ABUAD Law Journal (ALJ)
Vol. 12, ISSUE. 1, 2024, Pages 1-27 https://doi.org/10.53982/alj.2024.1201.01-j
Published by College of Law, Afe Babalola University Law Journal,
College of Law, Afe Babalola University, Km 8.5, Afe Babalola Way,
P.M.B. 5454, Ado Ekiti, Ekiti State, Nigeria ISSN: *2971-7027*
www.abuad.edu.ng, abuadlawjournal@abuad.edu.ng

ARTIFICIAL INTELLIGENCE AND THE LAW:

AN OVERVIEW

Dr. Ifeoluwa A. Olubiyi*, Rahamat Oyedeji-Oduyale, Damilola M.Adeniyi*****

Abstract

AI has been deployed in finance, health care, law enforcement, research, teaching, communication and even transportation. In the legal industry, AI has been useful to law students, lawyers and judges. The widespread use of AI has raised salient questions over its effects on legal concepts like human rights, intellectual property, labour and employment law, criminal law, health law and entertainment law. The need for formal regulation became more evident in recent years with the popularisation of generative AI models which have brought AI closer to the people more than ever. Regulating AI is essential to curb its adverse effects on the society. It is critical that harmonised rules and policies are made across countries, to truly harness the potential of AI in enhancing socio-economic development and mitigate the risks that are inherent in the deployment of AI. This paper serves as an overview of the relationship and impact of AI in various fields of law and provides suggestions on various thorny issues raised by the deployment of AI in law.

Keywords: *Artificial Intelligence, Law, Technology, AI, Regulation, Nigeria.*

https://doi.org/10.53982/alj.2024.1201.01-j

1.0 INTRODUCTION

There is no universally agreed definition of Artificial Intelligence (AI)[1]. The term 'Artificial Intelligence' was first credited to Scientist John McCarthy in 1955, who defined it as 'the science and engineering of making intelligent machines'.[2] AI is a branch of computer science dedicated to designing systems capable of mimicking human intelligence, deciphering patterns, understanding language, and making complex decisions.[3] It has also been defined as the science of training machines to perform human tasks.[4]

AI is a wide umbrella which houses many components and different but related computer science fields[5] including Machine Learning and Deep Learning. Machine Learning is a branch of AI studying how computers can improve their knowledge, thinking and skills by learning from data. It is similar to teaching computer programs by presenting multiple examples to them.[6] Deep Learning is a subset of machine learning that uses large, multi layer, artificial neural networks modelled after the human brain.[7] Algorithm, another common term in AI discourse, refers to a component of an

*Associate Professor, Department of Private and Business Law, Afe Babalola University Ado Ekiti (ABUAD), Ekiti State, Nigeria; olubiyiia@abuad.edu.ng

**Barnaamaj, Lagos; oyedejirahmah@gmail.com

***Associate, Adedeji & Owotomo LP, Lagos, Nigeria; adeniyidamilolamotunrayo@gmail.com

[1] A Idder and S Coulaux, 'Artificial Intelligence in Criminal Justie :Invasion or Revolution', (2021) International Bar Association https://www.ibanet.org/dec-21-ai-criminal-justice assessed 8 February 2022

[2] Stanford University Human Centered Artificial Intelligence, 'Artificial Intelligence Definitions', https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf accessed 2 February 2024

[3] N.Gutowski and J.Hurley 'AI in Legal Education: Drafting Policies for Balancing Innovation and Integrity' (November 9, 2023). http://dx.doi.org/10.2139/ssrn.4628812 accessed 8 February 2024

[4] F Marengo, 'Privacy and AI; Protecting Individuals in the Age of AI' (Federico Marengo 2023)

[5] Microsoft, 'AI In Africa: Meeting the Opportunity', availhttps://blogs.microsoft.com/wp-content/uploads/prod/sites/5/2024/01/AI-in-Africa-Meeting-the-Opportunity.pdf accessed 10 February 2024

[6] ibid

[7] Coursera, 'Deep Learning vs Machine Learning; A Beginner's Guide' https://www.coursera.org/articles/ai-vs-deep-learning-vs-machine-learning-beginners-guide

https://doi.org/10.53982/alj.2024.1201.01-j

AI system that sets out the precise steps the machine is expected to take[8] to process and analyse data.[9]

AI Systems are trained based on datasets that represent the outcome that is expected of them.[10] For example, an AI System that translates a particular language will be trained based on texts from that language. Modern AI systems have been designed to be autonomous, which means that they can display rationality, learning from experience to improve their skills, and upgrading their actions over time.[11]

The digital economy of the 21st century has been overtaken by Artificial Intelligence (AI). AI, once in the realm of sophisticated science projects,[12] now lies within the reach of the over 7 billion people on the planet. In just 2 months of its release, The Generative AI Software, ChatGPT, reached over 100 million users, a feat that Instagram, one of the most successful social media apps, took 2 and a half years to achieve.[13] Artificial Intelligence has taken the world by a storm, and it is here to stay. It has significantly affected, and continues to affect various aspects of human life, requiring lesser human intervention even in complicated tasks.

AI has been deployed in finance, health care, law enforcement, research, teaching, communication and even transportation. In the legal industry, AI has been useful to law students, lawyers and judges. The widespread use of AI has raised salient questions over its effects on legal concepts like human rights, intellectual property, labour and employment law, criminal law, health law and entertainment law. Over the years, stakeholders have insisted upon a formal regulation of the Artificial Intelligence Ecosystem, however, the need for formal regulation became more evident in recent

---

[8] (n2)
[9] (n5)
[10] (n5)
[11] S Agarwal, 'Use of Artificial Intelligence in Criminal Cases' International Review of Law and Technology (2023) (2) (2) http://dx.doi.org/10.2139/ssrn.4609135
[12] W Connell and M H Black, 'Artificial Intelligence and Legal Education', The Computer & Internet Lawyer (2019)(36)(5) https://williamjconnell.com/books/research/Artificial%20Intelligence%20and%20Legal%20Education%20%20May%202019%20Article.pdf Accessed 15th February 2024
[13] V Mahajan,'100+ Incredible ChatGPT Statistics and Facts in 2024', https://www.notta.ai/en/blog/chatgpt-statistics Accessed 8 February 2024

https://doi.org/10.53982/alj.2024.1201.01-j

years with the popularisation of ChatGpt and other generative AI models which have brought AI closer to the people more than ever. Regulating AI is essential to curb its adverse effects on the society. It is critical that harmonised rules and policies are made across countries, to truly harness the potential of AI in enhancing socio-economic development and mitigate the risks that are inherent in the deployment of AI.

This paper serves as an overview of the relationship and impact of AI in various fields of law and provides suggestions on various thorny issues raised by the deployment of AI in law. Part two gives a deeper overview of the deployment and impact of AI in various fields of law such as health law, labour/employment law, finance, intellectual property law among others. Part three examines efforts made by various governments towards its regulation and provides recommendations in this regard. Part four concludes the paper.

2.0 DEPLOYMENT OF ARTIFICIAL INTELLIGENCE IN VARIOUS FIELDS OF LAW

As earlier stated, AI is currently being utilized in virtually every industry to ease tasks and automate workflow. The deployment of AI in various fields comes with it a attendant pros and cons. This part examines the deployment of AI in various fields of law like legal education, legal practice, criminal law, human rights, intellectual property law, health law, labour/employment law, E-Commerce, Media and Entertainment law, and Theology/Religion. **2.1 AI AND LEGAL EDUCATION**

Education lies at the core of the future of the legal profession.[14] As AI rapidly develops, lawyers must be equipped with the tools to understand the ever evolving tech-augmented legal landscape and the intersection of AI and the law.[15] It is critical that aspiring legal practitioners embrace AI, as the vast number of emerging opportunities in the legal profession will be open to lawyers who are proficient in the use of AI.[16] The

[14] Connell and Black (n12)
[15] Ibid
[16] Ibid

https://doi.org/10.53982/alj.2024.1201.01-j

formal acceptance of AI into legal education has sparked a debate amongst stakeholders. On the one hand, it is argued that the profound capacity of AI will revolutionise legal research, drafting, and provide general assistance to the learning efforts of students. On the other hand, there are concerns around plagiarism, academic integrity, and an overreliance on AI which may lead students to lose the sharp analytical and critical thinking skills that has been the cornerstone of legal education for generations.[17]

Despite the legitimate concerns surrounding the introduction of AI to formal legal education, a balanced approach towards the use of Generative AI tools will significantly enhance the state of legal education. AI, when used effectively can simplify the cumbersome process of legal research, improve drafting precision, offer fresh insights based on analysis of millions of training data and improve accessibility to persons having disabilities or the impaired.[18]

Law schools should also consider updating their course work and curriculum to include AI so as to equip students with the necessary skills to work with AI Technology and research tools.[19] Some schools have already begun to pioneer this development.[20]

Apart from incorporating AI tools to enhance legal education, students must also be prepared for the regulatory landscape of the 4th industrial revolution. Both theoretical and practical approaches must be employed to achieve wholistic learning. Hands on legal-training may be incorporated by pairing law students with startups to offer legal advice on the risks of AI Systems.[21] Ideally, this sort of program will be monitored by a supervising attorney. There is an increasing demand for AI Governance experts, Risk Analysts, and AI policy and research analysts. Just as traditional legal practice evolves with the rapid development of technology, legal education must also be updated to produce lawyers who are ready for the industry.

---

[17] Gutowski and Hurley (n3)

[18] Ibid

[19] Connell and Black (n12)

[20] ibid

[21] Ibid

https://doi.org/10.53982/alj.2024.1201.01-j

2.2 AI AND LEGAL PRACTICE

The wave of fear that spread across professional networks upon the popularity of AI did not elude the legal profession. In 2023, GPT-4, the latest Large Language Model, passed both the multiple choice segment and the written portion of the Uniform Bar Exam, scoring in the 90th percentile.[22] Experts have expressed the opinion that some roles in legal employment, especially for recent graduates and paralegals, is being taken over by AI Legal technologies.[23]Despite this, The fear that AI Is out to take the lawyer's job is not (yet) imminent.[24] On the contrary, it has been shown that when used effectively, AI does not replace lawyers, rather, it aids them.[25] AI can be extremely resourceful to the bar, the bench, and even the general public who may turn to these technologies for basic legal advice and contracts.[26] It can be used to ease work flow, unclog the overload of cases waiting to be heard in the judiciary,[27] and to perform legal tasks at an incredible speed.[28]

AI Models such as ChatGPT, Bing Chat, Google Bard and Grammarly as well as legal practice specific AI such as Thomson Reuters Generative AI, Harvey and Casetext CoCounsel are commonly used to enhance a cost effective and time efficient legal practice by performing legal research, drafting legal briefs, drawing up contracts and writing succinct legal opinions.[29] In the courts, AI has been used to analyse massive amounts of previously decided cases to predict the outcome of future cases. This

---

[22] P Arredondo, Q & A with Sharon Driscoll & Monica Schreiber, 'GPT-4 Passes the Bar Exam; What That Means For Artificial Intelligence Tools In The Legal Profession', available at https://law.stanford.edu/2023/04/19/gpt-4-passes-the-bar-exam-what-that-means-for-artificial-intelligence-tools-in-the-legal-industry/ accessed 18 February 2024

[23] Connell and Black (n12)

[24] MD Murray, 'Artificial Intelligence and the Practice of Law Part 1: Lawyers Must be Professional and Responsible Supervisors of AI' (2023) http://dx.doi.org/10.2139/ssrn.4478588 accessed 20 February 2024

[25] Ibid

[26] Connell and Black (n12)

[27] JK Igbozurike, 'Adopting Artificial Intelligence to the Practice of Law in Nigeria – Lawyer's Delight or Dismay' (2020) http://dx.doi.org/10.2139/ssrn.3603036 accessed 20 February 2024

[28] Murray (n 24)

[29] ibid

https://doi.org/10.53982/alj.2024.1201.01-j

strengthens the justice system by offering more harmonised court decisions.[30] However, AI systems must be used with caution and wisdom to avoid the disastrous consequences that are attendant with unchecked and unsupervised use of AI.

One of the risks associated with the use of AI in legal practice is AI Hallucination. This is a situation where a generative AI makes up quotes, citations, or court decisions.[31] This was the issue in *Mata v. Avianca Inc*.[32], where the claimant's lawyer relied on ChatGPT to prepare his brief.[33] Upon verification by the opposing counsel and the judge, it was found that all the court decision cited in the brief, including quotations and summaries, had been completely made up. The claimant's lawyer admitted that he had never before used AI to undertake legal research, and the only effort he made to verify the content of the document was to ask ChatGPT itself if the cases and quotations were true, to which the program emphatically replied, Yes.[34] This occurred because Generative AI Systems like ChatGPT are trained to produce grammatically correct results, and respond to prompts based on their training data. The system is not yet intelligent enough to verify if the result it produces actually exist in real life or are legally accurate.[35]

A high level of human discernment, judgment and rationality is required for a successful legal practice. The legal profession is a social science field that will always require creativity and emotional intelligence.[36] AI Tools will remain machines, and as such, the ingenuity and judgement of a human will be required to solve complex legal issues. Rather than imposing the task of making independent or discretionary

---

[30] A Idder and S Coulaux,'Artificial Intelligence in Criminal Justie: Invasion or Revolution', (2021) International Bar Association available at https://www.ibanet.org/dec-21-ai-criminal-justice assessed 8 February 2022

[31] Murray (n 24)

[32] *Mata v. Avianca Inc*., 22-CV-1461-(PKC)

[33] B Weiser, ;Here's What Happens When Your Lawyer Uses ChatGPT', available at https://www.nytimes.com/2023/05/27/nyregion/avianca-airline-lawsuit-chatgpt.html accessed 17 February 2024

[34] ibid

[35] Murray (n 24)

[36] Connell and Black (n12)

https://doi.org/10.53982/alj.2024.1201.01-j

judgments on an AI Systems, they should be used instead as a form of legal assistant to summarise, make corrections, translate, explain, or perform such other related tasks.[37]

2.3 AI AND CRIMINAL LAW

AI has been deployed in the criminal justice system, by both law enforcement and the courts, not only as a crime prediction and prevention tool, but also as a crime solving and recidivism tool.[38] In general, AI has been utilised to undertake video and image analysis, DNA Analysis, Gunshot Detection, and Crime Forecasting/predictive policing. AI, such as facial recognition systems, have been deployed to establish an individual's identity and location, track down offenders, and find missing individuals.[39] In addition, it has been used to enforce traffic rules, to assess the potential for an individual to reoffend, to conduct DNA and other forensic analysis in murder cases, and to predict and detect anomalous patterns in fraud detection.[40]

The Correctional Offender Management Profiling for Alternative Sanctions has been used in the United States to perform risk evaluation in determining an inmate's terms of release/parole conditions.[41]The government of Canada has also approved the use of AI in law enforcement.[42] In general, AI has gone a long way to curb and detect crimes like fraud, sexual abuse, traffic violations, human trafficking and robbery.[43] While AI might seem to be the current day marvel, with actors from every sector scrambling to introduce it to their day to day work to increase efficiency, the far reaching negative effects of AI in the criminal justice system cannot be ignored.[44]

---

[37] Murray (n 24) pg 4
[38] Idder and Coulaux (n 30)
[39] S Agarwal, 'Use of Artificial Intelligence in Criminal Cases'International Review of Law and Technology (2023) http://dx.doi.org/10.2139/ssrn.4609135
[40] C Rigano, 'Using Artificial Intelligence to Address Criminal Justice Needs'NIJ Journal , (2019) 280 https:// www.nij.gov/journals/280/Pages/using-artificialintelligence-to-address-criminal-justice-needs.aspx. Accessed 20 February 2024
[41]S Agarwal (n 39)
[42] Idder and Coulaux (n 30)
[43] Ibid
[44] S Agarwal (n 39)

https://doi.org/10.53982/alj.2024.1201.01-j

The use of AI in the administration of justice can result in discrimination against a segment of the society. In regions like Europe and the United States where AI is more frequently used in the administration of justice, cases of discrimination against blacks and people of colour have been recorded.[45] The use of AI in crime prediction is likely to reflect information bias. AI used in predictive policing are used either to point out high risk localities for crimes or to identify individuals who are more likely to commit crimes.[46] PredPol and HART are commonly used in this regard. These AI System analyse previous criminal incidences to make predictions.[47] The training data for these AI Systems are usually sourced from police departments or court administrations.[48] In the U.S.A for example, the training data for predictive policing AI is now distorted because the police have been proven to often harass and arrest African-Americans and people of colour; thus, it is foreseeable that the AI will more often than not make malignant predictions against those categories of persons/localities as opposed to other races/localities on which large amount of data have not been recorded or fed to the AI systems.[49] Research has shown that AI surveillance of criminal hotspots leads to geographical discrimination as those areas become more controlled by the police, resulting in a higher number of arrests.[50]

Some regulatory efforts have been made to curb the negative effects of the deployment of AI in the criminal justice system. The EU-AI Act regulates the use of Artificial intelligence in the criminal justice system by imposing restrictions and safeguards in relation to the use of remote biometric identification systems for the purpose of law enforcement.[51] To minimise the risks of algorithmic discrimination, the EU-AI Act also

[45] Ibid
[46] Ibid
[47] Ibid
[48] C Barabas, 'Beyond Bias: Re-Imagining the Terms of 'Ethical AI' in Criminal Law' (2019) http://dx.doi.org/10.2139/ssrn.3377921 accessed 26 February 2024
[49] S Agarwal (n 39)
[50] Idder and Coulaux (n 30)
[51] Article 9, 10, 11 and 14, EU-AI Act

https://doi.org/10.53982/alj.2024.1201.01-j

imposes obligations for testing, risk management, documentation and human oversight throughout an AI System's life cycle.[52]

2.4 AI AND HUMAN RIGHTS

Human rights are fundamental rights of all humans in every society. The essence of human rights is reflected in how national governments and international organizations have enacted laws, treaties and conventions and agreements to protect human rights in various degrees.

The discussion around the human rights implications of AI is interconnected with the ethics of deploying these systems.[53] An objective evaluation of the human rights implications of the use of AI is to employ a comparative analysis of the current status quo with AI vis-a-vis the status quo prior to the introduction and widespread use of AI systems.[54] This approach recognises that preexisting institutional frameworks already had human rights implications which must be acknowledged before discussing the impact of AI on these frameworks.[55]

The advancement of AI has revolutionised the world in many aspects and significantly impacts human rights.[56] Accusations of discrimination, bias, inequity and opacity have been levelled against the machine learning algorithms of AI.[57]AI systems have been used to predict likelihood of future criminality, monitor and influence individuals decisions, predict emotions, categorise individuals, and make crucial decisions upon which access to public services and welfare such as loans, education, and employment

---

[52] EUR-Lex, 'Proposal for a Regulation of the European Parliament and of the Council laying down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts' available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021PC0206 accessed 20 February 2024

[53] F Raso et al, 'Artificial Intelligence & Human Rights: Opportunities & Risks' (2018) Berkman Klein Center Research Publication No. 2018-6 http://dx.doi.org/10.2139/ssrn.3259344 assessed 22 February 2024

[54] ibid

[55] ibid

[56] MS Cataleta and C Anna C, 'Artificial Intelligence and Human Rights, an Unequal Struggle'*CIFILE Journal Of International Law* (2020) (1) (2) Available at https://www.cifilejournal.com/article_107380_67c700d685169c365119d8c673919772.pdf assessed 27 January 2024

[57] ibid

https://doi.org/10.53982/alj.2024.1201.01-j

are based.[58] AI systems deployed in the course of law enforcement, security and migration also pose huge risks to the protection of fundamental rights[59] as they are capable of infringing the rights to privacy, and non-discrimination,[60] freedom of movement, freedom of expression, and right to dignity of human persons among others.

Some concerns around the human rights implications of AI can be found in automated decision making, fairness of decisions made using AI, and profiling.[61]The international community and international human rights organisations recognise the need to establish set frameworks for the protection of human rights including the right to equality and non discrimination, and the right to privacy in the digital age. Some AI Systems are trained using personal data, and for others, personal data may be processed at different stages in the lifecycle of the AI Systems, which goes to affect the privacy rights of individuals.[62] AI systems that process personal data often involve automated/AI assisted decision making and profiling.[63]Automated decision making can result in decisions which are discriminatory, biased, or completely wrong such as to affect the rights of individuals.[64] The potentially discriminatory nature of AI systems is supported by the notion that AI is only as intelligent as the data that is used to train it, thus, an AI system that is trained based on prejudiced data will definitely reflect and amplify the prejudices that currently exist in the society.[65]

Recognising the critical need for a regulation on AI to protect fundamental rights, Article 1 of the the EU-AI Act states that the purpose of the regulation is 'to promote the uptake of human-centric and trustworthy artificial intelligence , while ensuring a

[58] Human Rights Watch, 'EU: Artificial Intelligence Regulation Should Protect People's Rights', available at https://www.hrw.org/news/2023/07/12/eu-artificial-intelligence-regulation-should-protect-peoples-rights assessed 16 February 2024

[59] ibid

[60] Idder and Coulaux (n 30)

[61] F Marengo, *Privacy and AI; Protecting Individuals in the Age of AI* (2023) 16

[62] Ibid, 129

[63] Ibid, 130

[64] Ibid, 131

[65] S Agarwal (n 39)

https://doi.org/10.53982/alj.2024.1201.01-j

high level of protection of health, safety and fundamental rights enshrined in the charter…'[66]

At the inception of the trilogue negotiations of the AI Act in the European Union, the Human Rights Watch and 149 other Civil Society Organizations released a statement making crucial recommendations to ensure that fundamental rights are upheld in the final version of the Act.[67] It was recommended that the Act develops a framework of accountability, transparency, accessibility and redress for people affected by the use of AI by imposing an obligation on deployers of AI Systems to conduct a Fundamental Rights Impact Assessment before deploying high risks AI systems, ensuring that people who have been affected by AI assisted decisions have a right to seek information and lodge complaints with a national authority, and including a right to effective remedies for breach of fundamental rights amongst others.[68]

It was also recommended that limits be placed on harmful and discriminatory surveillance by national authorities, law enforcement and migration authorities by prohibiting the use of AI to make risk assessments and reach decisions in migration contexts, prohibiting predictive and profiling systems in law enforcement and criminal justice, prohibiting biometric categorisation systems in publicly accessible spaces, and ensuring full transparency as to how public actors deploy high risk AI Systems. In the area of big tech control, it was advised that the Act set clear standards and uphold an objective process to determine high risk systems, such that big tech companies are not incentivised to under classify themselves by taking advantage of loopholes in the Act.[69]

The final text of the EU AI Act[70] considers an AI System High Risk if it poses significant threats to the fundamental rights of persons.[71] These high risk AI Systems

[66] Article 1 EU-AI Act
[67] Human Rights Watch (n 58)
[68] ibid
[69] Human Rights Watch (n 58)
[70] The final version of the EU AI Act was released on the 22nd of January, 2024, after which it will be put to a vote by COREPER on the 2nd of February 2024.
[71] W Fry, 'Final Text of the AI Act is Out, Our Initial Thoughts' (2024) available at https://www.williamfry.com/knowledge/final-text-of-the-ai-act-is-out-our-initial-thoughts/ accessed 21 January 2024

https://doi.org/10.53982/alj.2024.1201.01-j

will have to comply with certain mandatory requirements and undergo conformity assessment procedures before they can be marketed in the EU Region.[72]

Although the EU AI Act is the first comprehensive legislation governing the use and administration of AI Tools, practitioners and academics have inferred regulations affecting AI from existing legislations, especially privacy legislations.[73] The EU General Data Protection Regulation (GDPR) was passed in 2018 to protect the rights of individuals in the processing of their personal data.[74] Following the introduction of the GDPR, several countries around the world have passed national Data Protection Laws to meet up with international best practices.

The Data Protection Act of Nigeria was passed in 2023. In Nigeria, Section 27(1)(g) of the Nigeria Data Protection Act (NDPA)[75] mandates a data controller to inform a data subject of the existence of automated decision making and profiling, envisaged consequences, and the right to object to same. In a similar vein, Section 37 of the NDPA emphatically proscribes subjecting a data subject to a decision based solely on automated decision making or profiling, subject to certain exceptions including automated decisions 'necessary for entering into or the performance of a contract between the data subject and a data controller', automated decisions 'authorised by a written law which establishes suitable measures to safeguard the fundamental rights and freedoms, and the interests of the data subject', and automated decisions 'authorised by the consent of the data subject'.[76] In addition, the Act places on the data controller the responsibility of implementing suitable measures to safeguard the fundamental rights, freedoms, and interest of the data subjects including the right to obtain human

[72] EUR-Lex (n 52)
[73] Tech Hive Advisory & Center for Law and Innovation, 'State of AI Regulation in Africa, Trends and Development' (2024) available at https://www.techhiveadvisory.africa/report/state-of-ai-regulation-in-africa-trends-and-developments accessed 28 February 2024
[74] Marengo (N 61) 129
[75] Nigeria Data Protection Act 2023 https://ndpc.gov.ng/Files/Nigeria_Data_Protection_Act_2023.pdf
[76] Section 37(2) NDPA

https://doi.org/10.53982/alj.2024.1201.01-j

intervention, express the data subject's point of view and to contest the decision.[77] The provision of Section 37 NDPA mirrors Article 22 of the GDPR.

2.5 AI AND INTELLECTUAL PROPERTY LAW

Artificial Intelligence has significantly changed traditional concepts of intellectual property rights as they are known, and it has also successfully infiltrated core aspects of IP law especially in the administration, protection and enforcement of IP Rights.[78] Traditionally, intellectual property rights exist in the forms of patents, copyrights, trademarks and industrial designs. The goal of intellectual property is to incentivize innovation to foster economic growth.

There are different components involved in the development of an AI System. This includes the model architecture, training data, algorithm, and the software itself.[79] Some of the different components of an AI system may enjoy protection under different intellectual property regimes.[80]

Works produced by AI in the course of its use have generally been referred to as Computer/AI Generated Works. Computer Generated Works (CGWs) have enjoyed copyright protection in the US since as far back and 1965, and patent protection since as far back as 1998.[81] These works have been divided into three based on a spectrum; Works created using a computer - where computers are the tools utilised by a human to bring the work to life, Intermediate works - where a computer makes substantial contributions to the creation, and Works created by a computer or Computer generated works - where a computer independently creates a work and no human inventor can be

[77] Section 37(3) NDPA

[78] A Moerland, 'Artificial Intelligence and Intellectual Property Law' (2022) http://dx.doi.org/10.2139/ssrn.4203360 assessed 18 February 2024

[79] Moerland (n 78)

[80] Ibid

[81] RB Abbott, ;Artificial Intelligence, Big Data and Intellectual Property: Protecting Computer-Generated Works in the United Kingdom' in Tanya Aplin (ed) *Research Handbook on Intellectual Property and Digital Technologies* (Edward Elgar Publishing Ltd, 2017) https://ssrn.com/abstract=3064213', accessed 26 February 2024

https://doi.org/10.53982/alj.2024.1201.01-j

identified.[82]The Max Planck Institute for Innovation and Competition (MPIIC) research has provided a similar classification of works created by or with the assistance of AI into AI Generated Inventions, AI Assisted Inventions and AI Implemented Inventions.[83]

The patentability of Computer Generated Works has been a controversial topic in the intellectual property ecosystem. A reverberating query in recent times has been whether Artificial intelligence assisted and fully autonomous AI Generated works can enjoy protection under the currently available intellectual property regimes.[84] The argument lies especially in the status of works created by computers/AI, where even the software engineer or programmer may not be able to predict the outcome of the system, and where an AI System may sometimes be able to change its own code, that is, AI Generated Inventions. The traditional patent system only recognises a human inventor, thus, even where a computer generates a novel invention, it is the maker of the computer who will be entitled to the patent.[85] In 2003, for example, Technologist Raymond Kurzweil was granted a patent on 'The Cybenic Poet', a computer program that could independently generate creative writings.[86]

This traditional approach has been recently challenged in an attempt to file a patent with an AI System named as the inventor. In *Thaler V. Comptroller General of Patents , Designs and Trademarks*, the Supreme Court of the United Kingdom held that DABUS, an AI powered machine owned by the appellant, cannot enjoy the status of an inventor under the UK Patent Act of 1977 as an inventor must be a natural person, and any other person seeking a grant or assignment of the patent must claim through the inventor.[87] Although computer programs and mathematical methods cannot enjoy patent protection, computer-implemented inventions have been considered to qualify for a grant of patents by the European Patent office. These inventions must show that

[82] ibid
[83]Moerland (n 78)
[84] ibid
[85] Abbott (n 81)
[86] ibid

[87] *Thaler v. Comptroller General of patents, designs amd trademarks*, 2023 UKSC 49, available at https://www.supremecourt.uk/cases/docs/uksc-2021-0201-press-summary.pdf

https://doi.org/10.53982/alj.2024.1201.01-j

they are novel and industrially applicable, and most importantly that the invention using AI Technology produces a technical solution/effect, to distinguish it from a mathematical method or computer program.[88]

Authorship of creative works produced by non-human actors presents another contention.[89] On the one hand is the argument that the AI should be the author of any creative work it generates, on the other hand is the notion that any creative work produced autonomously by an AI system is not copyrightable and automatically goes into the public domain, and finally there is the argument that the programmer of the AI system should be the author of any work it produces. Supporters of the proposition that an AI should be named the author/inventor of any work it generates independently argue that automatically attributing inventorship to the human creator of the AI or the person who discovers the inventive capacity of the AI will create an unfair system where genuine human efforts in innovation is undermined.[90] This conflicts with the goal of intellectual property which is to incentivise innovation by recognising inventors, and the foundation of copyright law being the protection of the expression of original creative efforts.

International treaties on intellectual property rights did not envisage authorship or inventorship of AI generated works.[91] The World Intellectual Property Organization's (WIPO) proposed 'Model Copyright Law' includes 'Computer Produced Works' which is defined as works generated by a computer where identification of authors is impossible. The project was however abandoned after it was concluded that more research still needs to be carried out.[92]

The national law of the United Kingdom contains references to AI generated/assisted works. Section 178 of the UK's Copyright, Designs and Patents Act (CDPA) provides for Computer Generated Works with rules for authorship and duration. For works

[88] Moerland (n 78)
[89] K Hristov, 'Artificial Intelligence and the Copyright Dilemma' *IDEA: The IP Law Review* (2017) (57) (3) https://ssrn.com/abstract=2976428 accessed 26 February 2024
[90] Abbott (n 81)
[91] ibid
[92] ibid

https://doi.org/10.53982/alj.2024.1201.01-j

"generated by a computer in circumstances that there is no human author of the work(s)", the author shall be "the person by whom the arrangements necessary for the creation of the work are undertaken". A different stance is taken in the USA where the US Copyright Office has emphatically stated that creative works generated autonomously by an AI system cannot enjoy copyright protection if they do not satisfy the human author requirement.[93] Here, AI Generated creative works automatically fall in the public domain. In Nigeria, the Copyright Act 2022 only makes mention of Computer Programs as literary works eligible for protection, the Act does not go further to address works generated/created independently by these programs.[94]

2.6 **ARTIFICIAL INTELLIGENCE AND HEALTH LAW**

The healthcare industry is rapidly changing due to the transition of the industry towards a cloud environment for the management of data, improving the process of clinical or patient care, improving productivity, and advancing medical research.[95] According to Statistica, the Artificial Intelligence Healthcare market valued at $11 billion in 2021, was projected to be worth $187 billion in 2030.[96] This calculated increase means that we will continue to see how medical providers, hospitals, biotechnological companies, pharmaceutical companies, and others in the healthcare industry operate with the use of artificial intelligence.[97]

The management of data has been a critical part of healthcare organisation. Management of data means the process of gathering and sharing information. The use of AI in data management makes the gathering and sharing of patients' information easier.[98] With the help of Artificial Intelligence, wearable or monitoring devices are

---

[93] Hristov (n 89)
[94] Section 108 Copyright Act 2022
[95] P Nicholson, 'Artificial Intelligence in Health care: Applications and Legal Implications' *University of Michigan Public Law Research Paper* (2017) (10) (599) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3078704 Accessed 20 April, 2024.
[96] Conor Stewart, 'Artificial Intelligence (AI) in Healthcare Market Size Worldwide from 2021- 2030 (Statistica, 20 September 2023) <https://www.statista.com/statistics/1334826/ai-in-healthcare-market-size worldwide/#:~:text=In%202021%2C%20the%20artificial%20intelligence,11%20billion%20U.S.%20dollars%20worldwide.> Accessed 20 April, 2024.
[97] Ibid
[98] Nicholson (n 95)

https://doi.org/10.53982/alj.2024.1201.01-j

now provided for patients with data of particular illnesses such as diabetes or heart diseases. These wearable or other monitoring devices help provide the patients or the medical personnel feedback on their glucose levels by monitoring them.[99]

Additionally, the use of AI Algorithms in the healthcare industry has produced viable results in the process of clinical care by enhancing accuracy in diagnoses.[100] This is done through the use of AI algorithms to analyse vast amounts of patient data and produce accurate diagnostic reports from them to assist medical personnel in making accurate and precise diagnoses.[101] The impact of AI also extends to patient care, because it can influence patient outcomes, for instance, concerning maternal care, AI assists in providing potential methods of recognising mothers who have a high risk of having babies with disabilities, and reducing the number of mothers who end up with disabilities postpartum.[102] This is achieved by utilising electronic health data and AI to determine whether a woman is at risk of having problems during childbirth.[103] The early detection of this would prevent complications that would have occurred if the detection of the problem was not done at the early stage of the pregnancy. Secondly, AI or digital technology can be utilised to facilitate patients into groups, these groups would be for patients that need regular care and for patients that require high-risk care. This would help prevent high maternity morbidity after birth.[104]

Furthermore, AI has caused great advancement in medical research through the invention of certain medical robots to assist patients.[105] The invention of these medical robots makes it less strenuous for medical personnel to watch their patients.[106] For

---

[99] Ibid
[100] D Dada, 'Legal Implications of AI in Healthcare: Nigerian Perspective (The Trusted Advisors, 25 September 2023) < https://trustedadvisorslaw.com/legal-implications-of-ai-in-healthcare-nigerian-perspective/.> Accessed on 10 January, 2024
[101] Ibid
[102] M Shaheen, 'Applications of Artificial Intelligence (AI) in Healthcare: A Review' (2021) Available at http://dx.doi.org/10.14293/S2199-1006.1.SOR-.PPVRY8K.v1 accessed on 20 April, 2024.
[103] Ibid, 5
[104] Ibid, 5
[105] O Cruciger et al, 'Impact of Locomotion Training with a Neurologic Controlled Hybrid Assistive Limb (HAL) Exoskeleton on Neuropathic Pain and Health Related Quality of Life (HRQoL) in Chronic Sci: A Case Study', (2016). 11(6), 529–534.https://doi.org/10.3109/17483107.2014.981875 Accessed on January 10, 2024.
[106] Ibid

https://doi.org/10.53982/alj.2024.1201.01-j

instance, exoskeleton robots can assist paralysed patients in walking again and becoming self-sufficient.[107] These robots assist in the process of rehabilitation and surgeries. As an example, Cyberdyne's Hybrid Assistive Limb (HAL)[108] exoskeleton is designed to help patients rehabilitate from conditions that lead to lower limb disorders, such as spinal cord injuries and strokes, by using sensors placed on the skin to efficiently detect electrical signals in the patient's body and responding with movement at the joint.[109]

These are just a few of the applications of AI in the healthcare industry. However, there are legal challenges posed by the application of AI in this industry. First, the collation of patient's data by AI algorithms and the sharing of such data with other entities for evaluation and validation can pose a privacy and ethical challenges.[110] Where this protected health information is shared with entities not permitted or disclosed, this may lead to the infringement of the data privacy rights of patients. In the end, this may lead to a legal suit against the medical institution.[111] Secondly, biases in the information given by the AI and the possibility of hacking of health data may raise legal issues regarding the protection of the data of patients.[112]

2.7 ARTIFICIAL INTELLIGENCE AND LABOUR/ EMPLOYMENT LAW

The Labour market is not left out in the technological improvements, particularly the digitalization of the process of employment. The Labour market has been impacted both positively and negatively by artificial intelligence.[113]

---

[107] Ibid
[108] Cyberdyne, 'What is HAL?' (2023) <https://www.cyberdyne.jp/english/products/HAL/>. Accessed January 10, 2024.
[109] Cruciger et al (n 105)
[110] Nicholson (n 95)

[111] Ibid
[112] Forbes, 'AI And Healthcare: A Giant Opportunity' (Forbes, 11 February 2019) <https://www.forbes.com/sites/insights-intelai/2019/02/11/ai-and-healthcare-a-giant-opportunity/?sh=6598086a4c68> Accessed 20, April, 2024.
[113] G Petropoulos, Impact of Artificial Intelligence on Employment, 119-120 Available at: https://www.bruegel.org/sites/default/files/wp-content/uploads/2018/07/Impact-of-AI-Petroupoulos.pdf. Accessed on 20 April 2024.

https://doi.org/10.53982/alj.2024.1201.01-j

Artificial Intelligence has opened doors for the upgrading and transformation of the digital economy industry.[114] Certainly, the rapid repetition and cross-border incorporation of general information technology in the era of the digital economy has made a momentous contribution to the stabilization of employment and the promotion of growth.[115] Due to the integration of Artificial Intelligence in the process of recruitment, the processs had been made seamless for employers who don't have to go through the rigorous hassle of calling people for interviews, reading resumes and preparing questions for tests. AI has made it easy as recruiters now input the requirements they require from a prospective employee on the AI tool which would eventually screen out resumes that do not match the requirements given.[116] Also, AI has the potential to assist workers in freeing up their time so they can focus on higher-level tasks.[117] For instance, the adoption of Robotics Process Automation (RPA) by Human Resource Managers to free up their tasks, most especially with repetitive tasks. It also helps in improving the accuracy of these tasks and then identifies tasks that are suitable for automation.[118] For Instance, the Softbank Robotics, a Japanese company's development of humanoid robots which have been used by several companies to conduct human resource tasks such as providing customer services, another viable example is Hanson Robotics 'Sophia' which has been used by several companies to conduct Human Resource tasks such as screening resumes and interviewing candidates for a job.[119]

However, on a more complex note, Digital technology, which is a resultant effect of Artificail Inelligence will unavoidably replace some of the tasks that were once

[114] Y Shen and X Zhang, 'The Impact of Artificial Intelligence on Employment: The Role of Virtual Agglomeration', (2024) Institute of Quantitative Economics 2, Available at: https://doi.org/10.1057/s41599-024-02647-9. Accessed on 20 April, 2024.
[115] Ibid
[116] Petropoulos (n 113)
[117] SR Vinjamuri, 'Robot Process Automation in Human Resource Management' https://www.linkedin.com/pulse/robot-process-automation-human-resource-management-vinjamuri Accessed on 20 April 2024.
[118] Petropoulos (n 113)

[119] L Levine, 'Humanoid Robots Conducting HR Work?' <https://www.linkedin.com/pulse/humanoid-robots-conducting-hr-work-lanning/> Accessed 20, April 2024.

https://doi.org/10.53982/alj.2024.1201.01-j

executed by human labour.[120] Compelled by the rapid development of artificial intelligence technology, some businesses have accelerated the pace of "machine replacement," resulting in repetitive and standardized jobs being executed by robots.[121] Deep learning and AI enable machines and operating systems to perform more complex tasks, as a result causing the employment prospects of enterprise employees to face new challenges in the digital age. Based on the Future of Jobs 2020 report released by the World Economic Forum[122], the recession caused by the COVID-19 pandemic and the rapid development of automation technology are changing the job market much faster than expected, and automation and the new division of labour between humans and machines will disrupt 85 million jobs in 15 industries worldwide over the next five years.[123] Consequently, the demand for skilled jobs, such as data entry, accounting, and administrative services, has been difficult one.

It causes displacements of workers from tasks that they were previously performing, thus leading to increased unemployment.[124] A society with increased unemployment also falls into the trap of societal inequality.[125] The use of AI in employment and labour will not totally lead to a replacement of human labour especially in non-routine tasks like problem-solving, creative thinking and innovation, working on a unique task, dealing with unforeseen emergencies, and investing time in personal growth. AI has not been developed to take up these tasks; thus, they might only replace humans in routine tasks.[126]

Additionally, the use of AI in labour and employment creates certain legal implications.[127] The most reported of all the criticisms on AI is its high discrimination

[120] Shen and Zhang (n 114)
[121] Ibid
[122] S Zahidi et al, 'The Future of Jobs Report 2020' (2020) World Economic Forum < WEF_Future_of_Jobs_2020.pdf (weforum.org)> accessed 20 April 2024.
[123] Ibid
[124] Petropoulos (n 113)
[125] Ibid
[125]Ibid
[126] Ibid
[127] Z Chen, 'Ethics and Discrimination in Artificial Intelligence Enabled Recruitment Practices' *Humanities And Social Sciences Communications* (2023) (10)567 <https://doi.org/10.1057/s41599-023-02079-x.> Accessed on 20 April 2024.

https://doi.org/10.53982/alj.2024.1201.01-j

risks. This implies that the input into the AI system can become discriminatory to other categories of persons most especially during recruitment processes.[128] An example is the an ML-based hiring tool developed by Amazon in 2014 to select the strongest candidates for employment in recruitment processes.[129] However, it exhibited gender biases, the bias was a resulting effect of training the AI system on predominantly male employees *resume* and the AI tool perceived this as indicative of success and hence the discrimination against female employees.[130] All these compelled Amazon to withdraw the AI tool and develop a new unbiased algorithm.[131] However, this discrimination though unintentional, revealed the flaws inherent in algorithmic bias that continues existing gender inequalities and social biases.[132]

2.8 ARTIFICIAL INTELLIGENCE AND ELECTRONIC COMMERCE

The emergence of AI in e-commerce has caused a systematic revolution in the sphere of business operations by offering powerful tools that boost market growth, and customer satisfaction and provide solutions to various challenges in business operations.[133] As a revolutionizer in the e-commerce industry, AI offers numerous benefits and enhances various aspects of e-commerce by empowering businesses to deliver personalized experiences to customers, improving operational efficiency, and enhancing customer satisfaction, eventually driving growth in the online retail industry.[134] Some cases in which AI has been employed in the provision of satisfiable services to customers in the E-Commerce industry are:

---

[128] ibid
[129] ibid
[130] Ibid
[131] BCC, 'Amazon Scrapped 'Sexist AI' tool', (BCC News, 10 October 2018) < https://www.bbc.com/news/technology-45809919.> Accessed on April 20, 2024.
[132] Ibid
[133] Munagapati, 'Artificial Intelligence in E-commerce: How AI is Changing Online Shopping for the Better' (2024) Available at: https://www.sellerapp.com/blog/artificial-intelligence-ai-e-commerce/#:~:text=AI%20can%20analyze%20the%20data,website%20without%20making%20a%20purchase Accessed on 17 February 2024.
[134]PS Shanmugapriya, 'Artificial Intelligence and E-commerce' (2024) Digital Ecosystem & Harnessing Artificial Intelligence, 216 https://www.researchgate.net/publication/379566725_ARTIFICIAL_INTELLIGENCE_AND_E-COMMERCE. Accessed on 20 April 2024.

https://doi.org/10.53982/alj.2024.1201.01-j

- Pricing Optimization- the optimal use of AI tools such as 'Vendavo', 'Zilliant', 'Smartpricing.cloud' assists businesses to develop a strategy of changing their product prices largely based on demand and supply.[135] With the right amount of data, these tools can determine when a discount would be appropriate and and the amount of discount to be given at that material time.[136]
- Product Recommendations- AI tools like 'Adoric' 'Apptus' 'Salesforce' can be used to offer perosnalized product recommendations to suit a customer's needs.[137] These AI tool do this by recommending appropriate products to customers in their searches by documenting key specifics of the previous searches of the customer and connecting the specifics to the requested product to provide a suitable result (product) to the customer.[138]
- Enhanced Customer Service- AI tools such as AI Assistant (Chatbot) can be used to simulate conversations with customers, to respond to their requests and provide product suggestions that are tailored to their requests.[139] Examples of such AI assistant chatbots are Google Assistant, Apple's Siri, Amazon's Alexa, and Microsoft's Cortana. Particularly in e-commerce, these AI chatbots are used by online retailers to facilitate transactions within the online interface.[140]
- Other ways in which AI is used in e-commerce to enable the smooth operation of business activities are Intelligence and smart logistics, automation of warehouse operations in packing and unpacking goods without the need to take lunch breaks and catalogue management.[141]

Additionally, the implementation of AI in digital marketing can be observed through various instances such as the chatbot Disha from Indian Railways, algorithm-driven recommendations on Netflix, restaurant suggestions provided by Zomato and Swiggy,

---

[135] S Pawankumar, 'Relevance of AI in Optimizing Product Pricing and Revenue Management', (2020) https://www.researchgate.net/publication/374143798. Accessed 20 April 2024.
[136] ibid
[137] O Okugbe, 'Top25 Product Recommendation Tools to Grow your Sales' (26 March 2024) < https://adoric.com/blog/top-25-product-recommendation-tools/.> Accessed 20 April, 2024.
[138] ibid
[139] Shanmugapriya (n 134)
[140] ibid
[141] Petropoulos (n 113)

https://doi.org/10.53982/alj.2024.1201.01-j

real-time traffic updates on Google or Apple Maps, the utilization of smart cars and drones, as well as the dynamic pricing models employed by Ola and Uber.[142]

Currently, the significant shift of retail operations to the online realm, the substitution of traditional salespeople with AI, and the utilization of AI for processing extensive customer databases, coupled with interactive chatbots for customer engagement, present numerous avenues for potential human rights infringements.[143] Such infringements include improper collection and handling of personal data, unauthorized use of personal information, and encroachment upon privacy.[144]

2.9 ARTIFICIAL INTELLIGENCE AND MEDIA/ENTERTAINMENT LAW

The scope of application of AI in the entertainment and media industry is rapidly evolving, from content creation and recommendation to marketing and distribution. The integration of AI technologies is enhancing the entertainment experience for both creators and consumers.[145] This shows that there are three key areas in which AI is taking its place in the media and entertainment industry.[146] These key areas are Content creation, Recommendations and search optimization, and influencing marketing strategies.[147]

For content creation, Artificial Intelligence is used to analyse viral media content (that is content that spreads rapidly online) that people consume and the sentiments these contents create, whether positive, negative, or neutral, this can give insights into future content trends by content creators.[148] An example of an AI tool that makes use of predictive analysis of consumed viral media and sentiment analysis of owned media is

---

[142] Ibid

[143] D Kolodin et al, 'Artificial Intelligence in E-Commerce: Legal Aspects'. In International Scientific Congress Society of Ambient Intelligence'*Advances in Economics, Business and Management Research* (2020) (129). Available at: https://doi.org/10.2991/aebmr.k.200318.012. Accessed on 20 April 2024

[144] ibid

[145] B Sancanin and A Penjisevic, 'Use of Artificial Intelligence for the Generation of Media Content' *Social Informatics Journal* (2022) 1(1), 1-7, Available at: http://dx.doi.org/10.58898/sij.v1i1.01-07. Accessed 20 April, 2024.

[146] ibid

[147] ibid

[148] Ibid

https://doi.org/10.53982/alj.2024.1201.01-j

the social media monitoring and analytics platform called Brandwatch.[149] Brandwatch uses AI algorithms to track conversations and trends across various social media platforms. It can also analyse the sentiment of posts to determine whether they are positive, negative, or neutral.[150] Additionally, it can identify which content is gaining momentum and becoming viral by tracking engagement metrics such as likes, shares, and comments. By analysing these data, Brandwatch can provide insights into emerging trends, audience preferences, and potential content opportunities for businesses and marketers.[151]

In making optimal recommendations and searches, with the increasing popularity of voice assistants such as Siri, Alexa, and Google Assistant, the significance of optimizing content for voice search cannot be overstated.[152] Unlike traditional text-based search, voice search demands a unique strategy due to its reliance on conversational language and longer, more specific queries. In this regard, AI emerges as a valuable tool for businesses seeking to enhance their content for voice search.[153] Finally, the use of AI in marketing and advertising is not new to the entertainment industry as AI can analyse trends on social media platforms, the sentiments of the audience, and engagements online to effectively target particular demographics and inform marketing strategies better.[154]

Challenges posed by AI in the entertainment/media industry include the use of AI by fraudsters to produce deepfakes.[155] The use of deepfakes is alarming. These are realistic videos where the faces of people, usually celebrities or top politicians, are imposed on an artificial body to convey ideas and messages as if they were conveyed by the owners of the faces.[156] For instance, the AI voice generator and voice cloning App VoxBox[157]

---

[149] P Auwerx, 'Success Story: Brandwatch' https://www.linkedin.com/pulse/success-story-brandwatch-peter-h-j-auwerx Accessed 20 April, 2024.
[150] Ibid
[151] Sancanin and Penjisevic (n 145)
[152] Ibid
[153] Ibid
[154] Ibid
[155] YK Law LLP, 'How is AI Affecting Entertainment Law?' (YK Law LLP, 25 September 2023), <https://www.yklaw.us/blog/2023/09/how-is-ai-affecting-entertainment-law/.>Accessed on 28 January 2024.
[156] Ibid

https://doi.org/10.53982/alj.2024.1201.01-j

allow a user to attach one of the 32000 plus celebrity voices to any text one writes, it is just a matter of time for it to be used for fraudulent purposes.

2.10 ARTIFICIAL INTELLIGENCE AND RELIGION

AI has found its way into religion thereby creating ease in the performance of religious activities. Some religious bodies have accepted it into their religious activities thus making the best of AI in spreading their religious teachings and enhancing the practice of their faith.[158] For example, certain AI Applications that can enhance the study of the Bible for Christians and the Quran for Muslims can be downloaded on the App Stores. ChatGPT is also an example of an AI algorithm that is used to provide speedy information about religious texts, beliefs, practices, different historical backgrounds of different religions, and the doctrine and philosophical teachings of these religions.[159]

The bone of contention with AI from a religious perspective is usually that AI is imbued with cognitive understanding and doing things humans only have been designed by God to do.[160] The assumption of human capabilities by AI has been seen by religious worshipers as a derogation from the understanding of the creation of Man by God.[161] Although humans are allowed by God to do anything that utilises technology to make creations, they are not permitted to make creations that would harm humanity. Hence, religion permits the exploration of technology to make creations that would make life easier, however, religion frowns at it where such creation threatens the existence of humans believed to be of divine creation.[162]

There are concerns that in the long run, AI may seek or be conferred with human-like status in the society; hence, they may be conferred with similar rights and protections

---

[157]ibid
[158] T Helfrich, 'Artificial Intelligence and its Impact on Religion', (The AI Journal, 23 February 2022) <https://aijourn.com/artificial-intelligence-and-its-impact-on-religion/> Accessed 20 April 2024.
[159] Ibid
[160] B Singler, 'An Introduction to Artificial Intelligence and religion for the Religious Studies Scholar', (2017), *The Faraday Institute of Science and Religion* (2017) (20) 3, Available at: https://doi.org/10.1558/imre.35901 Accessed 20 April 2024.
[161]Helfrich (n 158)
[162]Singler (n 160)

https://doi.org/10.53982/alj.2024.1201.01-j

that humans enjoy.[163] This would not only lead to a distortion in the human framework but also in the economic framework of a country.[164] Also, the religious information provided by these applications may be unreliable because the information supplied to these algorithms may be based on biases for certain religious standards and beliefs, hence, its unreliability.[165]

3.0 REGULATING ARTIFICIAL INTELLIGENCE: EFFORTS MADE AND KEY CONSIDERATIONS

Governments around the world are developing frameworks for AI Governance.[166] The regulation of AI faces what is termed the Collingridge Dilemma - regulating a new technology is easy at the initial stages— but the possible risks are not clear enough to justify hindering progress. However, when those risks become evident, regulation has turned into an expensive and sluggish process.[167] This dilemma has resulted in a double tiered approach towards tackling AI regulation. First is predicting and averting harms by evaluating the negative impacts of AI, and second is ensuring that regulations are flexible enough to meet the demands of the constantly evolving technological landscape.[168] To maximise the benefits of AI Globally, a uniform, multilateral framework that harmonises various national laws, such as what is obtainable with the International Standard Organization, is desirable to effectively regulate AI on an international level.[169]

A risk-based approach to AI Governance puts in place processes to identify and mitigate the risks before an AI System is deployed.[170] An existing template for risk management is the A.I Risk Management Framework launched by the United States

[163] Ibid
[164] Ibid
[165] Helfrich (n 158)
[166] Microsoft (n 5)
[167] S Chesterman, 'The Tragedy of AI Governance", (2023) available at https://www.justsecurity.org/89432/the-tragedy-of-ai-governance/ accessed 24 February 2024
[168] ibid
[169] Microsoft (n 5)
[170] ibid

https://doi.org/10.53982/alj.2024.1201.01-j

National Institute of Standards and Technology (NIST) in 2023.[171] In December 2023, The International Standards Organization released new standards, the ISO/IEC 42001 on AI Management systems, designed to ensure responsible development and use of AI.[172]

The initial proposal for the first uniform law regulating Artificial Intelligence was put forward by the European Union in 2021, following explicit requests from the European Parliament and the European Council[173]. Three years later in 2024, the law has been passed. The AI Act categorises AI Systems into 3 based on the level of risk they pose to users. These are (1) Prohibited AI Systems (2) High Risk AI Systems and (3) General Purpose AI Systems Models with systemic risks.[174] To implement the AI Act, a governance system will be established at the member states level,[175] the European Artificial Intelligence Board will be set up,[176] and regulatory sandboxes will be organised to promote innovation and support SMEs and startups.[177]The Act will work hand in hand with existing laws on human rights, non discrimination, consumer protection and data protection including the EU Charter of Fundamental Rights, and the General Data Protection Regulation.[178]

African countries have not been left behind in making concerted efforts towards developing AI policies and strategies.[179] Although none of the 55 countries in Africa currently have a dedicated AI Legislation, 7 Countries have a National AI Strategy,[180] 4

[171] NIST, 'NIST AI Risk Management Framework', available at https://www.nist.gov/itl/ai-risk-management-framework accessed 15 February 2024
[172] ISO,'ISO/IEC 42001:2023 Information technology Artificial intelligence Management system' available at https://www.iso.org/standard/81230.html accessed 226 February 2024
[173] EUR-Lex (n 52)
[174] Title II Article 5, Title III Article 6, and Title IVA Article 52a, EU AI ACT
[175] Title VI Article 55b, EU AI ACT
[176] Title VI Article 56 EU AI Act
[177] Title V Article 53 EU AI Act
[178] Recitals 4, 4a, 4aa, 5, 5a, 5aa, 5ab to the EU AI Act
[179]Microsoft (n 5)
[180] Algeria, Benin, Egypt, Mauritius, Morocco, Sierra Leone, Uganda - see Thomson Reuters Foundation, 'Emerging AI Governance Frameworks in Africa ' (2023) available at https://www.trust.org/dA/97390870db/pdfReport/AI%20Governance%20for%20Africa%20Toolkit%20-%20Part%201%20and%202.pdf

https://doi.org/10.53982/alj.2024.1201.01-j

countries have a National AI Policy,[181] and 31 Countries have legislated a National Data Protection law that affects AI, especially in terms of automated decision making.[182]

Mauritius was the first country in Africa to adopt a National Strategy on AI in 2018, Egypt followed suit by establishing the National Council for Artificial Intelligence in 2019 and the National AI Strategy in 2021. The Egyptian Charter for responsible AI was endorsed in 2023. Rwanda released its National AI Policy in 2023, with the aim of positioning the country as a global innovator for responsible and inclusive AI, Tunisia is working on its National AI Strategy, and Ethiopia is finalizing its National AI policy.

On a continental level, The African Union has put plans in motion to develop the African Union Artificial Intelligence Continental Strategy (AU-AI CS), which aims to address responsible, safe and beneficial use of AI, and the technological, ethical, economic, security and social perspectives of AI.[183] Other continental instruments - declarations, policies and reports - that govern AI directly or indirectly include The African Union Convention on Personal Data Protection and Cyber Security (The Malabo Convention 2014),[184] Resolution 473 of the African Commission on Human and Peoples Rights (2021),[185] Artificial Intelligence for Africa Blueprint (2021), 'AI for Africa: Artificial Intelligence for Africa's Socio-Economic Development' by the

[181] Ethiopia, Mauritius, Rwanda, and Tunisia; ibid

[182] Algeria, Angola, Benin, Botswana, Burkina Faso, Cabo Verde, Congo, Cote D'ivoire, Eswatini, Gabon, Ghana, Guinea, Kenya, Lesotho, Madagascar, Mali, Mauritania, Mauritius, Morocco, Niger, Nigeria, Rwanda, Sotome & Pricipe, Senegal, South Africa, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe; ibid

[183] African Union, 'The 5th Ordinary Session of the Specialized Technical Committee on Communication and Information Communications Technology' available at https://au.int/en/5thstccict

[184] African Union Convention on Cyber Security and Personal Data Protection, available at https://au.int/sites/default/files/treaties/29560-treaty-0048_-_african_union_convention_on_cyber_security_and_personal_data_protection_e.pdf

[185] African Commission on Human and Peoples Rights,'Resolution on the need to undertake a Study on human and peoples' rights and artificial intelligence (AI), robotics and other new and emerging technologies in Africa - ACHPR/Res. 473 (EXT.OS/ XXXI) 2021', available at https://achpr.au.int/en/adopted-resolutions/473-resolution-need-undertake-study-human-and-peoples-rights-and-art accessed 15 february 2024

https://doi.org/10.53982/alj.2024.1201.01-j

African Union High-Level Panel on Emerging Technologies (APET) and the African Union Development Agency (AUDA-NEPAD) Report (2023).[186]

The Malabo Convention was adopted in 2014 but came into force on June 8, 2023. Although the convention does not directly address AI, it contains certain provisions which are significant to the processing of personal data in the training and use of AI.[187] Article 9 of the Convention mandates national data protection laws to include automated processing within their scope of application, while Article 14(5) provides that a person cannot be subjected to a decision producing significant/legal effects, made solely by automated processing.

The Nigerian ecosystem is also making positive efforts towards AI Governance. The National Center for AI and Robotics was established in 2020 as a subsidiary of the National Information Technology Development Agency (NITDA) which has set plans in motion to develop a National AI Policy, and the Ministry of Communications is leading the efforts towards developing a Nations AI Strategy.[188]

The following are suggestions that should be taken into consideration in the development, use and regulation of Artifiicial Intelligence.

Data security is still one of the biggest concerns in the development and use of AI. This is because, naturally, to make use of these artificial intelligence tools, one must provide the algorithm with certain personal information which if not well protected may be susceptible to hacking. There is a need for the introduction of cyber and data security strategies for updating and controlling artificial intelligence technologies.

The law also needs to provide a safe and progressive regulatory environment for the development and use of AI. Since AI touches practically various every aspects of life in the society, government has the responsibility to provide safeguards and ensure its safe

[186]African Union Development Agency,'AI For Africa:Artificial Intelligence for Africa's Socio-Economic Development' available at https://www.nepad.org/publication/ai-africa-artificial-intelligence-africas-socio-economic-development accessed 15 february 2024

[187] Thomson Reuters Foundation, 'Emerging AI Governance Frameworks in Africa ' (2023) available at https://www.trust.org/dA/97390870db/pdfReport/AI%20Governance%20for%20Africa%20Toolkit%20-%20Part%201%20and%202.pdf accessed 16 February 2024

[188] Microsoft (n 5)

https://doi.org/10.53982/alj.2024.1201.01-j

use. This includes evaluating the potential discriminatory effect of AI tools. All the data sets that they used in training the AI should be verified and balanced in order to reduce possibilities of bias or discriminations.

Additionally, the extent of the risks and capabilities of AI systems have not yet been fully realized. AI regulations must be flexible enough to adapt to the constantly evolving nature of the field and promptly address new challenges that may arise. Sector-specific regulations are also desirable to meet the needs of unique issues posed by the use of AI in different fields. This may be achieved by amending existing laws and regulations - like the Copyright Act, Patents, Trademarks and Designs Act, Labour Laws, and the Rules of Professional Conduct for Lawyers - to adequately address the use of AI in those fields.

The role of education in the ethical use of AI tools especially in the legal profession cannot be overemphasized. Stakeholders including lawyers, judges, lecturers, and students must be educated on the risks of AI usage such as hallucination, bias and plagiarism. Users should take responsibility for the outputs of AI systems by reviewing their works.

4.0 CONCLUSION

With the rise in technological advancements, humans are constantly confronted with AI tools that has significant impact on life in the society. This paper has examined the use and impact of AI in various disciplines of law; thereby showing the widespread impact of AI in the society. There is no doubt that the application of AI in law has significant benefits, however, it also has negative consequences thereby creating legal and ethical implications. There is therefore a need to provide a safe and progressive legal regulatory framework for the development, deployment and use of AI in various sectors. The tenets or ethics of each sector as well as protection of fundamental human rights must be borne in mind. In all, the adoption of AI in various spheres of life would

https://doi.org/10.53982/alj.2024.1201.01-j

harness the power of technology to improve the quality of life and performance of tasks thereby saving humanity time, energy and money.