

AN EVALUATION OF THE IMPACTS OF ARTIFICIAL INTELLIGENCE ETHICS ON DIGITAL ECONOMY

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Abstract

Artificial intelligence is a human creation. The potential danger in artificial intelligence is that it has led to the displacement of human workforce. Artificial intelligence is aimed at human betterment and innovative transformation. The philosophy of artificial intelligence has led to misinformation, manipulation, exploitation and hegemonic tendency; and this has created a divide between developed and developing countries of the world. The objective of this paper is to critically examine the impacts of artificial intelligence on society, health care system, democracy, trust, human rights and privacy, environment, education, legal system and the financial sector. The impact of artificial intelligence on economic development or digital consciousness is immense and it remains an existential imperative. Artificial intelligence centres on man himself and intelligent machines like computers, robots, and other biometric machines are programmed to communicate and act like human beings. One of the potential benefits of artificial intelligence to our emancipated global society is the immense benefits of increased efficiency, speed and accuracy in the labour force. Artificial intelligence algorithms can perform tasks with higher speed, accuracy and consistency compared to the human workforce. This paper adopts the analytic framework in explaining the conceptual and contextual clarification of artificial intelligence to our humanity. From the findings of this study, this paper concludes that the influence of artificial intelligence on our humanity has existential effect and ethical consequences ranging from the physical to the psychological influences which have both positive and negative consequences on economy.

Keywords: Artificial Intelligence, Ethics, Impact, Machines, Robots, Society

Introduction

Artificial intelligence marks the triumph of the 21st century and it has undoubtedly changed the course of human history. It showcases the fact that that human social is defined by an evolutionary process from primitive to more complex societies. Artificial intelligence is a human creation and some scholars have argued that artificial intelligence has no discretion unlike human beings. However, intelligent machines are not moral agents due to their inability to possess discretion by distinguishing what is good from what is bad. Intelligent machines cannot distinguish rightness and wrongness of certain actions. The potential danger in artificial intelligence is that it has led to the displacement of human workforce. Artificial intelligence is aimed at human betterment and innovative transformation. The philosophy of artificial intelligence has led to misinformation, manipulation, bias, exploitation and hegemonic tendency; and this has created a divide between developed and developing countries of the world. The paper is aimed at examining the impacts of artificial intelligence on our global society, health care system, democracy, trust, human rights and privacy, environment, education, legal system and the financial sector. The impact of artificial intelligence on the world's growing economy and its epistemological significance on digital consciousness is immense and it remains an existential imperative. Artificial intelligence centres on man himself and intelligent machines like computers, robots, and other biometric machines are programmed to communicate and act like human beings. One of the potential benefits of artificial intelligence to our emancipated global society is the immense benefits of increased efficiency and accuracy.

In addition, artificial intelligence algorithms can perform tasks with higher productivity output, accuracy and consistency compared to the human workforce. This paper examines the conceptual and contextual framework of artificial intelligence to our digital global economy. From the findings of this study, this paper posits that the influence of artificial intelligence on our humanity has existential effect and ethical consequences ranging from the physical to the psychological influences which have both positive and negative consequences on economy. Worthy of note is that despite the negative consequences of artificial intelligence on our global society it remains an existential imperative and a necessary evil for our humanity.

Impact of Artificial Intelligence Ethics on Digital Economy

The impact of artificial intelligence on economic development or digital economy is immense and it remains an existential imperative. It contributes to increased production outputs of countries of the world. Artificial intelligence can improve decision making capabilities over time (Davenport, 2018, 417). Artificial intelligence could contribute to artificial intelligence games like chess, whot and sudoku. Burr and Goldinger assert that:

For the fact is that we have learned to accept the principle that any rule-governed activity that can be precisely formalized can be simulated with a computer program. And even though in chess, thanks to the vast number of possible combinations, one cannot compute an infallible minimax strategy as one can for simpler board games, the use of appropriate heuristics has made possible increasingly powerful chess-playing programs (Burr & Goldinger, 2008, 418-419).

Worthy of note is that, artificial intelligence serves as a new source of economic growth and change. For Nikita Duggal, he expresses that experts regard artificial intelligence as a factor of production, which has the potential to introduce new sources of growth and change the way work is done across industries. Artificial intelligence could potentially contribute \$15.7 trillion to

the global economy by 2035. China and the United States are primed to benefit the most from the coming artificial intelligence boom, accounting for nearly 70% of the global impact (Duggal, 2023). However, artificial intelligence centres on man himself. Intelligent machines are programmed to communicate and act like human beings. As Asodun Fatai rightly observed, intelligent machine programme is capable of communicating with humans in a manner not distinguishable from humans themselves. Strengthening human relations all over the world despite language differences is enhanced through machine prowess in natural language processing.

Nevertheless, such machines make communication possible between humans who have different linguistic backgrounds (Fatai, 2021,13). Humans have to master the complexity of the spoken language to use it effectively. Programming computers to achieve this feat is a great challenge (Fatai, 2021, 4). Worthy of note is that artificial intelligence strengthens human relationships. Artificial intelligence has help in natural language processing. Artificial intelligence understands and interprets human language, facilitating communication and information retrieval. However, artificial intelligence (AI) has emerged as a transformative technology. Technology plays a critical role in the quest for national development or human improvement.

Worthy of note is that the use of technology has elicited many philosophical debates, with divergences over whether technology improves the human conditions or worsens it; and technology is a creation with the aim of attaining some values (Osemwegie & Jeko, 2021, 245). However, the instrumentality of technology to humanity cannot be overemphasized (Osemwegie & Jeko, 2021, 240). Put differently, technology is the knowledge of techniques, processes etc(Osemwegie & Jeko, 2021, 242). Artificial intelligence is all about the development and deployment of intelligent machines; and the machine is one of the greatest conquest of the scientific knowledge of nature. Technology represents the practical, applied bent of culture; it is the application of theoretical knowledge to the world of nature; to the environment (Mondin, 1985, 158-159). For Chenu, humanity passes from the era of the tool into the era of the machines (Chenu, 1970, 30). However, the era of the machines showcases our complex modern societies.

Moreover, artificial intelligence is an information processing psychology; it is a modern information processing technology; it remains the archetypal blueprints for all other paradigms of symbolic description of cognition in their complex interconnecitonist network. Information processing technology is either Cartesian dualism, Kantian transcendentalist idealism and cognitivist paradigm. In other words, artificial intelligence presupposes Cartesian, Kantian and Cognitivist paradigms (Dukor, 2009, 103-104). Artificial intelligence reveals the evolution of consciousness; and consciousness remains a superior and independent domain of cognition that informs and creates the mechanical universe and its machines including the information processing technology (Dukor, 2009, 104). Revolutionizing industries and reshaping the way we live, work and interact. With its remarkable capabilities, artificial intelligence holds immense potential benefits to enhance efficiency, accuracy, improve decision making processes and unlock new opportunities across various domains.

Nonetheless, artificial intelligence enhances efficiency and automation. Artificial intelligence powered automation has revolutionized industries by streamlining processes, reducing errors, and increasing efficiency and accuracy. For instance, in manufacturing industries, robots equipped with artificial intelligence algorithms can perform repetitive tasks with precision and speed, leading to increased productivity output. In the healthcare sector,

artificial intelligence systems can analyse vast amounts of medical data, aiding in diagnosis and treatment decisions, ultimately saving lives and improving patient outcomes.

Nevertheless, artificial intelligence could lead to intelligent decision making processes. Artificial intelligence algorithms can process and analyse vast volumes of data, extracting valuable insights and patterns that human analysts may overlook. The artificial intelligence (AI) and machine learning (ML) capabilities enable business operators to make informed decisions, optimized operations and enhance strategic planning. For example, financial institutions leverage artificial intelligence-powered algorithms to detect fraudulent activities in real-time situations, protecting customers and mitigating management risks. However, artificial intelligence-driven personalization has revolutionized business experiences. Online platforms utilize artificial intelligence algorithms to understand user's preferences, tailoring recommendations and content suggestions. Visual assistants, powered by artificial intelligence, can comprehend natural language processes and provide personalized assistance, whether it's scheduling appointments, answering queries or controlling smart home devices.

Impact of Artificial Intelligence Ethics on Healthcare Systems

Artificial intelligence has resulted in the advancement in healthcare facilities around the world. Artificial intelligence has revolutionized the healthcare systems by aiding in disease or urine diagnosis, drug discovery and treatment planning. Machine learning algorithms can analyse medical images and identify potential abnormalities, assisting radiologists in making accurate disease diagnoses. Artificial intelligence-driven drug discovery platforms can accelerate the identification of potential therapeutic compounds, expediting the development of new treatments. For Thomas Davenport, there could also be major progress in diagnosing diseases with medical imaging computer-aided diagnosis (CAD) using MRI, CAT, or ultrasound devices is already as good as many human radiologists, according to multiple studies (Davenport, 2018, 16). However, healthcare in any democratic society is one of the indices of good governance and sustainable development.

Impact of Artificial Intelligence Ethics on Global Society.

Artificial intelligence has drastically affected our modern societies in a variety of ways such as the transportation industry, sports, financial industry, educational sector, and the healthcare sector. The transportation industry remains one of the most viable or pivotal sectors of any global society. Autonomous vehicles have been revolutionized due to the positive impact of artificial intelligence (AI) and machine learning (ML) on man and society. Worthy of note is that artificial intelligence has propelled the development of autonomous vehicles, revolutionizing transportation industries. Self-driving otherwise known as autonomous cars utilize artificial intelligence algorithms and sensor technology to navigate roads, interpret traffic patterns, and make real-time decisions, leading to enhanced road safety and more efficient transportation systems. According to David Vandegrift, in his work, "The Future of Business: An Introduction to Artificial Intelligence" asserts that we are in the midst of an artificial intelligence revolution. Artificial intelligence is now driving our cars, running our factories and winning our game shows.

Furthermore, there are many opportunities to take advantage of this nascent technology (Vandegrift, 2019, 89). However, one pivotal potential benefits of artificial intelligence to global society is its increased efficiency and accuracy. Artificial intelligence algorithms can perform tasks with higher speed, accuracy and consistency compared to the human workforce. Artificial

intelligence can advance data analyses and data collections. Artificial intelligence algorithms process vast amounts of data quickly and accurately, speedily, and extracting valuable insights. Accordingly, Thomas Davenport asserts that in digital economy or marketing, machine learning is already used to target particular publishers and individuals customers with digital advertisements; and thousands of models a week are created for this purpose (Davenport, 2018, 27). Artificial intelligence has a great advantage in predictive analyses. Artificial intelligence models predict future outcomes based on historical data analyses, and aiding in proactive planning strategies. Artificial intelligence algorithms can rapidly analyse scenarios and provide fundamental solutions in real-time decisions. It could help in efficient resource allocation and prudential management supervision. Artificial intelligence optimizes resource allocation, minimizing wastages and maximizing efficiency or increasing accuracy. According to James Seligman, the exponential growth of data has inspired companies to gather and process information using a systematic approach. Marketers now require a sound working knowledge of new technologies that can allow them to analyze large volumes of data (Seligman, 2019, 12). Artificial intelligence has aided a myriads of scientific discoveries. Artificial intelligence aids researchers in analyzing complex data sets, and accelerating scientific breakthroughs. Artificial intelligence (AI) has far-reaching implications for an emancipated global society.

Nevertheless, it encompasses social, political, cultural, moral, ethical, existential, economic and religious dimensions and humanist contexts. On the social context, artificial intelligence impacts the human workforce, prompting job transformations and economic paradigm shift. It also impacts on the social media platforms, information dissemination and societal discourse. On the political context, artificial intelligence raises a lot of concerns regarding privacy, bias, fairness, transparency, and accountability, necessitating regulatory frameworks to ensure responsible usage of information-based technology and information dissemination to the public domain. Artificial intelligence and its impacts on our emancipated global society have raised some ethical questions such as will machines take over the world one day? Will they be our friends or foes? Will they make our lives easier or will they wipe out the human workforce? (Cunningham, 2016, 11). However, artificial intelligence has led to fraud detection in human society.

Moreover, there are no perfect human societies. Artificial intelligence can help to identify patterns and anomalies, aiding in the detection and prevention of fraudulent activities in human societies. In our present day society, people's rights have been outrightly violated due to the prevalence of fraudulent activities that have become so peculiar in our contemporary times due to the emergence of artificial intelligence. Artificial intelligence has been used by internet fraudsters to hack people's bank accounts and this trend has become so worrisome leading to financial insecurity and apprehensions.

In addition, moral and ethical reasoning become paramount as artificial intelligence technologies are evolving in our contemporary times. Ethical questions arise regarding the fundamental issues of privacy protection, algorithmic biases, accountability, transparency, artificial intelligence decision makings and the responsible development and deployment of artificial intelligence systems. Ethical considerations serve as guidelines in the discussions on the impact of artificial intelligence on human rights, societal values, and the greater good of the people in society. In the light of the ethical considerations of artificial intelligence, Ben Buchanan and Andrew Imbrie, assert that:

If we manage this technology well, it will become a tremendous force for global good, lighting the way to many transformative inventions. If we deploy it too quickly and without adequate foresight AI will burn in ways we cannot control. If we harness it to destroy, it will enable more powerful weapons for the strongest governments on earth as they engage one another in a combustible geopolitical completion (Bucahan & Imbrie, 2022, 2-3).

In the light of the above theoretical position given by Bucahan and Imbrie, the existential implications of artificial intelligence provoke philosophic contemplation about human identity, human consciousness and the potential consequences of creating intelligent machines for nuclear weapon. The production of nuclear weapon has assumed a very worrisome dimension because of its very negative consequences on our humanity or an emancipated global society. The fundamental questions of human uniqueness, money agency and the boundaries of technological advancements challenged traditional philosophical and ethical frameworks. However, artificial intelligence's impact extends to religious and theological realms or theological assumptions (Burr & Goldinger, 2008). It raises profound ethical questions about the nature of intelligence, consciousness and the role of humans as moral agents in a world that is increasingly intertwined with intelligent machines and modern complexities. For Asodun Fatai, humanity can now boast of intelligent machines that can compete with them in intelligent-oriented games, effortlessly diagnose countless human ailments and offer expert advice engage in auto-driving without a human guide, and carry out many other complex intelligent activities for human beings (Fatai, 2021, 16). However, religious perspectives consider moral agency, the existence of the soul, and the implications of creating artificial beings that possess artificial intelligence. As Derek Patridge rightly observed:

Computers have moved us into domains of unbelievable complexity and enable us to manage them fairly successfully most of the time. In fact computers don't just enable us to deal with situations of far greater complexity than we could possibly manage without them positively lure us into these domains of excessive complexity. The modern computer is an exceedingly seductive device; it tempts us with the promise of its great power, but it also entices the unwary to overstep the bounds of manageable complexity (Patridge, 1998, 1).

Nonetheless, Derek Patridge explains how the contemporary influence of artificial intelligence on global society is multidimensional, requiring careful ethical considerations and dialogical engagement from various stakeholders. It calls for responsible human conducts, decision making, ethical practices and guidelines, robust discussions, and collaboration to ensure that artificial intelligence technologies serve the betterment of humanity while upholding societal values, fostering inclusivity, and navigating the manageable complexities of our rapidly evolving technological landscape. It is germane to note that machines are not spiritual beings; they have no soul and thus must be incapable of thought (Burr & Goldinger, 2008, 405). Worthy of note is that artificial intelligence is all about the rationalization of society. On the one hand, rationalization is a process whereby thought and action motivated by emotion, superstition,

respect for mysterious forces and tradition are replaced by thought and action grounded in the logical assessment of the most efficient ways to achieve a valued goal or end; otherwise known as value-rational-action (Ferrante, 2003, 543). On the other hand, society is a large complex of human relationships; and a system of social interactions (Ferrante, 2003, 545). Put differently, society is made up of a group of people who relate to one another for specific purposes.

In addition, societies exist at all levels (Hoffman & Graham, 2009, 501). However, one of the impacts of artificial intelligence (AI) on society is in the area of the labour market. According to Eleanor Bird et al, people have been concerned about the displacement of workers by technology for centuries. Automation and then mechanization, computing and more recently AI and robotics have been predicted to destroy jobs and create irreversible damage to the labour market (Bird et al, 2020, 6-7). Be that as it may, it is possible that AI and robotic technology could exacerbate existing social and economic division, via putting current jobs classes at risk, eliminating jobs, causing mass unemployment in automatable job sectors (Bird et al, 2020, 10). The biggest ethical issues surrounding AI is the issues of inequalities in our global society. One of the ethical issues surrounding AI ethics is that it ensures that AI's benefits are distributed fairly and equally. AI's ethics could lead to the concentration of power among elites (Bird et al, 2020, 11). However, the elites in society have a way of exploiting the masses; and the elites are referred to as the ruling class from the Marxian perspective.

Impact of Artificial Intelligence Ethics on the Financial Sector

Artificial intelligence has led to improved customer services in the financial sector. Artificial intelligence chatbots and visual assistants provide prompt and personalized customer supports. The rapid progress in artificial intelligence (AI) and machine learning (ML) development and deployment could deepen the digital divide between advanced and developing economies. The key growth areas include customer relationships and risks management. Banks are exploring ways to leverage their experience of using AI/ML to handle the high volume of loans applications during the Covid 19 pandemics to improve their underwriting process and fraud detection (IMF, 2020, 5-6). However, the emergence of AI/ML growth of customer relationship within the financial sector industry has resulted in what Emmanuel Mogaji and Nguyen Phong Nguyen called customer engagement in banking industry (Mogaji & Nguyen, 2021, 32-33). AI/ML development and deployment and the resulting benefits, have been concentrated largely in advanced economies (IMF, 2020, 6-7). Artificial intelligence is already widespread in finance, space exploration, advanced manufacturing, transportation, energy development and healthcare system.

Nonetheless, as computers become more sophisticated, creative, and versatile, more jobs, will be affected by technology and more positions made obsolete. Artificial intelligence has impacted on economic growth, higher productivity level, and conveniences in the human workforce. It is possible that artificial intelligence's ethics has elicited multifaceted dimensions. Artificial intelligence (AI) and machine learning (ML) systems have made major impacts on the financial sector over the past decades. Artificial intelligence and machine learning systems have perform optimally and maximally well tasks that are quite defined and normally require human intelligence. Eleanor Bird et al, assert that:

The financial sector and financial technology (fintech) companies have been increasing the use of artificial intelligence and machine learning in the past decades. Artificial intelligence and machine learning capabilities have tremendously and immensely transformed or reshaped the financial sector with

client experiences such as chatbots; the use of robotics as sexbots and robo-advisors; automated mortgage underwriting; and image recognition; visual assistants; automated teller machines (ATMs). The rapid development, deployment and resulting benefits of artificial intelligence and machine learning systems have been concentrated largely in advanced economies of the world. Artificial intelligence and machine learning systems, development, deployment and advancement in the financial sector has brought new unique risks management, challenges and opportunities that need to be addressed to guarantee financial stability. Artificial intelligence and machine learning systems have widened digital consciousness and it requires developing a digital friendly policy framework anchored around four broad pillars; including investing in infrastructures; investing in policies for a supportive business environment; investing in skills; and investing in risk management framework (IMF, 2020, 6-7)

Nonetheless, financial stability issues could also arise with respect to the robustness and safety of the artificial intelligence and machine learning algorithms in the face of structural shifts and increased interconnectedness through widespread reliance on few artificial intelligence and machine learning capabilities have led to forecasting; natural language processing; image recognition; and fraud detection (IMF, 2020, 7-8). Artificial intelligence system has led to the violation of fundamental human rights.

Impact of AI Ethics on Privacy, Human Rights and Dignity

Artificial intelligence ethics will have profound impacts on privacy in the next decades as far as our contemporary times are concerned. One way in which artificial intelligence (AI) ethics is already affecting privacy is via intelligent personal assistants (IPA), such as Amazon's Echo, Google's Home and Apple's Siri. Machine learning allows us to extract information from data and discover new patterns, and is able to turn seemingly innocuous data into sensitive and personal data (Bird et al, 2020, 12-13). However, the misuse of artificial intelligence (AI) could inadvertently violate people's rights and privacy. On the issue of human rights, artificial intelligence (AI) has important repercussions for democracy, and people's right to a private life and dignity. Freedom of speech and expression is a fundamental right in democratic societies. Unfortunately, artificial intelligence (AI) is human creation, which means it can be susceptible to prejudice. Artificial intelligence (AI) system has revealed certain ethical problem; and this problem is exacerbated by the fact that artificial intelligence (AI) applications are usually "black boxes" where it is impossible for the consumer to judge whether the data used to train them are fair or representative. Consequently, there has been much recent research on making machine learning fair, accountable, and transparent, and more public activities and demonstrations of this type would be beneficial (Bird et al, 2020, 15-16). Worthy of note is that artificial intelligence centres on human betterment.

Impacts of Artificial Intelligence Ethics on Trust

The artificial intelligence (AI) impact on trust has revealed that there are surveys that suggest some ways to go before people are comfortable with the widespread use of robots and advanced technology in society. In fact, the issue of trust is so pivotal or paramount because digital technologies are so pervasive that trusting them is essential for our modern societies to work properly (Bird et al, 2020, 28-29). In order to trust, AI must be fair and impartial. It is vital

that decisions made by AI are fair, and do not deepen already entrenched social inequalities. On the issue of trust, AI brings about fairness, transparency, accountability and control. AI is set to change our daily lives in domains such as transportation, the service industry; healthcare; education; public safety and security; and entertainment. AI systems must be reinvigorated in a manner that will sustain or build trust and understanding and respect for human rights and dignity. The overwhelming consensus among the research community is that trust in AI can only be attained or sustained by fairness, transparency, accountability and ethical guidelines or regulations (Bird et al, 2020, 29-30). AI ethics is deeply rooted in the general principles and ethical guidelines regarding the notions of human rights, human wellbeing, value-based designs, development, deployment, implementation, autonomous and intelligent systems, data agency, transparency, effectiveness, accountability, awareness of misuse, and technological competence. According to the European Commission (2020), cited by Eleanor Bird et al, artificial intelligence (AI) must not impinge on basic and fundamental human rights, human dignity, global security, privacy, freedom of expression, and information, protection of personal data, equality, solidarity, and justice (Bird et al, 2020, 63-64). Artificial intelligence has impacted so much on our global society and it has a myriad of legal consequences.

Impact of Artificial Intelligence Ethics on Legal System

Artificial intelligence is surrounded by certain legal implications. Laws are ordinance of reason and it helps in regulating human behaviours. Laws are aimed at ensuring normative outcomes and legitimate expectations. Accordingly, Eleanor Bird et al, employing artificial intelligence (AI) in warfare and weaponization raises several legal consequences and ethical issues or moral questions. One concern is that automated weapon systems that exclude human judgement could violate International Humanitarian Laws, and threaten our fundamental human rights and the normative principles of human dignity. Artificial intelligence (AI) could also lower the threshold of going to war, affecting global stability. Robots also have no concept of what it means to kill the 'wrong person' (Bird et al, 2020, 64-65). A small new generation of ethical standards are emerging as the ethical, legal and societal impacts of artificial intelligence and robotics are further understood (Bird et al, 2020, 66). As the technology behind AI continues to progress beyond expectations, policy frameworks or initiatives are springing up across the globe to keep the pace with these current developments AI technologies (Bird et al, 2020, 71). Artificial intelligence (AI) technologies reflect on the innovative transformation of our digital consciousness in growing global economy. Eleanor Bird et al, further heightened their theoretical position by asserting that:

The creation of AI machines and their use in society could have a huge impact on criminal and civil law. The entire history of human laws has been built around the assumption that people, and not robots make decisions. A crime consists of two elements: a voluntary criminal act or omission (*actus reus*) and an intention to commit a crime (*mens rea*). If robots were shown to have sufficient awareness, then they could be liable as direct perpetrators of criminal offenses, or responsible for crimes of negligence (Bird et al, 2020, 22-23).

Impact of AI Ethics on Democracy

Democracy is all about the political; and the political is an aspect of the social (Odimegwu, 2008, 54). Democracy is a system of government in which power is vested in the

citizen body and in which members of that citizen body participate directly or indirectly in the decision making process (Ferrante, 2003, 538). On the other hand, democracy reflects a society in which people govern themselves (Hoffman & Graham, 2009, 496). Democracy is the form of government in which the people participate in the important decisions that affect their lives (Burr & Goldinger, 2008, 519). Worthy of note is that the democratisation of technology has the potential to reduce inequalities in our emancipated global society, and inclusion and social development are important goals for many national or international AI initiatives, particularly those of developing economies (Bird et al, 2020, 85). Democracy or democratic principles are built on truth and actions. According to Harrison Ross, democracy is deeply rooted in truth and action (Ross, 1998, 876-877). Accordingly, Eleanor Bird et al., posited that the concentration of technological, economic and political power among a few mega corporations could allow them undue influence over governments- but the adoption and implementation of AI could threaten democratic governance in our contemporary times (Bird et al, 2020, 17). Modern democracies have used the help or aid of artificial intelligence (AI) to manipulate public opinion.

Furthermore, artificial intelligence (AI) can be used to target and manipulate individual voters in period of elections. The interaction of different ideas and people is considered crucial to functioning democracies. The development and deployment of AI are best suited for modern democracies (Bird et al, 2020, 17-18). However, for the past 200 years democracies have flourished because individual freedom is good for the economy. Freedom promotes innovation, boosting the psychological being of peoples, economy, wealth and creating well-off people who value freedom. A critically planned, state controlled- economy may well be better suited to a new artificial intelligence (AI) age, as it is less concerned with people's individual rights and privacy. Democracy plays a very critical role in the promotion of human rights, social, political, economic, and psychological freedom of a people in any democratic society and artificial intelligence has a myriad of impacts on the environment.

Impact of Artificial Intelligence Ethics on Environment

AI and robotic technologies require considerable computing power which comes with an energy cost. The extraction of nickel, cobalt and graphite for use in lithium ion batteries- commonly found in electrical cars and smart phones- have already damaged the environment- the ecosystem, and AI ethics will likely increase this demands. Worthy of note is that AI will also require large amounts of energy for manufacturing and training (Bird et al, 2020, 29). Eleanor Bird et al assert that:

Alternatively, AI could actually help us take better care of the environment or the planet, by helping us to manage waste and pollution. For example, the adoption of autonomous vehicles could reduce greenhouse gas emissions, as autonomous vehicles could be programmed to follow the principles of eco-driving throughout a journey; and there are also applications for AI in conservation settings (Bird et al, 2020, 28-29).

Nevertheless, the ethical issues surrounding AI around the international community has been a call for concern to all operators and stakeholders. The lack of ethical standards for AI could lead to a very serious problem of climate change or global warming and environmentalism. However, environmentalism is a movement which highlights the importance of preserving the earth's natural resources and guaranteeing a fair share of those resources for future generation. Unlike ecologism it can be combined with many different ideologies (Hoffman & Graham, 2009,

496). However, the desire to protect the environment is based primarily on the concern about the consequences of environmental degradation on human beings. Worthy of note is that the misuse of AI could lead to environmental crisis or degradation. The reason is obvious: there is a consensus that humanity faces an environmental crisis, and that later in the century many other social and political problems- above all, war and famine- will be the root causes in the negative environmental changes brought about by human beings (Hoffman & Graham, 2009, 365). However, the quest for ecological or environmental sustainability especially through its environmental friendliness and consciousness, is a philosophical engagement and an ethico-existential imperative (Isanbor & Bature, 2018, 54). The concept of the environment is centred on the human beings and other living and non-living beings.

Nonetheless, environmental sustainability has been one of the major problems in the African continent. As Wangari Maathai rightly observed, Africa is still rich in natural resources that can be used sustainably and equitably for the benefits of her people. Up until now, however, most African government have not prioritized the environmental sector in terms of budget allocation, nor made it a central focus of parliamentary discussion or policy development (Maathai, 2009, 250). However, the environment remains one of the key elements of human survival. An eco-friendly environment is fundamental for human politico-existential relationships.

Impact of Artificial Intelligence Ethics on Human Psychology

This theoretical discourse deals with the ethical implications and moral questions that arise from the development and implementation of artificial intelligence (AI) technologies on the world economy. Artificial intelligence technologies and machine learning systems bring about fair benefits sharing; assigning of responsibilities; exploitation of workers of the human workforce; energy demands in the context of environmental and climate changes; and more complex and less certain implications of Artificial Intelligence (AI) such as those regarding human relationships (Bird, et al, 2020, 18). Psychology remains one of the key elements of human rationality or human development. Psychological freedom is part and parcel of human existence.

Nevertheless, artificial intelligence is getting better and better at modeling human thought, experience, human action, conversation, and human relationships. In an age where we will frequently interact with machines as if they are humans, what will the impact be on real human relationships? Relationships with others form the core of human existence. People may start to form emotional attachments to robots, perhaps even feeling love for them. If this happens, how would it affect human relationships and the human psyche? (Bird, et al, 2020, 18). According to John Havens, cited by Eleanor Bird et al, the biggest risk of AI that anyone faces is the loss of ability to think for yourself. However, we are seeing people are forgetting how to read maps, they are forgetting other skills. If we've lost the ability to be introspective, then, we have lost human agency and we're spinning around in circles (John Haven, cited by Bird, et al, 2020, 18-19).

Furthermore, one danger is that of deception and manipulation. It is also possible that people could become dependent on robots. Technology is known to tap into the reward functions of the brain, and this addiction could lead people to perform actions they would not have performed otherwise. Robots may affect the stability of marital or sexual relationships. For instance, feelings of jealousy may emerge if a partner is spending more time with a robot (Bird, et al, 2020, 18-19). People in human-robot relationships may be stigmatized. People may become impatient and unwilling to put the effort into working on human-human relationships with a

‘perfect’ robot and avoid the challenges of beliefs, attitudes, trusts, and/or value we have about human-human relationships. However, some have argued that robots (sex-bots) could be an outlet for sexual desire, reducing the likelihood of violence, or the help recovery from assault (Bird, et al, 2020, 19). Worthy of note is that, the majority of ethics research regarding AI seems to agree that AI machines should not be given moral agency, or seen as person (Bird, et al, 2020, 19-20). In other words, artificial intelligent machines should not be given the status of human personhood.

Impact of Artificial Intelligence Ethics on Education

The education of a country remains one of the critical sectors of such a country. Education is the liberation against illiteracy, mediocrity and ignorance. Education remains a platform for the formation of human character. For Naboth Nwanfor, education, no doubt, is the key to socio-economic and political development of any nation. This is based on the philosophy of the nation’s education system, which encapsulates her needs, goals, objectives, and aspirations (Nwafor, 2014, 92-93). Moreover, the impact of AI ethics on education could contribute to a country’s national development. However, philosophy should have a practical moral end (Odimegwu, 2008, 3). According to Jremy Wisnewki, philosophy has practicality function (Winewski, 2007, 91-92). In other words, philosophy as a catalyst for national development means that a catalyst is a substance that activates the rate of a chemical or physical reaction but remains unchanged after the reaction.

Broadly speaking, the philosophy of artificial intelligence and education play a significant role in national development. They accelerate the rate of national development but remain unaffected by the aftermath of the development (Bartholomew, 2023, 350). Philosophy has a rational foundation and every sphere of national development has a specific philosophy behind it. This rational foundation is the bedrock on which its development edifice rests (Bartholomew, 2023, 348). Besides, philosophy ensures a steady resource supply from immediate social environments. Success in any national development project requires a mutual relationship between the project management and the immediate environments. The ethics of AI contributes immensely to this project management. Education just like philosophy helps national development from bursting or shrinking (Bartholomew, 2023, 348-349). Put differently, the use of AI ethics has led to distance and online learning. People now have access to the internet to acquire any information of their choice. Information technologies through the availability of Twitter, Zoom, Tiktok, Google’s Home, Apple’s Siri, Facebook and other internet sources people are easily assessing information from these social media. Internet sources have made people very lazy in acquiring primary reading materials. AI has played a significant role in education.

Moreover, the word “education” is derived from the Latin word, “*educare*” which means to lead out (Ohwovorione & Aghaosa, 2018, 22). According to Gumut cited by Ohwovorione and Aghaosa, defines education as the deliberate attempt to educate children and adult in the dynamics of conflict and the promotion of peace making skills in homes, schools, and communities. Education is an investment in the younger generations and attests to the fact that by educating younger minds in the virtue of peace, the skills of conflict analysis, and management, identification of conflict and sources of conflict and how a more peaceable future could be secured for humanity (Gumut cited by Ohwovorione & Aghaosa, 2018, 23). According to James cited by Ohwovorione and Aghaosa, defines education as a process of acquiring the values, knowledge, and developing the attitudes, skills and behaviour to live in harmony with

oneself, with others, and with the natural environment. It is a means of improving the awareness and confidence of the individuals as agents of normative peace (James cited by Ohwovorione & Aghaosa, 2018, 23-24). Accordingly, education as an intrinsic part of the curriculum of the nation's educational system at all tiers is inevitable especially at this critical period that the Nigerian nation is witnessing unprecedented security challenges and armed conflicts (James 2008). Worthy of note is that the ethics of AI systems, education and national development are critical elements of human values and development.

Furthermore, the interconnectedness between AI systems and education to Nigeria's quest for national development constitutes a "fundamenting wholeness". Here, artificial intelligence is a kind of a new philosophy of humanism. We expect this new philosophy to approach with and introduce a fundamenting wholeness that is at once and severally ontological, epistemological, psycho-anthropological and ethical in some consistent order (Odimegwu, 2008, 7). However, this "fundamenting wholeness" of AI systems and education; and their resulting benefits to country's national development is a logical necessity to the material and the spiritual needs of a people.

Concluding Considerations

Having critically examined the impacts of artificial intelligence on the digital global economy, this paper, therefore, concludes that the influence of artificial intelligence on our humanity has existential effect and ethical consequences ranging from the physical, ethical, socio-political, humanistic, economic, and to the psychological influences which have both positive and negative consequences. However, artificial intelligence is a human creation. The potential danger in artificial intelligence is that it has led to the displacement of human workforce. Artificial intelligence is aimed at human betterment and innovative transformation. The philosophy of artificial intelligence has led to misinformation, manipulation, exploitation and hegemonic tendency; and this has created a divide between developed and developing countries of the world. This paper concludes that the impacts of artificial intelligence on society, health care system, democracy, trust, human rights and privacy, environment, education, legal system and the financial sector are enormous; and it requires the need for ethical guidelines in order to regulate human behaviour. The impacts of artificial intelligence on economic development or digital consciousness is immense and it remains an existential imperative. Finally, artificial intelligence centres on man himself and intelligent machines like computers, robots, and other biometric machines are programmed to communicate and act like human beings and they have no discretion because they are not moral agents.

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Works Cited

- Asodun., Fatai., “The Connection between Humanism and Artificial Intelligence: Interpreting Turing’s Ideals for Humanity” in Joseph Penlong Nietlong (Editor-in-Chief) Makurdi Owl Journal of Philosophy (MAJOP), A Journal of the Department of Philosophy, Benue State University, Makurdi, Volume 1., No. 1, (2021): 1-20
- Bartholomiew., Nnaemedo., “Analysis of the Five-Fold Role of Philosophy to National Development”, International Journal of Research and Review, Volume.10; Issue:5 (2003):350-359
- Bird., Eleanor., et al., “The Ethics of Artificial Intelligence: Issues and Initiatives”, Brussels, European Parliamentary Research Service, (Scientific Foresight Unit, (March 2020): 1-108
- Bucahan., Ben., and Imbrie., Andrew., *The New Fire War, Peace and Democracy in the Age of Artificial Intelligence*, Cambridge, Massachusetts.: The MIT Press, 2022.
- Burr., John., and Goldinger., Milton., *Philosophy and Contemporary Issues*, Ninth Edition, New Delhi: Prentice Hall of India Private Limited, 2008.
- Chenu., M. D., “The Theology of Work before Atheism” in Contemporary Atheism, Turin: SEI, 1970.
- Cunningham., Anne., *Artificial Intelligence and Technological Singularity*, USA: Greenhaven Publishing, 2016.
- Dukor., Maduabuchi., “Symbol and Symbolism in Info-Tech Epistemology” in Maduabuchi Dukor (Editor-in-Chief), Journal of the Department of Philosophy, Nnamdi Azikiwe University, Awka, Vol. 2, No. 1 (2009), pp. 103-104
- Davenport., Thomas., *The Artificial Advantage: How to Put the Artificial Intelligence Revolution to Work*, (New Delhi: Prentice Hall of India Private Limited, Ninth Edition, 2008.
- Duggal., Nikita., What is Artificial Intelligence: Types, History, Future, <http://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelligence2023>.
- Emmanuel., Mogaji., and Nguyen P. Nguyen., “Manager’s Understanding of Artificial Intelligence in Relation to Marketing Financial Services: Insights from a Cross-Country Study”, International Journal of Bank Marketing, (2021): 1-49
- Ferrante., Joan., *Sociology: A Global Perspective*, Fifth Edition, USA: Wadsworth/Thomson Learning, 2003.
- Gumut., V., *Peace Education and Peer Meditation in Introduction to Peace and Conflict Studies in West Africa*, Ibadan: Spectrum Books Limited, 2006.

Haven., John's comments on "Robots" cited by Bird., Eleanor., et al., "The Ethics of Artificial Intelligence: Issues and Initiatives", Brussels, European Parliamentary Research Service, (Scientific Foresight Unit, (March 2020): 1-108

Hoffman., John., and Graham., Paul., *Introduction to Political Theory*, Second Edition, England: Pearson Higher Education Limited, 2009.

Hoffman., John., and Graham., Paul., *Introduction to Political Theory*, Second Edition, England: Pearson Higher Education Limited, 2009.

International Monetary Fund Departmental Paper Report on "Powering Digital Economy", (2020): 1-20

Isanbor., Philip., and Bature., Anthony., "Morality, Integral Ecology and Development in Francis' Laudato Si: A Review" in Peter F. Omonzejele (Editor-in-Chief) Philectics Benin Journal of Philosophy, A Publication of the Department of Philosophy, University of Benin, Volume.1, No. 2, (March, 2018): 54-62

James., P.S., *Peace Education: Exploring Ethical and Philosophical Foundations*, Charlotte: Information Agent Publishing, 2008.

Maathai., Wangari., *The Challenge for Africa: A New Vision*, London: Heinemann Books Limited, 2009.

Nwanfor., Naboth, "Philosophy of Education and National Development: A Philosophical Appraisal", Journal of Information and Knowledge Management, Volume.4, No.6 (2014): pp.92-99

Odimegwu., Ike., *Philosophic Foundations of Politics*, Amawbia: Lumos Publishing Limited, 2008.

Ohwovorione., Peter and Aghaosa., Ike., "Peace Education for National Unity and Development in Nigeria" in Peter F. Omonzejele (Editor-in-Chief) Philectics Benin Journal of Philosophy, A Publication of the Department of Philosophy, University of Benin, Volume.1, No. 2, (March, 2018) p. 22

Osemwegie., Wesley., and Jeko., Victor., "On the Value Status of Technology", in Idorenyin Esikot (Editor-in-Chief), Sapiencia Journal of Philosophy, A Publication of the Department of Philosophy, University of Uyo, Volume.15, (2021): 240-312

Patridge., Derek., *Artificial Intelligence and Software Engineering: Understanding the Promise of the Future*, London and New York: Taylor & Francis Publishing, 1998.

Ross., Harrisson, "Democracy" in Edward Craig (Ed.), *Routledge Encyclopedia of Philosophy*, London and New York: Routledge, 1998.

Seligman., James., *Artificial Intelligence and Marketing*, United Kingdom: Taylor & Francis Limited, 2019.

Wisnewski., Jeremy., *Wittgenstein and Ethical Inquiry: A Defense of Ethics as Clarification*, London and New York: Continuum International Publishing Group, 2007.

Vandegrift., David., *The Future of Business: An Introduction to Artificial Intelligence* (USA: Independent Publishing , 2019.