 of the Copyright Act, 2001.
[271] Copyright Act (n 75), Section 5.
[272] ibid, Section 14.
[273] Marisella Ouma, 'Enforcement of Copyright and Related Rights' [2012] *Copyright News, Issue 7* 4 <http://www.copyright.go.ke/awareness-creation.html?download=5:copyright-news-issue-7> accessed 23 September 2015.
[274] Edward Sigei, 'Building Respect for Copyright Is a Long Term Process' [2016] *Copyright News, Issue 21* 3 <http://www.copyright.go.ke/awareness-creation.html?download=87:2016-issue-21-building-respect-for-copyright> accessed 19 July 2016.

investigate and prosecute hundreds of infringement cases and deal with the extremely high levels of piracy experienced in all parts of Kenya.

The lack of investigative and enforcement capacity is further exemplified by the concentration of KECOBO's enforcement actions on small to medium piracy operations[275] despite evidence of large-scale, organized manufacturing and distribution networks for pirated works.[276] KECOBO is attempting to correct the enforcement deficit through the existing infrastructure of the National Police Service by undertaking training of police officers at police stations and training colleges.[277] However, significantly increasing the numbers of prosecutors specialized in investigating and prosecuting infringement cases would be the most effective solution. Studies of past infringement cases could further inform the decentralized distribution of enforcement staff in various parts of the country.

3.3.2 Competent Authority / Copyright Tribunal

Section 48(1) of the Copyright Act provides for the appointment of a competent authority for the purposes of exercising jurisdiction to determine certain matters brought under the Act. The authority is principally intended to function as an independent arbiter dealing with disputes arising from KECOBO's decisions on licensing of collecting societies and disputes arising from the levies charged by the collecting societies.[278] The authority's members were gazetted as the Copyright Tribunal in 2009 [279] and further reconstituted in 2012.[280]

The Copyright Tribunal has not been operationalized has not determined any dispute since its inception, pointing to the likely conclusion that rights-holders have no information of its

[275] Victor Nzomo, 'Ten Years Later: Dismal Performance Scorecard for the Copyright Office' <http://blog.cipit.org/2013/07/25/ten-years-later-dismal-performance-scorecard-for-the-copyright-office/> accessed 13 December 2015.
[276] Raymond Gichuki, 'Industry under Siege by Pirates' (*Daily Nation*, 1 November 2008) <http://www.nation.co.ke/lifestyle/lifestyle/1214-486074-bf5pja/index.html> accessed 9 December 2015.
[277] Sigei, 'Building Respect for Copyright Is a Long Term Process' (n 274) 4.
[278] Copyright Act (n 75), Section 48(2).
[279] Attorney-General, 'Gazette Notice No. 6385' *The Kenya Gazette* (26 June 2009) 1588.
[280] Attorney-General, 'Gazette Notice No. 4339' *The Kenya Gazette* (5 April 2012) 1105.

existence or mandate.[281] The very narrow mandate of the Tribunal could be another cause for the inactivity of the Tribunal.[282] Several disputes arising between KECOBO, CMOs and users over licensing conditions and tariffs have been wrongly directed to courts without proper relief. This failure has even been held as amounting to an abdication of Constitutional duties imposed on the State in *Republic v Kenya Association of Music Producers (KAMP) & 3 others Ex- Parte Pubs, Entertainment and Restaurants Association of Kenya (PERAK)*.[283] Plans for putting in place a compulsory licensing scheme for audio-visual performances could potentially give rise to more complicated disputes requiring the presence of a fully functioning Copyright Tribunal.

3.3.3 Collective Management Organizations (CMOs)

Section 46 of the Copyright Act enables KECOBO to register collecting societies or collective management organizations (CMOs). CMOs are private organizations representing certain classes of right-holders as recognized by the Act and function to collectively administer their members' rights. Currently, four CMOs have been licensed by KECOBO namely the Reproduction Rights Society of Kenya (KOPIKEN), Kenya Association of Music Producers (KAMP), Performers' Rights Society of Kenya (PRiSK) and Music Copyright Society of Kenya (MCSK).

The gaps in KECOBO's supervisory role over collecting societies, the absence of a functioning Competent Authority as well as other problematic aspects of the CMOs' activities such as arbitrary adjustment of levies; lack of proper accounting; opaque royalty distribution criteria and methods; discrimination and lack of due process in enforcement actions; and the inefficiency of the separate administration of rights in musical works by KAMP, PRisK and MCSK have already been well documented. [284]

The Digital Age introduces new opportunities and challenges for CMOs. Licensing opportunities are increasingly expanding in the digital space with various platforms for digital broadcasting

[281] Justice NR Ombija, 'Case Study of Kenya's Specialized Intellectual Property Rights Court Regime' (*Kenya Law*, December 2011) <http://kenyalaw.org/kl/index.php?id=1899> accessed 5 October 2015.
[282] ibid.
[283] [2014]eKLR.
[284] Nzomo, 'Collective Management of Copyright and Related Rights in Kenya: Towards An Effective Legal Framework for Regulation of Collecting Societies. A Research Project Submitted in Partial Fulfilment of the Requirements of Master of Laws, School of Law, University of Nairobi.' (n 67) 43 – 63.

and communication of works being adopted worldwide, such as mobile-based premium services, webcasts, podcasts, on-demand streaming, and other forms of digital transmission. It is important that the CMOs build the capacity to negotiate with, track and collect royalties from these online services, as well secure better terms with traditional revenue sources like radio and television broadcast companies. At the same time, the rising numbers of small users who want to use works for one-off, obscure and low-value activities,[285] such as including a musical work in a YouTube video or using images for a website, represents an unexplored area for licensing.

Capacity building would involve initiatives such as uniting the lobbying and negotiation efforts of the three music industry CMOs to secure favourable and enforceable terms for traditional and emerging uses of their members' works.[286] In order to effectively tap into licensing of one-off and low-value uses, a digital hub should be developed to enable ease of licensing transactions for various uses and showcase the CMOs members' repertoires. CMOs should also sensitize their members on strategies of maximizing internet-based revenue from their repertoire, such as obtaining International Standard Recording Codes (ISRCs) for their works. The ratification of the Beijing Treaty on Audiovisual Performances could likely necessitate the registration of a collecting society representing audiovisual performers. This development may create an overlap between the related rights and the rights granted to the authors of audio-visual works.[287]

3.3.4 Anti-Counterfeit Authority (ACA)

The Anti-Counterfeit Act establishes the Anti-Counterfeit Agency (ACA)[288] with the core function of combating counterfeit trade and other dealings in counterfeit goods; public awareness on matters relating to counterfeiting; devising training programmes on combating counterfeiting and coordinating national, regional or international organizations involved in the fight against

[285] Bently and Sherman (n 5) 310.
[286] Nzomo, 'Collective Management of Copyright and Related Rights in Kenya: Towards An Effective Legal Framework for Regulation of Collecting Societies. A Research Project Submitted in Partial Fulfilment of the Requirements of Master of Laws, School of Law, University of Nairobi.' (n 67) at 62.
[287] Chrissy Milanese, 'Lights, Camera, Legal Action: Assessing the Question of Acting Performance Copyrights Through the Lens of Comparative Law' (2015) 91 Notre Dame Law Review 1641 (discussing the US case of *Garcia v. Google, Inc.* in which it was held that held that an actor can maintain a copyright interest in her acting performance in a film independent of the copyright held by the filmmaker).
[288] No. 13 of 2008.

counterfeiting. Like KECOBO, the ACA enforcement apparatus includes inspectors with powers of entry, search and seizure and prosecutors.[289]

Ideally, KECOBO is meant to handle cases solely pertaining to copyright counterfeit while the ACA handles cases involving infringement of both copyright and trademarks.[290] However, lack of a clear legal distinction between the two agencies enforcement roles could lead to duplicity and inefficiencies. The perception of prosecution through the Anti-Counterfeit Act being faster and more punitive than through the Copyright Act has made enforcement through the ACA more attractive, even for cases of pure copyright infringement.[291]

3.3.5 National Police Service

Where copyright infringement has occurred or is justifiably suspected, rights-holders may initiate criminal investigations and prosecutions by lodging a complaint with the police, independent of the KECOBO enforcement structure. KECOBO also works with non-appointed police officers in their enforcement actions occasionally due to its personnel limitations.[292] Section 39(2) of the Copyright Act provides that any police officer may perform the functions of a Copyright Inspector, with the same powers of entry, search, seizure and arrest accorded to Copyright Inspectors under the Act.

Since most police officers do not receive training in enforcement and prosecution arising from the infringement of intellectual property, they may not be able to effectively carry out the procedures and actions required to prosecute such cases effectively. This training includes proper assessment of complainant rights, proper investigation of infringing actions, proper seizure and custody of evidence, and drafting non-defective charge sheets. Even though KECOBO has begun improving the capacity of the National Police Service through piecemeal training sessions,[293] a structured training programme should be integrated into the police training curriculum to

[289] Anti-Counterfeit Act, Section 22 – 30.
[290] Business Action to Stop Counterfeiting and Piracy and Kenya Anti-Counterfeit Agency (n 11) 17.
[291] ibid.
[292] George Mbaye, 'Role of the Judiciary, Police and the Anti-Counterfeit Agency in the Enforcement of Copyright and Related Rights' [2012] *Copyright News, Issue 7* 6 – 7 <http://www.copyright.go.ke/awareness-creation.html?download=5:copyright-news-issue-7> accessed 23 September 2015.
[293] Sigei, 'Building Respect for Copyright Is a Long Term Process' (n 274) 4.

produce a certain quota of specialized officers that are capable of independently investigating 7infringement complaints and available for KECOBO enforcement actions when required.

3.3.6 Communications Authority of Kenya/ KENIC

The Communications Authority of Kenya (CAK) is the chief regulator for the communications sector in Kenya and is established by the Kenya Information and Communications Act of 1998 (later revised in 2009). One of the core functions of CAK is to license all systems and services in the communications industry, including licensing persons to administer a sub-domain in the country code top-level domain.[294] The CAK has facilitated the establishment of the Kenya Network Information Centre (KENIC), a non-profit organization responsible for the management of the .ke Country Code Top-Level Domain (ccTLD) name.[295] Every organization in the business of registering .ke domain names have to be approved and licensed as a registrar by KENIC.[296]

In the context of online copyright infringement, KENIC may potentially play a significant role in facilitating domain seizure as one of the enforcement mechanisms springing from forthcoming internet intermediary liability laws[297] and even currently existing enforcement actions against online marketplaces through which counterfeit goods that infringe copyright are traded.[298] KENIC's policies should reflect its registrars as intermediaries that are supposed to facilitate the seizure of domain names of websites involved in extensive copyright infringement. Once domain seizure is authorized through due process arising from civil action or criminal prosecution, KENIC should be able to order the relevant registrar to sever the link between a domain name and the infringing website or provide information regarding the domain name owners.[299]

[294] Kenya Information and Communications Act, 2009, Section 83F.
[295] KENIC, 'About Us' (*KENIC*) <http://www.kenic.or.ke/index.php/en/background> accessed 16 November 2015.
[296] KENIC, 'Become a Registrar' (*KENIC*) <http://www.kenic.or.ke/index.php/en/how-to-become/registrars/kenic-registrar-application-procedure> accessed 16 November 2015.
[297] Section 3.2.2.8 above.
[298] Business Action to Stop Counterfeiting and Piracy (n 246) 48.
[299] ibid 66.

3.3.7 The Judiciary

The majority of the judges and magistrates in Kenyan courts have general legal expertise and lack the specialized knowledge and training required to properly appreciate and adjudicate intellectual property matters, which tend to be technical and constantly-evolving in nature.[300] This situation creates a high likelihood of the emergence of inconsistent and erroneous jurisprudence out of the courts. In *Faulu Kenya Deposit Taking Microfinance Limited v. Safaricom Limited*,[301] for example, the court held that a concept paper could not be interpreted as being a literary work under the open-ended definition of "literary work" provided by the Copyright Act. Similarly, in *Nonny Gathoni Njenga & Another v. Catherine Masitsa & 2 Others*,[302] the court extended copyright protection to the format of a reality television series and granted an injunction against the owners of a competing reality show with apparent similarities to it. This decision contradicts leading precedents requiring a much higher standard than generic similarity to be proved[303] and does not consider how it would potentially have a chilling effect on the creative output of the film and television industries.[304]

The digital age has presented courts with complex and ever-evolving issues to grapple with. Kenyan courts will require judges with a clear understanding and interpretation of the limitations and exceptions available to users and how they play out in the digital space. They will also require knowledge of the intricacies surrounding internet intermediary liability, an appreciation of differentiated sentencing policies regarding copyright infringement by ordinary users vis a vis organized criminal elements on the Internet and other emergent issues. Capacity building will only be possible by putting in place a continuous training programme for the Judiciary to keep its judges and magistrates up to speed with all aspects of intellectual property law at local, regional and international levels.

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[300] Ombija (n 281).
[301] [2012] eKLR.
[302] [2015] eKLR.
[303] Stefan Bechtold, 'The Fashion of TV Show Formats' [2013] Michigan State Law Review 463–480 <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2191664> accessed 10 December 2016; Kent R Raygor and Edwin Komen, 'Limitations On Copyright Protection for Format Ideas in Reality Television Programming' 114 <http://www.sheppardmullin.com/media/article/806_Reality%20Format%20Paper.pdf> accessed 19 May 2015.
[304] Victor Nzomo, 'Establishing Copyright Infringement: High Court Ruling in Nonny Gathoni v. Samantha's Bridal Wedding Show Case' <https://ipkenya.wordpress.com/2015/04/09/establishing-copyright-infringement-high-court-ruling-in-nonny-gathoni-v-samanthas-bridal-wedding-show-case/> accessed 19 May 2015.

3.4 Conclusion

Several gaps in the legal and institutional framework for the protection and enforcement of copyright have been revealed in this chapter. Not only is there a need to make certain clarifications and additions to the current version of the Copyright Act, but the absence of provisions regarding intermediary liability also remains the most significant gap that requires further study of leading approaches in other jurisdictions in the next chapter. With regard to the institutional framework, the single-cross cutting failing has been the lack of adequate human and financial resources for the main agencies involved as well as the need to build capacity and specialized personnel to carry out enforcement, prosecution, and adjudication of copyright-related cases. The opportunities for increased revenues provided by increased internet adoption must be harnessed and fully maximized by CMOs.

CHAPTER 4: INSIGHTS FROM THE USA'S DIGITAL MILLENNIUM COPYRIGHT ACT, 1998

4.1 Introduction

This chapter seeks to further illuminate the gaps in Kenya's legal and institutional framework for the protection and enforcement of copyright in the digital space by examining a leading approach implemented by the United States of America (US) in this endeavour implemented through the Digital Millennium Copyright Act (DMCA) 1998. The chapter aims to identify useful provisions and best practices within the framework provided by the DMCA that could provide useful insights and guidance for the improvement of Kenya's copyright law framework.

Several justifications inform this study's choice of the US generally and the DMCA in particular as the subject of a comparative study. As a leading exporter of cultural and creative products, as well as front-runners in the development and adoption of new technologies, the legislative responses implemented by the US to deal with copyright protection and enforcement in the digital environment, serve as benchmarks to guide Kenya's approach. According to the International Property Rights Index 2016, the US is the top-ranked country globally in copyright protection with a score of 8.2 out of a possible 10, while Kenya ranks at 80 out of 104 countries studied with a score of 2.2.[305] This further suggests that a study of the US copyright framework could benefit Kenya as it seeks to modernize its framework.

The DMCA is a specifically suitable target within the US copyright framework to concentrate on because it conveniently encompasses provisions dealing with the bulk of the current gaps and shortcomings of Kenya's legislative framework as identified in the previous chapters. The DMCA has implemented the WIPO Internet Treaties; dealt with the issue of liability of internet intermediaries; accounted for emergent technologies that affect copyright; and has expounded on exceptions and limitations to rights granted by copyright, including some on public interest grounds.

This study is, however, also alive to the differences in the economic, cultural and political contexts within which Kenya and the US have applied their copyright laws. The US is a

[305] Property Rights Alliance, 'The International Intellectual Property Index 2016' (*IPRI*, 2016) <http://internationalpropertyrightsindex.org/countries> accessed 7 November 2016.

developed country which is vastly more economically endowed than Kenya. As of 2015, the GDP per capita of the US was $56,115, approximately forty times higher than Kenya's.[306] This economic advantage has enabled the US to create a robust framework for the support of its creative industries globally, particularly by asserting its trade dominance and coercing other countries to adopt intellectual property laws that align with its interests. Consequently, the US has become one of the largest net importers of cultural products while Kenya still struggles to support its creative industries properly.

The difference in development status of the two countries also implies a strong asymmetry in each countries interests as they develop intellectual property laws. The legislative provisions and policies of developed countries tend to lean more towards stronger intellectual property laws to safeguard the dominant positions of their knowledge-based industries to the detriment of developing countries. It has been argued that it is more beneficial for developing countries to adopt lower levels of protection for intellectual property to promote technology transfer, promote research and development, and ensure low prices for vital products such as medicines and agricultural plant varieties.[307] This comparative study between countries with such asymmetrical interests would, therefore, have to employ caution so as not to encourage the transplanting of laws that would be detrimental or inapplicable to the point of rejection by the sector it aims to regulate.

It has also been argued that for transplanting of laws to be effective, more so in 'modern' transplants of laws developed in the past few decades, the motivation should not be outright plagiarizing but should first ensure a good fusion between the legal systems of both countries, ensure that there are satisfactory conditions for the legal transplant, and also ensure that the laws align with the specific interests of the destination country.[308] They should also take into account the effect of emergent factors such as globalization, which may bring about convergences in certain areas like culture and social contexts but also promote detrimental ideas like the

[306] World Bank, 'GDP per Capita (current US$)' (*World Bank*, 2015) <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD> accessed 11 October 2016.

[307] Jean-Frédéric Morin and Edward Richard Gold, 'An Integrated Model of Legal Transplantation: The Diffusion of Intellectual Property Law in Developing Countries' (2014) 58 International Studies Quarterly 781, 785.

[308] María Paula Reyes Gaitán, 'The Challenges of Legal Transplants in a Globalized Context: A Case Study on "Working" Examples, Dissertation Submitted in Partial Fulfillment of the Requirements for the Master of Laws Degree in International Economic Law at the University of Warwick' (University of Warwick 2014) <http://banrepcultural.org/sites/default/files/colf_reyesgaitan_mariapaula_tesis.pdf> accessed 18 October 2016.

liberalization of markets which favours economic efficiency over social welfare, access, and substantive equality.[309]

With regard to this comparative study, both Kenya and the US legal systems adopt the common law conceptualization of copyright that focuses on economic rights as an incentive for furthering creativity than innovation as opposed to viewing creative works as an extension of the personality of the author. The DMCA as a response to challenges posed on copyright by the digital revolution has provided provisions to strengthen copyright protection in the digital environment and also provided for a range of exceptions and limitations in the public interest. From the DMCA, Kenya's primary interest would be to gain guidance on how to further promote access to knowledge by further bolstering the raft of exceptions and limitations it currently has in place. The other interest would be obtain some insights on how to provide adequate protection for its creative industries in digital spaces through interventions it has already voluntarily began, such as the ISP liability provisions being developed by KECOBO.

While the ideal comparators for this study would be South Africa or Nigeria as Sub-Saharan African countries with similar trends in internet penetration and burgeoning creative industries, both countries are still grappling with reforms to their copyright law in response to the digital revolution, like Kenya.[310] These countries' chosen method of reforms through amendment bills to their Copyright Acts draws inspiration from US law in areas such as notice and takedown mechanisms for internet intermediaries, anti-circumvention provisions and the expansion of exceptions and limitations.[311] A better approach for this comparative study would be to consult the US law directly so as to take advantage of the insights that can be gleaned from actual application of the DMCA, keeping in mind Kenya's unique interests.

[309] ibid.

[310] Jeremy Malcolm, 'South African Copyright Review Is Overdue, Pioneering, and in Parts Completely Absurd' (*Electronic Frontier Foundation*, 14 August 2015) <https://www.eff.org/deeplinks/2015/08/south-african-copyright-review-overdue-pioneering-and-parts-completely-absurd> accessed 19 August 2016.

[311] Standeford (n 73); Speres (n 73).

4.2 Overview of the US Creative Industries

The creative and cultural industries in the US experienced rapid growth in the 20th Century to the position of global dominance they hold today. It has developed a strong combination of creative and marketing talent that has a competitive edge, to become a leader in nearly every creative sectors as evidence by the global consumer demand for its films, television productions, newspapers, books, and software.[312] It is a net exporter of copyright-based cultural products with foreign sales amounting to $156.3 billion in 2013; and a global leader in the performing arts which commanded sales amounting to $61.5 billion over the same period.[313] Together with the United Kingdom, the US accounted for 31.3% of global book exports in 2014.[314] Overall, the arts and cultural production industries contributed accounted for 4.3% of the country's GDP, amounting to $698.7 million.[315]

The economic contribution and job-creating potential of US copyright-based industries have given them a significant influence over the country's legislators and policymakers through representative lobby groups such as the Intellectual Property Committee (IPC) and the International Intellectual Property Alliance (IIPA). These organizations have played a key role in influencing US copyright policy towards greater protection of rights holders in its domestic legislation level and in negotiating bilateral and multilateral trade agreements.[316]

Since the US was also on the forefront in the development of digital technologies and networks like the Internet, the effects of these technologies on its copyright framework became apparent earlier than other jurisdictions that were yet to adopt these technologies. As early as the 70s and 80s, the development and use of digital media protocols and devices such as the home video cassette recorder and the Digital Audio Tape (DAT) opened up the possibility for consumers to

[312] EY (n 109) 55.
[313] ibid.
[314] Lenin Mona, Bernado Jaramillo and Carolina López, 'El Espacio Iberoamericano Del Libro 2014' (CERLALC-UNESCO 2014) 69–70 <http://cerlalc.org/wp-content/uploads/2015/04/El-Espacio-Iberoamericano-libro-2014.pdf> accessed 20 June 2016.
[315] Bureau of Economic Affairs, 'Spending on Arts and Cultural Production Continues to Increase' (US Department of Commerce 2015) <http://www.bea.gov/newsreleases/general/acpsa/acpsa0115.pdf> accessed 15 September 2016.
[316] Peter Drahos and John Braithwaite, *Information Feudalism: Who Owns the Knowledge Economy?* (Earthscan 2002) Chapters 6–9.

make unauthorised copies of digital media.[317] Courts began to grapple with technology-based infringement cases such as *Sony Corp. of America v. Universal City Studios, Inc.*[318] in which home video recorders were held to have substantial non-infringing uses including time-shifting of television programs; as well as *Playboy Enterprises, Inc. v Frena* and *Religious Technology Center v. Netcom On-Line Communications Services, Inc.*[319] In its 1995 report, the Information Infrastructure Task Force's Working Group on Intellectual Property - formed to assess the effectiveness and applicability of US copyright law in the context of the global information society - recognized that digital technology was having "an enormous impact on the creation, reproduction, and dissemination of copyrighted works" and foresaw that these technologies would "generate both unprecedented challenges and important opportunities for the copyright marketplace."[320]

By the late 90s, the technological landscape featured the ownership of personal computers, and the use of the World Wide Web had become ubiquitous; the popularity of compressed digital media formats such as MP3; and the shift in the mode distribution of audiovisual works and software to CDs and DVDs. This environment made it easier to make perfect copies of copyrighted material and distribute them digitally through the internet, defying geographical limitations and other barriers faced by physical media.[321] In response, creative industries incorporated technological protection measures in their works such as the Content Scramble System which encrypted DVD content, but these measures were quickly circumvented enabling unauthorized copying and distribution of copyrighted works to persist.[322] This environment necessitated the formulation of a more effective legislative response in the form of the DMCA.

[317] Michael P Matesky, 'The Digital Millennium Copyright Act and Non-Infringing Use: Can Mandatory Labeling of Digital Media Products Keep the Sky from Falling' (2005) 80 Chicago-Kent Law Review 515, 521–523.
[318] 464 U.S. 417 (1984).
[319] Discussed in Section 2.3.3 of Chapter 2 above.
[320] Bruce A Lehman, 'Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights' (Information Infrastructure Task Force 1995) 7 <http://www.uspto.gov/web/offices/com/doc/ipnii/ipnii.pdf> accessed 9 October 2015.
[321] Matesky (n 317) 521–523.
[322] ibid 523–525.

4.3 The Digital Millennium Copyright Act, 1998

The Digital Millennium Copyright Act (DMCA) of 1998 aimed to implement the WIPO Internet Treaties and make several additions and alterations to the US Copyright Act in response to the challenges and the new environment of digital media and digital networks as discussed above. The DMCA is divided into five titles, four of which are discussed below.

4.3.1 WIPO Copyright and Performances and Phonograms Treaties Implementation Act

This first title of the DMCA makes several amendments to the US Copyright Act meant to implement the WIPO Copyright Treaty and the WIPO Performance and Phonograms Treaty (WIP Internet Treaties). To implement the principle of national treatment enshrined in the two treaties, the Act amended Section 104 of the Copyright Act with the effect of extending its protection to works from other countries party to the WIPO Internet Treaties.[323] This title also amended Section 411(a) of the Copyright Act to exempt all foreign works from being subject to the formality of registration at the US Copyright Office as a condition for enjoying the rights under the Act.[324]

In compliance with the WIPO Treaties' requirement for adequate legal protection and effective legal remedies against the circumvention of technological measures (TPMs), the DMCA had the effect of adding a new Chapter 12 to the US Copyright Act. Section 1201 of Chapter 12 prohibits the circumventing of technical measures used to prevent unauthorized access to copyrighted works, including computer programs. Section 1201 also prohibits the manufacture or sale of devices used to circumvent measures that prevent unauthorized access to protected works. This provision does not prohibit the circumvention of measures that prevent unauthorized copying of works as such actions may fall within fair use.[325] It specifically proscribes devices or services that are primarily designed to circumvent, have only limited commercially significant purposes or use other than to circumvent, or are marketed for use in circumventing.[326]

[323] Digital Millennium Copyright Act (DMCA), Section 102(b).
[324] DMCA, Section 102(d).
[325] United States Copyright Office, 'The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary' 4 <http://www.copyright.gov/legislation/dmca.pdf> accessed 16 April 2016.
[326] US Copyright Act, Title 17 of the US Code, Section 1201(a)(2).

Section 1201 also provides for several exceptions to the prohibition against circumvention including exempting non-profit libraries, archives, or educational institutions which gain access to a commercially exploited copyrighted work solely in order to make a good faith determination of whether to acquire a copy of that work; lawfully authorized law enforcement, intelligence and other governmental activities; the reverse engineering of a computer program to achieve interoperability with other programs; and good faith encryption research conducted to advance the state of knowledge in the field of encryption technology or to assist in the development of encryption products; the protection of minors; the protection of personally identifying information; and testing the security of a computer, computer system or computer network, with the authorization of its owner or operator.[327]

Recognizing that the prohibition against circumvention impacts a broad range of consumer activities, including activities beyond the core concerns of copyright, the framework regularly supplements the provisions of Section 1201 through a triennial rulemaking proceeding within the ambit of the Library of Congress and Register of Copyrights.[328] Public participation is a central feature of these proceedings whereby the public proposes the potential exemptions and these proposed exemptions are evaluated in a process composed of public hearings, the submission of written comments, and input from stakeholders.[329] The Librarian of Congress and Register of Copyrights evaluate the proposed exemptions against set legal standards such as ensuring the use does not infringe existing law and whether the use is likely to be affected by the prohibition on circumvention.[330] Adopted exemptions are reviewed afresh after the lapse of three years, taking into account changes in technology and markets; as well as developments in the fair use doctrine.[331] In the 2015 rulemaking proceeding, for example, the Register recommended the adoption of exemptions such as allowing for circumventing access controls on motion pictures for educational purposes, non-commercial purposes and for use in documentary films; the unlocking and jailbreaking of devices to enable them to connect to alternative networks or to interoperate with or remove certain software; and an exemption relating to computer programs

[327] ibid, Section 1201(d) – (j).
[328] United States Copyright Office, 'Understanding the Section 1201 Rulemaking' <https://www.copyright.gov/1201/2015/2015_1201_FAQ_final.pdf> accessed 21 August 2016.
[329] ibid 1.
[330] ibid 2.
[331] ibid 3.

that operate 3D printers to allow them to use alternative feedstock that are not authorized by the manufacturer.[332]

In compliance with the WIPO Treaties' obligation to protect digital rights management information (DRM), the DMCA, as codified in Section 1202 of the US Copyright Act, prohibits the knowing provision or distribution of false copyright management information (CMI), if done with the intent to induce, enable, facilitate or conceal infringement; and bars the intentional removal or alteration of CMI without authority, as well as the dissemination of CMI or copies of works, knowing that the CMI has been removed or altered without authority. In *Cable v. Agence Fr. Presse*,[333] for example, a federal court held that a copyright notice embedded in a digital photograph which included the author's name and a link to his website constituted a copyright management system or CMI protectable under Section 1202. This provision is also balanced by certain exceptions including the activities of law enforcement, intelligence, and other government organs; and limitation of the liability of broadcast stations and cable systems for removal or alteration of CMI in certain circumstances where there is no intent to induce, enable, facilitate or conceal an infringement.[334]

By contrast, the parallel provisions in Kenya's Copyright Act prohibiting circumvention of TPMs and the destruction or alteration of DRMs do not expressly include any exceptions or limitations, more so when non-profit actors undertake such actions for the benefit of expanding access to knowledge or when such actions constitute fair dealing. The vague exceptions and limitations clause in Section 26 do not contain specific mention of these actions. Consequentially, the Copyright Act fails to achieve a proper balance between protecting the rights of copyright owners and sufficiently shielding actions within fair dealing from liability. With further developments in technologies, markets, and consumer behaviour, the general prohibition against circumvention in Kenya's Copyright Act without any exemptions based on fair dealing could end up becoming a major hindrance to non-infringing uses of copyrighted material and devices connected to this material.

[332] ibid.
[333] 728 F. Supp. 2d 977 (N.D. Ill. 2010).
[334] ibid, Section 1202(e).

4.3.2 Online Copyright Infringement Liability Limitation Act

This second title of the DMCA added a new Section 512 to the US Copyright Act, creating four new limitations on liability for infringement by online service providers. These limitations are transitory communication, system caching, storage of information on systems at the direction of users and information location tools. Each of these limitations requires certain specific conditions to be met before they can be relied upon. In order to be eligible for the limitation of storage of information on systems at the direction of users for example, a service provider must not have the requisite level of knowledge of the infringing activity; must not receive a financial benefit directly attributable to the infringing activity if it has the right and ability to control the infringing activity; upon receiving proper notification of claimed infringement, it must expeditiously take down or block access to the material; and must have filed with the Copyright Office a designation of an agent to receive notifications of claimed infringement.[335] Section 512(e) provides the specific conditions for non-profit educational institutions to meet to be eligible for limitation from liability for the actions of faculty members, students or employees performing teaching or research functions.

In addition to the specific conditions, a service provider must adopt and reasonably implement a policy of terminating in appropriate circumstances the accounts of subscribers who are repeat infringers; and must accommodate and not interfere with standard technical measures used by copyright owners to identify or protect copyrighted works to be generally eligible for any of the limitations.[336] Failure of a service provider to qualify for any of the limitations does not automatically make it liable for copyright infringement. The copyright owner must still demonstrate infringement and other defences are still available to the service provider, including fair use.[337]

To prevent unnecessary breaches of subscribers' privacy by service providers, copyright owners are required to obtain a subpoena from a federal court ordering a service provider to disclose the identity of a subscriber who is allegedly engaging in infringing activities.[338] In comparison, and

[335] United States Copyright Office, 'The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary' (n 325) 11.
[336] US Copyright Act (n 326), Section 512(i).
[337] ibid, Section 512(1).
[338] ibid, Section 512(h).

especially since Kenya has still not enacted any specific data protection legislation, a similar provision would be crucial to the workability of future amendments to Kenya's Copyright Act providing for limitations on ISP liability.

Section 512 provides a notice and takedown procedure for the removal of infringing content hosted by service providers. This procedure is initiated by the copyright owner, on good faith belief that the hosted material is infringing, submitting to the service provider a takedown notice.[339] The service provider is required to expeditiously remove or prevent access to the allegedly infringing material once the notice is received.[340] The affected subscriber may then post a counter notification essentially stating under penalty of perjury that the subscriber has a good faith belief that the material was removed or disabled as a result of mistake or misidentification of the material to be removed or disabled.[341] On receipt of the counter notification, the service provider is required to restore the material within 10-14 business days, unless it receives notice that the copyright owner has filed an action in court seeking to prohibit the user from engaging in the allegedly infringing activity.[342]

To prevent parties from submitting takedown notices or counter notifications based on misrepresentation, Section 512(f) creates a cause of action against a party who knowingly materially represents that the content is infringing or was removed or disabled by mistake or misidentification. An example of such a scenario is the case of *Lenz v. Universal Music Corp.*[343] Universal sent YouTube a DMCA takedown notice for a family video uploaded by Lenz on their platform in which their copyrighted material was audible for only twenty seconds. Lenz sent a counter-notification, claiming that her video constituted fair use. She also sued Universal alleging misrepresentation pursuant to Section 512(f) and tortious interference with her contract with YouTube. The court held that Lenz had produced sufficient evidence that Universal had issued the takedown notice in bad faith and failed to evaluate whether the video had made fair use of their copyright, an action sufficient to prompt a misrepresentation claim under Section 512(f).

[339] ibid, Section 512(c).
[340] ibid.
[341] ibid, Section 512(g).
[342] ibid.
[343] 572 F. Supp. 2d 1150 (N.D. Cal. 2008).

A significant oversight in the proposed ISP liability amendments to Kenya's Copyright Act published by KECOBO[344] is its one-sided notice and takedown procedure that does not provide for a counter notification by the subscriber contesting the takedown notice and lacks reasonable time frames for service providers to comply with takedown notices. Section 512 of the US Copyright Act provides useful insights on how to improve the proposed amendments.

Despite its useful provisions, this title of the DMCA has not been free from challenges and criticism. The extra-territorial applicability of the DMCA takedown procedure is has been held by courts to be extremely limited and therefore may not sufficiently deal with infringement of US-based copyrighted material in other jurisdictions. In ***Shropshire v. Canning***,[345] Shropshire sued Canning (a resident of Canada) for failing to remove an infringing video posted on YouTube containing audio of a performance of Shropshire's song. The court allowed a motion to dismiss the plaintiff's action, stating that since the creation of the video occurred entirely in Canada, it could not discern any act of infringement that had occurred within the United States.

Professor Donald Harris has argued that the anti-circumvention provisions of the DMCA have become obsolete due to the unrelenting development of circumvention technologies at par with TPMs and consumers' protests against TPMs due to their cumbersome nature.[346] Drawing from aspects of secondary liability of employers in employment law and pre-internet era copyright law on border control measures, Harris proposes a duty-based approach to ISP liability requiring to use reasonable measures such as cost effective filtering and monitoring of hosted content to prevent infringement in addition to their duties under the notice and takedown procedure.[347] The reasonableness standard would remove the certainty found in the current state of Section 512 but would be flexible enough to allow for a case-by-case determination of ISPs liability based on size and capability. Such a provision would be adaptable to include newer preventive measures as they are developed over time, thereby encouraging innovation and accommodating the gradual evolution of ISP liability standards.[348] Sam Castree III makes a further case for Harris' extended ISP liability proposal, pointing out the wilful blindness of online digital media marketplaces

[344] Section 3.2.7 of Chapter 3 above.
[345] 2011 WL 90136 (N.D. Cal. 2011).
[346] Donald P Harris, 'Time to Reboot?: DMCA 2.0' (2015) 47 Arizona State Law Journal 801, 815.
[347] ibid 846 – 852.
[348] ibid.

which profit from the sale of heavily plagiarized content.[349] Castree argues that there is a rising need to require this category of service providers to put in place basic monitoring mechanisms against cyber-plagiarism.[350]

Harris concedes that the difficulty of altering the present system introduced by the DMCA limiting ISPs' duties to removing or restricting access to infringing content on notice is due to factors such as lack of empirical evidence on costs of monitoring to ISPs and lack of political will.[351] In contrast, the fact that the development of ISP liability laws in Kenya is still at its infancy provides room for considering extending the obligation of ISPs to basic monitoring and blocking before committing the relevant amendments to the Copyright Act. The negative stance of KECOBO's proposed ISP liability laws against any form of monitoring by ISPs could become problematic in the future, more so with no evidence to suggest any significant use of TPMs by Kenyan copyright owners as a preventive measure.

Frank Guzman observes that copyright owners take advantage of the subjective good faith belief requirement of the notice and takedown procedure to remove non-infringing derivate works that use their material but fall within fair use.[352] The counter notification procedure still favours copyright owners, and users of such derivative works have no other recourse than potentially costly, time consuming and unpredictable causes of action based on misrepresentation by the copyright owner under Section 512(f).[353] This restriction creates a chilling effect on the creation of user-generated content and undermines the purpose of the fair use doctrine. He proposes the addition of carefully crafted safe harbour provisions for certain narrow categories of content that are irrebuttably presumed to be fair use and which copyright owners cannot claim a good faith basis for issuing takedown notices.[354] These provisions could create a broad exception for UGC as a fair use standard or create narrow conditions to be satisfied by UGC in order to enjoy safe

[349] Sam Castree III, 'Cyber-Plagiarism for Sale: The Growing Problem of Blatant Copyright Infringement in Online Digital Media Stores' (2012) 14 Texas Review of Entertainment and Sports Law 25.
[350] ibid 34 – 45.
[351] Harris (n 346) 809.
[352] Frank Guzman, 'The Tensions Between Derivative Works Online Protected by Fair Use and the Takedown Provisions of the Online Copyright Infringement Liability Limitation Act' (2015) 13 Northwestern Journal of Technology and Intellectual Property 181, 187 – 190.
[353] ibid.
[354] ibid 194 – 196.

harbour for the sake of clarity.[355] A safe harbour provision for derivative works falling under commentary and criticism, for example, could entail conditions such as not using more than ten seconds of continuous footage from the original film, and not using more than half of the content from the original work in total.[356] Similar conditions could be formulated for fan-made derivate works, another category recognized as constituting fair use.[357] Kenya's Copyright Act can benefit not only from a more elaborate provision on fair dealing but also balanced ISP liability laws that offer some form of protection of user-generated content from aggressive takedowns by copyright owners.

Professor Daniel Seng's empirical study of the actual content of DMCA takedown notices provides at least cursory evidence of frequent, systematic and often negligent submission of takedown notices tainted with technical errors (missing formalities such as copyright owners contact information or attestation to the accuracy of the information provided) as well as substantive errors (those that raise substantive legal questions).[358] The creative industry's increasing reliance on automated methods of detecting and reporting infringement seems to be the major contributor of these errors.[359] Seng proposes a mechanism requiring reporters to provide only verified takedown requests; and a mechanism which places a binding disincentive for submitting erroneous takedown requests through some form of penalty for numerous and consistently defective takedown requests or slower processing of the takedown requests of reporters who submit a certain threshold of erroneous requests on a rolling basis.[360]

4.3.3 Computer Maintenance Competition Assurance Act

This title of the DMCA expands on the limitations on exclusive rights with regard to computer program provided under Section 117 of the US Copyright Act, permits the owner or lessee of a computer to make or authorize the making of a copy of a computer program in the course of

[355] ibid.
[356] ibid 195.
[357] ibid.
[358] Daniel Seng, '"Who Watches the Watchmen?"An Empirical Analysis of Errors in DMCA Takedown Notices' (January 23, 2015) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2563202> accessed 16 April 2016.
[359] ibid 45.
[360] ibid 46 – 49.

maintaining or repairing that computer. The computer must already lawfully contain an authorized copy of the program and the new copy generated cannot be used in any other manner and must be destroyed once the maintenance or repair is completed.[361] The corresponding provisions in Kenya's Copyright Act are similar, even to the extent that both frameworks expose the limiting of uses within fair dealing or fair use by license agreements attached to computer programs.

4.3.4 Miscellaneous Provisions

This title of the DMCA made several miscellaneous amendments to the US Copyright Act to further improve its application in the digital environment. It extended the exemption granted to broadcasters for the making of ephemeral recordings of works that facilitate the broadcasting functions to include recordings made to facilitate the digital transmission of sound recordings.[362] It may also permit circumvention of TPMs restricting access to a sound recording under certain circumstances. [363]

In the interests of promoting distance education, Section 403 of the DMCA required the US Copyright Office to undertake consultations with interested parties in the sector and report to Congress the way forward. After public consultations and further research, the Copyright Office presented a report to Congress in May 1999.[364] The report recommended amendments to Section 110(2) of the US Copyright Act creating an exemption for instructional broadcasting and allowing certain performances and displays to be transmitted digitally for use by students in remote locations.[365] This expanded exemption would also require the incorporation of safeguards to prevent unauthorized dissemination of materials.[366] The recommendations of the report were implemented through the Technology, Education and Copyright Harmonization (TEACH) Act of 2002. Additionally, the TEACH Act creates a provision in Section 112(f)(1) of the US Copyright

[361] US Copyright Act (n 326), Section 117(c).
[362] ibid, Section 112.
[363] ibid, Section 112(e)(7).
[364] United States Copyright Office, 'Report on Copyright and Digital Distance Education' (United States Copyright Office 1999) <http://www.copyright.gov/reports/de_rprt.pdf> accessed 16 April 2016.
[365] ibid 7.
[366] ibid.

Act permitting governmental and non-profit educational institutions to reproduce a work, under certain conditions, for purposes of performance or display of the work within the distance education requirements of the TEACH Act.

The DMCA also amended the exemption for non-profit libraries and archives in Section 108 of the US Copyright Act allowing for digital technologies and newer forms of preservation of works other than the single physical facsimile copy previously permitted. Under the amendments, digital copies are not made available to the public outside the library premises,[367] and these institutions are allowed to archive works in new formats once the original format becomes obsolete.[368]

Kenya's narrow exceptions to the exclusive rights in favour of educational uses of works remain very narrow and conflict with its interests as a developing country to take advantage of technology to improve access to knowledge and information. This gap could be addressed through specific exemptions that facilitate distance learning in educational institutions, and a wider leeway for non-profit libraries to reformat archived works into digital forms and reproduce works under certain conditions.

As webcasting (digital transmissions of sound recordings over the internet via streaming) had not been anticipated previously, the DMCA amended Section 114 of the US Copyright Act to include webcasting as a non-subscription transmission that is subject to a statutory license. The statutory license also applies to the making of ephemeral recordings by webcasters. Kenya's Copyright Act requires similar clarity with regard to emergent digital transmission technologies.

4.4 Conclusion

The experience of the US as it made its copyright law digital-ready through the DMCA provides useful lessons for further improving Kenya's legal and institutional framework for copyright protection and enforcement. The DMCA's implementation of the WIPO Internet Treaties emphasizes the inclusion of express limitations and exceptions to the protection of TPMs to balance out owners' and users' interests. The Section 1201 rulemaking process not only

[367] US Copyright Act (n 326), Section 108(b).
[368] ibid, Section 108(c).

emphasizes the importance of regularly reviewing and refining non-infringing uses within fair dealing in line with developments in technology and consumer practices, but it also provides an example of a model for public participation in which such a review may be undertaken. The DMCA provisions on ISP liability highlight Kenya's lack of data protection legislation and lack of provisions providing for counter notifications or judicial review within the draft ISP liability laws published by KECOBO. Kenya's policy makers should also be inspired by the DMCA's efforts to promote fair use and access to knowledge through new forms of online education and progressive protection for non-profit libraries and archives.

The limitations of the DMCA and its failure to eliminate online piracy and file-sharing in the US indicates that other solutions should also be formulated beyond the legislative framework. Legislative measures must also be accompanied by copyright owners developing innovative business models and advocacy strategies that are responsive to the legitimate expectations of users, keeping in mind factors driving consumer preferences such as reasonable pricing, convenience and value addition.[369]

[369] Peter K Yu, 'Digital Copyright and Confuzzling Rhetoric' (2011) 13 Vanderbilt Journal of Entertainment and Technology Law 881, 914 – 937.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study sought to investigate whether or not the current legal and institutional framework for the protection and enforcement of copyright is sufficient to meet the challenges posed by increased uptake and use of the Internet and other digital networks in Kenya. Chapter 1 identified the challenges presented by the digital networks on copyright protection and enforcement. These challengesincluded the ease by which perfect unauthorized copies of a work could be reproduced and transmitted, lack of a perception of harm by users as they engage in infringing behaviour, the problem of determining the extent of liability of internet service providers and the difficulty of enforcement in the digital space. On the other hand, the internet's potential for enhancing access to knowledge and information was identified as a benefit that cannot be ignored by developing countries such as Kenya. The literature review established that although a few piecemeal studies have been made on certain specific aspects of Kenyan laws regarding copyright protection and enforcement in the digital space, there was a need for an updated and more extensive study of the existing legal and institutional framework as a whole.

Chapter 2 laid the groundwork for discussing the core research questions of the study through a discussion of the general concepts in copyright law. The chapter also provided an exploration of the creative industries, and an overview of the Digital Age, the Digital Revolution and the Digital Economy in both the global context and within the context of Kenya and its creative industries. This chapter further elaborated on the growing range of opportunities the Digital Age is availing to creative industries, as well as the various challenges that threaten not only these new possibilities but also the traditional models of exploiting copyrighted works.

Chapter 3 entailed an analysis of the existing legal and institutional framework for the protection and enforcement of copyright in the digital space. The Chapter identified several legal and institutional limitations that hindering the effective protection and enforcement of copyright. This analysis established that there was a need to make certain clarifications and amendments to the Copyright Act; as well as the need to bolster further the proposed ISP liability laws currently being developed by the Kenya Copyright Board.

Chapter 4 undertook an examination of two globally prominent laws dealing with the protection and enforcement of copyright in the digital space, namely the USA's Digital Millennium Copyright Act (DMCA) and France's graduated response law HADOPI. The examination yielded important lessons and useful insights on how to further improve Kenya's legal and institutional framework, particularly with regard to the implementation of the WIPO Internet Treaties, limitations and exceptions to rights, fair use provisions, and approaches on how to consider the extent with which to co-opt internet service providers in enforcement activities.

This study confirms that the current legal and institutional framework in place for the protection and enforcement of copyright in Kenya is inadequate and not sufficient to effectively deal with the challenges posed by the Internet and other digital networks. As the country's Internet penetration continues to grow and as internet access become cheaper, the need for further actions to improve and make the regime digital-ready becomes more and more urgent. This study provides a raft of legislative and policy recommendations that could significantly contribute to further strengthening Kenya's copyright protection and enforcement regime below.

5.2 Legislative Recommendations

The legislative reforms recommended below would involve the amendments of current provisions of, or further additions to, the legislation involving digital copyright and the ICT sector through an amendment act passed by the National Assembly. In light of the *Mercy Munee* case as discussed in Chapter 3,[370] adequately facilitated and well-documented public and stakeholder participation must be a core feature of these reforms in order to comply with constitutional requirements and to adopt reforms that reflect the interests of players in the creative industries.

5.2.1 Address Gaps and Limitations in the Copyright Act, 2001

The following deficiencies and limitations of the Copyright Act need to be addressed:

Update the Definitions Clause: The technology-related definitions provided under Section 2(1) should be updated to remove ambiguity which affects subsequent provisions, and to reflect the

[370] Section 3.2.2.3 of Chapter 3 above.

realities of the digital age. The problematic terms include "broadcasting," "broadcast authority," and "communication to the public." In order to recognize the current reality in which a significant portion of works are published exclusively online; and in order to harmonize the rest of the Copyright Act with the recently added Section 30A which recognizes online publication for the purposes of the equitable remuneration right, the definition of "publication" in Section 2(2) should clarify that publication may include the making available of works through digital networks.

Right of Making Available to the Public: The exclusive right of making a work available to the public for access at their convenience needs to be expressly granted to authors as part of the economic rights they enjoy under Section 26; especially since a similar right has already been granted to performers and producers of sound recordings and broadcasters. This provision will provide copyright owners with greater control over the commercial distribution of their works through digital networks, and align the provision with the requirements of the WIPO Copyright Treaty.

Update Right of Equitable Remuneration: The provision for equitable remuneration available to performers, producers, and broadcasters under Section 30A should be amended to also expressly apply to audiovisual works in order comply with the requirements of the Beijing Treaty on Audiovisual Performances. Such an amendment would ideally be followed by the development of a compulsory licensing scheme for the exploitation of audiovisual works via broadcasting or other communication to the public. Section 30A should also provide clarity as to whether digital transmission technologies such as webcasting or simulcasting are also subject to the equitable remuneration right.

Investigate Utility of Provisions for Opting Out of Collective Management: The input of relevant right-holders and stakeholders should be sought to address the question of the utility a mechanism of opting out of the collective management system or opting to make particular works subject only to open content licenses. If such a mechanism is considered necessary, advancements in digital technologies for managing and tracking the use of works should be taken advantage of when developing the opt-out mechanism.

Make Exceptions and Limitations More Robust for Certain Non-infringing Uses: The limited exceptions and limitations to the rights granted provided under Section 26 need to be significantly expanded to be able to serve their purpose feasibly. The provision regarding the exception for acts falling within fair dealing should provide some general guidance as to how to assess whether a particular use of a work is fair dealing. Provisions expressly classifying user-generated content as falling under fair dealing through specified general guidelines for the unauthorized use of copyrighted works in user-generated content would significantly promote the creation of more content. The exceptions and limitations which aim to facilitate access to knowledge and to encourage the use of digital technologies in education are also in need of an upgrade to facilitate developments such as distance learning and easier conversion of works' formats for the benefit of persons with disabilities. Notably missing is an exception allowing for the justifiable circumvention of technological protection measures to access works for educational, research, or public interest uses, and to restrict the collection of users' personal data. These exceptions should not be limited by license agreement or contracts for the use of computer programs and other works which grant licenses for their use instead of transferring ownership of copies. Regarding Kenya's recent migration to digital broadcasting, provisions allowing for time-shifting technologies and allowing for re-broadcasting of free-to-air channels by broadcast signal distributors under the "must-carry rule" should be adopted.

Improve Draft Intermediary Liability Provisions: The ISP liability provisions being developed by KECOBO would be incomplete without a notice and take-down procedure that imposes timeframes by which to comply with notices; allows for affected users' to file counter-notifications; and provides for an expeditious mechanism for determining opposing claims, possibly through the Copyright Tribunal or KECOBO. Adequate provisions penalising bad faith take-down notices and countering the wilful blindness of ISPs to blatant copyright infringement, especially in online marketplaces would provide a crucial counterweight to the safe harbour that ISPs would enjoy. Measures to prevent unnecessary breaches of users' privacy by service providers is another critical provision indispensable to the working of ISP liability laws, given the lack of a standalone legislation on data protection. These provisions should also clarify the role of KENIC and licensed domain name registrars in the seizure of infringing websites and

domain names, as well as in providing information regarding infringing registrants as a possible enforcement measure.

Delineate the Role of KECOBO and ACA in Enforcement: The overlap in enforcement roles between KECOBO and the ACA under the Anti-Counterfeiting Act should be resolved, not only to avoid duplicity and inefficiencies but also to provide clarity to the public and copyright owners who wish to pursue matters to do with infringement.

Operationalize and Expand the Role of the Copyright Tribunal: The Copyright Tribunal should be operationalized, and all stakeholders made aware of its presence, its mandate, and procedures. Its mandate should be expanded beyond dealing with disputes to do with compulsory licensing schemes to other disputes that may require expedient resolution such as disputes to do with takedown notices under the forthcoming ISP liability provisions being developed by KECOBO.

Review Enforcement Measures: Criminal enforcement measures and the sanctions attached to infringement offences should give more priority to targeting infringement carried out on a commercial scale and those with an element of organized crime. Instead of relying on blanket minimum penalties and fines, judicial discretion in assessing appropriate penalties as well as limiting criminal enforcement to measures where civil litigation is futile could prove a much more efficient way of ensuring criminal enforcement achieves the desired deterrent effect.

5.2.2 Address Gaps and Limitations in KICA, 2009

Some provisions of KICA go beyond basic regulation of the ICT sector and have implications that extend to the broadcasting sector and other creative industries. The copyright implications that these provisions create should either be reflected within the legislation itself or, more ideally, synthesized into the Copyright Act. The "must-carry" provisions allowing broadcast signal distributors to broadcast or rebroadcast content owned by free-to-air channels should be classified as a non-infringing use authorized under Section 29 of the Copyright Act or within KICA itself. Offences relating to electronic devices or electronic data should similarly recognize or provide provisions similar to the exceptions and limitations allowed by the Copyright Act.

The role of the ccTLD administrator and authorized domain name registrars within the enforcement mechanism of the upcoming internet intermediary laws needs to be explored.

5.3 Policy Recommendations

These recommendations relate to improvements in internal policies of the institutions involved in copyright protection and enforcement; as well as improvement in policy documents which guide institutions and stakeholders within the creative industries and the ICT sector.

5.3.1 Improve the Capacity of the Kenya Copyright Board

The investigative and enforcement capacity of KECOBO requires a significant improvement. The Board requires more copyright inspectors and specialized prosecutors to be able to investigate and prosecute infringement cases efficiently. The Board also requires a permanently decentralized presence throughout the country, not only for efficient enforcement but also to facilitate more inclusive awareness creation programmes. In addition to expanding human resources, more funding should be allocated to the Board for it to be able to carry out its functions sufficiently. Specific budgetary allocations for policy studies would be of particular benefit to informing and improving the activities of the Board.

5.3.2 Build Capacity of Collective Management Organizations

CMOs should enhance their capacity to maximize emerging opportunities for revenue arising from all the various form of digital communication of works to the public. They should have the ability to negotiate with and efficient collect royalties from commercial online services. A digital licensing hub should be developed to enable easy and efficient licensing of one-off, low value uses of works. CMOs should also strengthen their lobbying and negotiation efforts for better terms for their members under compulsory licensing schemes.

5.3.3 Specialised Police Training

A structured training programme should be put in place within the training curriculum of the National Police Service to produce a certain quota of specialized officers or a specific unit of officers capable of carrying out specialized investigative and enforcement roles.

5.3.4 Continuous Training for the Judiciary

A continuous training programme for judges and magistrates to regularly update their knowledge of emergent and technical aspects of intellectual property law at local, regional and international levels is crucial to the Judiciary's capacity to determining complex and ever-evolving intellectual property disputes.

5.3.5 Reflect Opportunities and Challenges of the Digital Age in ICT Sector and Creative Industries' Policy Documents

Policy documents for the ICT and broadcasting sector, such as the Kenya National ICT Masterplan, the Ministry of Information, Communications and Technology Strategic Plan and the National Broadband Strategy, should explore the role of the creative industry and their contribution to the GDP, particularly in regard to the challenges and opportunities posed by digital technology and digital networks. Policy documents specifically targeting the creative industries, namely the National Music Policy and the Ministry of Sports, Culture and the Arts ICT Strategic Plan, should provide a framework for dealing with specific concerns of the creative industries in the digital environment including promotion of their works, promotion of legitimate online marketplaces, modernization of copyright licensing, education of copyright owners on exploiting their works digitally, and improving enforcement measures against online infringement.

5.3 Concluding Statement

This study concludes that an adequate legal and institutional framework for the protection and enforcement of copyright is vital to copyright-based industries as they face the challenges and opportunities posed by the ever-expanding use of and access to the Internet and other digital networks. Reforms to the legal and institutional framework should seek to achieve an optimal balance between protecting copyright owners from rampant infringement online and facilitating opposing public interest, promoting access to knowledge and enhancing creativity by not restricting user-generated content unnecessarily.

BIBLIOGRAPHY

BOOKS

Armstrong C, De Beer J, Kawooya D. Prabhala A and Schonwetter T (eds), *Access to Knowledge in Africa: The Role of Copyright* (UCT Press 2010)

Bainbridge DI, *Intellectual Property* (9th ed, Pearson 2012)

Bently L and Sherman B, *Intellectual Property Law* (4th ed, Oxford University Press 2014)

Castells M, *The Rise of the Network Society* (2nd ed, Wiley-Blackwell 2010)

Cornish W, Llewelyn D and Aplin T, *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights* (8th ed, Sweet & Maxwell 2013)

Drahos P and Braithwaite J, *Information Feudalism: Who Owns the Knowledge Economy?* (Earthscan 2002)

Fitzgerald B and Gilchrist J (eds), *Copyright Perspectives: Past, Present and Prospect* (Springer 2015)

Goldstein P and Hugenholtz PB, *International Copyright: Principles, Law and Practice* (2nd edn, Oxford University Press 2010)

Howkins J, *The Creative Economy: How People Make Money from Ideas* (Penguin Group 2013)

Karaganis J (ed), *Media Piracy in Emerging Economies* (Social Science Research Council 2011)

Locke J, *Second Treatise of Government* (Macpherson CB ed, 1st edn, Hackett Publishing 1980)

Menell P, 'Intellectual Property: General Theories' in Gerrit de Geest and Boudewijn Bouckaert (eds), *Encyclopedia of Law and Economics, Vol. 1: The History and Methodology of Law and Economics* (Edward Elgar Publishing 2000)

Reed C, *Internet Law: Text and Materials* (2nd edn, Cambridge University Press 2004)

Spence M, *Intellectual Property* (Oxford University Press 2007)

Weisman CJ, *The Essential Guide to RF and Wireless* (2nd edn, Prentice Hall PTR 2002)

Wekesa M and Sihanya B, *Intellectual Property Rights in Kenya* (Konrad Adenauer Stiftung: SportsLink 2009)

World Intellectual Property Organization, *Intellectual Property on the Internet: A Survey of Issues* (WIPO 2002)

CHAPTERS, PAPERS, AND REPORTS

& Innovation Consulting, 'Competing With Piracy: Understanding and Redefining Consumer Perception of Value in Developing Markets' <http://www.slideshare.net/And_Innovation/competing-with-piracy-can-video-on-demand-beat-pirated?from_action=save> accessed 9 October 2015

Bureau of Economic Affairs, 'Spending on Arts and Cultural Production Continues to Increase' (US Department of Commerce 2015) <http://www.bea.gov/newsreleases/general/acpsa/acpsa0115.pdf> accessed 15 September 2016

Business Action to Stop Counterfeiting and Piracy, 'Roles and Responsibilities of Intermediaries: Fighting Counterfeiting and Piracy in the Supply Chain' <http://www.iccwbo.org/Data/Documents/Bascap/International-engagement-and-advocacy/Roles-and-Responsibilities-of-Intermediaries-BASCAP-Report-2015---Low-Resolution/> accessed 15 May 2015

—— and Kenya Anti-Counterfeit Agency, 'Promoting and Protecting Intellectual Property in Kenya' (International Chamber of Commerce 2013) <http://www.iccwbo.org/Data/Documents/Bascap/International-engagement-and-advocacy/Country-Initiatives/Kenya/Value-of-IP-in-Kenya/> accessed 15 April 2015

Business Software Alliance, 'The Compliance Gap: BSA Global Software Survey' (2014) <http://globalstudy.bsa.org/2013/downloads/studies/2013GlobalSurvey_Study_en.pdf> accessed 17 April 2015

Cominos A, 'The Liability of Internet Intermediaries in Nigeria, Kenya, South Africa and Uganda: An Uncertain Terrain' <http://www.apc.org/en/system/files/READY%20-%20Intermediary%20Liability%20in%20Africa_FINAL.pdf> accessed 15 April 2015

COMMUNIA, 'COMMUNIA Policy Paper on the Directive Proposal on Collective Management of Copyright' <http://www.communia-association.org/wp-content/uploads/2013/01/communia_policy_paper_colsoc_directive.pdf> accessed 28 August 2016

Communications Authority of Kenya, 'Minimum Specifications for DVB-T2 Digital Set Top Boxes for the Kenyan Market' <http://www.ca.go.ke/images/downloads/TypeApproval/specifications/DVB=T2%20MINIMUM%20TECHNICAL%20SPECIFICATIONS%20JULY%202015.pdf> accessed 10 June 2016

——, 'Quarterly Sector Statistics Report; Second Quarter of the Financial Year 2015/16' (CAK 2016) <http://ca.go.ke/images/downloads/STATISTICS/Quarterly%20Sector%20Statistics%20Report%20for%20Second%20Quarter%20FY%202015-2016%20(October-December%202015)%20Final.pdf> accessed 10 April 2016

——, 'Statistics' <http://www.ca.go.ke/index.php/statistics> accessed 12 March 2016

Elkin-Koren N, 'After Twenty Years: Revisiting Copyright Liability of Online Intermediaries' in Susy Frankel and Daniel Gervais (eds), *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014)

EY, 'Cultural Times: The First Global Map of Cultural and Creative Industries' (CISAC 2015) <http://www.ey.com/Publication/vwLUAssets/ey-cultural-times-2015/$FILE/ey-cultural-times-2015.pdf> accessed 10 January 2016

Fischer W, 'Theories of Intellectual Property' in Stephen Munzer (ed), *New Essays in Legal and Political Theory of Property* (2001) <http://www.law.harvard.edu/faculty/tfisher/iptheory.html> accessed 5 October 2014

Fitzgerald B, Shi XS, Foong C and Pappalardo K, 'Country of Origin and Internet Publication: Applying the Berne Convention in the Digital Age', *Copyright Perspectives: Past, Present and Prospect* (Springer 2015)

Geiger C, 'The Rise of Criminal Enforcement of Intellectual Property Rights . . . and Its Failure in the Context of Copyright Infringements on the Internet', *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014)

Hargreaves I, 'Digital Opportunity: Review of Intellectual Property and Growth' (2011) <http://autoblog.leslibres.org/autoblogs/creativecommonsorgweblog_6f7623748a4b5ddd872fd8c2fcd53404e0e69a8a/media/16ae12ee.ipreview-finalreport.pdf> accessed 15 May 2015

ICT Authority, 'The Kenya National ICT Masterplan 2013/14 – 2017/18' <http://www.ict.go.ke/wp-content/uploads/2016/04/The-National-ICT-Masterplan.pdf> accessed 27 September 2015

International Intellectual Property Alliance, '2003 Special 301 Report - Kenya' (Office of the US Trade Representative) <http://www.iipa.com/rbc/2003/2003SPEC301KENYA.pdf> accessed 9 October 2015

——, '2006 Special 301 Report: Special Mention - Kenya' (Office of the US Trade Representative) <http://www.iipa.com/special301_TOCs/2006_SPEC301_TOC.html> accessed 9 October 2015

Jack W and Suri T, 'Mobile Money: The Economics of M-PESA' (National Bureau of Economic Research 2011) <http://www.nber.org/papers/w16721> accessed 12 October 2016

Kaigwa M, 'From Cyber Café to Smartphone: Kenya's Social Media Lens Zooms In on the Country and Out to the World' in Bitange Ndemo and Tim Weiss (eds), *Digital Kenya: An Entrepreneurial Revolution in the Making* (Palgrave Macmillan UK 2016)

Kameri-Mbote P, 'Intellectual Property Protection in Africa: An Assessment of the Status of Laws, Research and Policy Analysis on Intellectual Property Rights in Kenya' (2005) 2 IELRC Working Paper <http://www.ielrc.org/content/w0502.pdf> accessed 15 April 2015

Kenya Copyright Board 'KECOBO Copyright Survey Report' (KECOBO / Mdundo 2016) <http://www.copyright.go.ke/downloads/send/5-copyright-news-magazine-survey/60-kecobo-copyright-survey-report.html> accessed 14 September 2016

Lehman BA, 'Intellectual Property and the National Information Infrastructure: The Report of the Working Group on Intellectual Property Rights' (Information Infrastructure Task Force 1995) <http://www.uspto.gov/web/offices/com/doc/ipnii/ipnii.pdf> accessed 9 October 2015

Lieber E and Syverson C, 'Online versus Offline Competition' in Martin Peitz and Joel Waldfogel (eds), *The Oxford Handbook of the Digital Economy* (Oxford University Press 2012)

Lunney, Jr. GS, 'Copyright on the Internet: Consumer Copying and Collectives', *The Evolution and Equilibrium of Copyright in the Digital Age* (Cambridge University Press 2014)

Manyika J, Cabral A, Moodley L, Yeboah-Amankwah S, Moraje S, Chui M, Anthonyrajah J and Acha L, 'Lions Go Digital : The Internet's Transformative Potential in Africa' (McKinsey Global Institute 2013) <http://www.mckinsey.com/~/media/mckinsey/dotcom/insights/high%20tech%20internet/lions%20go%20digital/mgi_lions_go_digital_full_report_nov2013.ashx> accessed 11 August 2015

Ministry of Information Communications and Technology, 'Ministerial Communications and Technology Strategic Plan 2013 - 2017' <http://www.ict.go.ke/wp-content/uploads/2016/04/MinistryStrategic.pdf> accessed 27 September 2015

——, 'National Broadband Strategy' <http://www.ca.go.ke/images//downloads/PUBLICATIONS/NATIONAL%20BROADBAND%20STRATEGY/National%20Broadband%20Strategy.pdf> accessed 27 September 2015

Ministry of Sports, Culture and the Arts, 'ICT Strategic Plan 2013 - 2017' <http://www.sportsculture.go.ke/index.php/2015-03-09-09-37-44/category/4-publications?download=4:mosca-draft-ict-strategy> accessed 27 September 2015

——, 'National Music Policy' <http://musicinafrica.net/sites/default/files/national-music-policy-revised-26-february-2015.pdf> accessed 27 September 2015

Mona L, Jaramillo B and López C, 'El Espacio Iberoamericano Del Libro 2014' (CERLALC-UNESCO 2014) <http://cerlalc.org/wp-content/uploads/2015/04/El-Espacio-Iberoamericano-libro-2014.pdf> accessed 20 June 2016

Munyua A, Githaiga G and Kapiyo V, 'Intermediary Liability in Kenya' (Kenya ICT Action Network 2012) <http://gb1.apc.org/fr/system/files/Intermediary_Liability_in_Kenya.pdf> accessed 15 October 2015

Muriuki M, 'The Internet Journey for Kenya: The Interplay of Disruptive Innovation and Entrepreneurship in Fueling Rapid Growth' in Bitange Ndemo and Tim Weiss (eds), *Digital Kenya: An Entrepreneurial Revolution in the Making* (Palgrave Macmillan UK 2016)

Nicholson DR, 'Copyright - Are People with Sensory-Disabilities Getting a Fair Deal?', *The Fourth Pan-Commonwealth Forum on Open Learning (PCF4).* (Commonwealth of Learning and the Caribbean Consortium 2006) <http://pcf4.dec.uwi.edu/viewpaper.php?id=379&print=1> accessed 10 May 2016

Nyariki D and others, 'The Economic Contribution of Copyright-Based Industries in Kenya' (WIPO 2009) <http://www.wipo.int/copyright/en/performance/pdf/econ_contribution_cr_ke.pdf> accessed 16 December 2014

Ombija JNR, 'Case Study of Kenya's Specialized Intellectual Property Rights Court Regime' (*Kenya Law*, December 2011) <http://kenyalaw.org/kl/index.php?id=1899> accessed 5 October 2015

Ouma M and Sihanya B, 'Kenya' in Chris Armstrong and others (eds), *Access to Knowledge in Africa: The Role of Copyright* (UCT Press 2010)

Perset K, 'The Economic and Social Role of Internet Intermediaries' (OECD 2010) <http://www.oecd-ilibrary.org/science-and-technology/the-economic-and-social-role-of-internet-intermediaries_5kmh79zzs8vb-en> accessed 4 March 2016

Peukert A, 'Why Do "Good People" Disregard Copyright on the Internet?', *Criminal Enforcement: A Blessing or A Curse for Intellectual Property?* (Edward Elgar Publishing 2010) <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1660319> accessed 15 April 2015

Raygor KR and Komen E, 'Limitations On Copyright Protection for Format Ideas in Reality Television Programming' <http://www.sheppardmullin.com/media/article/806_Reality%20Format%20Paper.pdf> accessed 19 May 2015

Seng D, '"Who Watches the Watchmen?"An Empirical Analysis of Errors in DMCA Takedown Notices' <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2563202> accessed 16 April 2016

Sihanya B, 'Copyright in E-Commerce and the Music Industry in Kenya' in Moni Wekesa and Ben Sihanya (eds), *Intellectual Property Rights in Kenya* (Konrad Adenauer Stiftung : SportsLink 2009)

——, 'Copyright Law in Kenya' <http://innovativelawyering.com/attachments/article/26/Copyright%20Law%20in%20Kenya%20-%20Prof%20Ben%20Sihanya.pdf> accessed 16 May 2016

Tyler M, Hughes J and Renfrew H, 'Kenya: Facing the Challenges of an Open Economy' in Eli M Noam (ed), *Telecommunications in Africa* (Oxford University Press 1999)

UK Department of Culture, Media and Sport, 'Creative Industries Mapping Document 2001' (DCMS 2001) <https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/183544/2001part1-foreword2001.pdf> accessed 12 September 2016

United States Copyright Office, 'The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary' <http://www.copyright.gov/legislation/dmca.pdf> accessed 16 April 2016

——, 'Report on Copyright and Digital Distance Education' (United States Copyright Office 1999) <http://www.copyright.gov/reports/de_rprt.pdf> accessed 16 April 2016

——, ‘Understanding the Section 1201 Rulemaking’ <https://www.copyright.gov/1201/2015/2015_1201_FAQ_final.pdf> accessed 21 August 2016

van der Pol H, ‘Key Role of Cultural and Creative Industries in the Economy’ (UNESCO Institute for Statistics 2007) <https://www.oecd.org/site/worldforum06/38703999.pdf> accessed 12 September 2016

World Bank, World Development Report 2016: Digital Dividends (The World Bank 2016) <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2016/01/13/090224b08405ea05/2_0/Rendered/PDF/World0developm0000digital0dividends.pdf> accessed 18 January 2016

JOURNAL ARTICLES

Bechtold S, ‘The Fashion of TV Show Formats’ [2013] Michigan State Law Review

Caraway BR, ‘Survey of File-Sharing Culture’ (2012) 6 International Journal of Communication

Castree III S, ‘Cyber-Plagiarism for Sale: The Growing Problem of Blatant Copyright Infringement in Online Digital Media Stores’ (2012) 14 Texas Review of Entertainment and Sports Law 25

Chander A and Sunder M, ‘Everyone’s a Superhero: A Cultural Theory of “Mary Sue” Fan Fiction as Fair Use’ [2007] California Law Review 597

Cohen B, ‘A Proposed Regime for Copyright Protection on the Internet’ (1996) 22 Brooklyn Journal of International Law 401

Ficsor M, ‘Collective Management of Copyright and Related Rights at a Triple Crossroad: Should It Remain Voluntary or May It Be “Extended” or Made Mandatory’ [2003] Copyright Bulletin

Fromer JC, ‘Expressive Incentives in Intellectual Property’ [2012] Virginia Law Review 1745

Guibault L and Melzer R, 'The Legal Protection of Broadcast Signals' [2004] IRIS plus

Guzman F, 'The Tensions Between Derivative Works Online Protected by Fair Use and the Takedown Provisions of the Online Copyright Infringement Liability Limitation Act' (2015) 13 Northwestern Journal of Technology and Intellectual Property 181

Harris DP, 'Time to Reboot?: DMCA 2.0' (2015) 47 Arizona State Law Journal 801

Higgs P and Cunningham S, 'Creative Industries Mapping: Where Have We Come from and Where Are We Going?' (2008) 1 Creative Industries Journal 7

Mann RJ and Belzley SR, 'The Promise of Internet Intermediary Liability' (2005) 47 William and Mary Law Review 239

Martin B and Newhall J, 'Criminal Copyright Enforcement Against Filesharing Services' (2013) 15 North Carolina Journal of Law and Technology 101

Matesky MP, 'The Digital Millennium Copyright Act and Non-Infringing Use: Can Mandatory Labeling of Digital Media Products Keep the Sky from Falling' (2005) 80 Chicago-Kent Law Review 515

McCutcheon J, 'Curing the Authorless Void: Protecting Computer-Generated Works Following IceTV and Phone Directories' (2013) 37 Melbourne University Law Review

Milanese C, 'Lights, Camera, Legal Action: Assessing the Question of Acting Performance Copyrights Through the Lens of Comparative Law' (2015) 91 Notre Dame Law Review 1641

Morin J-F and Gold ER, 'An Integrated Model of Legal Transplantation: The Diffusion of Intellectual Property Law in Developing Countries' (2014) 58 International Studies Quarterly 781

Mortimer JH, Nosko C and Sorensen A, 'Supply Responses to Digital Distribution: Recorded Music and Live Performances' (2012) 24 Information Economics and Policy 3

Ndiaye N, 'The Berne Convention and Developing Countries' (1986) 11 Columbia-VLA Journal of Law & the Arts 47

Ndonye MM, Khaemba J and Bartoo P, 'Digital Migration and the Battle of Terrestrial Titans in Kenya: Issues and Prospects' (2015) 2 International Research Journal of Engineering and Technology <https://www.irjet.net/archives/V2/i3/Irjet-v2i3375.pdf> accessed 12 October 2016

Ochara NM, Van Belle J-P and Brown I, 'Global Diffusion of the Internet XIII: Internet Diffusion in Kenya and Its Determinants–A Longitudinal Analysis' (2008) 23 Communications of the Association for Information Systems 123

Potts J and Cunningham S, 'Four Models of the Creative Industries' (2008) 14 International Journal of Cultural Policy 233

Redondo T, 'The Digital Economy: Social Interaction Technologies – an Overview' (2015) 3 International Journal of Interactive Multimedia and Artificial Intelligence 17

Schlachter E, 'The Intellectual Property Renaissance in Cyberspace: Why Copyright Law Could Be Unimportant on the Internet' (1997) 12 Berkeley Technology Law Journal 15

Sihanya B, 'Infotainment and Cyberlaw in Africa: Regulatory Benchmarks for the Third Millenium' (2000) 10 Transnational Law & Contemporary Problems 583

Silva AJC, 'Beyond the Unrealistic Solution for Development Provided by the Appendix of the Berne Convention on Copyright' (2012) 60 Journal of the Copyright Society of the USA 581

Sudler H, 'Effectiveness of Anti-Piracy Technology: Finding Appropriate Solutions for Evolving Online Piracy' (2013) 56 Business Horizons 149

Yu PK, 'P2P and the Future of Private Copying' (2005) 76 University of Colorado Law Review <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=578568> accessed 17 October 2015

——, 'Digital Copyright and Confuzzling Rhetoric' (2011) 13 Vanderbilt Journal of Entertainment and Technology Law 881

NEWSPAPER ARTICLES AND WEB PAGES

AFP, 'Netflix Becomes "Global TV Network" Now in Kenya' (*Daily Nation,* 7 January 2016) <http://www.nation.co.ke/lifestyle/Netflix-becomes-global-TV-network-now-in-kenya/-/1190/3023956/-/o5qqyk/-/index.html> accessed 11 January 2016

Alexa, 'Top Sites in Kenya' (*Alexa*) <http://www.alexa.com/topsites/countries/KE> accessed 5 May 2016

Balancing Act Africa, 'Kenya's Buni TV Launches Its Buni+ Pay for Premium Subscription Service (VoD)' (*Balancing Act Africa,* 13 March 2014) <http://www.balancingact-africa.com/news/broadcast/issue-no175/top-story/kenya-s-buni-tv-laun/bc> accessed 20 December 2014

——, 'Music to the Ears – African Online Mobile Music Platforms Break out All over the Continent' (*Balancing Act Africa*, 7 June 2013) <http://www.balancingact-africa.com/news/en/issue-no-658/top-story/music-to-the-ears-af/en> accessed 20 December 2014

Burrus D, 'The Internet of Things Is Far Bigger Than Anyone Realizes' (WIRED, 21 November 2014) <https://www.wired.com/insights/2014/11/the-internet-of-things-bigger/> accessed 27 September 2016

——, 'The Internet of Things Is Far Bigger Than Anyone Realizes (Part 2)' (WIRED, 26 November 2014) <https://www.wired.com/insights/2014/11/iot-bigger-than-anyone-realizes-part-2/> accessed 27 September 2016

Fayo G, 'Safaricom Reaches Sh15.5m Settlement with Musician' (*Business Daily*) <http://www.businessdailyafrica.com/Corporate-News/Safaricom-reaches-Sh15-5m-settlement-with-musician/539550-2304920-nm4rbhz/index.html> accessed 4 December 2015

Flew T, 'Copyright Laws and Developing Countries' (ARC Centre of Excellence for Creative Industries and Innovation, 4 September 2013) <http://www.cci.edu.au/node/1603> accessed 22 October 2015

Gichuki R, 'Industry under Siege by Pirates' (*Daily Nation*, 1 November 2008) <http://www.nation.co.ke/lifestyle/lifestyle/1214-486074-bf5pja/index.html> accessed 9 December 2015

Ghafele R and Gibert B, 'Counting the Costs of Collective Rights Management of Music Copyright in Europe' <https://mpra.ub.uni-muenchen.de/34646/> accessed 10 June 2016

iHub, *African Tech Bits Episode 3: Gaming in Kenya* (2014) <https://www.youtube.com/watch?v=_SvhF2FCDyQ&feature=youtu.be> accessed 4 October 2015

Kabura S, 'DJ Afro Movies Lead As Urban Kenya's Preferred Home Cinema Collection' (*TechMoran*, 4 August 2014) <http://techmoran.com/dj-afro-movies-lead-nairobis-prefered-home-cinema-collection/> accessed 11 October 2015

KENIC, 'About Us' (*KENIC*) <http://www.kenic.or.ke/index.php/en/background> accessed 16 November 2015

——, 'Become a Registrar' (*KENIC*) <http://www.kenic.or.ke/index.php/en/how-to-become/registrars/kenic-registrar-application-procedure> accessed 16 November 2015

Kenya Copyright Board, 'Phase Out of the Physical Barcode Sticker' (*Kenya Copyright Board*, 10 August 2016) <http://www.copyright.go.ke/media-gallery/news-and-updates/290-phase-out-of-the-physical-barcode-sticker.html> accessed 12 August 2016

——, 'The Scourge of Piracy' [2011] *Copyright News, Issue 3* <http://www.copyright.go.ke/awareness-creation.html?download=2:copyright-news-issue-3> accessed 23 September 2015

Konstantaras A, 'Secrets About Piracy Revealed By Jitu Films Director' (*Actors.co.ke*, 23 January 2012) <http://www.actors.co.ke/en/mer/articledetail/127> accessed 1 October 2015

Maina W, 'Digital Migration: The What and Why' (Daily Nation, 2 January 2015) <http://www.nation.co.ke/oped/Opinion/Digital-migration-The-what-and-why/440808-2601350-53bvhwz/index.html> accessed 12 October 2016

Malcolm J, 'South African Copyright Review Is Overdue, Pioneering, and in Parts Completely Absurd' (Electronic Frontier Foundation, 14 August 2015) <https://www.eff.org/deeplinks/2015/08/south-african-copyright-review-overdue-pioneering-and-parts-completely-absurd> accessed 19 August 2016

Matinde V, 'Photography Theft Growing in Kenya amid Greater Connectivity' (*IT Web Africa*, 6 May 2014) <http://www.itwebafrica.com/ict-and-governance/256-kenya/232846-photography-theft-growing-in-kenya-amid-greater-connectivity> accessed 5 March 2015

Mbaye G, 'Role of the Judiciary, Police and the Anti-Counterfeit Agency in the Enforcement of Copyright and Related Rights' [2012] *Copyright News, Issue 7* <http://www.copyright.go.ke/awareness-creation.html?download=5:copyright-news-issue-7> accessed 23 September 2015

McCarthy J, 'What Is Artificial Intelligence?' (Stanford University, 12 November 2007) <http://www-formal.stanford.edu/jmc/whatisai/> accessed 10 June 2016

Mohamed A, 'Economics of the Kenyan Music Industry' (*UP Nairobi*, 29 May 2014) <http://www.upnairobi.com/dt_portfolio/kenyan-music-industry/> accessed 20 October 2015

Moss R, 'Big Game: The Birth of Kenya's Games Industry' (*Polygon*, 3 July 2013) <http://www.polygon.com/features/2013/7/3/4483276/kenya-games-industry> accessed 4 October 2015

Mwaniki P, 'Online Pirates Engage Local TV Stations in Battle of Dramas' (*Daily Nation*, 5 December 2009) <http://www.nation.co.ke/magazines/lifestyle/-/1214/817826/-/7altspz/-/index.html> accessed 22 December 2014

Nzomo V, 'Election Campaigns and Copyright Infringement' (*IP Kenya*, 5 January 2012) <https://ipkenya.wordpress.com/2012/01/05/election-campaigns-and-copyright-infringement/> accessed 22 December 2014

——, 'Establishing Copyright Infringement: High Court Ruling in Nonny Gathoni v. Samantha's Bridal Wedding Show Case' <https://ipkenya.wordpress.com/2015/04/09/establishing-copyright-

infringement-high-court-ruling-in-nonny-gathoni-v-samanthas-bridal-wedding-show-case/> accessed 19 May 2015

——, 'Some Gleanings: Intellectual Property Rights Infringement in the Digital Environment' <https://ipkenya.wordpress.com/2012/08/10/some-gleanings-intellectual-property-rights-infringement-in-the-digital-environment/> accessed 16 April 2015

——, '"Sue, Baby, Sue!": Miguna's Peeling Back the Mask and the Digital Copyright Infringement Debate' (*IP Kenya*, 20 July 2012) <http://ipkenya.wordpress.com/2012/07/20/sue-baby-sue-migunas-peeling-back-the-mask-and-the-digital-copyright-infringement-debate/> accessed 5 October 2014

——, 'Ten Years Later: Dismal Performance Scorecard for the Copyright Office' <http://blog.cipit.org/2013/07/25/ten-years-later-dismal-performance-scorecard-for-the-copyright-office/> accessed 13 December 2015

——, 'Test Case on Liability for Online Copyright Infringement: Music Industry Players Sue ISPs, Telcos and Government' <https://ipkenya.wordpress.com/2014/12/15/test-case-on-liability-for-online-copyright-infringement-music-industry-players-sue-isps-telcos-and-government/> accessed 18 September 2015

Ochieng' L, 'Liquid Telecom to Leverage Its Fibre in War on Streaming Titan' (*Daily Nation*, 4 February 2016) <http://www.nation.co.ke/business/Liquid-Telecom-to-leverage-its-fibre-in-war-titan-Netflix/-/996/3062550/-/yyoux3/-/index.html> accessed 9 February 2016

Opar J, 'Kenya's Film Distribution Problem' (*This Is Africa*, 19 June 2014) <http://thisisafrica.me/lifestyle/kenyas-film-distribution-problem/> accessed 28 October 2015

Ouma M, 'Copyright in the Digital Environment' [2012] Copyright News, Issue 5 <http://www.copyright.go.ke/awareness-creation.html?download=37:2012-issue-5-copyright-in-the-digital-environment> accessed 23 September 2015

——, ‘Enforcement of Copyright and Related Rights’ [2012] *Copyright News, Issue 7* <http://www.copyright.go.ke/awareness-creation.html?download=5:copyright-news-issue-7> accessed 23 September 2015

——, ‘Finally, an International Treaty on the Protection of Audio-Visual Performances’ [2012] *Copyright News, Issue 6* <http://www.copyright.go.ke/awareness-creation.html?download=4:copyright-news-issue-6> accessed 23 September 2015

Podolny S, ‘If an Algorithm Wrote This, How Would You Even Know?’ The New York Times (7 March 2015) <http://www.nytimes.com/2015/03/08/opinion/sunday/if-an-algorithm-wrote-this-how-would-you-even-know.html> accessed 10 June 2016

Property Rights Alliance, ‘The International Intellectual Property Index 2016’ (IPRI, 2016) <http://internationalpropertyrightsindex.org/countries> accessed 7 November 2016

Riaga O, ‘Pirated Hollywood Movies Is the Biggest Threat to the Growth of Film Industry in Kenya’ <http://www.kachwanya.com/2016/02/15/pirated-hollywood-movies-is-the-biggest-threat-to-the-growth-of-film-industry-in-kenya/> accessed 20 February 2016

Safaricom Limited, ‘Skiza FAQ’ <http://skiza.com/wap2/common/safaricomhelp.ftl> accessed 20 May 2016

Shaw K, ‘What Makes Up the Digital Economy - TechBytes Blog’ (Webopedia, 16 September 2015) <http://www.webopedia.com/Blog/the-digital-economy.html> accessed 27 September 2016

Sigei E, ‘Building Respect for Copyright Is a Long Term Process’ [2016] *Copyright News, Issue 21* <http://www.copyright.go.ke/awareness-creation.html?download=87:2016-issue-21-building-respect-for-copyright> accessed 19 July 2016

——, ‘Digital Migration in Broadcasting and Copyright: The Supreme Court Direction’ *Copyright News, Issue 15* <http://www.copyright.go.ke/awareness-creation.html?download=50:copyright-news-issue-15> accessed 15 May 2015

——, ‘Proposed Amendments to Provide Web Blocking Measures in Cases Of Copyright Infringement Online’ [2015] *Copyright News, Issue 18* < http://www.copyright.go.ke/awareness-creation.html?download=64:issue-18-photography-image-rights> accessed 25 January 2016

Speres J, ‘HOT OFF THE PRESS: SA Copyright Amendment Bill Published for Comment’ <http://afro-ip.blogspot.com/2015/07/hot-off-press-sa-copyright-amendment.html> accessed 19 August 2016

Standeford D, ‘Nigeria Prepares To Revamp Its Copyright System For The Digital Age’ <http://www.ip-watch.org/2015/11/22/nigeria-prepares-to-revamp-its-copyright-system-for-the-digital-age/> accessed 19 August 2016

Sunday F, ‘Piracy Eats Away Movie Rentals and Cinema Revenues’ (*Business Daily*, 27 July 2010) <http://www.businessdailyafrica.com/Piracy-eats-away-movie-rentals-and-cinema-revenues/-/539444/965112/-/qf84kqz/-/index.html> accessed 1 October 2015

United States Copyright Office, ‘The Digital Millennium Copyright Act of 1998: U.S. Copyright Office Summary’ <http://www.copyright.gov/legislation/dmca.pdf> accessed 16 April 2016

Wafula P, ‘Theatre to Close Shop as Sales Plunge’ (*Business Daily*, 5 October 2010) <http://www.businessdailyafrica.com/Corporate-News/Theatre-to-close-shop-as-sales-plunge/-/539550/1026178/-/6c5g1jz/-/index.html> accessed 20 September 2015

Wangari N, ‘E-Kitabu; Kenya’s First EBook Store Launches at the Nairobi International Book Fair’ (*Kenyan Poet*, 30 September 2012) <http://www.kenyanpoet.com/2012/09/30/e-kitabu-digital-book-store-launches-at-the-nairobi-book-fair/> accessed 22 December 2014

——, ‘10 Cases of Plagiarism in Kenya’ (*Kenyan Poet*, 11 March 2014) <http://www.kenyanpoet.com/2014/03/11/10-cases-of-plagiarism-in-kenya/> accessed 11 December 2014

——, ‘Rampant Plagiarism of Kenyan Photographs Online’ (*Kenyan Poet*, 10 February 2015) <http://www.kenyanpoet.com/2015/02/10/rampant-plagiarism-of-kenyan-photographs-online/> accessed 5 March 2015

World Bank, 'GDP per Capita (current US$)' (World Bank, 2015) <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD> accessed 11 October 2016

Wrong M, 'Adventures of a Book in Africa' (*Standpoint Magazine*, August 2009) <http://www.standpointmag.co.uk/node/1703/full> accessed 22 December 2014

——, 'A Letter from Michela Wrong - It's Our Time to Eat.' (*Storymoja*, 20 September 2010) <http://storymojaafrica.wordpress.com/archives-20092010/politics/a-letter-from-michela-wrong-its-our-time-to-eat/> accessed 5 October 2014

THESES AND DISSERTATIONS

Gaitán MPR, 'The Challenges of Legal Transplants in a Globalized Context: A Case Study on "Working" Examples, Dissertation Submitted in Partial Fulfillment of the Requirements for the Master of Laws Degree in International Economic Law at the University of Warwick' (University of Warwick 2014)

Macharia A, 'Enforcement of Copyright in Information Communication Technology (ICT) Era: How Effective? A Thesis Submitted in Partial Fulfilment of the Requirements of the Degree of Master of Laws (LL.M) of the University of Nairobi' (University of Nairobi 2015)

Njengo JM, 'Analyzing the Legal Protection of Music Copyright in Kenya: A Project Submitted in Partial Fulfillment of the Requirements for the Award of Master of Laws Degree, LLM' (University of Nairobi 2014)

Nzomo V, 'Collective Management of Copyright and Related Rights in Kenya: Towards An Effective Legal Framework for Regulation of Collecting Societies. A Research Project Submitted in Partial Fulfilment of the Requirements of Master of Laws, School of Law, University of Nairobi.' (University of Nairobi 2014)