A STUDY ON THE EFFICACY OF ANTI-COUNTERFEIT LAWS IN CURBING ONLINE COUNTERFEITING IN KENYA: IS THIS THE PANACEA?

Submitted in partial fulfilment of the requirements of the Bachelor of Laws Degree, Strathmore University Law School

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DECLARATION

I, ELISHA COLE MUNENE, do hereby declare that this research is my original work and that to the best of my knowledge and belief, it has not been previously, in its entirety or in part, been submitted to any other university for a degree or diploma. Other works cited or referred to are accordingly acknowledged.

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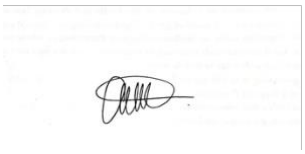
Date: .....29/2/2024.....

This dissertation has been submitted for examination with my approval as University Supervisor.



Signed:

Ms Janet Njambi

ABSTRACT

The growth of the internet and e-commerce since the turn of the millennium has led to widespread benefits to economies world-wide. However, this growth has also coincided with the emergence of new crime types such as online counterfeiting. This study therefore takes a deep dive into the efficacy of anti-counterfeiting laws in Kenya and suggesting possible solutions to curb this illicit trade. The study shall primarily focus on online counterfeiting and the laws addressing this specific crime in Kenya. The research methodology involves an in-depth analysis of various sources, including the World Health Organization's estimates on counterfeit medicines, the International Peace Institute's estimates on counterfeit trading in Kenya, and a study conducted by the Anti-Counterfeit Authority on online counterfeiting levels in Kenya. Major findings reveal that online counterfeit goods account for a significant portion of all goods sold online which has led to Kenya losing significant tax revenue, compromised consumer safety and the exploitation of intellectual property rights. The study concludes that the growth of e-commerce has exacerbated the counterfeiting problem, with counterfeiters exploiting social media platforms and online markets. Law enforcement faces significant challenges, including anonymity issues, jurisdictional challenges, inadequate training, and low reporting of these cybercrimes. To curb this problem, I recommend the revamp of existing laws to include provisions to cater to online counterfeiting which is currently absent in the Anti-Counterfeiting Act. Moreover, my study proposes the use of Blockchain technology and the adoption of new strategies such as Situational Crime Prevention by the Anti-Counterfeit Authority to effectively curb this problem.

LIST OF ABBREVIATIONS

ACA	Anti-Counterfeit Authority
ARVs	Anti-Retro Viral
ARIPO	African Regional Intellectual Property Organisation
BASCAP	Business Action to Stop Counterfeiting and Piracy
EBSI	European Blockchain Services Infrastructure
EUIPO	European Union Intellectual Property Office
IFPI	International Federation of Phonographic Industry
IPR	Intellectual Property Rights
ISP	Internet Service Provider
KAM	Kenya Association of Manufacturers
KIPPRA	Kenya Institute for Public Policy Research and Analysis
SCP	Situational Crime Prevention
TRIPS	Trade Related Aspects of Intellectual Property Rights
VPN	Virtual Private Network
WHO	World Health Organisation
WIPO	World Intellectual Property Organisation

LIST OF CASES

Tiffany v eBay (2008), United States Court of Appeal.

Hermes v eBay (2010), France Court of Appeal of Reims.

LIST OF LEGAL INSTRUMENTS

Kenya

The Constitution of Kenya 2010

Anti-Counterfeit Act 2008

Copyright Act 2001

Computer Misuse and Cyber Act 2008

Industrial Property Act 2001

Trademarks Act 2002

International Instruments

Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) 1994.

Berne Convention for the Protection of Literary and Artistic works 1886.

Madrid Agreement Concerning the International Registration of Marks 1998.

Paris Convention for the Protection of Industrial Property 1883.

Agreement on the Creation of the African Regional Intellectual Property Organisation (ARIPO) 1976.

CHAPTER ONE

1.1 Background

Counterfeiting is defined as the making of a product which so closely imitates the appearance of another so as to mislead the consumer that it is the product of another[1]. The Trade Related Aspects of Intellectual Property (TRIPS) Agreement is a multilateral agreement within the World Trade Organization that gives the universal definition of counterfeiting and piracy. It defines it as "counterfeit trademark goods shall mean any goods, including packaging, bearing without authorization a trademark which is identical to the trademark validly registered and which thereby infringes the rights of the owner of the trademark in question under the law of the country of importation.[2]" The World Intellectual Property Organisation (WIPO) also defines it as the unauthorised reproductions or imitations of products, often protected by intellectual property rights, such as trademarks, copyrights, or patents. These goods are usually produced and distributed with the intent to deceive consumers into believing that they are purchasing genuine products[3]. Counterfeit products are typically of lower quality and can damage the reputation of the genuine brand or product. However, counterfeiting as a rule of thumb encompasses many different things including copyright infringement, trademark infringement as forms of intellectual property infringement[4].

The production and distribution of counterfeit goods poses several threats. To begin with, it poses a significant health and safety risk[5]. Counterfeit medicines and pharmaceuticals are extremely dangerous as they can fail to cure and ultimately kill its users. The World Health Organization (WHO) estimates that counterfeit medicines account for 50% of the global drug market with a significant portion sold in developing countries[6]. Furthermore, the WHO

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[1] Merriam Webster Dictionary, 4 ed.

[2] Organisation for Economic Co-operation and Development, The Economic Impact of Counterfeiting, 1998, 5.

[3] World Intellectual Property Organization, 'The Impacts of. Counterfeiting on Corporate Investment,' Economic Research Working Paper No. 67, 3.

[4] Ongola B, 'Efficacy of Anti-Counterfeiting Laws in Kenya,' published, University of Nairobi, Nairobi, 2011, 22.

[5] United States Immigration and Customs Enforcement, final draft, 2022.

[6] Shipalana P, 'Counterfeit Pharmaceuticals: A Major Threat to Public Health' South Africa Institute of International Affairs, 2020, 3.

estimated that the annual death toll from counterfeit drugs was about 700,000[7]. Counterfeit products pose an equally significant threat to the country's economy. It is estimated that Kenya loses about Ksh. 200 billion annually as potential tax revenue due to counterfeit products[8]. Moreover, the International Peace Institute estimates that in Kenya counterfeit trading was worth about Ksh. 70 billion in 2017 rivalling tourism and the agricultural sector as the top exchange earners of the country[9]. According to a study conducted by the Anti-Counterfeit Authority, online counterfeiting levels in Kenya reached 18% in 2017 and 20% in 2022 which was an exponential increase due to the COVID-19 pandemic and decrease in physical interactions[10].

E-commerce in Kenya and the world at large has experienced exponential growth over the years due to the deep penetration of the internet and mobile phones. This growth however has come with challenges as counterfeit and pirated goods continue to distort the virtual marketplace[11]. This form of crime is unexacting as there is little infrastructure required, no heavy investment needed and can be done remotely[12]. Nowadays, counterfeiters do their business on social media platforms and online markets. Filters that automatically examine any uploaded content for trademark or copyright infringement are anathema to many social media platforms. Many do not have running brand protection programs to assist brand owners in finding platform infringers[13]. This also poses a significant challenge to law enforcement, especially in 3rd world countries, as they face anonymity issues, jurisdictional challenges, inadequate training and machinery and non- availability of data as a result of low

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[7] Shipalana P, 'Counterfeit Pharmaceuticals: A Major Threat to Public Health' 7.
[8] Kenya Institute for Public Policy Research and Analysis, final draft, 2019.
[9] Kenya Institute for Public Policy Research and Analysis, final draft, 2019.
[10] Meneses F, Pereira D, 'Kenya's Battle Against Counterfeits' Inventa, 2023. https://inventa.com/en/news/article/824/kenyas-battle-against-counterfeits#:~:text=This%20partnership%20plan%20was%20revealed,2017%20and%2020%25%20in%202022
[11] Sabharwal N, 'E-commerce: The threat of counterfeits and piracy' Hiindustan Times, 2020. https://www.hindustantimes.com/analysis/e-commerce-the-threat-of-counterfeits-and-piracy-opinion/story-Q7LujeIDtiVn9OTvnZKeqL.html
[12] Sabharwal N, 'E-commerce: The threat of counterfeits and piracy' Hiindustan Times, 2020. https://www.hindustantimes.com/analysis/e-commerce-the-threat-of-counterfeits-and-piracy-opinion/story-Q7LujeIDtiVn9OTvnZKeqL.html
[13] 'How ecommerce platforms and governments are taking steps to fight online counterfeiters,' Coresearch, 5th September 2019. https://corsearch.com/content-library/blog/how-ecommerce-platforms-and-governments-are-taking-steps-to-fight-online-counterfeiters/

reporting of these cybercrimes[14]. Governments in areas with a track record of high-risk counterfeiting have started to take stronger action against organisations, websites, and private individuals that support or ignore such behaviour[15]. Governments are now scrutinising platforms more closely as the power of ecommerce platforms like Amazon and Alibaba continues to expand, turning to regulation and new legislation instead of relying on self-regulation[16]. In India, their government has recently made a raft of changes to their ecommerce act that now requires ecommerce retailers to register their businesses locally, inform brands that are being targeted by counterfeiters and refund customers who receive counterfeit goods[17]. In the United States, an executive order was signed on 31st January 2020 which established a mechanism to address and remove international posts from these sites that were non-compliant with ecommerce regulations[18].

The effectiveness of Anti-Counterfeit Laws in Kenya's digital age has become a subject of rigorous examination [19]. The Anti-Counterfeiting Act of 2008 provides the legal framework upon which counterfeiting is combated. The *Act* under section 23 prescribes the powers of inspectors of the Anti-Counterfeit Authority (ACA) who at any reasonable time may enter and inspect any premise reasonably suspected of harbouring counterfeit goods, detain suspected counterfeit goods and seal off any premises where these goods are either produced, packaged, or stored[20]. However, the *Act* has been limited in combating counterfeit goods in the cyberspace as there are no established guidelines of fighting counterfeits in online

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[14] Ajoy P, 'Effectiveness of Criminal Law in Tackling Cybercrime; A critical Analysis,' National University of Advanced Legal Studies, 1 June 2023, 1.

[15] 'How ecommerce platforms and governments are taking steps to fight online counterfeiters,' Coresearch, 5th September 2019. https://corsearch.com/content-library/blog/how-ecommerce-platforms-and-governments-are-taking-steps-to-fight-online-counterfeiters/

[16] 'How ecommerce platforms and governments are taking steps to fight online counterfeiters,' Coresearch, 5th September 2019. https://corsearch.com/content-library/blog/how-ecommerce-platforms-and-governments-are-taking-steps-to-fight-online-counterfeiters/

[17] 'How ecommerce platforms and governments are taking steps to fight online counterfeiters,' Coresearch, 5th September 2019. https://corsearch.com/content-library/blog/how-ecommerce-platforms-and-governments-are-taking-steps-to-fight-online-counterfeiters/

[18] Office of the United States Trade Representative, 2020 Review of Notorious Markets for Counterfeiting and Piracy, 9. https://ustr.gov/sites/default/files/files/Press/Releases/2020%20Review%20of%20Notorious%20Markets%20for%20Counterfeiting%20and%20Piracy%20(final).pdf

[19] Kitimo A, 'Why laws remain a weak link in counterfeits battle' Business Daily, 25 May 2022 - https://www.businessdailyafrica.com/bd/corporate/shipping-logistics/why-laws-remain-a-weak-link-in-counterfeits-battle-3825970 on 25 May 2022.

[20] Section 23, Anti Counterfeit Act (Act No. 13 of 2008).

platforms such as e-commerce sites and online piracy because there is a service and technology absence that is not accessible to entrepreneurs and customers working with software, the Internet, e-commerce, and associated ICT product and service concepts [21]. This is because the Act mainly focuses on the physical markets[22]. Section 23 of the *Act* gives inspectors the right to enter and search any premises suspected of having counterfeit goods. However, in ecommerce trade these goods are usually stored in warehouses outside the country and are shipped off to the consumer after purchase. These gaps in the current legislation have made it increasingly difficult to tackle online counterfeiting as there are limited enforcement procedures[23]. Additionally, there are not many inspectors who are proficient at identifying, apprehending, prosecuting, and punishing counterfeiting who are active in cyberspace for instance, the International Federation of Phonographic Industry (IFPI) demonstrated Kenya's police force capacity limitations and the challenges law enforcement officials face in telling authentic or original goods from counterfeits.[24] The Computer Misuse and Cybercrimes Act is also silent on online anti-counterfeit measures. One of the objects of this *Act* under Section 3 is to facilitate the prevention, detection, investigation, prosecution, and punishment of cyber-crimes[25]. Despite both *Acts* having overlapping mandates, there is a lack of a coherent system of fighting counterfeiting online[26] as the Anti-counterfeit Authority and the National Computer and Cybercrimes Co-ordination Committee work in isolation as each tackle the problems of cybercrimes and counterfeiting separately. It could be especially beneficial for these two organisations to work together as the Anti-Counterfeiting Authority can lean on the expertise of the National Computer and Cybercrimes Coordination Committee to tackle online counterfeiting through data sharing, intelligence sharing, joint enforcements and joint prosecutions[27].

In light of these shortcomings, a change intact is needed in order to counter this problem effectively. In this paper I will study various ways in which we can stop the proliferation of

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[21] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 245.
[22] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 245.
[23] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 245.
[24] Syekei J, 'Kenya's Journey towards a Harmonized IP Legal Regime,' Bowmans law - https://bowmanslaw.com/wp-content/uploads/2020/08/ARTICLE-ON-THE-DRAFT-INTELLECTUAL-PROPERTY-BILL-2020.pdf
[25] Section 3, Computer Misuse and Cybercrime Act (Act No 5 of 2018).
[26] Syekei J, 'Kenya's Journey towards a Harmonized IP Legal Regime,' Bowmans law - https://bowmanslaw.com/wp-content/uploads/2020/08/ARTICLE-ON-THE-DRAFT-INTELLECTUAL-PROPERTY-BILL-2020.pdf
27 Kenya Institute for Public Policy Research and Analysis, final draft, 2019.

counterfeiting online by first expanding the powers and capacity building of the ACA inspectors under section 23 of the Anti-Counterfeit Act so as to allow them access to monitor, inspect and have the ability to take down these sites and platforms that sell counterfeit products. Moreover, this paper will be advocating for a joint taskforce comprising of the Anti-counterfeit Authority and the National Computer and Cybercrimes Co-ordination Committee whereby new strategies such as situational crime prevention and supply chain blockchain technology can be used to not only deter potential counterfeiters but also increase the transparency of the whole supply chain thus increasing traceability and protection of intellectual property rights. Blockchain technology is a form of digital data storage that is intended to create faster and more secure ways to transmit, receive, track, and perform transactions[28]. This framework will consist of the identification of activities through tagging, information sharing, cloud-based storage and this information would be managed by regulators or inspectors[29]. The adoption of blockchain technology would allow all participants in the supply chain who are the Intellectual Property right holders, distributors, and the inspectors to monitor the movement of products from source to consumer and any suspicious activities would be flagged[30]. Situational crime prevention would make the action of counterfeiting less attractive through removing the minimal necessary elements of a crime, increase the effort and risk of crime while reducing its rewards thus dissuading offenders[31].

1.2 Statement of Problem

Counterfeiting is a global challenge that poses a major threat to consumers, corporations, and whole economies alike. It disrupts fair competition, causes loss of tax revenue, fuels tax evasion and money laundering. In the realm of online counterfeiting, the complexity of this

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28 European Observatory on Infringements of Intellectual Property Rights, Anti-Counterfeit Technology Guide' Final Draft, 2021. https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Anti_Counterfeiting_Technology_Guide/2021_Anti_Counterfeiting_Technology_Guide_en.pdf

29 Mani V, 'Cloud-based Blockchain Technology to Identify Counterfeits,' Journal of Cloud Computing, 2022. https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-022-00341-2

30 European Observatory on Infringements of Intellectual Property Rights, Anti-Counterfeit Technology Guide' Final Draft, 2021https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Anti_Counterfeiting_Technology_Guide/2021_Anti_Counterfeiting_Technology_Guide_en.pdf

31 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 3.

issue has only grown more intense. Extensive studies demonstrate that cybercrime has escalated in Africa, particularly in Kenya[32]. The effective fight against online counterfeiting necessitates comprehensive legislation and cooperation among all stakeholders. Unfortunately, the current legal framework used to tackle counterfeiting in the Anti-Counterfeit Act lacks the required effectiveness, as it focuses mainly on physical goods leaving cyberspace unchecked. Law enforcement officers are also ill-equipped to effectively combat these counterfeiters due to limited training and knowledge of cyberspace[33]. As a result, investigating, prosecuting, and convicting cybercrime suspects has become increasingly difficult. Therefore, this paper will study on how the law enforcement can effectively counter this problem through a multi-pronged approach that involves expansion of the powers and capacity building of inspectors to be able to detect and take down hubs of online-counterfeit trade, adopting the situational crime prevention strategy, in collaboration with internet service providers, to deter counterfeiters and the adoption of blockchain technology to increase transparency and monitoring capabilities.

1.3 Research Questions

1. What is the current legal framework governing anti-counterfeiting?

2. How does online counterfeiting work and how can blockchain technology be used in fighting counterfeiting?

3. What situational crime prevention and how will it help fight online counterfeiting?

1.4 Research Objectives

1. To understand the current legal framework governing anti-counterfeiting.

2. To understand how online counterfeiting works and to understand what blockchain technology is and assess its efficacy in fighting online counterfeiting.

3. To understand situational crime prevention and how it will help fighting counterfeiting.

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32 Lawi J, 'Cybercrime on the rise as Kenya faces 1 million threats every day,' The Star, 10th May 2023.
33 Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 245.

1.5 Hypothesis

The strategic improvement of inspector skills, empowerment, and adoption of new anti-counterfeiting strategies will lead to a substantial reduction in intellectual property-related crimes, including those perpetrated by cyber-squatters exploiting brand identities for unlawful gains[34]. Furthermore, it is expected that applying situational crime prevention techniques targeting identified hotspots and modifying physical environments will significantly contribute to diminishing criminal activities associated with online counterfeiting[35]. Situational crime prevention would make the action of counterfeiting less attractive through removing the minimal necessary elements of a crime, increase the effort and risk of crime while reducing its rewards thus dissuading offenders[36]. Moreover, adoption of blockchain technology will aid in combatting online counterfeiting by increasing transparency and identification procedures[37]. The hypothesis asserts that a comprehensive approach addressing economic, transparency and underlying causes of counterfeiting will establish a robust framework for safeguarding intellectual property in Kenya.

1.6 Justification

Counterfeiting affects whole economies, intellectual property right holders and consumers in several ways. Many developing countries including Kenya face numerous health challenges including AIDS, malaria, and tuberculosis[38]. Procuring generic medicines has been costly to these countries as patent holders, mainly from the west, monopolise the

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34 European Observatory on Infringements of Intellectual Property Rights, Anti-Counterfeit Technology Guide' Final Draft, 2021. https://euipo.europa.eu/ohimportal/documents/11370/72081/Seven+Best+Practices+for+Fighting+Counterfeit+Sales+Online?TSPD_101_R0=089375ec4aab2000470b39ad077b5597cff2bf96a587354acfcdbc2f004686dd5fb92ef3c5fb51d908cefb3439143000acb12fec65d3aa3283b5d20a0efb49a5e92c1787d69cb959ff13e54fb621499f4de0b78faf71ff09ad78913a1074581c

35 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 8.

36 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 3.

37 Weinberger D, 'How Blockchain, Smart Tags are Tackling Counterfeit Goods' Supply Chain Brain, March 30, 2022. https://www.supplychainbrain.com/blogs/1-think-tank/post/34693-tackling-product-counterfeiting-with-blockchain

38 Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 213.

industry and set high prizes to maximise profits[39]. This has provided a ready market for counterfeit pharmaceuticals at significantly lower prices[40]. These medicines are usually produced at a small cost and are often polluted by dangerous chemicals as there is little regard for health and safety. The counterfeit pharmaceutical products therefore present serious and fatal health risks to consumers as they are not subjected to health inspections and are usually produced with little regard for health standards[41]. Moreover, countries also suffer both tangible and intangible losses. To begin with, foreign producers of reputable products become reluctant to manufacture products where counterfeiting is rife[42]. This reduces foreign investment in the country. It also creates a poor reputation in the export industry thus reducing foreign exchange earnings. A further direct loss for countries that are havens for counterfeiters is tax losses since counterfeiters are less keen to pay taxes for their ill-gotten gains and their products are usually sold through clandestine channels. Intellectual property right holders also suffer economic losses in several ways. They usually suffer a direct loss of sales in industries where they are in direct competition with counterfeit products. Some markets even tend to be dominated by counterfeiters creating a barrier of entry for the producers of the genuine product[43]. Intellectual property right holders also suffer a loss of reputation when consumers are deceived into buying counterfeit products which then malfunction. They then end up blaming the genuine producers which may in turn reduce the brand image of products [44]. This study is useful as it will study ways in which this problem of counterfeiting, with special focus on online counterfeiting, can be effectively confronted. The biggest beneficiaries of this study would be the institutions charged with eradicating counterfeiting (Anti-Counterfeiting Authority) as they could adopt new strategies to counter this problem effectively and lawmakers who would be tasked with developing the law that gives the regulatory bodies the powers to perform these functions.

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[39] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 13.
[40] Organisation for Economic Co-operation and Development, Impact of Counterfeit Medicines, 2020, 58.
[41] Organisation for Economic Co-operation and Development, Impact of Counterfeit Medicines, 2020, 57.
[42] Organisation for Economic Co-operation and Development, The Economic Impact of Counterfeiting, 1998, 22.
[43] Organisation for Economic Co-operation and Development, The Economic Impact of Counterfeiting, 1998, 22.
[44] Organisation for Economic Co-operation and Development, The Economic Impact of Counterfeiting, 1998, 22.

1.7 Conceptual Framework: Proactive Policing

Proactive policing means to stop the occurrence of crimes before they ever happen[45]. Reactive policing is the action taken to address a crime or resolve a problem before it becomes a crisis. In this case the crime would have already taken place. Proactive policing entails a departure from these reactive measures, where authorities respond after a crime has occurred, to a more anticipatory and preventive approach. Proactive policing is not a new concept as it is so seamless that most people are not even aware of its existence. An example of this is the proactive role the government takes in patrols, impromptu checks, and anti-terrorist efforts [46].

In the context of countering online counterfeiting, this approach involves state authorities taking a leading role in preventing the crime before it transpires. It also shifts the burden of intellectual property protection from intellectual property right holders solely to a new approach where the burden is shared between state agencies and intellectual property right holders. In a proactive policing model, state authorities play a central role in preventing counterfeit activities. This involves intelligence gathering, situational crime prevention strategies, and empowering enforcement agencies with enhanced tools and capabilities[47]. Proactive governance relies on robust intelligence systems to identify potential counterfeiting activities. This involves collaboration between enforcement agencies, leveraging technology, and adopting data-driven insights[48]. By understanding the dynamics of the counterfeit industry, authorities can pre-emptively address vulnerabilities and emerging trends. Currently the ACA inspectors are inadequately equipped to fight online counterfeiting as they are not trained in monitoring and taking down platforms that partake in this trade. This means that counterfeit trade in the online market thrives unchecked due to these deficiencies. Proactive policing thus advocates for a diversified set of enforcement strategies, including expanded powers for inspectors, situational crime prevention measures and adoption of blockchain technology. The merger of agencies also aims to enhance

[45] Pounds R, 'Compare and Contrast: Proactive vs Reactive Governance' Diligent, 2022.
[46] Dr. Kadish J, 'Do we want a proactive or reactive government? Only we can decide' The Sun Chronicle, 3rd April 2020- https://www.thesunchronicle.com/opinion/columns/guest-column-do-we-want-a-proactive-or-reactive-government-only-we-can-decide/article_5384b88a-06c5-5b12-9171-9759e4265908.html

[47] Helfer S, 'Proactive Policing Strategies and Examples' Study.com, 2022.
[48] Helfer S, 'Proactive Policing Strategies and Examples' Study.com, 2022.

coordination, addressing historical challenges of fragmentation. Law enforcement would then develop plans that avert and decrease crime by aiming at the underlying conditions that impact recurring crime. However, critics of this model point to the potential abuse of power by law enforcement in instances where they use an aggressive practice of searches and seizure to deter criminal activity[49]. However, the available scientific evidence suggests that certain proactive policing strategies are successful in reducing crime and disorder. This concept of proactive governance helps the study in that it provides a perspective through which the government can adopt a proactive strategy in fighting counterfeiting. The Anti-counterfeit Authority can adopt strategies which look at the underlying causes of counterfeiting then develop a strategy of preventing the crime through problem-oriented policing which works by identifying the underlying causes of crime and opportunities of crime and tailoring solutions to counter those specific forms of crime.

1.8 Literature Review

In Kenya there have been various scholars commenting on the current state of counterfeiting laws in Kenya and the importance of protecting intellectual property. Ben Sihanya points out that Kenya addresses counterfeiting through criminal and civil sanctions[50]. Shaluma Ongola also points to the several gaps that the Anti-counterfeiting act possesses which allows for the rampant spread of counterfeit products in the country[51]. He points out the incoherent laws that govern the fight against counterfeiting laws and the limited powers given to enforcement agencies which relies on a protracted judicial process[52]. The Kenya Institute for Public Policy Research and Analysis (KIPPRA) also points out the weak enforcement of anticounterfeit laws due to loopholes and corruption of the top brass of enforcement organisations[53]. However, none of the scholars recommend ways in which the current laws could be improved to curb counterfeiting.

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[49] National Academies of Sciences, Engineering, Medicines 'Proactive Policing: Effects on Crime and Communities' 2018, 3.

[50] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 244.

[51] Ongola B, 'Efficacy of Anti-Counterfeiting Laws in Kenya,' published, University of Nairobi, Nairobi, 2011, 8.

[52] Ongola B, 'Efficacy of Anti-Counterfeiting Laws in Kenya,' published, University of Nairobi, Nairobi, 2011, 49.

[53] Kenya Institute for Public Policy Research and Analysis, final draft, 2019.

1.8.1 Factors behind consumption of counterfeit goods in developing economies.

Counterfeiting appears in two different forms: deceptive and non-deceptive counterfeiting[54]. The first victim unknowingly and unintentionally purchases counterfeit goods due to them being so similar in nature to the authentic one while the second consumer of counterfeit products intentionally seeks them even when they knew they were illegal. There exists a school of thought that argues that counterfeit trade has played a big role in the progress of many developing countries[55]. An example of this is India and Pakistan where the pharmaceutical industry has experienced rapid development due to piracy. For the growth of any modern industry, research, and development (R & D) is necessary. An alternative to this would be transfer of technology from more developed nations. Developing countries remain disadvantaged as the technology is not easily available and often expensive. Some countries have taken to the piracy of software technology that has enabled many African consumers and corporations to enjoy state of the art technology that would otherwise be unaffordable.

Intellectual Property Rights (IPRs) create monopolies for right holders allowing them to set high prices on medicines[56]. It is acknowledged that the monopolies have invested a lot in R & D in the area of HIV/AIDS which has led to medical breakthroughs in the sector. However, the strong IPRs are viewed by some scholars as being an impediment to access to affordable drugs[57]. Patents are at the centre stage of the friction between the private interests and profit motives of pharmaceutical companies on the one hand and the public health and social impact concerns of governments, especially in Africa[58].

Moreover, consumers buy branded products for its physical attributes and the brand image associated with the product[59]. Factors such as brand identity, price, social influence, and demographic factors play a massive role when it comes to consumer choice in establishing

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[54] Masambutulula J, 'The Demand for Counterfeit Goods in Kenya: a case study of mobile phones' unpublished thesis University of Nairobi, Nairobi, 2012, 10.
[55] Sihanya B, 'Intellectual Property Rights in Kenya,' 1st ed, Konrad Adenauer Stiftung, Nairobi, 2009, 219.
[56] Opati L 'Intellectual Property Rights in Health- Impact on Access to Drugs' in Intellectual Property Rights in Kenya, 1st ed, Konrad Adenauer Stiftung, Nairobi, 2009, 13.
[57] Opati L 'Intellectual Property Rights in Health- Impact on Access to Drugs' 14.
[58] ICTSD-UNCTAD, "Intellectual Property Rights: Implications for Development", Policy Discussion Paper, ICTSD-UNCTAD Geneva, 2003.
[59] Masambutulula J, 'The Demand for Counterfeit Goods in Kenya: a case study of mobile phones' unpublished thesis University of Nairobi, Nairobi, 2012, 10.

whether or not to purchase counterfeit products[60]. Consumers who lack purchasing power may be inclined to still buy counterfeit products despite knowing the downsides as even though the counterfeit product does not offer the same value as an authentic product the brand image is preserved. In essence they get the brand prestige without paying for it.

1.8.2 The current Intellectual Property Rights Regime

Intellectual Property Rights are underpinned by Western philosophies to property ownership[61]. One of the school of thoughts used to justify IPRs is the John Locke property theory which justifies private property based on the premise that every individual should own what they produce[62]. The utilitarian school of thought also opines that IPR protection is necessary to incentivise technological advancement. Both school of thoughts agree that IPRs qualify into the conventional definition of property, and it must be protected as a basic human right. However, the African view to property is excluded as communal property such as traditional knowledge like traditional dances and medicine are not protected by IPRs as they fail to fit in this definition of property. This has led to the rights of communities being unenforceable and open to expropriation.[63]

The TRIPS agreement, which is the pre-eminent convention that governs IPRs, introduced global minimum standards for protection of intellectual property rights. In Kenya the TRIPS agreement was domesticated in various forms through the Copyright Act 2001, the Industrial Property Act, the Trademarks Act, and the Counterfeit Act. Scholars believe that consumer protection is best achieved through concerted anti-counterfeiting and IP protection campaigns[64]. The IP doctrines which are most relevant to combat counterfeiting are patent, trade secrets, unfair competition, trademarks, and copyrights. In summary, patents grant exclusive rights for a limited time in respect to an invention in return for disclosure of the

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[60] Amirul M, 'Factors affecting consumers intention to purchase counterfeit products in fashion industry,' International Journal of Academic Research in Business and Social Sciences, 2020, https://hrmars.com/papers_submitted/8013/factors-affecting-consumers-intention-to-purchase-counterfeit-products-in-fashion-industry.pdf

[61] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 267.

[62] Wekesa M, 'An Overview of the Intellectual Property Rights Regime in Kenya' in Intellectual Property Rights in Kenya, 1st ed, Konrad Adenauer Stiftung, Nairobi, 2009, 2.

[63] Wekesa M, 'Traditional Knowledge- the need for sui generis system of IPRS Protection' in Intellectual Property Rights in Kenya, 1st ed, Konrad Adenauer Stiftung, Nairobi, 2009, 280.

[64] Hung-yuk W, 'Intellectual property and the consumer' in S.S Rachagan Consumer Protection in the WTO Era, International Association of Consumer Law, 1999, 223.

details regarding the invention[65]. Patent infringement is a criminal offence however there remains fundamental weaknesses in detecting and prosecuting the crime[66]. Trade secrets are protected where they consist of confidential information of commercial value such as the Coca-Cola formula. It is used to guard technological know-how that may not be effectively protected by other IP regimes[67]. Due to the monopoly that IP rights confer on the owner over the IP, anti-competitive conduct is subject to internal processes under IP law. These tools include thorough inspection procedures before IP rights are assigned, opposition proceedings that let parties voice concerns about IP rights being assigned, and cancellation regimes. The latter allow third parties to request the cancellation of IP rights that have been registered with the appropriate agencies. Several laws support the IP law's provision of anti-competitive behaviour prevention methods. For instance, restrictive trade agreements are forbidden by Kenya's Competition Act. Restrictive agreements are forbidden because they amount to the use of an IP right in a way that goes beyond the bounds of legal protection[68].

1.8.3 Situational Crime Prevention theory

This theory was developed by Ronald Clarke in 1992 with the aim of eliminating crime through opportunity reduction and expanding the crime reduction role beyond the justice system[69]. It calls for the careful analysis of specific crime types to uncover the situational factors that facilitate their commission. In theory it is meant to reduce crime by making it impossible for it to be committed no matter the offender's motivation or intent. It draws from various disciplines such as criminology, psychology, economics and sociology and various studies have shown its effectiveness in reducing crime in practice[70]. Key to this theory is an analysis of the opportunity structure of a crime and breaking it down into small components. This is the minimal elements that must converge in space and time for example a motivated

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[65] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 224.
[66] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 234
[67] Fialka J, 'War by Other Means: Economic Espionage in America,' W.W Norton & Company, 1997.
[68] Njeru R, 'Kenya: Intellectual Property and Consumer Protection in Kenya,' Bowmans, 2019.
[69] Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3
[70] Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3

offender, suitable victim, and lack of capable guardianship[71]. The main technique of applying this theory is through increasing the effort needed to commit crime, increasing the risk, and reducing the rewards[72].

A critical first step in using situational crime prevention in fighting counterfeiting is developing a typology to define the different types of counterfeiters, counterfeiting and offender groups[73]. Each type of counterfeiter provides a unique challenge to stop since they operate in different opportunity structures that require different responses. Most counterfeiters are motivated by economic gain, but others may be motivated by acts of terrorism and economic sabotage[74]. There are also different types of counterfeiters namely, adulterate where a component of the legitimate product is fraudulent, simulation where a fraudulent product is designed to look like the real one but not exactly, diversion where a legitimate product is distributed in an unintended market and counterfeit where all aspects of the fraudulent product are fully replicated[75]. This expands the common definition of product counterfeiting that is limited to an IPR infringement perspective. A knowledge of these different counterfeiters helps authorities develop effective strategies to combat these specific crimes as they are able to understand the motivations of the fraudsters and the intrinsic workings of the fraud itself. This method is heavily used by crime prevention units in countries such as Sweden, Great Britain, and the Netherlands to great effect[76]. This could be an effective method to fight counterfeit in Kenya as the authorities will better understand where the opportunities for counterfeit activities are and what are the motivations of the offender, and they would then be able to stop the crime from happening by removing the minimal elements of the crime to take place while reducing the rewards. An example of this

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[71] Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 3.

72 Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3

73 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 2.

74 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013, 3.

75 Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organizations' Crime Science Journal, 2013,8.

76 MHRD Govt. of India, 'Theories of crime prevention,' 6.

is by regulating the chemicals necessary to produce counterfeit alcohol while conducting quality checks so as to make it to dissuade offenders from committing the crime.

1.8.4 Blockchain technology in fighting Counterfeits

Blockchain is a form of 'shared ledger' technology, where each node (participating computer) in the network has a duplicate copy of the ledger, which is effectively a database of transactions. Every participant's copy also has a record of each new transaction that is added to the ledger[77]. It keeps real time duplicate copies of the ledger, and a record of the transaction appears in each participant's end. This new form of technology has been proposed as a means of fighting counterfeiting online and in the physical marketplace by enhancing traceability, data storage, privacy of data and quality assurance along the supply chain. It helps tackle counterfeiting by identifying a product's proof of origin or provenance[78]. An essential component of blockchain's use in the fight against counterfeit goods is its inherent transparency. Because a blockchain is a decentralised ledger, everyone using the network has access to and can see the same data. At every stage of the supply chain, this transparency may be used to confirm the legitimacy of the items. On a blockchain, businesses can keep track of information about the creation, handling, and distribution of their products. This produces a permanent, unchangeable record that is auditable by both consumers and authorities[79]. By scanning a quick QR code, buyers may quickly confirm a product's provenance and validity thanks to this level of openness. This guarantees that the item they are buying is real and doesn't have any potential health dangers or ethical issues.

The decentralised structure of blockchain also offers a useful method for tracing the provenance of goods. Since every transaction is tracked and connected to those that came before it, it is more difficult for fake items to enter the supply chain. In sectors like

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[77] European Observatory on Infringements of Intellectual Property Rights, Anti-Counterfeit Technology Guide' Final Draft, 2021 https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Anti_Counterfeiting_Technology_Guide/2021_Anti_Counterfeiting_Technology_Guide_en.pdf

[78] Weinberger D, 'How Blockchain, Smart Tags are Tackling Counterfeit Goods' Supply Chain Brain, March 30, 2022. https://www.supplychainbrain.com/blogs/1-think-tank/post/34693-tackling-product-counterfeiting-with-blockchain

[79] Pearl R, 'Developing an anti-counterfeit system using blockchain technology,' Bina Nusantara University, 216,2022, 1. https://www.sciencedirect.com/science/article/pii/S1877050922021925#:~:text=Blockchain%20technology%20will%20ensure%20that,need%20of%20a%20corresponding%20merchant.

pharmaceuticals and food, where product origins and handling are crucial for public health, this improved traceability has the potential to be a game-changer. Blockchain can be used to trace and verify the authenticity of prescriptions, ensuring that patients obtain safe and genuine drugs, according to the European Union Intellectual Property Office (EUIPO)[80]. Blockchain offers a quick and precise approach to identify the affected items in the event of a counterfeit drug recall, reducing health concerns.

1.9 Methodology

This study will consist of first assessing how the counterfeit trade works online by studying the factors behind the growth of counterfeit trade and the current legal framework that is used to fight counterfeiting in Kenya. This will be done through doctrinal analysis. Then I will assess whether blockchain technology can be useful in combating counterfeits in the online marketplace using an interdisciplinary approach. To do so the study will rely primarily on the qualitative method using secondary sources such as books, scholarly reports, and articles. I will also make use of primary sources such as the Anti-Counterfeit Act, Industrial Property Act, and the Trademark Act. I will then use a deductive method where-by I will set premises then draw conclusions afterwards. I will also use doctrinal analysis to discuss some of the factors behind the growth of the counterfeit trade and how gaps in the laws have enabled this growth. This is through an analysis of the Anti-Counterfeiting Act with special focus on section 23 of the Act. In the next chapter we shall use an interdisciplinary method by using criminology to assess whether situational crime prevention shall be an effective strategy to combat counterfeiting. This will be done through documentary analysis through examining academic literature on criminology principles and a study of situational crime prevention. Overall, I expect to arrive at my findings through a deductive method whereby I will attempt to prove my hypothesis through the research questions.

[80] European Observatory on Infringements of Intellectual Property Rights, Anti-Counterfeit Technology Guide' Final Draft, 2021. https://euipo.europa.eu/tunnel-web/secure/webdav/guest/document_library/observatory/documents/reports/2021_Anti_Counterfeiting_Technology_Guide/2021_Anti_Counterfeiting_Technology_Guide_en.pdf

1.10 Scope and Limitations of the Study

This study shall specifically focus on online counterfeiting looking at its development, the current legal framework and then suggest possible solutions to curb the problem.

Some of the limitations of this study is data availability and its reliability. In many instances, data related to counterfeiting and intellectual property infringement are incomplete, outdated or underreported. In the comparison with Tanzania on administrative proceedings there are limited in depth resources on how the system works.

1.11 Chapter Breakdown

Chapter 1 of this dissertation will introduce the subject matter of the study and give a brief background of current events, show the methodology used, have a literature review, show the conceptual framework used and lastly show why this paper is essential and its contribution to society.

Chapter 2 of this study will examine the current legal approach to intellectual property rights protection and anti-counterfeiting laws. It will study the history and development of anti-counterfeit laws up to now so as to provide an understanding of the current practice and why it has been inefficient in combating online counterfeiting.

Chapter 3 of this study will assess how online counterfeiting takes place and study why this industry has grown exponentially over the last couple of years. This chapter will also study what blockchain technology is and how it can be effective in helping fight the counterfeit trade. This chapter will study on the efficacy of this emerging technology as a possible means to curb the influx of counterfeit goods through online channels by securing supply chains and protecting the integrity of intellectual property.

Chapter 4 will study situational crime prevention as a method to curb online counterfeiting and how it can be applied by various players in the effort to curb this trade. This chapter will also discuss the role Internet Service Providers play in the fight against online counterfeiting and the shifting legal landscape in attaching liability to these online platforms where they have failed to meet industry best practices and standards.

Chapter 5 this paper shall be the conclusion and recommendations of this paper following the culmination of this study.

CHAPTER 2

2.0 The Current Legal Framework Governing Anti-Counterfeiting

2.1 Introduction

The establishment of the Kenya Anti-Counterfeit Authority (ACA) was undertaken by the Kenyan government as a strategic measure to address the issue of counterfeiting inside the country[81]. This initiative was carried out in line with Section 3 of the Anti-Counterfeit Act 2008, which is a legal framework governing anti-counterfeiting efforts in Kenya.[82] The establishment of the ACA aimed to mitigate the proliferation of counterfeit goods inside the Kenyan market. The primary duties of the ACA encompass many key areas, namely, the dissemination of knowledge, the implementation of preventive measures, the conduct of investigations, and the initiation of legal proceedings against counterfeit activities inside the borders of Kenya under section 5 of the Act[83]. Therefore, in this chapter I evaluate all the laws, local and international, that govern this regime and look at how effective they have been in countering this problem.

2.2 Historical Background of Anti-Counterfeit Laws in Kenya

After the turn of the millennium, the Kenyan government increased its efforts to curb the trade in counterfeit goods as the parliament drafted the Counterfeit Goods Bill in 2005[84]. However, this bill fell flat as there was controversy as to whether the definition of counterfeit goods included generic drugs. Several sects of parliament and parastatal bodies argued that the bill would restrict the access to drugs such as anti-retrovirals (ARVs), malaria and tuberculosis medicines[85]. According to the Kenya Access to Treatment Movement the bill would increase the cost of drugs by 20 to 80%[86]. However, this Bill received support from other sections of the public such as the Agrochemical Association of Kenya which reiterated

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[81] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 255.
[82] Kamau, M, 'Anti-counterfeit Bill rages on,' East African Standard (Nairobi) www.eastandard.net/archives, 2008.
[83] Section 5, Anti Counterfeit Act (Act No. 13 of 2008).
[84] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 251.
[85] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 251.
[86] Macharia K, 'Anti-Counterfeit Bill rages on.' East African Standard, 23rd November 2008. www.eastandard.net/archives

the importance of strict law enforcement against counterfeiters[87]. Following these widespread concerns, the government amended the Bill to exclude the production and sale of generic medicine by distinguishing them from counterfeit goods[88].

Following these amendments, the Anti-Counterfeit Bill was presented to parliament in November 2008 and passed into law on 24th of December 2008. The passing of the Act was met with mixed reactions as some quarters praised it as a step in the right direction as it would address issues that were initially unaddressed in the intellectual property regime and strengthen existing laws. However, sceptics argued that implementation of the Act given the nature of the counterfeit industry would be lax and reactive[89].

2.3 Legal Framework for Anti-Counterfeit Laws

The framework of anti-counterfeit laws encompasses national and international legislations that all deal with protecting intellectual property laws and combating counterfeiting. This section will analyse the several instruments that govern anti-counterfeit legislation.

2.3.1 The Constitution of Kenya

To begin with, the constitution of Kenya is the supreme law of the land that binds all persons and all state organs. Article 2 stipulates that any international laws or conventions that are ratified by Kenya forms part of Kenyan law[90]. This article empowers and gives binding force to several international instruments such as the TRIPS Agreement, the Paris convention for the Protection of Industrial Property and the African Regional Intellectual Property Institute inter alia. Moreover, Article 11(2) of the constitution provides that the state shall promote intellectual property rights of the people of Kenya[91]. In addition to this, under Article 69 (1) the state is obligated to 'protect and enhance intellectual property in, and indigenous knowledge of, biodiversity and genetic resources of the communities.'[92] This article places

[87] Macharia K, 'Association demands tough action on counterfeiters,' The Standard, 25th November 2008.
[88] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 254.
[89] Sihanya B, 'Intellectual Property Rights in Kenya,' Konrad Adenauer Stiftung, Nairobi, 2009, 258.
[90] Article 2, Constitution of Kenya (2010).
[91] Article 11, Constitution of Kenya (2010).
[92] Article 69, Constitution of Kenya (2010).

an obligation and burden for the state to take all necessary steps to protect intellectual property holders from infringements such as counterfeiting.

2.3.2 Conventions Under the World Intellectual Property Organisation (WIPO)

WIPO is a global forum for IP policy development, administrative cooperation among member states and protection of IP rights worldwide[93]. The WIPO convention goes back to the Paris convention of 1883 and Berne convention of 1886.[94] The organisation has administered 26 treaties such as the Berne convention, Paris convention and Madrid agreement inter alia. Kenya is a party to the Paris convention and under Article 1 it stipulates that industrial property shall include patents, trademarks, industrial designs, and geographical indicators. The convention also stipulates that any imported goods that infringe on a registered trademark or a geographical indicator should be seized in compliance with local laws of member states[95]. In Kenya, this provision is implemented in the Anti-counterfeit Act under section 23 which gives inspectors of the Anti-Counterfeit Authority the power to seize and detain goods reasonably suspected of being counterfeit[96]. Under Article 4, the convention provides the priority right for industrial property thus facilitating the protection of trademarks among member countries thus making it harder for counterfeiters to exploit national laws. The principle of National Treatment under Article 2[97] also ensures that foreign goods receive the same level of protection as domestic ones thus protecting international brands from local counterfeiters. Moreover, Kenya is also a party to the Berne Convention which provides for automatic protection of copyright. Moreover, the convention provides for the seizure of imported copies that infringe on copyrighted works in accordance with local laws of member states[98]. In addition to this, the convention also establishes the minimum standards for the protection of literary and artistic works thus encouraging member states to provide effective legal remedies against reproduction and

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[93] World Intellectual Property Organisation, 'Summary of the Convention Establishing the World Intellectual Property Organisation 1967.' https://www.wipo.int/treaties/en/convention/summary_wipo_convention.html
[94] World Intellectual Property Organisation, 'Summary of the Convention Establishing the World Intellectual Property Organisation 1967.' https://www.wipo.int/treaties/en/convention/summary_wipo_convention.html
[95] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 38.
[96] Section 23, Anti-Counterfeit Act (Act No. 13 of 2008).
[97] Paris Convention for the Protection of Industrial Property.
[98] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 38.

distribution of counterfeit works. Lastly, the Madrid Agreement provides a simplified and streamlined trademark registration system for member countries that allows IP right holders to be protected internationally thus protecting them against counterfeiting[99]. In conclusion, these international agreements aid in combating counterfeiting by leveraging their provisions and cooperation mechanisms to strengthen intellectual property protection and thus making it harder to counterfeit.

2.3.3 Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement

The TRIPS agreement was adopted as part of the World Trade Organisation's agreement at the Marrakesh conference and came into force in 1995[100]. It encompasses the protection of copyright, trademarks, geographical indicators, industrial designs, and patents[101]. To begin with, TRIPS sets out minimum standards that member countries must adhere to regarding IP protection[102]. By establishing these standards, the agreement creates the foundation that member states develop and enforce laws that combat counterfeiting across different types of intellectual property. Moreover, under Article 51[103]The TRIPS Agreement requires members to establish procedures for customs authorities to identify and detain goods suspected of counterfeiting. This clause enables the prompt seizure and prosecution of counterfeit goods that allow IP right holders to seek legal remedies. In addition to this, TRIPS encourages members to establish legal procedures for enforcement of IP rights and effective remedies to redress infringements such as counterfeiting under Article 41[104]. Furthermore, Article 61[105] of the TRIPS agreement allows member countries to establish criminal procedures and penalties for the wilful counterfeiting of IP rights. The criminalisation of such activities acts as a deterrent to potential counterfeiters and thus

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[99] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 39.

[100] World Trade Organization, 'Overview: The TRIPS Agreement.' https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#:~:text=The%20TRIPS%20Agreement%20requires%20Member,novelty%2C%20inventiveness%20and%20industrial%20applicability.

[101] World Trade Organization, 'Overview: The TRIPS Agreement.' https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#:~:text=The%20TRIPS%20Agreement%20requires%20Member,novelty%2C%20inventiveness%20and%20industrial%20applicability.

[102] World Trade Organization, 'Overview: The TRIPS Agreement.' https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm#:~:text=The%20TRIPS%20Agreement%20requires%20Member,novelty%2C%20inventiveness%20and%20industrial%20applicability.

[103] Article 51, TRIPS Agreement, 1st January 1995. https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

[104] Article 41, TRIPS Agreement, 1st January 1995. https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

[105] Article 61, TRIPS Agreement, 1st January 1995. https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

strengthens the legal framework for combating counterfeiting. In conclusion, TRIPS combats counterfeiting by establishing a comprehensive framework for the protection of IP rights and encouraging member countries to implement effective legal measures, border controls and cooperation mechanisms to address IP infringements.

2.3.4 The Anti-Counterfeiting Act

This legal instrument is the main legislation that deals with counterfeiting in Kenya. The Act was passed by the Kenyan Parliament in 2008, but it did not come into effect until July 1, 2009. Its primary objectives include public education on counterfeiting, prevention of the manufacturing, distribution, sale, and consumption of counterfeit goods, facilitation of anti-counterfeit training initiatives, and collaboration with domestic, regional, and global anti-counterfeiting organisations. Moreover, its other principal objectives include the prohibition of the selling of counterfeit goods[106], the dissemination of educational materials to the general public regarding counterfeit goods, as well as the creation and implementation of training programs aimed at creating awareness to combat counterfeiting as outlined in section 5 of the Act[107]. Furthermore, the authority engages in collaboration with the county government as well as several other stakeholders in order to facilitate research, public outreach, and enforcement efforts[108].

2.3.5 The Anti-Counterfeit Authority

The Act establishes the Anti-Counterfeiting Authority (ACA) under section 3[109]. The Act stipulates that the authority shall be a body corporate tasked with enforcing the provisions of the Act, coordination with regional and international bodies in combating counterfeiting and to educate the public on counterfeits[110]. The Act provides for the appointment of inspectors by the authority who shall have full police powers in the exercise of their duties under the Act[111]. Moreover, the act designates police officers, authorised customs officers, inspectors under the Standards Act and public health inspectors the full powers accorded to

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[106] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 45.
[107] Section 5, Anti Counterfeit Act (Act No. 13 of 2008).
[108] Section 5, Anti-Counterfeit Act (Act No. 13 of 2008).
[109] Section 3, Anti-Counterfeit Act (Act No. 13 of 2008).
[110] Section 5, Anti-Counterfeit Act (Act No. 13 of 2008).
[111] Section 22(2), Anti-Counterfeit Act (Act No. 13 of 2008).

inspectors under the Act[112]. The powers of the inspectors are stipulated under section 23 as having the authority to enter and inspect any place, premises or vehicle in which goods are reasonably suspected to be counterfeit, having the power to take necessary steps to terminate the production of counterfeit goods and to seize, detain and remove goods suspected to be counterfeit. Moreover, an inspector may have the powers to arrest any individual, without a warrant, suspected of having committed any offence under the Act[113]. Section 33 of the Act provides the procedure for intellectual property owners to lay a complaint whereby their intellectual property has been infringed or possess reasonable suspicion that their items have been counterfeited. They are required to furnish a complaint to the Executive Director and where the director is reasonably satisfied, they appoint inspectors in accordance with section 33 of the Act. Furthermore, they are authorised to undertake investigations and initiate legal proceedings in instances of infringement of intellectual property rights. When an intellectual property proprietor lays a complaint with the Anti-counterfeit Authority, the agency then collaborates with the customs commissioner, who possesses the jurisdiction to confiscate and retain things suspected to be counterfeit.[114]

2.4 Why the current regulatory framework has been inadequate in stopping online counterfeiting

Kenya has existing policies, rules, and enforcement agencies in place to protect intellectual property, but the trade in counterfeits persists anyway[115]. The Anti-Counterfeit Act possesses several loopholes as the Act is notoriously silent on internet counterfeiters and on the liability of internet intermediaries and service providers.[116] The law primarily focuses on the traditional modes of counterfeiting and is silent on enforcement of online counterfeiting thus making it difficult to combat this trade as there is no established procedure to deal with this problem. The public's faith in the efficiency of these institutions has diminished because of

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[112] Section 22(3), Anti-Counterfeit Act (Act No. 13 of 2008).
[113] Section 23, Anti-Counterfeit Act (Act No. 13 of 2008).
[114] Ratemo, J,'The loopholes counterfeiters exploit,' The Standard, Nairobi, 2009, 19/01/09 available online at http://www.eastandard.net/ sciencetech/InsidePage.php?id=1144004380
[115] Kitimo A, 'Why laws remain a weak link in counterfeits battle' Business Daily, 25 May 2022 - https://www.businessdailyafrica.com/bd/corporate/shipping-logistics/why-laws-remain-a-weak-link-in-counterfeits-battle-3825970 on 25 May 2022.
[116] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 46.

pervasive issues such as corruption and ineffective enforcement.[117] The proliferation of crime in these organisations must be controlled and it is essential to close the gaps that enable the manufacture and distribution of fake goods in the Kenyan market. This requires persistent cooperation between various bodies in the form of information and intelligence sharing, combined enforcement efforts and shared prosecutions. According to a report from March 2011 by the Kenya Association of the Pharmaceutical Industry, the fake drug market was worth around Ksh 9 billion a year.[118] Twenty-five to twenty-seven percent of the legitimate commercial pharmaceutical industry is at stake. In response, several businesses in the pharmaceutical and agricultural industries have begun putting codes on their products and requesting that customers submit SMS texts to verify that the items they get are authentic.[119] However, this imposes extra expenses on producers and buyers. Moreover, the limited uptake of these anti-counterfeiting methods by customers and the dynamic and inventive tactics used by counterfeits makers mean that this program may not properly safeguard the manufacturers.[120]

In e-commerce platforms, counterfeit sites may be taken down but the counterfeiter may open up other stores as a backup plan. This is because there are minimal requirements required to open up these sites[121]. The fact that a counterfeiter may start selling on various online marketplaces with very minimal personal information is a serious problem. Even if one online marketplace is shut down, counterfeiters can easily open shop at another one if there isn't full transparency. The proliferation of online markets thanks to social media also helps propagate counterfeit products. For instance, by hash-tagging expensive brands on Instagram, users may take advantage of the app's networking algorithms. Fake items are mingled in with the actual thing and the legitimate merchants, so users looking for a hashtag may find them. More than 50,000 Instagram accounts were discovered advertising and selling fraudulent items, which is a 171% increase over an analysis of the same data

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[117] Sihanya B, 'The State of Consumer Law in Kenya, Public Law Institute (PLI), Nairobi, 1997.
[118] Choi, K, 'Mixed markets with counterfeit producers," in Kwan Choi and James Hartigan (eds) Handbook of International Trade, Vol 1, Blackwell Publishing, Oxford, 2004.
[119] Choi, K, 'Mixed markets with counterfeit producers," in Kwan Choi and James Hartigan (eds) Handbook of International Trade, Vol 1, Blackwell Publishing, Oxford, 2004.
[120] Sihanya B, 'The State of Consumer Law in Kenya, Public Law Institute (PLI), Nairobi, 1997.
[121]Visua, 'Is the Counterfeit Problem in E-commerce something Brands need to worry about?' https://visua.com/counterfeit-problem-in-ecommerce

conducted in 2016[122]. Approximately 20% of fashion-related Instagram posts reviewed, had counterfeit or illegal products.[123] Since Instagram stories are deleted after twenty-four hours, counterfeiters have found this function to be quite useful. The rise of "hidden listings" for the selling of counterfeits is a relatively new phenomena on social media. In private online groups or via encrypted messaging platforms, links to online marketplaces selling counterfeit items are often distributed. Consumers who follow the link are brought to an online marketplace where they are offered an entirely different, real product for the same price as the phoney one[124].

Kenyan authorities came to the realization that the conventional anti-counterfeiting legislative framework and a reactive anti-counterfeiting strategy weren't enough to combat the problem, so they created the IP rights recordation system to aid in the detection, seizure, and destruction of counterfeit goods upon entry.[125] All items entering Kenya must be recorded, which is defined as the "process of collecting from IP right owners information regarding their registered IP rights" such as trademarks, patents, utility models, industrial designs and copyrights. Products sold under these trademarks must include photographs of the actual item, as well as details about the company that made the item. Border patrol agents utilize this information to double-check the imports' recordability.[126] However, given the porous borders in the country, little awareness on the program and the limited capacity of these agents to tackle counterfeiting online, this system has so far not been entirely effective in countering counterfeits especially in the online marketplace[127].

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[122] Sihanya B, 'The Model Law for Consumer Protection in Africa' in S. S. Rachagan (ed.), Consumer Protection in the WTO Era, International Association for Consumer Law, Louvain-la-Neuve, Belgium, 2009, 53.

[123] Sihanya B, 'The Model Law for Consumer Protection in Africa' in S. S. Rachagan (ed.), Consumer Protection in the WTO Era, International Association for Consumer Law, Louvain-la-Neuve, Belgium, 2009, 53.

[124] 'Social Media Counterfeiting: The Modern Day Nemesis of Trademark Proprietors,' Excelon IP. https://excelonip.com/social-media-counterfeiting-the-modern-day-nemesis-of-trade-mark-proprietors/

[125] Barton, J, 'The economics of TRIPs: international trade in information-intensive products' George Washington International Law Review, 2001, 473-501

[126] Business Daily, 'Vigilance needed for new standards law to be effective,' Business Daily (Nairobi), February 25 2009, Editorial, 2009, 10.

[127] Alando T, 'What the Intellectual Property Recordation Programme means for Manufacturers,' Kenya Association of Manufacturers, 2023.

2.5 Conclusion

In conclusion, the complex nature of counterfeiting in online marketplaces poses new challenges which necessitates the adoption of new and innovative strategies to counter this problem. This is important because online counterfeiting poses a significant threat to consumer protection, IP protection, supply chain integrity and global trade[128].

In the next chapters, I shall propose solutions which may be adopted into law, the Anti-Counterfeit Act, as additional to the roles of the Authority to counter the trade of counterfeit products in online platforms.

[128] International Chamber of Commerce, 'The Economic Impacts of Counterfeiting and Piracy- Report Prepared for BASCAP and INTA, 3rd February 2017.https://iccwbo.org/news-publications/policies-reports/economic-impacts-counterfeiting-piracy-report-prepared-bascap-inta/

CHAPTER 3

3.0 Online Counterfeiting and Blockchain Technology

3.1 Introduction

Online marketplaces and e-commerce have seen a meteoric rise since the turn of the millennium[129]. This comes on the shoulders of technological advancements that have transfigured the traditional methods of doing business. With the combined forces of technology, fast delivery, competitive price offerings and exciting deals, e-commerce sites have created a new buying experience for consumers that is easy, convenient, and stimulating[130]. The advent of online marketplaces such as Amazon, Alibaba, Jumia and Facebook Marketplace in the current digital age has led to the proliferation of the sale of counterfeit goods around the world[131]. In contrast to conventional counterfeiting that utilise brick and mortar operations, internet counterfeiters have unfiltered access to consumers by rising above physical limitations while being hidden in the shadows[132]. Previously, counterfeiters set up shop in discrete areas such as flea markets, street vendors and other less desirable urban locations[133]. The products were frequently distributed through underground networks and black-market channels. They relied on consumers to come to these physical establishments to purchase these goods and this opened them up to exposure from law enforcement[134]. However, the functionality and ease of use of e-commerce platforms have

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[129] Raj S, 'Online Marketplaces and Counterfeiting in India,' European Commission IP Helpdesk, 10th November 2022. https://intellectual-property-helpdesk.ec.europa.eu/news-events/news/online-marketplaces-and-counterfeiting-india-2022-11-10_en

[130] Raj S, 'Online Marketplaces and Counterfeiting in India,' European Commission IP Helpdesk, 10th November 2022. https://intellectual-property-helpdesk.ec.europa.eu/news-events/news/online-marketplaces-and-counterfeiting-india-2022-11-10_en

[131] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 157. https://core.ac.uk/download/pdf/288292754.pdf

[132] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 160. https://core.ac.uk/download/pdf/288292754.pdf

[133] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 170. https://core.ac.uk/download/pdf/288292754.pdf

[134] Organisation for Economic Co-operation and Development, 'Trends in Trade in Counterfeit and Pirated Goods,' 2019.

bypassed these problems by providing anonymity, unlimited access to consumers and effortless financial transactions[135].

3.2 Factors that have led to the growth of online counterfeiting

The proliferation of this trade has further been exacerbated by the fact that Internet Service Providers (ISPs) are not liable for the sale of counterfeits listed on their sited by third-party vendors[136]. In Kenya, section 35A of the Copyright Act provides that ISPs shall not be liable for transmitting infringing content as long as they do not promote the content and the transmission of the content is done in an automatic manner[137]. The result of this is that e-commerce platforms have been lax in protecting intellectual property rights of brands on their platforms as they are granted immunity from liability in many countries such as the United States provided that they do not have specific knowledge of the infringement[138]. The protection of these intellectual property rights is thus left to brand owners to enforce. This approach has been problematic as there are too many online stores to effectively monitor and counterfeiters remain anonymous and can easily open new stores. This has resulted in the unchecked growth of this industry at unprecedented rate[139]. For instance, China reported that nearly 40% of all goods sold on their e-commerce platforms are counterfeit[140]. In Kenya, the Kenya Institute for Public Policy Research and Analysis (KIPPRA) estimated that about 1 in 5 products sold on these platforms are counterfeit[141]. Many brand owners have concluded that companies such as Alibaba actually tolerate and support counterfeiting on it

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[135] Khan S, 'Taking online anti-counterfeiting efforts from the Internet to the real world,' World Trademark Review, 29th September 2023. https://www.worldtrademarkreview.com/guide/anti-counterfeiting-and-online-brand-enforcement/2023/article/taking-online-anti-counterfeiting-efforts-the-internet-the-real-world

[136] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 171. https://core.ac.uk/download/pdf/288292754.pdf

[137] Section 35A, Copyright Act (Act No. 14 of 2022.)

[138] Lei Z, 'Contributory Liability of Internet Service Providers for Online Counterfeit Goods,' Unitalen, 8th January 2013. http://www.unitalen.com/xhtml/report/16124398-1.htm

[139] Stephen K, 'Combating Counterfeit Goods in the Age of E-commerce,' The Regulatory Review… https://www.theregreview.org/2021/08/28/saturday-seminar-combating-counterfeit-goods-e-commerce/

[140] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 160. https://core.ac.uk/download/pdf/288292754.pdf

[141] Kenya Institute for Public Policy Research and Analysis, 'Institutions Combating Counterfeit Goods Not Doing Enough to Protect Kenyans,' 19th December 2019.

sites because they earn revenue from all sales including sale of counterfeit goods[142] and the compounding of all these factors have led to the unchecked growth of online counterfeiting.

3.3 How Does Online Counterfeiting Work?

Understanding the mechanics of online counterfeiting is vital to this study. By comprehending how counterfeiters exploit online platforms, lawmakers and enforcers can tailor anti-counterfeit laws and their enforcement mechanisms to effectively address these challenges. On electronic marketplaces, the process starts with the creation of false listings. E-commerce platforms' wide reach and relative anonymity are exploited by counterfeiters. They use high-quality photos and misleading product descriptions to carefully craft product listings that closely resemble the look and details of real products[143]. The counterfeiters may also create fake websites which consumers are familiar with. They then use these listings to trick the consumer as to the authenticity of the real product. This is done on a variety of online stores and platforms so that if one is removed the business operation goes on unperturbed[144]. Counterfeiters may then utilise advanced marketing techniques such as paid advertisements, search engine optimisation, unsolicited emails, or the theft of brand domain names to scam unsuspecting customers[145]. The exploitation of online payment systems is the next crucial component of online counterfeiting. Online payment systems are frequently used by counterfeiters as a covert means of processing transactions. In order to obscure the financial trail and make it more difficult for authorities to find and arrest those responsible, they might use cryptocurrency or middleman payment methods such as Paypal[146]. Alemanno points out that issues with identifying and prosecuting those involved in counterfeiting activities arise from the use of digital payment methods in online transactions that grant full

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[142] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 175. https://core.ac.uk/download/pdf/288292754.pdf

[143] Beebe B, 'Intellectual Property; Observations on Efforts to Quantify the Economic Effects of Counterfeit and Pirated Goods,' Testimony before the Subcommittee on Courts, Intellectual Property and the Internet, Committee on the Judiciary, U.S House of Representatives.

[144] Raj S, 'Online Marketplaces and Counterfeiting in India,' European Commission IP Helpdesk, 10th November 2022. https://intellectual-property-helpdesk.ec.europa.eu/news-events/news/online-marketplaces-and-counterfeiting-india-2022-11-10_en

[145] 'Awareness Campaign on Online Counterfeiting,' Europol, 4th December 2021. https://www.europol.europa.eu/operations-services-and-innovation/public-awareness-and-prevention-guides/awareness-campaign-online-counterfeiting

[146] Alemanno A, 'The Impact of Technological Progress on the Protection of Intellectual Property Rights: The Role of Regulatory Schemes and their Institutional Design.' European Journal of Risk Regulation, 7(4), 2016, 669.

anonymity from authorities and intellectual property owners. Payment service providers also have underdeveloped due diligence processes that allow them to know their customers, and this allows for counterfeiters to hide their true identities.[147] Counterfeiters may then use sophisticated tools to create replicas that closely resemble genuine items. Use of advanced technology such as graphic design software, 3D printing, and package replication techniques has allowed counterfeiters to use high quality imitations thus making it hard for consumers and enforcement agencies to distinguish between genuine and fake goods[148]. Moreover, counterfeiters employ various strategies to evade law enforcement. This generally involves the use of multiple online identities, dynamic IP addresses and virtual private network (VPNs) to conceal their true identities[149]. Furthermore, they may also use 'hit and run' tactics that involve putting up electronic stores that are quickly abandoned and replaced to avoid detection. Lastly, counterfeiters take advantage of the global scale of the internet as cross-border counterfeiting presents jurisdictional challenges for law enforcement. They may avoid prosecution due to the borderless nature of the internet as they may operate from one jurisdiction while their counterfeit goods are sold in another. This would allow them to exploit the different legal systems for intellectual property rights protection to avoid prosecution[150]. As a result, the lack of a harmonised international legal system addressing online counterfeiting presents major prosecution challenges as to where the crime occurred, who should prosecute and what laws should be applied. Moving forward, it is crucial to create an international legal standard that would prescribe on procedures for the prosecution of online counterfeiters to address these challenges that e-commerce transactions pose that emphasises on harmonisation and international cooperation. This would help countries to

[147] 'Addressing the Sale of Counterfeits on the Internet,' International Trademark Association. https://www.inta.org/wp-content/uploads/public-files/advocacy/committee-reports/Addressing_the_Sale_of_Counterfeits_on_the_Internet_021518.pdf

[148] Cockayne D, 'Illicit Trade: Converging Criminal Networks,' Global Initiative Against Transnational Organised Crime, 2017.

[149] Geiger S, 'intellectual Property Enforcement in the Digital World: An Overview of Challenges and Opportunities,' Vanderbilt Journal of Entertainment and Technology law, 21(3), 530.

[150] World Intellectual Property Organisation, 'The Economic Effects of Counterfeiting and Piracy,' 2022. https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1041.pdf

overcome jurisdictional complexities by creating a standardised legal procedure and the emphasis on international cooperation[151].

In summary, the act of creating counterfeit listings, taking advantage of online payment systems, using digital tools for duplication, eluding law enforcement, and operating on a global scale with varying jurisdictions are just a few of the intricate processes involved in online counterfeiting.

3.3 Blockchain technology and how it can be used to combat counterfeiting

In this section, I discuss what blockchain technology is and how it can be used to combat online counterfeiting.

3.3.1 What is Blockchain and how does it work?

Blockchain is defined as a ledger of decentralised data that is shared securely by enabling a collective group of select participants to share data[152]. With blockchain, transactional data from multiple sources can be easily collected, integrated, and shared. Blockchain provides data integrity with a single source of truth, eliminating data duplication and increased security.

Blockchain has several key components that are central to its operation. To begin with, unlike typical databases that are centralised, blockchain is decentralised as the data is distributed across a network of nodes or computers each having a copy of the entire ledger[153]. The technology also operates through a series of blocks and chains as transactions are grouped together into blocks with each block containing a reference to the previous block thus forming a chain of blocks. This ensures the integrity of the whole system. Moreover, blockchain technology also utilises consensus mechanisms that ensure all nodes agree on the contents of the blockchain. These mechanisms are called proof of work and proof of stake

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[151] 'Addressing the Sale of Counterfeits on the Internet,' International Trademark Association. https://www.inta.org/wp-content/uploads/public-files/advocacy/committee-reports/Addressing_the_Sale_of_Counterfeits_on_the_Internet_021518.pdf

[152] Oracle, 'What is Blockchain,' https://www.oracle.com/ke/blockchain/what-is-blockchain/#:~:text=Blockchain%20is%20defined%20as%20a,collected%2C%20integrated%2C%20and%20shared.

[153] Nakamoto, S, 'Bitcoin: A Peer-to-Peer Electronic Cash System' Bitcoin Organisation, 2008. https://bitcoin.org/bitcoin.pdf

that validate and secure the network. Lastly, once a block is added to the blockchain, it is nearly impossible to alter or delete the information as it uses cryptographic hashing that contains a unique hash and changing any part of the block would require recalculating the hash for that block and all subsequent blocks making tampering highly impractical. When a user creates a transaction on a Blockchain network, a block is created representing the transaction. The transaction is then relayed over the peer-to-peer network known as nodes which then validate the transactions. A transaction can be cryptocurrency, contracts, or records. The transaction is joined with other blocks to form a new block of data for the ledger after it has been verified. It's crucial to remember that every new transaction creates a secure block that is linked to one another by cryptographic principles. Every time a new block is produced, it is incorporated into the current Blockchain network, verifying its security and immutability[154].

Blockchain was originally designed as the underlying technology for Bitcoin, but it has since evolved beyond cryptocurrency to take on new forms. Its original intended use was for the creation and operation of cryptocurrencies like Bitcoin and Ethereum. These currencies utilise this technology for secure and transparent transactions without the need for a central authority[155]. However, it has evolved to take up new roles such as supply chain management whereby it enhances transparency and traceability by recording every transaction and movement of goods from the manufacturer up to the consumer[156]. Moreover, blockchain can be used for smart contracts which are self-executing contracts that automate and execute contractual agreements without the need of intermediaries thus streamlining contractual processes[157], identity management whereby blockchain offers a secure and decentralised way of managing digital identities and in intellectual property protection where it is used to

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[154] Srivastava N, 'What is Blockchain Technology, and How Does It Work?' Blockchain Council, 5th October 2023. https://www.blockchain-council.org/blockchain/what-is-blockchain-technology-and-how-does-it-work/?gad_source=1&gclid=Cj0KCQiAyeWrBhDDARIsAGP1mWRpGFTm_p9h8UwjYkbesCtK4BR2Rrq17Ll2SdmcVNyiOXguDMFXmOYaAlxBEALw_wcB

[155] Nakamoto S, 'Bitcoin: A Peer-to-Peer Electronic Cash System,' Bitcoin Organisation, 2008. https://bitcoin.org/bitcoin.pdf

[156] Srivastava N, 'What is Blockchain Technology, and How Does It Work?' Blockchain Council, 5th October 2023. https://www.blockchain-council.org/blockchain/what-is-blockchain-technology-and-how-does-it-work/?gad_source=1&gclid=Cj0KCQiAyeWrBhDDARIsAGP1mWRpGFTm_p9h8UwjYkbesCtK4BR2Rrq17Ll2SdmcVNyiOXguDMFXmOYaAlxBEALw_wcB

[157] Buterin V, 'Ethereum: A Next-Generation Smart Contract and Decentralized Application Platform,' Ethereum, 17th May 2023. https://ethereum.org/en/whitepaper/

track and manage intellectual property rights to ensure fair compensation for creators[158]. Blockchain offers several benefits such as being secure, transparent, and efficient way to share data across multiple parties[159]. Moreover, it cannot be altered or reversed thus making the data trustworthy. Furthermore, its confidential nature protects against identity theft especially of businesses and manufacturers who are susceptible to identity theft by fraudsters. Lastly, it enables users to transact in real time at any time globally unlike conventional systems that are limited by business hours and time differences.

In conclusion, blockchain works by generating blocks of data that contain different hashes that prove its identity to other blocks. Each block carries data that is tightly connected with each previous block thus forming a chronological order of data that is inalterable. To insert a new block, each block would need to be verified by every single node in the chain so as to verify the accuracy of the data. If the new block is verified, each node would then add the new block to its blockchain after reaching a consensus that the block is valid. Without a full consensus from all the nodes, the chain will reject the block and create a new hash while rejecting anything that does not match it thus creating an inalterable system[160].

3.3.2 How can Blockchain technology be used to fight counterfeiting?

This relatively new technology has evolved over the past decade from a cryptocurrency platform to find new uses. One of these new uses is the management of global supply chains. In other jurisdictions such as the European Union, there have been studies to investigate the feasibility of using this technology in intellectual property protection[161]. The European Union Intellectual Property Organisation (EUIPO) conducted a Blockathon Forum in 2018 that led to the Anti-Counterfeiting Blockathon Infrastructure. These fora culminated in the

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[158] World Intellectual Property Organisation, 'Blockchain and Intellectual Property.' https://www.wipo.int/cws/en/blockchain-and-ip.html

[159] Feger A, 'Blockchain technology: What it is, benefits, and its cross-industry applications,' Insider Intelligence, 19th October 2023. https://www.insiderintelligence.com/insights/blockchain-technology-applications-use-cases/

[160] Lee M C, 'Developing an anti-counterfeit system using blockchain technology,' 7th International Conference on Computer Science and Computational Intelligence 2022, School of Computer Science Bina Nusantara University, Indonesia, 2022, 88.

[161] World Intellectual Property Organisation, Advisory Committee on Enforcement, Fifteenth Session Geneva, 11th August 2022. https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ace_15/wipo_ace_15_10.pdf

creation of a design structure to develop the blockchain solution that created the European Blockchain Services Infrastructure (EBSI) that intends to roll out by the end of 2023[162].

In this section I propose an anti-counterfeiting system using blockchain technology. To begin with, the Anti-Counterfeiting Authority would develop a blockchain database and identity management system which would act as the repository system to store stakeholder's identities and products. This system would provide IPR owners with the means to sign digital twins of the product and also act as a repository for verified brand signatures to all parties by drawing upon the trademark, copyright, and patent registries. In this system manufacturers can store their product data in the blockchain with a unique identification. This Identification would then be used by the manufacturers, logistic companies, and custom officials to verify that the product is legitimate[163]. IPR holders would start the process by gaining access to the anti-counterfeiting blockchain through a special portal, granting them the ability to create tokens that would stand in for tangible goods also referred to as digital twins. Then, right holders could give permission to third parties, like manufacturers and customs officials, to produce and manage the tokens and log events and data related to their products[164]. The blockchain record is a unique and unalterable token. The token is transferred between digital wallets when goods are transferred from one party to another. Proof that the goods are authentic is produced by the combination of a distinct product identity and the ongoing transfer of the digital identity between wallets. Information can be accessed by customs and other enforcement authorities along a product's journey. While the solution focuses on the product level, a container can also be tokenized and connected to the goods contained using algorithms. This eliminates the requirement that each time a container moves between parties in the supply chain, it be opened to verify the legitimacy of the goods inside. Additionally, tokenized goods that have been verified as authentic may be granted expedited clearance through customs inspections. From an enforcement point of view, if an anomaly is found during the goods' transfer between parties in the supply chain, the blockchain can automatically generate alerts about the integrity of the goods. Users with

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[162]'European Blockchain Services Infrastructure,' European Commission. https://digital-strategy.ec.europa.eu/en/policies/european-blockchain-services-infrastructure

[163] Lee M C, 'Developing an anti-counterfeit system using blockchain technology,' 7th International Conference on Computer Science and Computational Intelligence 2022, School of Computer Science Bina Nusantara University, Indonesia, 2022, 90.

[164] World Intellectual Property Organisation, Advisory Committee on Enforcement, Fifteenth Session Geneva, 11th August 2022. https://www.wipo.int/edocs/mdocs/mdocs/en/wipo_ace_15/wipo_ace_15_10.pdf

permission are able to keep an eye out for any anomalies and collaborate with law enforcement and right holders when they appear. To keep parties in the supply chain informed about the status of the goods, the blockchain will also grant access to inspectors of the Anti-Counterfeit Authority and customs officials. The agents may then investigate these alerts and seize any counterfeit products that may have penetrated into the supply chain. This system also provides the opportunity to augment the data stored on the blockchain by manually adding records or automatically adding them via sensors. This means that a retailer, manufacturer, customs officials, and consumers can use these records to find out details about the manufacturing plant, the movements in the supply chain, and the origin of raw materials. A practical example of this system at work would be a shipment of pharmaceutical products from Canada. Each product would be physically labelled and digitally tagged with an encrypted code. This information would be available to the manufacturer, logistics company and government agents in a secure tamper-proof environment through the blockchain[165]. Every movement of goods would be recorded into the blockchain. If at any point an unregistered pharmaceutical product is detected along the way, an alert is sent to the stakeholders and custom officials may begin with seizing and investigating the goods for any fakes. This system has been used effectively in various sectors such as the luxury goods industry which has adopted this technology to allow all stakeholders from the manufactures to the consumers to trace the lifecycle of the goods[166]. Pharmaceutical companies such as Pfizer have also adopted this technology called the MediLedger Network to track prescription drugs globally to eliminate counterfeits[167].

3.4 Conclusion

This system would essentially allow the ACA to trace goods from source up to the point these goods enter the country. Non-registered goods would be flagged and rejected by the system, and this would then allow inspectors of the authority to investigate the legitimacy of these goods by referencing the unique identification hashes and numbers that have been

[165] Prakash M, 'Cloud-based blockchain technology to identify counterfeits,' Journal of Cloud Computing, 67, 2022. https://journalofcloudcomputing.springeropen.com/articles/10.1186/s13677-022-00341-2

[166] Bron D, 'The Role of Blockchain in Combating Counterfeiting and Fraud: Legal and Regulatory Approaches,' LinkedIn, Solidity Law, 24th May 2023.

[167] Bron D, 'The Role of Blockchain in Combating Counterfeiting and Fraud: Legal and Regulatory Approaches,' LinkedIn, Solidity Law, 24th May 2023.

recorded in the blockchain. Owing to the tamper-proof nature of the system, this technology would make it extremely difficult for fraudulent actors to gain accreditation for counterfeit items and thus making it difficult for these items to enter into the country and into the hands of the innocent consumer[168]. I, however, acknowledge that the successful implementation of this system would require significant investment and capacity building to train custom officials and IPR holders on the technical expertise required to run the system. Nevertheless, I still believe that this would be worthwhile as it would enable us to identify counterfeit goods before they ever reach our markets. The implementation of this system would require the codification of this technology into law by requiring all IPR holders to register their goods into the system and allowing inspectors of the ACA to have access and management rights to the system. Moreover, inspectors would be granted powers to seize and detain goods that have been flagged by the system then furnish an investigation after which fraudulent goods may be destroyed.

In the next chapter, I shall propose the use of Situational Crime Prevention (SCP) techniques as a possible solution to combat online counterfeiting.

[168] Lee M C, 'Developing an anti-counterfeit system using blockchain technology,' 7th International Conference on Computer Science and Computational Intelligence 2022, School of Computer Science Bina Nusantara University, Indonesia, 2022, 87.

CHAPTER 4

4.0 Using Situational Crime Prevention to Thwart Online Counterfeiting

4.1 Introduction

Over the past decade, the digital realm has become increasingly important to modern society.[169] While such advancements have made certain aspects of life easier, it has also created vulnerability to cyber threats especially in online marketplaces that threaten economic prosperity and consumer welfare[170]. This has been especially prevalent in online marketplaces which has seen a meteoric rise in online counterfeiting[171]. In Kenya, a study conducted by the Anti-Counterfeit Authority revealed that at least 20% of all goods sold on online marketplaces are counterfeit fuelled by several factors such as an inability to identify fake products, ignorance, globalisation and trade liberalisation policies.[172] Therefore, in this chapter, I shall put forward my second recommendation for possible measures to curb online counterfeiting through a Situational Crime Prevention (SCP) theoretical framework. I shall propose focusing on the conceptualization of anti-counterfeiting measures using SCP techniques which the Authority can use to reduce the proliferation of online counterfeiting.

4.2 What is Situational Crime Prevention?

Situational Crime Prevention is an approach to crime prevention with a focus on changing the immediate environment in which crime occurs.[173] This theory was developed by Ronald

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[169] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 25. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

[170] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 25. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

[171] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 160. https://core.ac.uk/download/pdf/288292754.pdf

[172] Anti Counterfeiting Authority, 'Level of Counterfeiting in Urban Kenya.' https://www.aca.go.ke/research-paper-abstracts/145-level-of-counterfeiting-in-urban-kenya-aca

[173] Heemeng Ho, Ryan Ko, and Lorraine Mazerolle, 'Situational Crime Prevention (SCP) techniques to prevent and control cybercrimes: A focused systematic review.' *Computers & Security* 115, 2022.

Clarke in 1992 with the aim of eliminating crime through opportunity reduction and expanding the crime reduction role beyond the justice system[174]. It calls for the careful analysis of specific crime types to uncover the situational factors that facilitate their commission. In theory it is meant to reduce crime by making it impossible for crime to be committed no matter the offender's motivation or intent. It draws from various disciplines such as criminology, psychology, economics and sociology and various studies have shown its effectiveness in reducing crime in practice[175]. Key to this theory is an analysis of the opportunity structure of a crime and breaking it down into small components. This is the minimal elements that must converge in space and time for example a motivated offender, suitable victim and lack of capable guardianship[176]. The main techniques of applying this theory is through increasing the effort needed to commit crime, increasing the risk and reducing the rewards[177]. In anti-counterfeiting practices, this can be applied by for example putting up structures such as firewalls to secure e-commerce platforms, putting up detection measures that increase the likelihood of perpetrators being caught and putting in place sanctions that reduce the rewards of this crime.

4.3 How Situational Crime Prevention works

SCP techniques can be applied in the cyberspace to thwart online counterfeiting and cybercrime in large through various ways[178]. For example, Internet Service Providers (ISPs) who run online marketplaces such as Amazon, Alibaba and Jumia can use cyber target

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[174] Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3

[175] Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3

[176] Spink J, 'Defining the types of counterfeiters, counterfeiting and offender organisations' Crime Science Journal, 2013, 3.

[177] Freilich J, 'Situational Crime Prevention,' Oxford Criminology and Criminal Justice Journal, 2017, https://oxfordre.com/criminology/display/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-e-3

[178] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 29. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

hardening techniques such as firewall systems which deny traffic for suspicious packets containing false information[179]. This would block access to the potential targets or victims thus making the crime increasingly difficult. Moreover, these ISPs can utilise entry and exit screening techniques such as spam filtering and bot monitoring software which would enhance the risk of identification and apprehension of cybercriminals thus acting as a deterrent to these crimes[180]. In addition to this, SCP techniques coupled with artificial intelligence has emerged as an effective tool in preventing cybercrimes[181]. This is because it is capable of real time detection of suspicious activity on these online platforms which it may then send out alerts to cybersecurity staff. This can be utilised by ISPs to identify fraudulent activities on their platforms and assign staff to assess whether or not the listings are counterfeit. Lastly, ISPs can use SCP techniques such as employing robust authentication and verification procedures for products, utilising blockchain technology to create transparent and traceable supply chains and the use of artificial intelligence to identify and remove listings for counterfeit products which would make these cybercrimes less lucrative thus turning away potential offenders[182].

The utilisation of these countermeasures would require the collaboration between authorities and internet service providers (ISPs) to not only increase the risk of detection and the ease of doing these crimes but also the apprehension and prosecution of these offenders.[183] In the

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[179] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 29. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

[180] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 41. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

[181] Back S, 'Cyber-Situational Crime Prevention and the Breadth of Cybercrimes among Higher Education Institutions,'International Journal of Cybersecurity Intelligence & Cybercrime, 2020, 41. https://vc.bridgew.edu/cgi/viewcontent.cgi?article=1074&context=ijcic

[182] International Chamber of Commerce Business Action to Stop Counterfeiting and Piracy, 'Managing Counterfeiting and Piracy Risks in the Covid-19 Era.' https://iccwbo.org/news-publications/policies-reports/guide-to-managing-counterfeiting-and-piracy-risks-in-the-covid-19-era/

[183]United Nations Office on Drugs and Crime, 'Cybersecurity and Cybercrime Prevention- Practical Applications and Measures.' https://www.unodc.org/e4j/zh/cybercrime/module-9/key-issues/situational-crime-

next subsections, I will discuss the role of ISPs in curbing online counterfeiting and why they should take more responsibility in the effort towards effectively suppressing this trade.

4.4 Internet Service Providers and the Current Legal Framework Regulating this Industry

4.4.1 What are Internet Service Providers?

ISPs are entities that provide access to the internet for both personal and business use[184]. Legally, it can be defined as any entity that provides information services for remuneration through electronic means[185]. In the context of e-commerce, they provide hosting services, payment processing, inventory management and customer support services inter alia[186]. It is crucial to distinguish the two types of ISPs. The first category of ISPs are Hosting Service Providers (HSPs) which are companies that provide services for companies to be viewed on the internet[187]. They host your websites on their servers ensuring that it's accessible to customers round the clock. The second category are Online Service Providers (OSPs) that provide a multitude of services that include access to the internet, email services, payment processing and the ability to conduct financial transactions. In essence, HSPs provide neutral hosting of data purely without taking advantage of the commercial value of the data beyond

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prevention.html#:~:text=The%20five%20proposed%20strategies%20to,and%20removing%20excuses%20for%20offending.

[184] Twin A, 'Internet Service Provider: What they do and examples,' Investopedia, 1st September 2022. https://www.investopedia.com/terms/i/isp.asp

[185] Adeyemi A, 'Liability and Exemptions of Intermediary Service Providers: Assessing the EU Electronic Commerce Legal Regime,' SSRN, 2. https://deliverypdf.ssrn.com/delivery.php?ID=437004004092117097126081003112080100113004071015039058088007025119000112065101127025101010116127126036124023111126075002022020016015022093033064003020022085115080069017091097102015126000127123080116119026123000080084100086019112119118068118020104027&EXT=pdf&INDEX=TRUE

[186] Twin A, 'Internet Service Provider: What they do and examples,' Investopedia, 1st September 2022. https://www.investopedia.com/terms/i/isp.asp

[187] Madamba B, 'Web Host v ISP: What's the difference?' Bitcatcha, 21st February 2024. https://www.bitcatcha.com/blog/web-host-vs-isp/

hosting while OSPs not only provide a wider range of services but also take advantage of the commercial value of the data[188].

4.4.2 What is the current Legal Regime?

ISPs currently operate within a complex framework of laws and regulation. With the rise of the internet, questions arose as to the extent which a party is responsible for the material uploaded, stored and accessible through the internet. Moreover, legal issues of privacy, consumer protection and IPR protection came up[189]. To address these problems, the United States and the European Union (EU) came up with a legal framework from which Kenya has developed its regulations. In the EU, an E-commerce directive was passed in June 2000 labelled Directive 2000/31/EC[190]. While it was introduced to harmonise the EU e-commerce rules, it was issued in the form of a directive, instead of regulation, so as to allow each member country to adopt it in a manner that fit their own legal systems[191]. Of importance to this paper is ISP liability which is captured in Article 12-15. The articles stipulate that ISPs shall not be held liable for information transmitted on their networks provided they did not initiate the transmission, modify the transmission, select the receiver and had no knowledge of the infringing information. However, the directive also stipulates that immunity applies

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[188] World Trademark Review, 'First Court of Appeal Decision of eBay's Liability Issued,' 10th September 2010. https://www.worldtrademarkreview.com/article/first-court-of-appeal-decision-ebays-liability-issued

[189] Adeyemi A, 'Liability and Exemptions of Intermediary Service Providers: Assessing the EU Electronic Commerce Legal Regime,' SSRN, 2. https://deliverypdf.ssrn.com/delivery.php?ID=437004004092117097126081003112080100113004071015039058088007025119000112065101127025101010116127126036124023111126075002022020016015022093033064003020022085115080069017091097102015126000127123080116119026123000080084100086019112119118068118020104027&EXT=pdf&INDEX=TRUE

[190] Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ('Directive on electronic commerce'). https://eur-lex.europa.eu/eli/dir/2000/31/oj

[191] Adeyemi A, 'Liability and Exemptions of Intermediary Service Providers: Assessing the EU Electronic Commerce Legal Regime,' SSRN, 5. https://deliverypdf.ssrn.com/delivery.php?ID=437004004092117097126081003112080100113004071015039058088007025119000112065101127025101010116127126036124023111126075002022020016015022093033064003020022085115080069017091097102015126000127123080116119026123000080084100086019112119118068118020104027&EXT=pdf&INDEX=TRUE

to the activity or service and not to the provider of the service[192]. This means that an intermediary's liability is determined by what they do (their activities), not what they are (their category) or the kind of information they deal with. This was important as it meant ISPs would not be granted immunity for simply being an ISP but immunity would be granted based on their conduct and their adherence to the regulations.

Similarly in the United States, ISPs have been found to be immune from third party contents provided they had not moderated or exercised some form of editorial control[193]. In addition to this, the US Digital Millennium Copyright Act also creates a mandatory obligation on ISPs to take down infringing content within 24 hours once they have been notified by copyright holders[194]. However, an amended version of the SHOP SAFE Act was recently tabled in congress which aims to establish liability for online marketplaces not only when a third party sells counterfeit goods but also when ISPs fail to follow best practices[195]. These best practices were; having a robust seller verification program, proactive content monitoring, fast and efficient take down processes, product authenticating technologies and collaboration with right holders[196]. In instances, where it can be proved these platforms did

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[192] Adeyemi A, 'Liability and Exemptions of Intermediary Service Providers: Assessing the EU Electronic Commerce Legal Regime,' SSRN, 6. https://deliverypdf.ssrn.com/delivery.php?ID=437004004092117097126081003112080100113004071015039058088007025119000112065101127025101010116127126036124023111126075002022020016015022093033064003020022085115080069017091097102015126000127123080116119026123000080084100086019112119118068118020104027&EXT=pdf&INDEX=TRUE

[193] Madeiha I, 'Internet Service Providers Liability for Third Party Content: Freedom to Operate?' International Islamic University Malaysia, IEEE, 1. https://ieeexplore.ieee.org.ezproxy.library.strathmore.edu/stamp/stamp.jsp?tp=&arnumber=8089226

[194] Madeiha I, 'Internet Service Providers Liability for Third Party Content: Freedom to Operate?' International Islamic University Malaysia, IEEE, 1. https://ieeexplore.ieee.org.ezproxy.library.strathmore.edu/stamp/stamp.jsp?tp=&arnumber=8089226

[195] Singh M, Anand P, 'How to create a robust anti-counterfeiting programme,' World Trademark Review, 3rd October 2023. https://www.worldtrademarkreview.com/guide/anti-counterfeiting-and-online-brand-enforcement/2023/article/how-create-robust-online-anti-counterfeiting-programme

[196] Singh M, Anand P, 'How to create a robust anti-counterfeiting programme,' World Trademark Review, 3rd October 2023. https://www.worldtrademarkreview.com/guide/anti-counterfeiting-and-online-brand-enforcement/2023/article/how-create-robust-online-anti-counterfeiting-programme

not employ these best practices, they would then be liable jointly with these counterfeiters[197]. In addition to this, the Act would grant safe harbour for platforms that vet sellers to ensure their legitimacy, remove counterfeit listings and remove sellers that repeatedly sell counterfeits[198].

In Kenya, the *Copyright Act* under section 35A grants ISPs protections and provides them immunity from liability for providing access to infringing content as long as they do not initiate transmission, do not select the addressee, do not modify the material and they do not promote the content being transmitted[199]. Moreover, ISPs are also granted immunity if they do not have knowledge that the material is infringing. In addition to this, section 35B of the Act also provides the procedure for a take-down notice by the ISPs following a complaint by the brand owners after which they are mandated to pull down the content within 48 business hours[200]. Crucially, under section 35C, ISPs are excluded from any obligation to monitor the material transmitted on their platforms or to actively seek any infringing activities within its services[201].

Notwithstanding, there has been extensive debate on whether a change in tact is needed to stop the proliferation of online counterfeiting[202]. In some jurisdictions there has been a paradigm shift whereby ISPs take on a more proactive role in combating this trade. In this next section I shall discuss this shift in approach.

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[197] Chicoine C, 'Counterfeit goods online: The government acts, despite platforms' efforts,' Digital Commerce 360, August 2nd 2021. https://www.digitalcommerce360.com/2021/08/02/counterfeit-goods-online-the-government-acts-despite-platforms-efforts/

[198] Congress Hansard Report, 26th May 2021, 1. https://www.congress.gov/bill/117th-congress/senate-bill/1843

[199] Section 35A, Copyright Act (Act No. 14 of 2022).

[200] Section 35B, Copyright Act (Act No. 14 of 2022).

[201] Section 35C, Copyright Act (Act No. 14 of 2022).

[202] Tosza S, 'Internet Service Providers as Law Enforcers and Adjudicators. A Public Role of Public Actors,' University of Luxembourg, 2021, 1.

4.5 A Shift in the Current Regime?

Due to the extent of online counterfeiting and the anonymity that the internet affords counterfeiters, brand owners are forced to turn to internet service providers, who play a crucial role, to block counterfeiters from using their services. Regretfully, there has been a lack of trust if not outright hostility between intermediaries and rights holders[203]. Internationally and domestically, the current legal framework on counterfeiting and intermediary liability were largely enacted before there was widespread counterfeiting on the internet and therefore it does not comprehensively deal with this problem[204].

The question on whether Internet Service Providers, such as Alibaba, Amazon, Jumia and eBay, should be liable for activities carried out by third parties was one of the earliest concerns facing the newly emerged e-commerce industry[205]. The initial discussions originated from the United States and the European Union. Both jurisdictions took different approaches as in the United States the debate centered on the interests of copyright holders versus intermediaries while in Europe the conversation was less tied to different types of content, trademarks and copyrights, but it was more focused on the general problem of whether intermediaries should be held responsible for the content they make accessible to the public and what practical steps should be taken to deal with this problem[206]. Generally, European trademark law does not expressly recognize contributory trademark infringement. Online marketplaces and ISPs only have an explicit obligation to remove in a timely manner any infringing information when becoming aware of it. However, the Safe Harbour law provides a circumvention of these obligations by providing that intermediaries need not

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[203] Elings R, Borich E, 'The evolution of internet service provider and host liability,' World Trademark Review, 28th February 2018. https://www.worldtrademarkreview.com/global-guide/anti-counterfeiting-and-online-brand-enforcement/2018-obe/article/the-evolution-of-internet-service-provider-and-host-liability

[204] Chow D, 'Alibaba, Amazon and Counterfeiting in the Age of the Internet,' Northwestern Journal of International law and Business, 2020, 157. https://core.ac.uk/download/pdf/288292754.pdf

[205] Elings R, Borich E, 'The evolution of internet service provider and host liability,' World Trademark Review, 28th February 2018. https://www.worldtrademarkreview.com/global-guide/anti-counterfeiting-and-online-brand-enforcement/2018-obe/article/the-evolution-of-internet-service-provider-and-host-liability

[206] Elings R, Borich E, 'The evolution of internet service provider and host liability,' World Trademark Review, 28th February 2018. https://www.worldtrademarkreview.com/global-guide/anti-counterfeiting-and-online-brand-enforcement/2018-obe/article/the-evolution-of-internet-service-provider-and-host-liability

actively root out infringement. In the US, contributory infringement law requires specific knowledge of particular acts of infringement before an intermediary has an obligation to act as stipulated in the case of *Tiffany v eBay*[207].

Different scholars have defended this school of thought by arguing that intellectual property rights are private rights and therefore owners should carry the burden of protecting them since they gain the maximum benefit from them[208]. Moreover, they also argue that the task of monitoring every single transaction on these platforms would be tedious and inefficient[209]. The opposing side to this view is the school of thought that ISPs should have a duty of care and they should take measures to prevent infringement. Given the exponential increase of online counterfeiting, they argue that ISPs do have the capability to interrupt and thwart this trade and should therefore take preventative measures to stop the proliferation of these goods[210].

In 2008, a French court used this rationale in a case between *Hermes International v eBay* whereby the defendants were found directly responsible for allowing the sale of counterfeit Hermes bags on their platform. The court ruled that both eBay and the seller 'had committed acts of gross negligence by failing to act within their powers to prevent reprehensible use of the site.'[211] The court dismissed the defendant's claim that it was only hosting information and instead viewed it as both a host and a website editor that controls the page layouts that made a profit from exploitation of hosted advertisements[212]. Moreover, the German Supreme

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[207] Lei Z, 'Contributory Liability of Internet Service Provider for Online Counterfeit Goods,' Unitalen, 8th January 2013. http://www.unitalen.com/xhtml/report/16124398-1.htm

[208] Lei Z, 'Contributory Liability of Internet Service Provider for Online Counterfeit Goods,' Unitalen, 8th January 2013. http://www.unitalen.com/xhtml/report/16124398-1.htm

[209] Lei Z, 'Contributory Liability of Internet Service Provider for Online Counterfeit Goods,' Unitalen, 8th January 2013. http://www.unitalen.com/xhtml/report/16124398-1.htm

[210] Lei Z, 'Contributory Liability of Internet Service Provider for Online Counterfeit Goods,' Unitalen, 8th January 2013. http://www.unitalen.com/xhtml/report/16124398-1.htm

[211] Weckstrom K, 'Liability for Trademark Infringement for Internet Service Providers,' University of Turku, 16, Marquette Intellectual Property Law Review, 2012, 30. https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1186&context=iplr

[212] Weckstrom K, 'Liability for Trademark Infringement for Internet Service Providers,' University of Turku, 16, Marquette Intellectual Property Law Review, 2012, 30. https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1186&context=iplr

Court also held several auction sites liable for allowing vending of counterfeit goods on their site by stating that the safe harbour rule from the European Commission Directive only applies when the ISP does not have control over the infringing listing and it is reasonably out of their control to prevent the listing[213]. The German court further expounded on this rationale by distinguishing between mere hosting from online service by stating that these platforms was an 'interferer' and thus had a duty to prevent illegal content on their platforms[214].

What legal standard can we extract from these cases moving forward? To begin with, we need to define what category of ISPs e-commerce platforms fall into. Platforms that operate as online auction sites that benefit from the sales/brokerage of products on their sites commercially are not merely hosts but also online service providers. In the opinion of the French Court in the eBay case, the hosting and brokerage services of these platforms were indivisible[215]. This is because they engaged in paid commercial activities and the services they offered did not imply a lack of knowledge and control of the information transmitted on their sites[216]. Therefore, these platforms cannot benefit from exemptions granted to HSPs and have to be subjected, just like other commercial players, to civil duties and responsibilities[217]. Having defined these e-commerce sites, we may now impute several responsibilities and obligations. First, these platforms have to ensure that its business would not generate any illicit actions to the detriment of other economic players. Second, ensure that the vendors that frequently completed transactions on its website were properly registered with the appropriate authorities. Third, to monitor its site to exclude adverts for "quite obviously" infringing items. This can be done by looking at the titles of the ads for

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[213] Weckstrom K, 'Liability for Trademark Infringement for Internet Service Providers,' University of Turku, 16, Marquette Intellectual Property Law Review, 2012, 32. https://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1186&context=iplr

[214] Cheung A, 'Comparative Study on the Liability for Trademark Infringement of Online Auction Providers,' University of Hong Kong, 2009, 3. https://core.ac.uk/download/pdf/37953576.pdf

[215] Cheung A, 'Comparative Study on the Liability for Trademark Infringement of Online Auction Providers,' University of Hong Kong, 2009, 13. https://core.ac.uk/download/pdf/37953576.pdf

[216] Cheung A, 'Comparative Study on the Liability for Trademark Infringement of Online Auction Providers,' University of Hong Kong, 2009, 13. https://core.ac.uk/download/pdf/37953576.pdf

[217] Cheung A, 'Comparative Study on the Liability for Trademark Infringement of Online Auction Providers,' University of Hong Kong, 2009, 13. https://core.ac.uk/download/pdf/37953576.pdf

example 'fine imitation of a famous Louis Vuitton design' or by looking at the pricing and quantities offered. Lastly, to put in place suitable and effective measures to stop violations[218].

Therefore, the European courts while not imposing strict liability on ISPs, have shown that it is possible and practical for ISPs to take a more active role in preventing the sale of these counterfeit goods on their platforms as they have the means and technical capabilities to take up this role that would have an all-round net benefit without putting an undue burden on them. These platforms are uniquely positioned in the fight against counterfeiting. They serve as intermediaries between buyers and sellers giving them power to monitor, control and regulate transactions on their platforms. By taking a more active role in thwarting counterfeiting on their platforms there will be a net benefit in society with increased consumer protection and economic growth[219]. It would therefore be beneficial for Kenya to borrow a leaf out of the European courts and adopt a similar stance that would mandate these online auction sites operating in Kenya to take up more responsibility in curbing online counterfeiting.

4.6 How can Internet Service Providers use Situational Crime Prevention to Stop Online Counterfeiting?

In this part, I shall therefore discuss how SCP approaches can be used by ISPs to make the sale of these goods harder and reduce the rewards of taking part in this trade.

To begin with, the first SCP technique that can be used to curb online counterfeiting is target hardening. This involves increasing the risks and effort required by the perpetrators to set up shop in these platforms[220]. ISPs should be mandated by law to have a robust seller verification program to ensure only legitimate sellers are allowed to list and sell products on

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[218] Cheung A, 'Comparative Study on the Liability for Trademark Infringement of Online Auction Providers,' University of Hong Kong, 2009, 14. https://core.ac.uk/download/pdf/37953576.pdf

[219] Tosza S, 'Internet Service Providers as Law Enforcers and Adjudicators. A Public Role of Public Actors,' University of Luxembourg, 2021, 15.

[220] Shariati A, 'Situational Crime Prevention,' George Mason University, Research Gate, 1st December 2017, 8.

their platforms. This program would require sellers to submit proof as to the legitimacy of their products while also requiring them to attest that the goods are not counterfeit[221]. This verification program can be paired with existing brand registry programs to verify the authenticity of the goods. Given that this is a seamless and automatic process, legitimate sellers would have an uninterrupted and unfettered access to the consumers thus not inhibiting trade[222]. This system would therefore allow access to verified sellers while also weeding out counterfeit listers from these platforms. In addition to this, the SCP technique of surveillance and reduction of anonymity could be utilised by requiring ISPs to display the seller's identity, location, and contact information, where the goods are made, and from where the goods will be shipped. This would allow for authorities and sellers to identify the source of counterfeit goods and notorious counterfeit markets after which extensive surveillance and policing may be used to curb the sale of these goods.

Another technique that may be utilised is screening procedures and threat identification. ISPs should be required to put in place screening technology and algorithms that monitor product listings, descriptions and images to flag potential counterfeits goods before they appear on the platform[223]. This would include listings which have not come from verified sellers or cannot be cross-matched with brand registration databases which could then be flagged till the vendors provide proof as to the genuineness of the product. ISPs should also terminate sellers that are repeat offenders by screening sellers whose stores have been taken down for selling counterfeit products and then prevent these terminated sellers from rejoining or remaining on the platform under a different alias or storefront. This technique would help reduce the proliferation of counterfeit products on these platforms by limiting access to the market. Lastly, they should implement a timely takedown process for removing listings for

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[221] Theogene D, 'How Online Retailers Can Fight Against Counterfeiting,' Prinsync, 20th April 2020. https://prisync.com/blog/how-online-retailers-can-fight-against-counterfeiting/

[222] Theogene D, 'How Online Retailers Can Fight Against Counterfeiting,' Prinsync, 20th April 2020. https://prisync.com/blog/how-online-retailers-can-fight-against-counterfeiting/

[223] Singh M, Anand P, 'How to create a robust anti-counterfeiting programme,' World Trademark Review, 3rd October 2023. https://www.worldtrademarkreview.com/guide/anti-counterfeiting-and-online-brand-enforcement/2023/article/how-create-robust-online-anti-counterfeiting-programme

counterfeit goods within 24 hours of receipt of notice as a means of thwarting offenders by reducing the probability of success in carrying out this crime[224].

4.7 Conclusion

In order to deal with this vice, it is imperative to adopt a comprehensive approach and put in place more robust regulations to deal with counterfeits. By adopting SCP principles in the fight against online counterfeits, we could deter offenders from taking part in this trade. This would require close collaboration between authorities and ISPs as well as an increased duty of care on these platforms. These policies ought to be enshrined in law in the Anti-counterfeit Act to compel these platforms to take an active role in preventing the sale of these goods on their platforms thus adopting a holistic approach that considers all aspects of the counterfeiting ecosystem[225]. This would entail mandating these platforms to set up systems that actively monitor their platforms to take down fake listings and take active steps to acquire and retain information of vendors on their platforms so as to increase accountability and traceability. Moreover, ISPs, specifically online auction sites, should be clearly defined in law by distinguishing between HSPs and OSPs so as to determine the liability of these sites in instances where they failed to comply with these best practices. Lastly, the law should introduce sanctions on platforms found to be liable of facilitating counterfeit activities on their platform.

In the next chapter I shall conclude my study by giving my findings and recommendations.

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[224] United Nations Office on Drugs and Crime, 'Cybersecurity and Cybercrime Prevention- Practical Applications and Measures.' https://www.unodc.org/e4j/zh/cybercrime/module-9/key-issues/situational-crime-prevention.html#:~:text=The%20five%20proposed%20strategies%20to,and%20removing%20excuses%20for%20offending.

[225] Singh M, Anand P, 'How to create a robust anti-counterfeiting programme,' World Trademark Review, 3rd October 2023. https://www.worldtrademarkreview.com/guide/anti-counterfeiting-and-online-brand-enforcement/2023/article/how-create-robust-online-anti-counterfeiting-programme

CHAPTER 5

5.0 Conclusion and Recommendations

5.1 Introduction

This is the final chapter of this study. I begin by briefly highlighting the topic of research and the problem the study intended to solve. I will then discuss the findings that I made based on the hypothesis. Lastly, I will then give recommendations and possibly highlight areas for further research to advance the body of knowledge on combating online counterfeiting.

Chapter 1 introduced the area of study by giving a background to the problem of online counterfeiting and highlighted the challenges faced by IPR owners in protecting their intellectual property in the digital space. This chapter also justified why this study was important by highlighting the implications of this trade. In this chapter, I also reviewed the literature around my field of study and briefly introduced the concepts that would form part of the solutions I proposed.

In chapter 2 I reviewed the current legal regime, local and international, that governs anti-counterfeit laws while also looking at the institutional framework that enforces these laws. In this chapter I also highlighted the shortcomings of the current system by underlining the current gaps in law in dealing with online counterfeiting setting up the foundation for proposed solutions in subsequent chapters.

Chapter 3 of this study looked into how online counterfeiting works and how blockchain technology could be used to curb the influx of counterfeit goods by bullet proofing the supply chain system. This chapter explained in depth how this technology functions and why it is well suited to secure our supply chains that are exploited by counterfeiters to bring in counterfeit products.

Chapter 4 of this study looked into SCP principles and how it can be applied by the Anti-Counterfeit Authority and ISPs to curb online counterfeiting. This chapter also explored the role ISPs play in the fight to curb this trade and why they should take more responsibility in curbing online counterfeiting on their platforms by adhering to set standards and practices.

5.2 Findings

While Kenya has existing policies, rules, and enforcement agencies in place to protect intellectual property, the trade in counterfeits persists anyway[226]. The Anti-Counterfeit Act possesses several loopholes as the Act is silent on internet counterfeiting and on the liability of internet intermediaries and service providers in the counterfeit trade.[227] The law, as it stands, primarily focuses on the traditional modes of counterfeiting and is silent on enforcement of online counterfeiting thus making it difficult to combat this trade as there is no established procedure to deal with this problem. This has led to the rampant increase of online counterfeiting which poses a serious threat to IP protection, consumer protection, supply chain integrity and to our local economy[228].

5.4 Recommendations

Having addressed the research objectives this study intended to discuss I now put forward recommendations on amendments that can be made to the Anti-Counterfeit Act to address some of the existing loopholes and policies the Anti-Counterfeit Authority can adopt to curb this problem.

5.4.1 Using Blockchain Technology to Combat Counterfeiting

I propose that the Anti-Counterfeiting Authority should develop a blockchain database and identity management system which would act as the repository system to store key information in relation to trademark and copyright belonging to IPR owners that would be used to verify and authenticate the genuineness of a product. Due to its secure and impenetrable nature, this system would allow for a transparent but secure means of authenticating products between IPR owners, logistical companies, and custom officials by flagging any goods that don't have the unique verification keys kept by the blockchain

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[226] Kitimo A, 'Why laws remain a weak link in counterfeits battle' Business Daily, 25 May 2022 - https://www.businessdailyafrica.com/bd/corporate/shipping-logistics/why-laws-remain-a-weak-link-in-counterfeits-battle-3825970 on 25 May 2022.

[227] Kirunga J, 'The Efficacy of Anti-Counterfeit Laws in the Digital Age in Kenya,' Unpublished LLM Thesis, University of Nairobi, Nairobi, 2019, 46.

[228] International Chamber of Commerce, 'The Economic Impacts of Counterfeiting and Piracy- Report Prepared for BASCAP and INTA, 3rd February 2017.https://iccwbo.org/news-publications/policies-reports/economic-impacts-counterfeiting-piracy-report-prepared-bascap-inta/

nodes[229]. This system would allow custom officials to identify counterfeit products before they ever reach the end consumer, and they would then be able to take appropriate action to halt the proliferation of this trade. This would be useful in countering this problem by bullet proofing the supply chain system thus effectively shielding the Kenyan market from the entry of counterfeit products.

5.4.2 Using Situational Crime Prevention to Combat Counterfeiting

I propose that the ACA in collaboration with ISPs should put in place policies consistent with SCP principles to make it harder for perpetrators to set up shop and conduct online counterfeiting. This would involve using target hardening techniques such as seller verification programs and screening algorithms to monitor counterfeit listings. Moreover, they should use SCP techniques to increase the risks associated with this crime while reducing its rewards by using principles such as putting in place transparency policies and timely take down procedures.

As it stands, ISPs are protected from liability under section 35A of the Copyright Act for any infringing content that may be on their platforms[230]. Moreover, under section 35B[231], ISPs are given 48 hours to take down infringing content. Lastly, under section 35C[232], ISPs are under no general obligation to monitor material transmitted on their platforms. As a result, ISPs have taken advantage of these protections to take a lax approach in combating counterfeiting on their platforms[233]. I therefore propose an amendment to these sections whereby ISPs can be charged for contributory liability whereby they do not conform to industry best practices to stop counterfeiting. In addition to this, the takedown time period should be reduced to 24 hours and lastly, ISPs should be mandated to monitor the content on their platforms to check for infringing content. The ACA should also be mandated by law to develop these industry best practices to regulate ISPs and monitor the compliance of these platforms in combating counterfeiting. This solution would be useful in so far as it would

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[229] Feger A, 'Blockchain technology: What it is, benefits, and its cross-industry applications,' Insider Intelligence, 19th October 2023. https://www.insiderintelligence.com/insights/blockchain-technology-applications-use-cases/

[230] Section 35A, Copyright Act (Act No. 14 of 2022).

[231] Section 35B, Copyright Act (Act No. 14 of 2022).

[232] Section 35C, Copyright Act (Act No. 14 of 2022).

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set industry best practices which ISPs have to comply with which would in turn reduce the ease at which these counterfeiters can conduct this business.

5.5 Conclusion

The objective of this research was to evaluate Kenya's institutional and legislative framework for countering online counterfeiting, and subsequently suggest potential remedies for this issue. Despite the fact that a framework of laws and institutions has been established to prevent counterfeiting, there is an urgent need for progress in legislation and policy in order to successfully address counterfeiting in online markets. During the course of my research and writing of this paper, I have come to appreciate and realize that this problem transcends one facet of law. There are many legal and technological challenges that have made this problem hard to deal with thus far. From unclear and disjointed local laws to a lack of an established international system to effectively identify and punish perpetrators are just some of the factors that have exacerbated this problem. Moreover, this is an industry that is incredibly dynamic and fastmoving. As the old age goes, law always follows life and therefore it is necessary for the law to catch up with this ever-evolving world and adopt new approaches and technology. As the world has evolved to a point where technology has become inseparable to our daily lives, the law also ought to embrace technology and effectively enshrine it into its modus operandi. In conclusion, this study proposes the use of blockchain technology and the use of SCP principles as an effective means of curbing online counterfeiting.

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