

**ARTIFICIAL INTELLIGENCE VIS-À-VIS ITS  
PROSPECTS AND CHALLENGES: LEGAL  
RIGHTS AND LIABILITIES**

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**ABSTRACT**

*The World is evolving. The society is changing. Ideas are set in place. Innovations are rising. Human energy and time are mostly invaluable, and it is sacrosanct to be reserved; as machines, robots are emerging and whereas taking over the territories of human activities. It is said that “machines aids our work to be easier and faster,” in this sense, artificial intelligence is a machine with the compendium of human capacity and beyond, it’s programmed to think like humans and mimic their actions. It can be called an artificial human. Artificial Intelligence as an emerging area in technology, that is also covered by law and this area of law is an emerging area. Therefore, more to a profound exposure is captured in this paper work. This article magnetizes the meaning of Artificial intelligence, the emergence of Artificial Intelligence, the prospect, challenges, rights and liabilities.*

Keywords: Artificial Intelligence, emergence, prospects, challenges, rights, liabilities.

## 1.0 INTRODUCTION

It is very obvious today that the most successful enterprises have embraced Artificial Intelligence (AI) to improve their operations over their competitors. Some advanced countries have adopted the use of AI in their restaurant, mode of transportation etc. AI is a tool to enhance development in a domain. Experts regard AI as a factor of production, which has the potential to introduce new sources of growth and change the way work is done across industries. For instance, China and the United States are primed to benefit the most from the coming AI boom, accounting for nearly 70% of the global impact.<sup>1</sup> However, it could not also escape some notable challenges which this article seeks to address in subsequent paragraphs.

## 2.0 UNDERSTANDING ARTIFICIAL INTELLIGENCE AND ITS EMERGENCE

### 2.1 WHAT IS AI?

AI is “human intelligence or behavior demonstrated by machines”.<sup>2</sup> AI is a method of making a computer or a computer-controlled robot think intelligently like the human mind. AI is accomplished by studying the patterns of the human brain and by analyzing the cognitive process.<sup>3</sup> Although, there is no precise definition of AI,

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<sup>1</sup> Karin Kelley, 'What is Artificial Intelligence: types history and future', available at <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelligence>> accessed 23 September 2022.

<sup>2</sup> Omaplex Law Firm, 'Artificial Intelligence and Human Rights', available at <<https://omaplex.com.ng/lessons/artificial-intelligence-and-human-rights/>> accessed 24 September 2022.

<sup>3</sup> Ibid

several technologies are generally understood to be included vis-à-vis pattern recognition, image recognition, voice recognition, and understanding of natural language.<sup>4</sup> The AI systems work by merging large with intelligent, iterative processing algorithms. This combination allows AI to learn from patterns and features in the analyzed data.<sup>5</sup>

## 2.2 ITS EMERGENCE

The beginning of modern AI can be traced to classical philosophers' attempts to describe human thinking as a symbolic system. However, the field of AI formally came into existence during a conference at Dartmouth College, in Hanover, New Hampshire, where the term "artificial intelligence" was coined<sup>6</sup> by John McCarthy, a professor emeritus of computer science at Stanford.<sup>7</sup> This was a time when the first digital computers were beginning to appear in university laboratories. The participants at this conference were predominantly mathematicians and computer scientists, many of whom were interested in theorem proving and algorithms that could be tested on these machines. There was much optimism at this conference, for they had been given some encouragement from early successes in this field. This led to euphoric predictions about AI that were overhyped. The

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<sup>4</sup> Omaplex Law Firm, *op.cit.*

<sup>5</sup> Karin Kelley, *op.cit.*

<sup>6</sup> Jesse Emspak, 'What Is Artificial Intelligence?', available at <<https://www.livescience.com/55089-artificial-intelligence.html>> accessed 23 September 2022.

<sup>7</sup> Andrew Myers, 'Stanford's John McCarthy, Seminal figure of Artificial Intelligence, Dies at 84', available at <<https://news.stanford.edu/news/2011/october/john-mccarthy-obit-102511.html#:~:text=John%20McCarthy%2C%20a%20professor%20emeritus,the%20early%20morning%20Monday%2C%20Oct>> accessed 23 September 2022.

thinking at the time was that if computers could solve problems that humans find hard, such as mathematical theorem proving, then it should be possible to get computers to solve easy problems for us.<sup>8</sup>

Thus, in 1960, the first robot was introduced to the General Motors assembly line. In 1961, the first chatbots were invented.<sup>9</sup> This is followed by IBM Deep Blue which beat the world champion Gary Kasparow, in the game of chess in 1997. In 2005, when the DARPA Grand Challenge was held, a robotic car named Stanley was built by the Stanford Racing Team won the DARPA Grand Challenge. There was another big accomplishment of AI. In 2011, IBM's question answering system, WATSON, defeated the two greatest Jeopardy champions, Brad Rutter and Ken Jennings.

This was how AI evolved. It started off hypothetical situation. Right now, it is an important technology in today's world. Currently, everything run through AI, Deep Learning and Machine Learning. Since the emergence of AI in 1950, we have actually seen exponential growth in its potential. AI covers domains such as Machine Learning, Deep Learning, Neural networks, Natural Language processing expert systems and so on. It had also made its way into computer vision and image processing. Now the question here is, for over half a century why it has suddenly gained so much importance, why are we interested in knowing about AI now? The main reason for the demand for AI is that we have more computer power now and AI requires a lot of computing power. AI is taking over since its emergence. And

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<sup>8</sup> Ibid

<sup>9</sup> The chatbots include Siri, Alexa and Eliza.

perhaps, in the next five decades all the activities of human beings will be actioned by AI.

### **3.0 PROSPECTS OF ARTIFICIAL INTELLIGENCE**

AI is shaping the future of humanity across nearly every industry. It is already the main driver of emerging technologies like big data, robotics and it will continue to act as a technological innovator for the foreseeable future. AI is really shaping the World and in the nearest future, the operation of human activities will be taken over by AI. Here are just a few prospects of AIs:

- a. *Self driving cars:* Although, at present, hundred percent autonomous cars are yet to be actualized. Notwithstanding, to some certain degree, there are advanced cars which require less human intervention at motion.
- b. *Manufacturing:* AI powered robots are now working alongside human workforce to perform a limited range of tasks like assembling and stacking, and predictive analysis sensors keep equipment running smoothly.
- c. *Media:* Journalism is harnessing AI, too, and will continue to benefit from it. Bloomberg uses Cyborg technology to help make quick sense of complex financial reports. The Associated Press employs the natural language abilities of Automated Insights to produce 3,700 earning reports stories per year — nearly four times more than in the recent past.
- d. *Customer Service:* Last but hardly least, Google is working on an AI assistant that can place human-like calls to make

appointments at, say, your neighborhood hair salon. In addition, the system understands context and nuance.<sup>10</sup>

#### 4.0 THE CHALLENGES OF ARTIFICIAL INTELLIGENCE

While the emergence of AI has brought some innovations and positive technological upheavals, inter alia, at the same time, it also has some challenges which pose some threats. Below are highlights of some of these challenges:

- a. The AI's ability to accomplish tasks is restricted. It has limitations because it cannot perform all tasks, just like any other technology.<sup>11</sup>
- b. The fact that AI is a costly technology and not every business owner can afford to invest in it is a challenge too.<sup>12</sup>
- c. Equally, AI has serious ethical implication which hinges on privacy and bias.<sup>13</sup>
- d. There is also a critical challenge of security threat as AI system may be hacked by malicious users.<sup>14</sup>
- e. Work overtake by AI is also a challenge. AI systems are replacing humans in various profession such as the banking

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<sup>10</sup> Mike Thomas, 'The Future of AI: How Artificial Intelligence Will Change the World', available at <<https://builtin.com/artificial-intelligence/artificial-intelligence-future>> accessed 23 September 2022.

<sup>11</sup> Dinesh G. Harkut, Kashmira Kasat and Vaishnavi D. Harkut, 'Artificial Intelligence - Challenges and Applications', available at <<https://www.intechopen.com/chapters/66147>> accessed 24 September 2022.

<sup>12</sup> Ibid

<sup>13</sup> Kate Jones, Marjorie Buchser and Jon Wallace, 'Challenges of AI', available at <<https://www.chathamhouse.org/2022/03/challenges-ai>> accessed 24 September 2022.

<sup>14</sup> Ali Mohammad Saghiri and others, 'Review A Survey of Artificial Intelligence Challenges: Analyzing the Definitions, Relationships, and Evolutions', available at <<https://doi.org/10.3390/app12084054>> accessed 24 September 2022.

and financial service sectors. This, in effect, has a potential to create unemployment.<sup>15</sup>

- f. There is also a challenge of liability. It thus pose a challenge of, who is responsible in case of an accident caused by an AI-powered machine? This shall be further discussed in the subsequent paragraphs.<sup>16</sup>

## **5.0 ARTIFICIAL INTELLIGENCE: THE ISSUE OF LEGAL RIGHTS AND LIABILITIES**

To start with, there have been a number of quiet discussions about whether AI should be granted legal rights and held liable for any flaw. One view is that AI should not be given legal rights and liabilities. **According to this point of view, granting AI legal rights and duties would be harmful and counterproductive. A unified or standardised policy and law on how to handle autonomous AI is also realistic, according to this viewpoint, without necessarily imposing strict obligations on the AI's manufacturer, user, or the AI system itself.**<sup>17</sup> This view equally posits that if AI is to have legal personality, problems of unexplainability and unforeseeability would remain; it would not be straightforward to establish that AI should have been able to avoid the mistakes it made, nor to understand its "thought

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<sup>15</sup> Michael E. Camilleri, 'Malta: Artificial Intelligence: Some Of The Challenges Ahead', available at <<https://www.mondaq.com/technology/784942/artificial-intelligence-some-of-the-challenges-ahead>> accessed 24 September 2022.

<sup>16</sup> Ibid

<sup>17</sup> Omaplex Law Firm, *op.cit.*

process" and the specific steps that led it to take a particular decision.<sup>18</sup>

Conversely, there is also a contending view advocating for the attribution of legal rights and liabilities to AI. Inter alia, this view advances that, "like every other thing created by humans, AI comes with its own imperfections—from a design, programming, or manufacturing defect, or improper use, or inadequate warning label, all of which could cause damage to third parties, raising serious questions about who should bear liabilities arising from such damage".<sup>19</sup> In addendum, it is argued that the implementation and usage of AI technology can result in harm to people and property, such as driverless automobiles running over pedestrians, drones colliding and causing damage, or AI software programmes incorrectly diagnosing medical conditions.<sup>20</sup> There have also been numerous discussions about who should be held accountable for any harm caused by AI. Thus, to this end, this segment seeks to address the issue of legal rights and liabilities of AI. However, before delving into the discourse proper, below is a summary of what legal rights and liabilities mean.

Legal rights are constitutional rights other than natural rights that accrue to natural and non-natural persons. However, before legal

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<sup>18</sup> Yaniv Benhamou and Justine Ferland, 'Artificial Intelligence & Damages: Assessing Liability and Calculating the Damages' available at <<https://www.researchgate.net/publication/339140477>> accessed 24 September 2022.

<sup>19</sup> Templars Law Firm, 'Liability for Damage Caused by Artificial Intelligence', available at <<https://www.templars-law.com/liability-for-damage-caused-by-artificial-intelligence/>> accessed 24 September 2022.

<sup>20</sup> Ibid

rights can be granted to an entity, such an entity must be legally recognised as an artificial person. Attempting to secure legal personhood is often seen as a potential pathway to obtain certain rights and protections for AI.<sup>21</sup> On the other hand, liability is the state of being legally responsible for something. Borrowing from the words of Barfield, liability is about "establishing who is to blame with system failures—or, more accurately, who society can extract legal redress from—when something goes wrong".<sup>22</sup>

On the issue of attributing legal rights to an AI system, the implication would be that a legally clothed AI system would be held liable personally for its action. Consequently, there are presently various divided schools of thought on the issue of liability. And the division of opinion stems from the inability to reach an international agreement on the nature of AI. There is no unified conclusion as to whether AI is an entity or product that has no legal personality and cannot be personally responsible for its actions nor as a person or e-person that has legal personality and can be personally liable for its actions.<sup>23</sup> This piece, however, will assume that AI is a legally clothed artificial person and, as such, should be held accountable for its actions for the fuller reasons below.

It is a fundamental principle of law that *ubi jus ibi remedium* (meaning, where there is a wrong, there is a remedy). Furthermore,

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<sup>21</sup> Roman Yampolskiy, 'AI Personhood: Rights and Laws', available at <<https://www.researchgate.net/publication/348123023>> accessed 24 September 2022.

<sup>22</sup> Barfield, Woodrow, Liability for Autonomous and Artificially Intelligent Robots. *Paladyn* 9 (1) 2018, s. 193–203.

<sup>23</sup> Templars Law Firm, *op.cit.*

the courts have repeatedly stated that where no remedy is provided by common law or statute, the courts are urged to create one, as the court cannot be deterred by the novelty of an action.<sup>24</sup> To this end, with the absence of specific AI legislation, the current legal rights and liabilities associated with AI are still the same as those attributed to other products or manufactured goods. The legal rights and liabilities are the ones assigned to the creator, seller, or user of the product.<sup>25</sup> AI liability is thus situated within the concept of product liability and vicarious liability.

### *a. Product Liability*

Product liability has been defined as “a manufacturer’s or seller’s tort liability for any damages or injuries suffered by a buyer, user, or bystander as a result of a defective product.”<sup>26</sup> Identifying whether the claimant meets the requirements to be considered a consumer of the product is the first bar to pass in product liability claims.<sup>27</sup> And with reference to various courts decisions, a consumer is being defined to include a user of the product or purchaser of the service.<sup>28</sup> However, the limitation with product liability claim of this nature is that it only provides compensation in damages against the manufacturer while availing the user/owner of the AI.<sup>29</sup>

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<sup>24</sup> Ibid

<sup>25</sup> Nur Adlin Hanisah Shahul Ikram and Mohd Yazid Bin Zul Kepli, 'Establishing Legal Rights and Liabilities for Artificial Intelligence', <<https://www.researchgate.net/publication/328284968>> accessed 24 September 2022.

<sup>26</sup> Garner Bryan A, Black’s Law Dictionary (8th edn. West Group) 1225.

<sup>27</sup> Templars Law Firm, *op.cit.*

<sup>28</sup> See, the case of Mekwunye v. Emirates Airlines (2019) 9 NWLR (Pt. 1677) 191

<sup>29</sup> Templars Law Firm, *op.cit.*

### *b. Vicarious Liability*

Vicarious liability means that a supervisory party bears for the actionable conduct of a subordinate or associate because of the relationship between the two parties.<sup>30</sup> This concept thus implies that if AI system should be treated as agents of their owners or manufacturers, depending on the circumstance. This being that, AI is designed to accomplish goals and tasks specified by a human being. A good example is where a robot is designed to perform roles in a company that would ordinarily be performed by a human being and damage occurs thereafter. In this scenario, vicariously, it is the company, by the virtue of it being the employer of the robot that would be held liable.

Notwithstanding, there also arises the issue of who specifically should be held liable. This predicates the fact that there are many parties involved in an AI system. They include the manufacturer, the user, and the AI system itself. By implication, anyone who has suffered loss or injury as a result of AI has several options for asserting claims for compensation. **Such a person could claim compensation against the manufacturer/developer, user/owner, or the AI itself under general torts law. However, it must be emphatically reiterated that** establishing the person on whose shoulders the liability lies is so difficult to establish when something goes wrong because there are many factors to be taken into consideration. This is due, among other things, to the lack of specific legislation governing AI's legal personality and liabilities in both the international and national spheres. Although some countries, like the European countries,

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<sup>30</sup> Tecno Mech. (Nig.) Ltd. v. Ogunbayo (2000) 1 NWLR (Pt. 639) 150.

currently have an existing AI regulatory framework in the form of an enactment which specifically provides for the legal personality of an AI system and its liabilities.

## **6.0 CONCLUSIONS & RECOMMENDATIONS**

From the foregoing, the emergence of AI, which has pervaded everyday life in the modern world, is nothing but a significant improvement and technological advancement. While this work has addressed the emergence of AI and its prospects and challenges, it equally extends its scope to the issue of legal rights and liabilities of AI systems. Sequel to the findings of this work, the author suggests that **the world community should come up with a unified understanding and agreement in relation to the definition, the legal personality, and the legal rights and liabilities of the AI system.** We equally suggest that various states should not hesitate to bring into force, necessary legal framework for the regulation of AI with the view to addressing the lingering question about AI liabilities. Ditto to the other challenges earlier identified, governments must think in advance when considering the challenges that the emergence of AI systems may pose to the populace.