ARTIFICIAL INTELLIGENCE ENTITIES, CRIMINAL RESPONSIBILITY AND NIGERIAN LEGAL JUSTICE SYSTEM*

Abstract

Following a surge in cybernetics and robotics in contemporary times, there emerges a cluster of research interests focusing on the criminal liability or otherwise of an artificial intelligence entity in the event causing criminal harm on its target. It could be an entity not created to cause harm, but which could nevertheless do so by accident or error. In Nigeria, some people may choose to regard this subject as too far remote into the future to concern us, yet one has to be reminded that the world is now a global village in which technology speedily gets transferred to the various ends. As automation machinery bypasses direct human control and becomes more advanced and widespread, questions of risks, fault, responsibility and punishment have become more pertinent. This study examined the challenges that affect imposition of criminal liabilities on artificial intelligence entities and discussed the application of Nigerian domestic laws in determining the extent of criminal responsibility that could be imputed, and on whom. It is recommended that a new legal framework be enacted specifically for artificial intelligence entities as the extant legal regime may not be immediately and directly suitable. It is hoped that this measure will address the liability conundrum that are currently in issue.

Keywords: Artificial intelligence, Criminal liability, Legal Justice System, Implications, Nigeria.

1. Exordium

Since the 1950s, artificial intelligence (AI) has been a recurring topic in research. However, this field has only recently gained significant momentum because of further advances in technology. Although establishments have joined and many eager to join the trend of this new artificial intelligence (AI) development and take advantage of its potential benefits, it is unclear what future implications artificial intelligence will have on human society. Artificial intelligence permeates human lives in numerous ways performing tasks that until recently could only be performed by humans. The increasing ubiquity and rapidly expanding commercial potential of artificial intelligence has spurred massive private sector investment in artificial intelligence projects. Firms such as Google, Facebook, Amazon and Baidu got into artificial intelligence arms race, poaching researchers, setting up laboratories and buying start-ups[1]. This phenomenon seems to continue for the foreseeable future. It also goes without saying that some smart phones have artificial intelligence assistants that learn which applications we use most and where we are heading when starting the car's engine.

Artificial Intelligence has also made inroads in judicio-legal circles. Some law firms have already hired their first artificial intelligence attorney[2]. With each passing month, use of artificial intelligence gains foothold in new industries and becomes more enmeshed in day to day human lives. Scientists from University College London and the University of Sheffield have created a computer judge that predicts decisions of the European Court of Human Rights within the accuracy of 79 %.[3] The process takes into consideration not only legal evidence, but also the moral aspect. The computer judge analyses the text version of the case using the machine learning algorithm.[4] It is noteworthy, however, that scientists do not consider the invention as a replacement for judges or lawyers, but find it useful to rapidly identify patterns in cases that lead to certain outcomes. It would also be a valuable tool for highlighting which cases are most likely to be violations of human rights. To develop the algorithm, the team allowed the computer judge to scan published decisions

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[1]AI: Rise of the machines, *ECONOMIST* (May 9, 2015), http: //www.economist.com/news/briefing/21650526-a-i-scares people excessively-so-rise-machines <http: //perma. Cc /B2LD-B4XS>. Accessed on April 15th 2021.

[2]T Karen, 'meet' Ross' the newly hired legal robot', Washington post, (Washington, 16th May 2016) <www.washingtonpost.com/news,innovations/wp/2016/05/16/meet-ross-the-newly-hired-legal robot/?utm_term=6d6dc.64d5330> accessed on 15th April 2021.

[3]S Knapton, artificially intelligent 'judge' developed which can predict court verdicts with 79 per cent accuracy. URL: <http://www.telegraph.co.uk/science/2016/10/23/artifically-intelligent-judge-developed-which-can-predict-court> Acessed on 15th April 2021.

[4] Ibid

on 584 cases relating to torture, degrading treatment, and fair trials.[5] The electronic judge delivered verdicts with 79 % accuracy.[6] At the same time, scientists have found that decisions of the European Court of Human Rights are often based on moral aspects rather than legal arguments[7].

More so, Google has recently obtained a patent on its own technology with the aim of upgrading robots and robotic devices. The interaction of a significant amount of robots (no restrictions on the quantity) is conducted via a tag cloud in which the owner can customize their devices according to their needs with a smart phone or an Android device.[8] Their actions can be controlled from any place if corresponding settings and code are specified in the settings. The company informs that its technology does not pose a threat to society and global security. In their opinion, it is intended exclusively for automation and optimization of the service industry.[9] Also, the company claims they put the most efforts in order to protect the technology from being spread and used in an arms race [10] Similarly, An international team of scientists from the US, France and China created a semi synthetic life form. Thus, they managed to create an organism with fundamental changes in the DNA that is able to store it indefinitely long without rejection. This invention will allow advancing in the protein synthesis and creating a full-scale artificial genetic code[11]. The intention to engage robots in the police service has been announced by the media service of the Dubai Police Force. For a start, they will stamp documents, remind one of various activities and important things, and register workflow interruptions. The border patrol is planning to equip airports with an undeclared item recognition system[12]. However, the problem began when computers evolved in their thinking. Could they become dangerous? In fact they already are. On 4th July 1981, the first death by a robot was recorded. Kenji Udara was an engineer at Kawaski Heary Industries Plant. He entered into a restricted area of manufacturing line to perform some maintenance work on the robot. The robot detected him as an obstacle and pushed him into an adjacent machine from its hydraulic arm, killing him instantly.[13]

In legal parlance, there is a cynical saying that 'where there's blame, there's a claim'. But who does one blame when an artificial intelligent entity 'commits' a crime? In existing fields, artificial intelligence has demonstrated a surprising ability to take enforceable decisions. Artificial intelligence has given rise to public concern that there will be crimes committed without any possibility to hold anyone liable. The race towards creating a super-intelligent artificial being challenges criminal law, as human control is one of the essential keys when holding a person liable for a crime.[14] Criminal law aims to prevent the occurrence of harm, embedded in communicating the wrongfulness and moral blame of the conduct that the crimes prescribe. When an artificial intelligence entity acts autonomously, the human's limited control over artificial intelligence seems problematic when examining the guilty act of the crime (*actus reus*). Previous research in criminal law and cybernetics is quite limited if not absent. Most researchers seem to focus on civil liability even as most harm that artificial intelligence entities cause borders on crime. Obviously, the assumption is that if there is no guidance concerning responsibility over artificial intelligence behaviour from within legislation and case law, criminal law and its principles will be constrained in extending responsibility to artificial intelligence entities.

This study seeks to immediately examine the nature and characteristics of artificial intelligence entities with a view to investigating the possibility or otherwise of imputing criminal liability or responsibility thereto under Nigerian criminal liability. The article also enquires into the suitability or otherwise of applying with success or otherwise the extant Nigerian law to artificial intelligence entities. The aim is to find out whether or not the characteristics will collide with the requirements for establishing criminal liability.

[5] Ibid
[6] Ibid
[7] Ibid
[8] N Serbenko, Avtonomnye sistemy vooruzheniya: nereshennye voprosy morali, nravstvennosti, mezhdunarodnogo prava i geopolitiki. URL <http://bintel.com.ua/ru/article/robots2> Accessed on 15th April 2021.
[9] Ibid
[10] Ibid
[11]B Novye, Sozdana polusinteticheskaya forma zhizni. URL: <http://x-files.org.ua/news> Accessed 15th April 2021.
[12]V Larionov, Politsiya Dubaya nachnet ispolzovat robotov. URL: <http://hi-news.ru/technology/policiya-dubaya-nachnyot-ispolzovat-robotov.html>. Accessed 15th April 2021.
[13] Pauls Edwards, 'killer robot: Japanese worker first victim of technological revolution' *Desert News* (Salt Lake City, 8th December 1981).
[14] GP Fletcher, *Basic Concepts of Criminal Law* (OUP 1998) 44.

2. Nature of Artificial Intelligence

So far, there continues to be ambiguity on the definition of Artificial Intelligence. Wang does not believe that there is one fixed definition for Artificial Intelligence[15]. Coppin gave a simple definition of artificial intelligence as the study of systems that act in a way that, to any observer, would be intelligent[16]. James stated that:

> Artificial intelligence is not the science of building artificial people. It's not the science of understanding human intelligence. It's not even the science of trying to build artefacts that can imitate human behaviour well enough to fool someone that the machine is human, as proposed in the famous Turing test... AI is the science of making machines do tasks that humans can do or try to do... you could argue that much of computer science and engineering is included in this definition[17].

Artificial intelligence means the capacity of a computer to perform tasks commonly associated with human beings. This includes the ability to reason, discover meaning, generalize, or learn from past experience and thereby find patterns and relations to respond dynamically to changing situations[18]. With regard to the above given definitions, it can be said that artificial intelligence is the capability of a machine to imitate the intelligent human behaviour. Essentially, artificial intelligence has the following major characteristics:

Deep learning

Deep learning is a machine learning technique that teaches computers to do what comes naturally to humans. An instance is in self-driving feature in cars like Tesla (Autopilot) where deep learning is a key technology behind enabling them to recognize a stop sign or to distinguish a pedestrian from a lamppost.

Facial Recognition

Artificial Intelligence has made it possible to recognize individual faces using biometric mapping. This has led to path breaking advancements in surveillance technologies. It compares the knowledge with a database of known faces to seek out a match. However, this has also faced a lot of criticism for breach of privacy. For example, Clearview AI**,** an American technology company, offers surveillance technology for law agencies to monitor entire cities with a network of CCTV Cameras exactly assigning each and every citizen with their Social Credit Score in real-time.

Automate Simple and Repetitive Tasks

AI has the ability to execute the same kind of work over and over again without breaking a sweat. To understand this feature better, one takes an example of **Siri,** a voice-enabled assistant created by Apple Inc. It can handle so many commands in a single day. The automation would not only lead to increased efficiencies but also result in lower overhead costs and in some cases a safer work environment.

Data Ingestion

Instead of manually feeding this data, **AI-enabled** not just gather this data but also analyzes it with the help of its previous experiences. Data ingestion is the transportation of knowledge from assorted sources to a data-storage medium where they are often accessed, used, and analyzed by a corporation. AI, with the help of neural networks, analyzes a large amount of such data and helps in providing a logical inference out of it.

Chatbots

Chatbots are a software that provides a window for solving customer problems' through either audio or textual input. Chatbots are a software that enables a conversation with the user to solve any issues faced via auditory methods or texting. This software simulates human behaviour while talking to a human over an application.

Quantum Computing

[15] P WANG What do you mean by 'AI'?. *Artificial General Intelligence*, 2008, 362-373.
[16] B Coppin, Artificial Intelligence Illuminated, *Jones & Barlett Learning*, 2004.
[17] J F Allen, *AI Magazine*, winter 1998.
[18] De Souza, *S.P.* (2017, November 16).

AI is helping solve complex quantum physics problems with the accuracy of super computers with the help of quantum neural networks. It is an interdisciplinary field that focuses on building quantum algorithms for improving computational tasks within AI, including sub-fields like machines.

Cloud Computing

With such a huge amount of data being churned out every day, data storage in a physical form would have been a major problem. AI capabilities are working within the business cloud computing environment to make organizations more efficient, strategic, and insight-driven.

3. The Meaning of Crime

It has been observed and rightly too that the transient nature of crime makes it very difficult to derive any precise definition of the term, such that in spite of the attempts made by various jurists, a satisfactory definition of crime has not been achieved[19]. This lack of uniformity in the definition of crime is evident from the following remarks by Rosier and Bittle that crime is not an objective phenomenon but subject to the way in which certain behaviour is understood and responded to by the society:

> To ask 'what is a crime?' is certainly not a novel endeavour. For decades, academics from numerous disciplines (such as law, sociology and criminology) have struggled to understand various aspects of this question. From studies that examine the factors contributing to the enactment of certain prohibitions or the impact of law and its enforcement, to studies that focus on the events that precede the decriminalization of certain behaviour, there are countless examples of scholarly work dedicated to exploring the nature of crime and its control. In the last half of the twentieth century, various scholars noted that crime is not an objective phenomenon and that the way in which certain behaviour is understood and responded to is more a reflection of how society is structured than an indication of any inherent problems with those individuals regarded as criminals[20]

Referring to what is crime, Henry and Lanier said that 'what counts as crime at one place and time, culture or location may not be considered criminal at another time, in another culture, or even across the street'[21]. A Nigerian jurist, Doherty offered a definition of crime as:

> an act or omission which under any written law is deemed to be a crime, thus attracting punishment the hallmark of a crime, therefore is singular criterion of the act or omission complained of or alleged, being designated in a statute, be it an act of the federation of a state, an Edict of a State or a law of a local Government.[22]

A crime is an offence against the State, as defined by each state's laws. No Act is a crime until it is recognized as such by society and written into the states and federal criminal codes. Before someone can be said to have committed a crime, there are two elements that must be present: *Actus Reus*, commonly translated into English as the guilty act which can be committed by way of omission or commission; and *Mens rea* that means a culpable mental state. Culpability means blameworthiness. There are four basic culpable mental states: purposely, knowingly, recklessly, and negligently. Criminal liability is responsibility for injury or damage that is serious enough to be covered by criminal law[23]. Criminal liability simply put is responsibility for a crime as stipulated in the laws of the State.

4. Criminal Liability of Artificial Intelligence in Nigeria

Artificial intelligence is a growing field in Nigeria. Artificial intelligence is not as evolved in Nigeria as it is in other countries. However, it is believed that in the nearest future, given the craze by Nigerians for exotic goods, use of artificial intelligence will become more popular in Nigeria. Nigeria reportedly approved a

[19] KG Nirmala & IS Zegeye, 'The Concept of Crime' in <www.abyssinalaw.com/index.php/study-online> accessed on 15th April 2021.

[20] Law Commission of Canada (ed.), which is Crime? Defining Criminal Conduct in Contemporary Society, UBS Press, Vancouver-Toronto, 2004, p. Viii, in <www.rdo-olr.uottawa.ca/index2.php? Option=com_sobi2...>, Accessed on 16th April 2021.

[21] S Henry & M Lanier, *What is crime? Controversies over the Nature of Crime and what to do about it*, Rowman and Littlefield publishers, New York:2001, p. 7

[22] O Doherty, *Criminal Procedure in Nigeria: Law and Practice*, Blackstone Press Ltd, London: 1990, P. 1.

[23] <http://www.Idoceonline.com/dictionary/criminal-liability> Accessed on 20th April 2021.

Robotics and AI agency in August 2018.[24] Sources at the countries ministry of science and technology stated that the new agency would leverage collaborations with the international research bodies on robotics and AI and enable research and teachings in more complex technology skills to thousands of young people.[25] During the official inauguration of an inter-ministerial committee tasked with the establishment of the agency, Christopher Ogbonnaya Onu, the Minister of Science and Technology, noted that there is no way Nigeria can achieve effective industrialization without investment in robotics and artificial intelligence because it is critical to manufacturing, health care delivery and transportation. A source from the office of the country's president stated that the ultimate goal is to have an agency mandated solely on advancing our knowledge and usability of robots and AI across sectors in Nigeria.[26]

Presently, there is no Nigerian law that directly affects artificial intelligence in Nigeria. The questions some scholars have asked is if the word 'person(s)' as contained in the Nigerian constitution could be interpreted to include artificial intelligent entities, in which case Nigerian criminal laws will now be said to apply to artificial intelligent entities just like they apply to humans. Section 36(12) of the Constitution provides that 'Subject as otherwise provided by this Constitution, a person shall not be convicted of a criminal offence unless that offence is defined and the penalty thereof is prescribed in a written law'. However, it is believe that the Constitution did not intend that artificial intelligent entities would be regarded as person especially since there is no law granting or conferring on these entities the personality status in Nigeria. It appears that the Constitution should be interpreted as it is.

For a better understanding of the term 'person(s)'philosophers have long debated this question and have come to different conclusions. One approach based personhood on the capacity for self-reflection. John Locke, for example, wrote that an 'intelligent Agent', meaning a human person, must be 'capable of a law, and happiness and misery'. Such an agent, moreover, must have a consciousness of his own past: 'This personality extends itself beyond present existence to what is past, only by consciousness, whereby it becomes concerned and accountable; owns and imputes to itself past actions, just upon the same ground and for the same reason as it does the present.[27] Immanuel Kant similarly emphasized the importance of self-consciousness.[28] Since man is conscious of himself, he understands his own freedom and knows that his own will is the cause of each of his acts. For that reason, a person knows that he could have refrained from committing each of his acts and hence regards himself as responsible for his acts. Kant regards the irrepressible voice of conscience as proof of the truth of this assertion. As a consequence, other persons may also hold the actor responsible for his acts.

Obviously, 18th and 19th century philosophers were not thinking about contemporary robots. But it is clear that a modern-day Intelligent Agent does not meet the requirements of personhood in the idealistic sense. While it may be able to learn and to make decisions that are unforeseeable by humans, a robot nonetheless cannot be conscious of its freedom, cannot understand itself as an entity with a past and a future, and certainly cannot grasp the concept of having rights and obligations.[29] Even robots that are able to learn do not have a conscience and do not reflect upon whether their actions are good or bad.[30]Therefore, we do not view robots as 'free' agents, which view implies that we cannot hold them 'personally' responsible for any harm they may cause.

The next challenge relates to the applicability of sections 28 and 30 of the Criminal Code which makes exceptions of persons of unsound mind and children from being capable of being held criminally liable. This exception is based on these persons' lack of mental capacity to understand the nature of their act as one that would result in an offence. It is argued that this can apply to artificial intelligent entities since it is the result of the programming of the inventor or command of the user that determines the action of the artificial intelligence entities, making it impossible for them to be said to have formed the intention to commit a crime.

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[24] N Alajemba & C James, Nigeria to set up New Agency for Robotics and Artificial Intelligence, *TEDGE NEWS* (Aug 6, 2018),<https:itedgenews.ng/2018/08/06/Nigeria-set-new-agency-robotics-artificial-intelligence/,archivedat https:/perma.cc/H2MF-GH33>.

[25] Ibid

[26] Ibid.

[27] J Locke, *An Essay Concerning Human Understanding*, § XVII No. 26 331 (1690).

[28] Immanuel Kant, *Kritik der praktischen Vernunft*, in Immanuel Kant, *Werke in zehn Bänden*, vol. 6, 223 (Wilhelm Weischedel ed., 1975).

[29] See LB Solum, Legal Personhood for Artificial Intelligences, 70 *N.C. L. Rev*. 1231 (1992); A Matthias, *Automaten als Träger von Rechten* (2d ed., 2010).

[30] See Koops *et al*. (note 10, supra), at 522 et seq

5. Who has the Liability?

Crime as we know simply means a specific act in violation of the law either by omission or commission .There are two main elements of crime which must be proved before a person can be convicted a crime, namely, *mens rea* (guilty mind) and *actus reus* (guilty act). *Mens rea* is derived from the maxim '*actus reus non facit reum nisi mens sit rea'* which means 'that an act is not guilty unless the mind is guilty[31]. The *mens rea* means some blame worthy mental condition, whether constituted by knowledge or intention or otherwise.[32] It is almost always necessary to prove *mens rea*. It is to be proven that the person accused really had the intention to cause such harm to the other person's property and also knows about the consequences of his action. Exception to *mens rea* is constituted in the 'strict liability offences' in which punishments are provided even when the act is done without a guilt intention. It is however noted that the idea of strict liability is roundly criticised and strong advocacy made for its rejection.

Motive is the reason for which the crime is committed, but the law is more concerned with the intention of the accused. *Mens rea* can be different in various crimes. For instance, in murder the *mens rea* is the intention to incur a forbidden result that is to kill the other person whereas in assault cases it is to provide serious bodily harm. In civil law, it is not always necessary to prove the mental element. It was held by the Supreme Court that *mens rea* is not an essential ingredient for contravention of the provision of a civil act.[33] In few cases such as tort, the punishment may increase the scope of liability. Unless a statute clearly or by necessary implication rules out *mens rea* as a constituent part of the crime, a person should not be found guilty of a crime unless he has got a guilty mind.[34]

Actus reus is derived from the same maxim and it means the guilty action that follows the guilty mind. *Actus reus* is related to the actual work and action that is required for the completion of the crime. Only thinking about killing someone is not murder until action is taken in order to kill the other person. The action alone also cannot be considered as crime. Both *mens rea* and *actus reus* works hand in hand. A crime can only take place where both these elements are simultaneously present. In order to find whether these elements are present or not, the facts and circumstances of the case are taken into consideration as to what was the intention behind the actions of the accused. Artificial intelligent entities are neither minors or of unsound mind, and to that effect sections 28 and 30 of the Criminal Code can only analogously and not directly apply to them. It would take some form of ardent judicial activism and convincing argumentation and logic to so apply them successfully.

Be that as it may, section 7 of the Criminal Code provides for parties to a crime (*participes criminis*) to include:

a) Every person who actually does the act or makes the omission which constitute the offence;
b) Every person who does or omits to do any act for the purpose of enabling or aiding another person in committing the offence;
c) Every person who aids another person in committing the offence;
d) Any person who counsels or procures any other person to commit the offence.

From the provisions of the Code, it can be construed to imply that the makers or users of the artificial intelligence entity can be held liable for a crime committed by an artificial intelligence entity. The provisions of this section also lean towards the three models of artificial intelligent criminal liability provided by Gabriel Hallevy, namely, the perpetration-via-another liability model; the natural-probable-consequence liability model; and the direct liability model.[35] The provisions entail that the person behind the machine (artificial intelligence entity) can be held responsible for crimes committed by it. Ultimately, it can be confidently said that the base for the growth of artificial intelligence technology has already taken shape and is forging ahead as one grapples daily to understand and acquaint oneself with the new form it takes. Yet, Nigerian laws cannot be said to be certain for applying them the way they are in relation to this sphere of human endeavour.

[31] Wikipedia, *Mens Rea* <https://en.wikipedia.org/wiki/Mens_rea>. Accessed on 30th June 2021.
[32] *State of Gujrat and another v Acharya D. Pandey and others*, 1971 AIR 866.
[33] *Chairman, SEBI v Shiriram Mutual Fund*, 2003 46 SCL 571 SAT.
[34] *Ravula Hariprasada Rao v The State*, 1951 air 204.
[35] Gabriel Hallevy; 'The Criminal Liability of Artificial Intelligence Entities—From Science Fiction to Legal Social Control' *Akron Intellectual Property Journal* 4:171, p. 172.

It leaves room for a lot construction and stretching which may lead to the law reaching its breaking point and being incapable of covering the desired grounds. [36]

6. Conclusion

Artificial intelligence is a product of both science and myth. The idea that a machine could think and perform tasks just as humans do is thousands of years old. The benefits of AI cannot be denied as everything we do in the world today involves AI. Artificial intelligence is used in predicting weather patterns, banking and monitoring trading stocks. Even the behavioural and mental healthcare fields are also benefitting from advancement in AI. Benefits of artificial intelligence range from solving complex problems and smart decision making to managing repetitive tasks. The benefits of AI cannot be over emphasized. Notwithstanding the immense benefits that they can bring, the risks and challenges posed by AI and their use in an ever growing world heightens the need to ensure that the law effectively protect society from these risks and promote the development of safe, societal beneficial artificial intelligence technologies. Some of these risks include privacy violations, job loss, poorly designed technologies that could be misused or hacked, deep fakes, and the most bothersome of all the problems which is the issue of criminal liability for crimes committed by artificial intelligence entities.

Criminal law aims to prevent the occurrence of harm embedded in communicating the wrongfulness and moral blame of the conduct that the crimes prescribe. Artificial intelligence and its development in the next years will undoubtedly pose great challenges for criminal law which will go beyond the question of criminal liability. With new technologies and a far more widespread use of artificial intelligence agents than is currently conceivable, new opportunities for crime will arise. Artificial intelligence is something completely different. It is certainly no fiction anymore but independent and potentially able to become fully autonomous. If it is to be handled with legal tools that were devised for humans, we must establish either that it is sufficiently human-like, which does not yet seem to be the case, or that the tools at hand are also suitable for non-humans, which especially in the case of *mens rea* and blame is at the very least, a matter of dispute as the whole concept reflects our collective experience of what it means to be human.

Furthermore, taking for granted that *mens rea* requirements could aptly be fulfilled by non-human intelligence agents necessarily presupposes the perception of historically and empirically informed concepts such as choice, voluntariness, knowledge and intent as simple technical terms without any grounding in human experience. This would be a real bold and forward looking approach. Equally, it is no longer doubtful that artificial intelligence entities may very well one day become like humans as countless works of science fiction have been trying to warn us. Looking back at the rapid changes that have taken place in computer sciences in recent decades, it is not unlikely that artificial intelligent entities of the future will acquire qualities and capabilities that make them even more humans. Should they gain the capacity for self-reflection and maybe conscience, the issue of their personhood may have to be rethought. Until then, it seems criminal liability of artificial intelligence entities makes sense only if mankind retains control over it. Conferring legal personality, even if fictionally (as on corporations), on artificial intelligence entities is not in our humble opinion the way forward, for such would inaugurate another round of problem of how to execute punishment after a so-called conviction and sentencing. An option would be to overhaul the relevant Nigerian legal framework and clothe it with the teeth and arm that can hold the user or the programmer criminally liable in the event of causing harm.

[36] Oraegbunam & Uguru: Artificial intelligence entities and Criminal Liability: A Nigerian Jurisprudential Diagnosis, *African Journal of Criminal Law and Jurisprudence* 3(2018), 1-14.