

THE ETHICS OF ARTIFICIAL INTELLIGENCE AS THE EPISTEMOLOGY OF INFORMATION-BASED TECHNOLOGY EXAMINED IN LIGHT OF BANKING INDUSTRY

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Abstract

The ethics of artificial intelligence as the epistemology of digital consciousness presupposes human-centeredness. The epistemology of artificial intelligence presupposes Cartesian, Kantian and cognitive paradigms. The AI ethics can be used to analyze the impact of banking innovation technology by ensuring quality services and financial inclusion. The impact of technology on the banking sector reveals a kind of a transformative moment. AI itself is a product of reasoning and scientific method. AI research is equally consistent with the epistemology of information technology. Information technology has resulted in the increase in the input-output flow in the banking performance of global economies. Artificial intelligence concerns itself with the notion of information technology in a global economy. Artificial intelligence is actually a reflection on the cognitive activity of minds and machines. Artificial intelligence as a collective term has both strengths and weaknesses. The notion of artificial intelligence stipulates that certain technological instruments such as the robots, computers, smart phones, biometric machines all exhibit certain cognitive activity. Artificial intelligence has undoubtedly changed the course of human history. Scholars in the fields of philosophy, psychology, law, political science, mathematics and computer engineering have been fascinated by the concept of artificial intelligence since its inception. This paper adopts the method of analysis. This paper discusses the resulting benefits of the use of artificial intelligence in banking industry. This paper concludes that the rise of artificial intelligence marks the triumph of the 21st century. Artificial intelligence challenges our understanding of consciousness, ethics and the very essence of what it means to be human.

Keywords: Artificial Intelligence, Banking Industry, Ethics, Information Technology, Machine Learning

Introduction

Artificial intelligence is a collective term that has to do with intelligent machines. Artificial intelligence has a constitutive sense. From these premises, we have been able to understand that the use of artificial intelligence has both merits, and demerits. Also, on analysing the efficiency and accuracy of artificial intelligence as not merely as acting resource, but with technological advancement in this 21st century, we can see that some artificial intelligence machines have the cognitive abilities to give human beings what they want in terms of speedy responses in the human workforce. Now with this new development and deployment and having established that artificial intelligence has the cognitive abilities to think and give human like responses, for instance,

computers, robots, and biometric machines this gives a different turn to the many possibilities of a thinking machines or artificial intelligence systems which makes it difficult to differentiate hence leading to so many existential problems like identity issues and detrimental issues which most people see as the birth of artificial intelligence ethics which poses existential and ethical crises.

Nevertheless, the world is entering a stage of innovative transformation, which we will be surprised at the scale of technological development. One of the surprising developments is what artificial intelligence intelligent machines can offer. But we should note that with the breakthrough development, comes with new responsibilities and problems that one should take cautious steps to make right decisions that are not injurious or an infringement to people's rights. Hence, harnessing and controlling technological developments so that it can fulfil its primary purpose instead of going overboard and causing harm. This is one of the important information that humans forget to have at the back of their minds. According to Eliza Yudkowsky, by far, the greatest danger of artificial intelligence is that people conclude too early that they understand it.¹ One of the fundamental problems of artificial intelligence is human inability to harness the potentialities of artificial intelligence. However, despite the negative impacts of artificial intelligence, it has a myriad of positive implications on human betterment.

Artificial Intelligence as the Epistemology of Information-Based Technology

The conceptualization and contextualization of artificial intelligence rests solely on technological transfer and scientific advancement. In other words, the scientific and technological advancement gives room for the digital consciousness of artificial intelligence. This paper envisages, criticizes, evaluates and questions the critical importance of artificial intelligence in our global economy. This paper posits that artificial intelligence is aimed at solving man's gullibility and inability to properly harness the positive values of scientific breakthrough and technological advancement. On the other hand, technology has a critical role to play in advancing human existence. Scholars have asked a myriad of questions such as will artificial intelligence (AI) take over human intelligence? Technological innovation as a result of the resulting benefits of artificial intelligence is expensive to maintain and sustain. For Ebele Orakpo, in his discourse entitled, "Technology Transfer: You Either Buy or Steal Technology", asserts that, technology itself is expensive to sustain. When you talk about AI, no matter how sophisticated a technology is, it is still less than the human brain and capacity. There is something that technology does not have-personal discretion. In everything you do, discretion is very fundamental. AI becomes a continual enslavement and colonialism of the African continent.² Technological advancement is meant to serve as an eye opener to make man take cautious steps in the business of artificial intelligence. The notion of artificial intelligence stipulates that certain technological instruments such as the robots, computers, smart phones, automated teller machines (ATMs) exhibit certain human characteristics. Artificial intelligence as a collective term has both positive and negative implications. In other words, it has ethical considerations and moral implications.

Nevertheless, artificial intelligence has undoubtedly changed the course of human history. Artificial intelligence has provided global society with a vast array of potential benefits that have drastically enhanced quality of human lives. Scholars in the fields of philosophy, psychology, law, political science, mathematics, and computer engineering have been fascinated by the concept of artificial intelligence since its inception. Exploring the moral and ethical implications that arises from its integration into our global society has elicited the attention of various scholars. Nonetheless, these contemporary scholars believe that artificial intelligence is essential to human progress by enabling us to attain new heights of knowledge and critical understanding. Scholars

like Christopher Evans, John Becloff, Alan Turing, John McCarthy and Clarence Darrow have argued that artificial intelligence is a reflection on human desires for power and control. Moreover, artificial intelligence reveals the evolutionary movement of human political, legal and ethical activities and normative contexts. The fast pace at which artificial intelligence is advancing raises humanistic concerns and it has significant implications for our global society and it also raises important ethical questions, considerations or implications. Worthy of note is that the potentials for artificial intelligence to surpass human intelligence which could lead to a paradigm shift in power dynamics and an existential crisis for our humanity has been seen as a great danger to our humanity. In other words, artificial intelligence poses a great danger to our humanity.

Moreover, the ethical implications and interrogation of artificial intelligence into our global economy will also require careful ethical considerations of how to create a balance of the benefits of increased efficiency and accuracy with the potential loss of jobs and the negative impact on human values. Due to the over-dependence of man on artificial intelligence and its ethical implications, philosophers all over the world have opened a myriad of philosophical discourses on the conceptual clarification, conceptualization or contextualization of artificial intelligence and its advancement towards human improvement. Artificial intelligence has enhances human flourishing. Broadly speaking, scholars have argued that machines such as the computers have certain characteristics of human behaviour. Worthy of note is that artificial intelligence has a serious ethical implications and its emergence will surpass human intelligence shortly leading to the technological singularity that will fundamentally transform human society. Within several decades, information- based technologies will encompass human knowledge and proficiency ultimately. The concept of artificial intelligence has given rise to humanist philosophy. Machines cannot really overwhelm the human beings.

In addition, this paper is aimed at making a uniform conceptual clarification of an ethical interrogation into the workings, recognition, sensibilities and consciousness of artificial intelligence chatbots deployed in the financial service industry. Many scholars from the fields of philosophy, mathematics, computer engineering, political science, psychology and law have critically analyse the workings, recognition, sensibilities, and consciousness of artificial intelligence due to the contemporary relevance, significance and application of intelligent machines such as the computers, robots, and automated teller machines (ATMs) within the banking sector has led to a new dynamics in the financial sector. Artificial intelligence has taken a new dimension in easing the physical, mental and the psychological stress of human beings. The philosophy of artificial intelligence has a practical demonstration. Philosophy just like the emergence of artificial intelligence presupposes the real life situation.

Nevertheless, the philosophy of artificial intelligence cuts across all sectors of human society. It cuts across the manufacturing industries, the transportation sector, sports, security, academic, and banking sector. In this regard, the problem we enhance in this paper is the problem of the human factor, poor government policies and lack of self- reliance in the financial service industry. The financial service industry should be self -reliant and should be devoid of corrupt practices by deploying good technological appliances that could withstand the emergence of internet fraudsters. The picturization of artificial intelligence can serve as a platform, the form and substance in analysing the philosophical investigation and an ethical interrogation into the workings, recognition, sensibilities and consciousness of artificial intelligence in the financial service industry.

Nonetheless, the use of artificial intelligence in the financial service industry has economic implications, political, ethical and legal contexts. This paper argues that the development and deployment of artificial intelligence remains a veritable platform for human emancipation. Our humanity is surrounded by fundamental political, economic and ethical problems. Man has become a subject matter in every philosophical reflection and critical inquiry.

Worthy of note is that this discourse attempts to offer practical solution to the fundamental problems facing the financial service industry. This discourse is significant because it would create an avenue for easy grasping of the concept of artificial intelligence in a digital economy. This discourse asserts that Nigeria as a country must emancipate herself from the negative implications of the conventional banking system due to the technological advancement, progression and assimilation that the world is currently experiencing today.

Moreover, the world is becoming a global village and the banking sector must also begin to toe the path of global best practices. This research is aimed at achieving thus: improvement of the banking industry and the need to embrace the usefulness of artificial intelligence in order to guarantee efficiency and accuracy in the banking sector; the need to reduce fraudulent activities within the banking sector; the need to enhance safety, privacy and human rights. This theoretical reconstruction takes a critical look at the merits and demerits of artificial intelligence within the financial service industry. A philosophical analysis of artificial intelligence in the financial service industry is deeply rooted or reflected in the need for sustainable development.

Worthy of note is that artificial intelligence refers to the theory and development of intelligent machines such as the computers, robots, and biometric machines; and it enables human beings to perform their tasks optimally and maximally requiring the human intellectual capacity such as visual assistance, perception, speech recognition, decision making and translation of natural languages. Artificial intelligence is a clear indication of the displacement of human workforce. As technology advances and become more pervasive in our lives, ethical issues and initiatives related to its ethical guidelines, safety measures, and impact on society have become increasingly important to us as human beings.

The Connection between Ethics, Morality and Artificial Intelligence

Ethics has a role to play in the development and deployment of artificial intelligence. Ethics has to do with the rightness and wrongness of human behaviour. On the other hand, ethical interrogation presupposes the idea of ethics. Ethics reflects on the morality guiding a thing. Ethics is all about the right form of behaviour that is consistent with the rules and regulations governing society. There is ethics behind everything we do as human beings. Worthy of note is that the concept of consciousness remains one of the most debated concepts in the field of philosophy. The field of AI comprises many fascinating areas but problem solving is fundamental to many of the AI-based systems. On the other hand, artificial intelligence is a branch of technology that attempts to make machines and computer programs that simulate human behaviour. Ethics remains one of the branches of philosophy as a discipline. Philosophy as we know it, seeks to inquire, analyse and critically evaluate the universe and its components. With this, we have figured out that the philosophy of artificial intelligence has several flaws that need to be critically analysed, evaluated and appraised. It could be detrimental to our humanity. It deals with the rightness and wrongness of human behaviour in society. Ethics remains an area of philosophy that reasons about morality, particularly the meaning and normative justification of claims concerning rightness or wrongness of human behaviour.

In the light of the above, there is a close theoretical affinity between ethics and artificial intelligence because the problem surrounding AI has remained today's ethical quandary. Ethics and morality are interrelated and morality no longer exists for some, and is increasingly falling short for others. Our today's ethical quandary presupposes that we live amidst the large scale fragmentation of our previously held systems of orientation or frameworks of meaning giving reference. Ethics stresses the primacy and privilege of the other human person and our unlimited responsibility towards the other person. Ethics was not a matter of autonomy but that of heteronomy and it is all about a life of shared values, commitments and experiences. The philosophy of artificial intelligence has raised some ethical questions. The philosophy of artificial intelligence leads to the ethical questions and these ethical questions lead to the question of privacy and violation of human rights, warfare mechanisms and political contexts, for example, the endless possibilities of artificial intelligence has made it easy for the violation of people's privacy for example password cracking and the hacking of personal bank accounts. Artificial intelligence can be applied to crack people's password.

Moreover, as a political mechanism artificial intelligence can be used to distribute false information and create false news as it can be used as surveillance hence leading to loss of privacy and it could be used to malign someone's reputation during electioneering campaigns. It is important to note that if artificial intelligence systems become more intelligent than their human creatures, then they could potentially become impossible to control their excesses and this could lead to the emergence of an artificial intelligence takeover in which machines take over the control of human society and pose a great danger or a significant threat to our humanity. In all, the instrumentality of artificial intelligence could lead to loss of jobs; and the problems of job losses and violation of human rights through theft are some of the problems surrounding artificial intelligence.

The Use of Artificial Intelligence in Banking Industry

The use of artificial intelligence in banking industry is an existential imperative because bank is a financial institution that accepts deposits from the public and creates demand deposits while simultaneously making loans. Banking refers to the umbrella of services provided by financial institutions, such as accepting deposits and providing loans. Banking provides essential financial services like depositing, lending and asset protection to support a digital economy. The primary purpose of banking is to facilitate the movement of money in an economy by helping people and businesses save, invest and borrow money. The banking industry includes financial institutions like banks, credit unions and NBFCs. Banks and other financial institutions play a critical role in global economy.

Nonetheless, there are two kinds of banking: retail and investment banking. There are types of banking such as retail banking, corporate banking, central banking and cooperative banking. Banking today exists in a myriad of forms due to the advancement of technology transfer. Banks today have a mobile app where account holders can make appropriate decisions on their bank transactions, check balances, open deposits and more. A banking industry is a group of financial institutions that engage in financial transactions. This discourse critically analyses the ethics and the use of artificial intelligence in the banking industry. However, a vivid understanding of the difference between artificial intelligence and machine learning is paramount so as to grapple with the essence of this research which is basically on the ethical interrogation into the workings, recognition, sensibilities and consciousness of artificial intelligence in the banking industry. In other words, artificial intelligence is not a synonym for machine learning. Artificial intelligence or

machine learning or intelligent machines such as robotics and computers have become significant and veritable tools for human improvement. We cannot do without them due to their importance in global economy.

In addition, artificial intelligence powers most of our technological appliances ranging from our smart phones, bank apps, satellites; social media handles and so on. Put differently, artificial intelligence has given rise to the emergence of information-based technology. This theoretical template discusses the moral and ethical implications of artificial intelligence and machine learning in digital economy.

Put differently, the development and deployment of artificial intelligence and machine learning has elicited series of debates among various scholars. Artificial intelligence or machine learning systems have made major advances over the past decades. Artificial intelligence and machine learning adoption in the financial sector is bringing new unique risks management and fundamental challenges that need to be addressed to ensure financial security or financial stability. Artificial intelligence or machine learning systems are used in the financial sector to forecast macro-economic and financial variables that meet global standards. It is also aimed at meeting customer demands, provide payment capacities and monitor business transactions. Artificial intelligence and machine learning systems or simulations can help explore fraud detection.

Furthermore, in the financial sector, advances in artificial intelligence and machine learning, in the past decades, have had their major impacts on the financial investment management industry. Artificial intelligence or machine learning introduces new challenges and potential risks management. In past decades, the development and deployment of artificial intelligence or machine learning has brought about the need for financial risks management and prudential supervision in the financial industry.

Nonetheless, artificial intelligence brings about data analysis, data collection, privacy protection, fraud detection, robustness, safety, and impact on financial stability. One of the merits of artificial intelligence in the financial sector is that it could lead to central banking arrangement and financial inclusion. Financial inclusion through the availability and usage of banking services does not significantly influence economic growth in Nigeria. The concept of financial inclusion has continued to assume increasing importance across the globe.³ Artificial intelligence or machine learning applications may lead to risks and policy consideration and embedded preconception. The ethics of artificial intelligence has raised some fundamental issues and initiatives such as the concept of financial inclusion.

Nonetheless, the impacts of artificial intelligence on global economy are enormous and fundamental. The negative implications of AI include unemployment, inequality, privacy, human rights and dignity, prejudice, and democracy. Artificial intelligence has a myriad of disastrous consequences or negative impacts on global society, the legal system, environment and the planet earth, human psychology, financial system and confidence. Artificial intelligence has become the most important digital transformation enablers across the globe. Artificial intelligence has a potential to facilitate a better business environment that will be more competitive, imaginative, versatile and adaptable than the traditional operations of doing business. It has been further asserted that artificial intelligence enhances higher productivity level and global competitiveness and that it drives digital transformation in a range of business organisations. Artificial Intelligence

helps managers to have a clearer understanding and awareness of key challenges facing their organizations. It provides information technologies as well as highlighting key stakeholders and their collaborative efforts in providing financial services. Artificial intelligence provides the significant opportunities and prospects for bank marketing and other business activities. Artificial Intelligence will change the future narratives of bank marketing. Worthy of note is that artificial intelligence provides the platform for a robust customer engagement in a banking sector. This research identifies the enormous prospects artificial intelligence offers to business practices and to the banking sector. Accordingly, Thilo Hagendorff argued that:

Current advances in research, development and applications of AI systems have yielded a far-reaching discourse on AI ethics. In consequence, a number of ethical guidelines have been released in the past decades. AI ethics has given rise to countless omissions. There are omissions which are missing or severely underrepresented without any good reason, for instance, the aspect of political abuse or “hidden” social and ecological costs of AI systems- and omissions that can be justified, for instance, deliberations on artificial general intelligence or machine consciousness, since those technologies are purely speculative. To critically examine the AI ethics one needs to ask that to what extent the respective ethical principles and values are implemented in the practice of research, development and application of artificial intelligence systems and how the effectiveness in the demands of AI ethics can be improved upon?⁴

Nonetheless, the utilization of artificial intelligence (AI) in the banking sector bridges the gap between academic research and industry knowledge. Bank marketers and decision makers in the banking sector are geared towards formulating strategic decision making regarding the utilization and optimization of value from AI technologies in the banking sector. It has been asserted that technological changes will bring about a better business environment within the banking industry.

Broadly speaking, innovative transformation will simply address the various fundamental challenges facing business organizations such as the banking sector. Technological innovation will help in transforming and managing technical problems in the banking industry. AI ethics reveals that there are common strategy for managing new technological challenges in business organizations and this include the awareness of the applications of cutting edge technologies in strategic decision making process, strategic response to problems by integrating managerial functions to the process of innovative transformation. AI ethics entails innovative transformation. The impact of technology on the banking sector reveals a kind of a transformative moment. AI ethics can be used to analyse the impact of banking innovation technology by ensuring quality services and financial inclusion.

Worthy of note is that technological advances helps bank customers to opt for technologically-driven services rather than a service from an employee in the banking industry. Scholars have argued that bank customers have more control over technologically- driven services in the banking sector rather than having control over bank employees. The availability of electronic banking services guarantees greater accessibility of banking services and products. Information technology is key because it provides electronic facilities that could cater for the needs of the elderly and the disabled in banking industry. The adoption of technology and technology enablers have made structural changes among banking employees to reskill, upgrade and retrain

in order to guarantee maximum efficiency and customer service delivery.

Nonetheless, the discourse on artificial intelligence explores the fundamental questions about technological progress and the various criticisms surrounding technological innovations. The growth of technology and its potential dangers on the human workforce has elicited “techno-optimism” and “techno-pessimism”. The exponential growth of artificial intelligence or machine learning such as computers, robotics and biotechnology have serious negative implications on global economy. Artificial intelligence has disastrous consequences on our humanity because technology does not know nor does it care for human happiness and it lacks discretion. It only understands value-rational- action.

Nevertheless, this discourse demonstrates that artificial intelligence has been utilised in the banking industry in a variety of ways such as credit rating models and predictive analysis. Artificial intelligence could lead to predictive value. Predictive value is the quality of information that helps to increase the likelihood of correctly forecasting the outcome of past or present events.⁵ Artificial intelligence systems have had a substantial impact on the socio-economic matrix of global society. The financial industry is not an exception; practitioners and researchers have utilised AI-based technologies to enhance numerous business operations. The instrumentality and implementation of technological innovations is aimed at guaranteeing greater efficiency, transparency and radical transformation in banking activities in order to achieve financial inclusion. According to Oyewo and Oyewole, the challenges facing financial inclusion among others are as follows:

1. Inadequate financial literacy;
2. Low level of income;
3. Lack of assurance to savers of the safety of their members in savings;
4. Lending risks and risks perceptions inherent in lending to key productive sectors;
5. Poor level of technological infrastructure; and
6. Lack of financial literacy and the improved financial capability with the majority of the population.⁶

Nonetheless, this theoretical template provides the nationalization of banking reforms. Artificial intelligence is a powerful technology that helps cyber-security networks automate repetitive tasks, accelerate fraud detection and financial stability; and improve the accuracy of their actions to strengthen the security posture against various security risks. The innovative approach to the banking sector has serve as a catalyst for the economic growth of countries. There are a myriad of influences and impacts of artificial intelligence on the banking sector. This discourse explains and asserts how the philosophy of artificial intelligence has transformed the phase of modern day banking industries. Artificial intelligence has become a widespread phenomenon in the banking sector. AI ethics has become the normal routine and tasks which have been initiated by humanity and it is gradually displacing human workforce. Artificial intelligence has become a veritable tool in the field of banking industry and different technologies have emerged such as core banking, operational performance model, customer support system, computer data analysis or data collection and predictive analysis in the banking sector. The effort of digitalization on the banking industry has created a significant impact on the human workforce.

In addition, the digital transformation has taken a new dimension and it has changed the organizational structure and risks management framework within the banking sector. It involves the

deployment of technological appliances in the banking sector. Artificial intelligence has widened the contact of banking customers due to easy access to banking services whenever they want to embark on their bank transactions. Artificial intelligence has displaced certain banking positions such as tellers, loan officers, customer service relation officers and clerks are replaced by chat-bots, voice assistants and automated biometric technology. The role of the human workforce is not completely outdated. Increased digitalization process would definitely improve the profitability of the banking sector and reduce costs and manual errors due to efficiency and accuracy in the banking sector.

Moreover, the role of information technology in the development of the banking sector represents one of the critical aspects of any country's sustainable development. The banking industry remains the live wire of any country's economy. The use of information technology through artificial intelligence has led to the replacement of traditional operations in banking sector. The process of computerization of the banking sector includes the process of card payments and automated biometric machines. Automated teller machines (ATMs) are now available in urban areas and this should be replicated in rural areas as well. The use of information technology has help in redesigning the internal processes and activities; and it has resulted in the improvement of banking products and services based on customer needs and satisfaction. AI ethics aims at ensuring normative outcomes, innovative transformation, creativity and efficiency in business operations. Technology has become part and parcel of our humanist philosophy. AI research is equally consistent with the epistemology of technology. AI itself is a product of reasoning and scientific method. AI represents the history and hallmark of human inventions. Inventions or created entities are the entailment of concepts. AI has posed a great danger to our humanity due to the threat of nuclear weapon. On the other hand, the use of AI showcases that our humanity is sitting on a gun powder waiting to explode at any moment. The use of information technology has provided positive impacts and it has created new job opportunities for information technology experts. Information technology has resulted in the increase in the inputs and outputs in the banking performance of global economies. AI analyses the need for customer service accessibility and to critically examine the possible strategies for improving the banking sector through technology driven- services. This research anchors on certain factors such as banking products and services, add on services, front desk officers, technology enabled services, safety and reliability of banking products and services. It identifies the strategies to improve information technology such as weekly accounts statement, email alerts, SMS facility for cash transactions are crucial factors that need to be developed in the banking sector. According to Asodun Fatai, artificial intelligence is another form of humanistic philosophy. A time would come when machines will be appropriately programmed to compete favourably with humans beings. If the vision for AI is properly understood it would be seen to imply a great vision for the development of humanity itself.⁷ However, artificial Intelligence explains the impact of technology on a country's national economy and job losses. Artificial Intelligence research has brought about the theory of Functionalism. According to Burr and Goldinger, the current theory of mind that is most congenial to the strong claim is that which goes by the name Functionalism....Briefly, it is the contention of a Functionalist that a mental event is to be understood in terms of the function that it performs with reference to a given system or organism.⁸ Burr and Goldinger, further heightened their theoretical position by asserting that:

The basic deficiency of the Functionalist account of mind which allows for the comparison of mind with a computer program is that a program is a program only so long as there is a potential user; a mind, on the other hand, exists in its own right, my subjective experiences exists for me whether or not they have any implications for anyone else. We may conclude that Functionalism can best account for the functional aspect of mental life.⁹

In addition, the ethics of artificial Intelligence in the banking sector represents both rule-governed activities; 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.¹⁰ Artificial intelligence (AI) refers to systems that display intelligent behaviour by analysing their environment and taking actions- with some degree of autonomy- to achieve specific goals. Artificial intelligence is all about intelligent behaviour. Artificial intelligence is an attempt to understand the workings of other minds like intelligent machines; and the attempt to understand the workings of the mind using mechanical models and analogies is as old as psychology itself. It is clear that understanding the workings of the mind using mechanical models and analogies is a bold one and yet it has already received widespread endorsement from eminent contemporary philosophers and psychologists.¹¹ However, for Madabuchi Dukor, the evolution of mind was accompanied simultaneously with the evolution of symbols and concepts. The computer language is characterized by formation and or use of symbols.¹² On the other hand, a symbol is at the level of knowledge. It is something, a reality we can apprehend with the aid of our consciousness and with which we connect meaning.¹³ Put differently, the use of symbols are representation of meaning.

Moreover, the roles of banking industry in Nigeria are quite immense and it is a socio-political, economic matrix and an existential imperative to Nigeria. The role of the banking industry in Nigeria cannot be overemphasized. It plays a pivotal role to Nigeria's quest for sustainable development. One of the contributory factors of banking industry in Nigeria is that they perform the function of money deposits and the issuance of loans and credit facilities to customers. Agricultural banks give loans to farmers for the sole objective of food production such as rice, beans, corns, millet, wheat, groundnut, poultry farming such as piggery, goat farming, snails, and fish farming. The giving out of loans to farmers in Nigeria could contribute immensely to Nigeria's Gross Domestic Product.

Broadly speaking, the roles of the banking industry are enormous because apart from accepting deposits from the public, one of their primary responsibilities is that they are saddled with the responsibility of curbing inflation or regulating Nigeria's national economy. One of the challenges of the use of artificial intelligence to the banking industry is that there is a recurring problem of poor economic policies poor financial literacy. Nigeria's political system has been characterized by the problem of leadership irresponsibility. This problem of leadership irresponsibility has drastically affected the banking sector. The Nigerian political leaders lack the political will to revamp the ailing Nigerian economic structure. Secondly, the problem of the evils of corruption has retarded the evolutionary process of artificial intelligence ethics within the banking sector in Nigeria. Corruption has become a cankerworm that has eaten deep into the fabric of Nigerian political and economic structures. Artificial intelligence is deeply rooted in ethical principles or ethical guidelines and these ethical guidelines are aimed at regulating human behaviour. Philosophers have debated the ethics of artificial intelligence for the past decades. AI ethics should not be used as a means to an end. It should be holistic in outlook. Kant, in his postulation of categorical imperative argues that human beings should not be used as a means to an end, but

they are ends in themselves.

Nevertheless, the application of information- based technologies or digital consciousness is a reflection on our immediate environment. The human workforce concerns about the normative possibility of artificial intelligence systems in going beyond human equivalent capabilities such as human rationality. The ethics of artificial intelligence as the epistemology of digital consciousness concerns itself with the notion of information technology in a global economy. Artificial intelligence is actually a reflection on the cognitive activity of the mind and other intelligent machines. The banking industry is a corporate world of its own. Artificial intelligence has an epistemological significance because it has to do with the symbols and experience of information-based technologies. On the other hand, artificial intelligence presupposes the representation of symbols. Artificial intelligence as the epistemology of information- based technology is the possibility of cognitive representation.

Nonetheless, the use of artificial intelligence in banking industry has elicited a myriad of ethical issues. One of the fundamental problems that are closely associated with the financial sector is the problem of violation of fundamental human right, human dignity, trust and privacy. The financial sector is exposed to a myriad of financial risks due to the incessant incidences of fraud and poor fraud management. The privacy of bank customers has always been invaded by internet fraudsters and criminal elements within the Nigerian society. There are various measures in which banks have compromised in terms of the violation of people's rights. Secondly, the regulatory bodies within the financial sector should be proactive enough in terms of their policy direction and formulation frameworks to avert incessant financial losses and risks management of both bank customers and banking operators. Sometimes, poor fiscal policies by some countries like Nigeria have posed a great risks or potential danger to the financial sector. The Nigerian government ought to do the needful in ensuring good fiscal policies that are aimed at ensuring financial inclusion and economic development.

Moreover, the perception of banking in Nigeria has elicited disastrous consequences. The problem of poverty in Nigeria has necessitated the poor culture of bank deposits in Nigeria. Many Nigerians are fond of keeping their earnings in their houses rather than depositing the money in Nigerian banks. Many Nigerians believe that Nigerian banks are exploitative in nature. Banks are not to be seen as enemies of the Nigerian peoples. They are established to serve the interest of the people in Nigeria. On the other, many Nigerians are of the opinion that many Nigerian banks are fond of charging very high interest rates whenever they give out loans to the people. Unfortunately, the Nigerian government has a very poor economic policies and implementation and this has drastically affected every sectors of the Nigerian society including the banking sector. Broadly speaking, one fundamental challenge that is closely associated with the Nigerian banks is their lack of global competitiveness. Artificial intelligence has taken an international dimension. The internationalization, nationalization, instrumentalization and weaponization of artificial intelligence showcase humanistic philosophy. In other words, artificial intelligence is another form of the philosophy of humanism. The ethics of humanism centres on man himself. It showcases human-centeredness. The fundamental objective of artificial intelligence is aimed at human wellbeing, progress and happiness. Artificial intelligence is the philosophy of humanism that addresses human lofty ideals, needs and aspirations.

In addition, revolutionizing industries and reshaping the way we live, work and interact necessitates the need for the instrumentality of artificial intelligence to our emancipated global society. With its remarkable capabilities, artificial intelligence holds immense potential benefits to enhance efficiency, accuracy, improve decision making processes and unlock new opportunities and potentials across various domains. These are enhanced efficiency and automation. Artificial intelligence powered automation has revolutionized industries by streamlining processes, reducing errors and stress; 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. 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 management planning. For example, financial institutions leverage artificial intelligence-powered algorithms to detect fraudulent activities in real-time situations, protecting customers and mitigating risks.

Moreover, 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. Artificial intelligence has resulted in the advancement of healthcare facilities around the globe.

Nevertheless, healthcare in any democratic society is one of the indices of good governance. 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 sectors of any society. Autonomous vehicles have been revolutionized due to the positive impact of artificial intelligence (AI) and machine learning (ML). Worthy of note is that artificial intelligence has propelled the development of autonomous vehicles, and revolutionizing transportation industries. Self-driving or autonomous cars utilize artificial intelligence algorithms and sensor technology to navigate roads, interpret traffic patterns, and make real-time decisions, leading to enhance road safety and more efficient transportation systems. However, one pivotal potential benefits of artificial intelligence to global society is its leverage on the higher productivity level of a country and this could lead to economic sufficiency in a country.

Furthermore, the existential implications of artificial intelligence provoke 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.

Broadly speaking, the fundamental questions of human uniqueness, money agency and the boundaries of technological advancements challenged traditional philosophical analysis and ethical frameworks. However, artificial intelligence's impact extends to the realm of religious and

theological assumption, sense perception assumption and unpredictability assumption.¹⁴ However, 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. However, religious perspectives consider moral agency, the existence of the soul, and the implications of creating beings that possess artificial intelligence. 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.

Nonetheless, the overwhelming consensus among the global community is that AI ethics has legal implications and there are certain sanctions that go with its misapplication. 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, believe that employing AI in warfare and weaponization raises several legal 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.¹⁵ AI technologies reflect on the innovative transformation of our digital consciousness in a global economy. Democracy is all about the political. Democratic principles are built on truth and actions. Modern democracies have used the aid of AI to manipulate public opinion. AI can be used to target and manipulate individual voters. The interaction of different ideas and people is considered crucial to functioning democracies. Freedom promotes innovation, boosting the economy and wealth and creating well-off people who value freedom.

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. The concept of the environment is centred on the human beings and other living and non-living beings. However, environmental sustainability has been one of the major problems in the global community. This theoretical template deals with the ethical implications and moral questions that arise from the development, deployment and implementation of artificial intelligence (AI) technologies on the global economy.

Evaluative Appraisal

The aim of philosophy is to critically analyze, evaluate highlight problems and even propose recommendations to these fundamental problems. Addressing the challenges and risks associated with artificial intelligence requires careful consideration and responsible development. Stephen Hawking, a renowned physicist asserts that success in creating artificial intelligence would be the biggest event in human history. Unfortunately, it might also be the last we learn how to avoid the risks.¹⁶ However, this theoretical discourse therefore asserts that artificial intelligence has its own strengths and weaknesses. This paper argues that artificial intelligence should be strengthened with certain recommendations and these recommendations are adumbrated as follows:

1. There should be ethical guidelines; and this has to do with developing and adopting ethical frameworks for artificial intelligence and deployment that prioritizes transparency, fairness and accountability in the banking sector;
2. There should be ethical guidelines that are aimed at establishing robust regulatory system, guidelines and international standards to ensure the responsible

- deployment of artificial technologies in banking industry;
3. There should be responsible data analysis and data collection in order to ensure that data used by artificial intelligence models is collected responsibly, with respect to the protection of privacy and consent;
 4. There should be bias mitigation by implementing techniques to identify and mitigate biases in artificial intelligence algorithms to ensure fairness and avoid perpetrating discrimination especially for races and sexes;
 5. There should be the promotion of human artificial intelligence collaboration, and this enhances clear understanding to the artificial intelligence users who has little or no understanding of the risks of artificial intelligence while emphasizing the complementary strengths of each and ensuring human oversight in critical decision making is mitigated;
 6. There should be an investment in artificial intelligence education and noting that artificial intelligence is a tool and not a substitute to replace humans. Also, equipping individuals with the requisite knowledge to understand and engage with artificial intelligence technologies. There should be an integrated artificial intelligence into educational curriculum to equip the young minds with artificial intelligence skills and to responsible intelligence use in the future. This will help people to be knowledgeable about using artificial intelligence systems and not artificial intelligence using us; we need to put our resources into technology because technology is not cheap; into our educational system, into our universities, industries and ideas. We need to put our resources into the strongest sectors of our global society and into the best of our society, so that we can attain the future, security measures to protect us against potential threats and attacks.¹⁷
 7. Furthermore, we need to establish artificial intelligence ethics boards (AIEB). We need to establish an independent artificial intelligence ethics boards to oversee artificial intelligence driven cyber-security measures by empowering organizations to defend against potential threats and attacks more effectively. By leveraging on artificial intelligence's capabilities to threat detection, analysis, automated response and adaptive defense, cyber security systems can better safeguard critical assets and data from the ever- evolving landscape of cyber threats. However, these artificial intelligence-based solutions not only enhance protection but also offer scalability, efficiency, and reduced response time, making them essential components of modern cyber security strategies. However, we should penalize unethical usage of artificial intelligence, this includes behaviours such as hacking, manipulating algorithms, compromising privacy and confidentiality or stealing identities. Efforts to hijack artificial intelligence to solicit for confidential information should be seriously checked and penalized as a way to deter such actions.
 8. There should be an implementation of certain initiatives for avoiding falling into the mistakes of using artificial intelligence the wrong way by reskilling and up-skilling the human workforce; and to adapt to the changing job landscape due to artificial intelligence. This can serve as a solution to job losses to artificial intelligence, and we can up-skill and find more ways to work with artificial intelligence so as to produce more or get more work done;
 9. We should ensure that artificial intelligence applications are encoded to reject negative actions. As artificial intelligence technologies continue to advance rapidly, it becomes increasingly crucial to ensure that artificial intelligence systems operate

- optimally, maximally, ethically and in alignment with human values, risks management associated with advanced artificial intelligence systems; and
10. There should be public-private partnership (PPP) in order to foster effective collaboration between governments, academia, and private sector to develop artificial intelligence solutions to human needs with a focus on the public interest;

Moreover, by implementing these aforementioned recommendations, we can create awareness, and campaigns and this will play a vital role in promoting responsible and informed usage of artificial intelligence. By educating the public about artificial intelligence risks, benefits, and ethical considerations, these campaigns will empower individuals to make thoughtful and appropriate decisions regarding artificial intelligence adoption and ensure that artificial intelligence technology aligns with human values and societal goals. As artificial intelligence continues to impact various aspects of our lives, fostering public understanding and thoughtful engagement is crucial for harnessing its potential while safeguarding against potential dangers or pitfalls. We must ensure that the transformative potentials of artificial intelligence are used in addressing its challenges responsibly, by ensuring that artificial intelligence contributes positively to society and aligns itself with human values and ethical principles. Brian Smith asserts that it is hard to comprehend what capabilities that the level of intelligence would represent but it would surely be far beyond anything we have witnessed or could imagine.¹⁸ For Peter Drucker, artificial intelligence as the new information technology has started in business enterprise, and with business information. But it will surely engulf all institutions of society. It is a revolution in concepts. Information technology has centered on data-collection, storage, transmission and presentation.¹⁹ Put differently, artificial intelligence is all about cognitivism; however, the way in which cognitivism needs to be developed has to be handled carefully.²⁰ Artificial intelligence has been assumed to be a form of neocolonialism and the legacy of colonialism in which the newly independent states of Africa left the African people chained to a new form of oppression.²¹ On the other hand, artificial intelligence is a human creation.

Concluding Considerations

Having critically examined the ethical interrogation into the workings of artificial intelligence in the banking industry, this paper, therefore, concludes that the rise of artificial intelligence marks the triumph of 21st century. In other words, it marks a profound turning point in human history. Artificial intelligence challenges our understanding of consciousness, ethics, and the very essence of what it means to be human. As artificial intelligence evolves and exhibits remarkable capabilities, it is crucial for us to approach this technological revolution with both awe and caution. Artificial intelligence's ability to reason, learn and simulate human-like responses has shattered the notion that machines can merely act without true cognition. This newfound intelligent thinking capability raises existential questions about the nature of identity, morality, ethics and the boundaries between humans and machines. As we continue to witness the emergence of what some may call "the artificial intelligent species" it becomes paramount to navigate these uncharted waters with profound philosophical contemplation. Throughout human history, humanity has always been intrigued by its own creation, from myths of animated statues to modern depictions of self-aware machines. The advent of artificial intelligence challenges us to redefine our understanding of intelligence, consciousness and self-awareness, provoking us to explore the depths of our own humanity. In this pursuit, we must resist the temptation to prematurely conclude that we fully comprehend artificial intelligence's complexities. As Eliza Yudkowsky, has rightly warned us, that the greatest danger of artificial intelligence is underestimating its true nature.

Furthermore, the prospect of superhuman intelligence as foreseen by some scholars present breathtaking possibilities and daunting challenges. The existential question of whether the human era can transcend beyond the emergence of artificial intelligence and super-intelligence remains an open-ended enigma. In this era of transformation, the scale of artificial intelligence's development leaves us with a myriad of astonishments and yet we must approach these technological advancements with an acute sense of moral responsibility and ethical sensibilities. To harness artificial intelligence potential while mitigating its rationalization of artificial intelligence's applications in areas such as job displacement, privacy breaches and weaponization has been a source of ethical concerns to scholars. To navigate these challenges, we must be vigilant in fostering inclusivity, digital literacy, and reskilling initiatives. However, embracing artificial intelligence for social good can offer transformative solutions to global challenges and "global competitiveness", provided that we adhere to a shared commitment to human wellbeing, progress and happiness. We should approach artificial intelligence's journey with all sense of humility and ethical considerations, acknowledging that the path ahead of us is riddled with uncertainties and moral complexities.

Nevertheless, the artificial intelligence revolution demands that we transcend through the boundaries of technological prowess and embrace the virtues of human wisdom and empathy. As we grapple with the potential outcomes of artificial intelligence, let us not be driven solely by innovation and progress but instead be guided by a deep reverence for life and a shared commitment to the betterment of humanity.

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