

BALANCING ARTIFICIAL INTELLIGENCE ETHICS: EXPLORING THE SYNTHESIS OF JOHN STUART MILL'S LOGIC AND SAFETY PROTOCOLS IN THE NIGERIAN WORK-PLACE

¹Idoniboye, Omiete & ²Stephen L. W. Nyeenenwa (PhD)

**Department of Philosophy
Faculty of Humanities
Rivers State University**

omiete.idoniboye@ust.edu.ng; nyeenenwa.stephen@ust.edu.ng

Abstract:

This study focuses on John Stuart Mill's Logic and Safety Protocols in the Nigerian Workplace as it examines the complex connections between ethics, artificial intelligence (AI), and workplace dynamics. The study, which draws inspiration from John Stuart Mill's consequentialist theory, attempts to reconcile ethical issues with safety protocols in settings where artificial intelligence is extensively used to evaluate applicants and students. The inclusion of safety rules in AI systems used in exam rooms is rigorously examined in this work to ensure ethical treatment and preserve the integrity of the evaluation process. It promotes a system that balances modern safety precautions with Mill's utilitarian worldview. The study emphasises the moral responsibilities of legislators, employers, and AI developers while highlighting the profound effects of AI decisions on people and society. It emphasises how crucial impartiality, openness, and fairness are in a world that is reliant on AI and is developing quickly. The paper advocates a pragmatic and moral framework for AI while adapting its methodology to the particular circumstances of Nigeria. To ethically and securely integrate AI into Nigerian workplaces, it requires a careful blending of philosophical ideas and practical safety measures when using the technology in aptitude testing and tasks.

Keywords: Safety, Artificial Intelligence (AI), Fairness, Bias, Transparency and Utilitarianism

Introduction:

In a time when artificial intelligence (AI) is being progressively incorporated into many aspects of human life, the moral implications of the use of AI are becoming more and more important (Makridakis, 2017). In particular, there is a strong overlap between the ethical aspects of AI, and John Stuart Mill's utilitarian philosophy, which emphasises the greatest good for the largest number of people. (Mill, 2016). When it comes to the application of AI in the workplace, more especially in examination rooms, given the distinct sociocultural setting of Nigeria, this synthesis is quite pertinent. The ethical concerns of using AI in conjunction with safety standards have become increasingly important in terms of testing and assessing students and job seekers, and to

make this innovation through the Nigerian technological environment (Abayomi, et al, 2021). In order to untangle the ethical complexities of AI in Nigerian test contexts, this work aims to explore the complex fusion of Mill's utilitarian logic and the requirement for safety procedures in AI.

A conceptual benchmark for comprehending the moral foundations of AI applications is John Stuart Mill's utilitarian theory. In order to create a society where the greatest good is realised, the utilitarian framework promotes behaviours that maximise happiness and the overall well-being of the society. This raises the need for a careful analysis of how AI in testing environments may affect stakeholders, including students and job seekers. When the influence of AI on human privacy, autonomy, and fair evaluation in high-stakes evaluations is taken into account, Mill's emphasis on individual liberties within the utilitarian equation becomes more pertinent (Mill, 1998).

In addition, it raises another complex viewpoint by combining Mill's utilitarian ideas with the requirement for safety precautions in AI. AI ethics are more than just utility; precautions must be taken to lessen possible risks. This is especially important in places like Nigeria, where the sociocultural fabric necessitates a cautious approach to the incorporation of technology. The growing impact of AI algorithms on decision-making processes makes safety precautions morally necessary. This is consistent with Mill's utilitarian reasoning, which aims to safeguard individual liberties and prevent unforeseen outcomes (Mill, 2015).

In Nigerian educational settings, the introduction of artificial intelligence into examination centres has generated a contentious ethical discussion. Some contend that disparities in economic status, cultural backgrounds, and educational achievement further exacerbate the ethical issues surrounding the application of AI (Olubukola, & Bankole, 2015). While others argue that AI requires ethical duties to protect individual rights and maintain justice, along with the potential advantages of efficiency and objectivity provided by an intelligence machine.

Efficiency and Objectivity:

The topic of artificial intelligence integration in examination centres is one that encourages philosophical reflection, particularly when considered in light of Nigeria's educational system. The promise of greater objectivity and efficiency is frequently highlighted by proponents of AI in this context. This view, which is mostly based on utilitarian considerations, asserts that there can be major advantages to using AI systems in grading and evaluation procedures. It is pertinent to consider the views expressed by Robert Nozick (2013) in his article, "The Experience Machine" where he tries to find out if any human being would rather like being permanently be attached to an experience machine, or to be consigned to have certain desires because of the experience machine, or be locked into a transformation machine whose duty will be to transforms him into the type of a person one has dreamt of becoming, say an astronaut (Nozick 2013: 265).

According to Nozick (2013), the problem is brought about by the fact that what matters to man is not the experiences that we get inside experience machines, just like we are now being steeped into AI ideas in our quest for knowledge. We are satisfied and can boast that after all, we tackled

the problem by ourselves, and with a machine even if we experienced doing it. Since “we want to do the actions that we want the experiences of doing them or thinking we’ve done them” it is the actual activity that is important to us. As a case in point, Nozick adds, that everyone who solves a problem or performs an action wants to be certain that the acting being is a man “a certain sort of person.” He follows his observation above with a remark, that “Someone floating in a tank is an indeterminate blob”, that he doesn’t have any answer to whether someone who has been in the tank is “courageous, kind, intelligent, witty, loving (Nozick 2013: 264). This is more than a problem of value, it is a problem of humanness. Would a man who relies on AI to tackle problems he is confronted with be certain that the eventual answer was produced by a man or not?

The speed with which AI can handle enormous volumes of data is one of the main justifications for its use in testing facilities (Hariri, et al, 2019). This efficiency can have a revolutionary effect in the Nigerian educational system, where a significant number of students take examinations. The greatest good for the greatest number should be the driving principle, according to utilitarian philosopher Jeremy Bentham (Mill, & Bentham, 1987). This idea is supported by the processing speed of the intelligent machines, which allows for the efficient and fast assessment of many examination scripts. This however does not exclude the questions of our owing the duties of beneficence that is there are other beings in existence that it is our place to make their condition better in respect of intelligence, virtue and pleasure. Therefore, pleasure isn’t all, it has to be moderated by virtue and intelligence. (Ross 2013: 756).

Moreover, there are extensive implications when grading and evaluation time are shortened. Examination results are frequently delayed in Nigeria because of the human grading process, governmental processes, and logistical difficulties. According to the utilitarian viewpoint, implementing AI can reduce these delays and guarantee that students receive feedback on time (Kaplan-Rakowski, et al, 2023). This is consistent with the utilitarian principle of optimising happiness and overall well-being, which will lead to better learning outcomes. It is yet to be explained whether merely optimising the happiness and wellbeing of the students by prompt release of results would be all? What if in a rush, by relying on machines, the inputs are wrong, entries are inadvertently swapped, and the end result are not representative of the students’ inputs. Would it turn out easy to reverse the errors that have occurred? Wouldn’t the eventual mistakes that ensue because so much pains and distress more than the pleasure that it was intended to produce?

The ability of AI to reduce human biases and promote objectivity is a critical feature that proponents of the technology in examination centres emphasise. Biases in grading might unintentionally affect students' academic paths in a heterogeneous educational environment like Nigeria, where cultural, socioeconomic, and geographical differences are common. AI promises to provide a more impartial assessment because it is free from bias (Devillers, et al, 2021). This aligns with the utilitarian theory of John Stuart Mill, which emphasises the value of impartiality in decision-making for the benefit of society as a whole.

Nonetheless, it is critical to recognise the possible ethical issues that come up when AI is used in examinations. The trend towards automation prompts concerns about the value of human judgement and the moral ramifications of giving computers this kind of authority (Colonna, 2021). Immanuel Kant and other deontological philosophers would contend that an automated grading system could violate moral precepts like respect for individual autonomy and dignity (White, 2009).

Moreover, Nigeria's socioeconomic environment adds complexity that calls for careful consideration from an ethical standpoint, which may likely create disparity in implementing AI and differences in access to technology and the digital divide. Also, there is this educational disparity that may be exacerbated by students in urban centres with superior technology infrastructure having an edge over their peers in rural places. This calls into question justice and fairness, reiterating the moral precepts upheld by Rawls (2017).

Therefore, the debate adduced by different schools of thought is highlighted by the integration of AI in Nigerian examination facilities. Although utilitarian concepts support effectiveness, objectivity, and general advancements in education, deontological and justice-focused concerns warn against potential moral problems. In order to guarantee that the application of AI is in line with the more comprehensive objectives of education in Nigeria, it is crucial to strike a balance between technological advancement and ethical concerns (Akinpelu, & Akintola, 2023). For example, if we are concerned with the “prima facie duty” of “not injuring others”, obviously we will also be dedicated to holding onto the inclination and the primary duty not to harm, which would equally produce the consequential duty to resist the inclination harm others. (Ross 2013: 756).

Cultural Considerations:

Through a philosophical lens, the ethical discussion around AI in Nigerian educational settings takes on a complicated interplay between communitarian principles and cultural relativism. Community well-being is prioritised over individual interests in communitarian philosophies, which have their roots in African ethical traditions. An example of this viewpoint could be the focus on Ubuntu, a philosophy that is common in many African communities and encourages community solidarity and interconnection (Ewuoso, & Hall, 2019).

There are others who suggest that integrating AI into Nigerian education would be in line with the general interest to enhance the educational system for the benefit of society as a whole. Artificial intelligence-powered solutions, for example, can improve the productivity of administrative work, offer customised education, and make educational resources easier to access. All of these benefits can contribute to the community's overall development.

However, taking cultural relativism into account raises ethical questions about the use of AI in education. Critics contend that all technical advancements, including artificial intelligence (AI), ought to honour and represent regional cultural norms. In certain cultural circumstances in Nigeria,

the educational process places more emphasis on one-on-one encounters and qualitative assessments. This viewpoint could have its origins in the idea that education encompasses more than just the dissemination of knowledge; it also involves the whole development of the person within the community.

For example, oral communication, storytelling and in-person contact between students and professors are highly valued in traditional African educational institutions. Cultural relativism-based critics raise worries about the possibility that an excessive dependence on AI could dehumanise education by undervaluing these interpersonal and culturally entrenched elements. The worry is that the use of AI could destroy the rich cultural tapestry that has historically defined Nigerian education and turn it into an impersonal, mechanical procedure (Meretoja, 2018).

Furthermore, in a system dominated by AI-generated quantitative measures, the cultural significance of qualitative assessments, such as their capacity to evaluate a student's morality, work ethic, and interpersonal skills, may be underestimated. The ethical challenge of whether it is appropriate to impose a technology-driven educational approach that may not accord with the cultural ethos is raised by this misalignment with local cultural norms. Further, it is an anathema in Nigerian cultural ethics for a person to act in any way that undermines the basic cultural values like courage, temperance or moderation, liberality, magnificence or personal and community wellbeing, accomplishments, ambition, gentleness, and concern for others, truthfulness, friendliness, communalism, modesty, righteous indignation, and justice, most of which were also listed by Aristotle as being representative of a virtuous person. For Aristotle, since a human is a rational being, his happiness is intricately tied to how he exercises his reasoning faculty, whether he lives in accordance with or in conflict to active or passive reasoning. Culturally, therefore, the use of AI for problem solving would be seen as being counter to the pursuit of the virtuous living.

The other issue which lies at the end of the eventual reliance upon AI for solutions to the problems of traditional African societies would be false living. It is the hallmark of the deontologist thought that duty is owed the community generally, and that these duties are defined by human reasoning and that all humans are equal. Thus can I universalise lying that I wrote an examination from my head when I know that it was a machine, AI that wrote it for me? Also, if in the course of my searching for a job, I misrepresented my curriculum vitae because it was flawlessly put in place for me based on the need of the employer, would I be able to look at the eyes of the other community members after I land the job that I was the perfect pick for the vacancy? But here again the import of AI runs afoul of the cultural standards that one should not lie and that achievement ought to be earned. A real check for the preference of AI in this case would be, since I knew that I lied, would I have tolerated everyone lying like me, for invariably, there would have been another who if he/she has lied would have been better packaged than me to have gotten that job. According to Kantian ethics, if all lied, no one would believe any person, because if honesty works in traditional cultural societies, then lying becomes impossible because lying depends on the pre-existence of truth telling and trustworthiness. (Hosmer 1992: 72).

Taking from the above, the ethical discussion around artificial intelligence in Nigerian educational settings, in essence, represents a careful balancing act between the need to uphold and respect cultural norms and the possible advantages of technical innovation. Finding a compromise that makes use of AI's benefits and keeps the educational system human-centred, culturally aware, and committed to the collective well-being that African ethical traditions promote is the difficult part (Brokensha, 2023). This calls for a framework of ethics that recognises and values the range of cultural viewpoints present in the educational landscape, as well as careful consideration of the local context and active involvement with stakeholders.

AI and Safety Protocols in the Nigerian Work-Place:

Exploring the amalgamation of Artificial Intelligence (AI) with safety protocols within the Nigerian workplace necessitates the application of John Stuart Mill's Joint Method. This methodology, advocated by Mill, encourages a synthesis of deductive and inductive approaches, blending a priori reasoning with empirical evidence. Its relevance in the AI context is pronounced, given the concurrent involvement of theoretical principles in its practical implementations. Mill, a proponent of utilitarianism, a consequentialist ethical theory emphasizing actions that maximize overall happiness, underscores the need to evaluate the impact of AI systems on the well-being of individuals within the Nigerian workplace (Jena, et al, 2022).

In the realm of AI and safety, an examination of utilitarian principles prompts a scrutiny of AI applications like predictive maintenance (Nassar, & Kamal, 2021). By utilizing sensors and machine learning algorithms, AI can prognosticate equipment failures, thereby diminishing the probability of accidents. This application aligns seamlessly with utilitarian ethics, as it fosters the well-being of workers by averting potential harm.

Furthermore, philosophical discourse on AI safety protocols delves into social contract theory, as expounded by thinkers such as John Locke and Jean-Jacques Rousseau (Saka, et al, 2023). This theory posits that individuals in a society implicitly agree to adhere to certain rules for the greater good. In the Nigerian workplace, this suggests that employers, employees, and AI systems should adhere to collectively agreed-upon safety protocols. Consider, for instance, an AI-driven safety monitoring system ensuring compliance with workplace safety regulations (Khanna, & Srivastava, 2021). This adherence mirrors the social contract, wherein all stakeholders implicitly commit to following safety rules for the collective benefit of the workforce.

Recent years have witnessed AI's pivotal role in advancing occupational safety, as demonstrated by some oil and gas companies in Nigeria. They have embraced AI-based predictive analytics to identify potential safety risks, encompassing predictions of equipment failures, assessment of environmental conditions, and adherence to safety standards. AI-powered simulations and virtual reality have been instrumental in health and safety training programs, allowing employees to engage in realistic scenarios that enhance their emergency response skills. Again, some Nigerian

companies have commenced the implementation of AI-driven training modules for improving safety awareness and preparedness (Nsude, 2022); (Idoniboye & Nyeenenwa, 2023).

In deductively applying Mill's Joint Method, general principles can be established, such as the notion that AI should be employed to enhance safety, aligning with the deductive reasoning of prioritizing the well-being of individuals in the workplace. Inductively, evidence from specific instances, like predictive maintenance and AI-driven training programs in Nigeria, serves as empirical support for the broader principle of utilizing AI for safety enhancement.

Considering the ethical implications and practical implementations of AI and safety protocols in the Nigerian workplace through the lenses of utilitarianism and social contract theory, Mill's Joint Method provides a comprehensive understanding. As technology progresses, continuous ethical considerations and empirical evidence should guide the integration of AI, ensuring the well-being of the workforce and alignment with societal principles.

Safety, AI Ethics in Nigerian Workplaces: An Evaluation.

The advent of artificial intelligence (AI) has engendered noteworthy progress across diverse fields, concurrently sparking ethical apprehensions, particularly in regions like Nigeria, where issues of academic dishonesty and jobseeker manipulation are pervasive. This discourse employs the philosophical framework of John Stuart Mill to scrutinize the safety and ethical dimensions of AI in Nigerian workplaces, centring on instances involving students resorting to AI devices for cheating in examinations and jobseekers manipulating AI to navigate aptitude tests. However, this practice has been met with resistance and condemnations from Nigerian and African cultural virtues of honesty, achievements and modesty, and in particular, that reliance on AI to pass examinations does not credit a man with the success, but rather the success are extraneous to the student, and it does not make him proud and human relying on machines rather than his intellect and brains.

In the educational domain of Nigeria, instances have been documented where students resort to AI devices for cheating during examinations, undermining the integrity of the educational system and contravening principles of fairness and meritocracy. This unethical conduct not only jeopardizes the prospects of individual students but also compromises the credibility of the entire education system. For example, in 2023, prominent Nigerian university reported cases of students utilizing AI-powered devices to access unauthorized information during exams, prompting concerns about the efficacy of existing examination security measures.

Jobseekers in Nigeria are increasingly leveraging on AI to manipulate outcomes in job aptitude tests, posing a threat to fair competition and merit-based hiring. This undermines the trust employers place in AI-driven recruitment processes, raising doubts about the authenticity of candidates' skills and qualifications. Notably, a multinational company in Nigeria reported instances where jobseekers manipulated AI algorithms to bolster their performance in aptitude tests, resulting in the recruitment of candidates with inflated qualifications and skills.

The incorporation of AI in workplaces in Nigeria gives rise to concerns regarding the security of personal and sensitive data, especially in a context where data protection laws are still evolving. The potential misuse or unauthorized access to AI-collected data poses significant risks to individual privacy. For instance, in 2022, a Nigerian company utilizing AI for employee performance tracking experienced a data breach, exposing confidential employee information and underscoring the urgent need for robust data protection measures in AI implementation.

AI systems in Nigerian workplaces are susceptible to bias, which will on the long run, perpetuate existing inequalities. Unchecked bias in algorithms can lead to unjust hiring practices, biased promotion decisions, and overall workplace discrimination. An illustrative case involves an AI-driven recruitment tool used by a Nigerian company, which was found to exhibit gender bias, placing female candidates at a disadvantage in the selection process. This incident emphasizes the imperative of regular audits and refinements of AI algorithms to mitigate bias.

In addition, it also poses some security risks as it has been reported that there AI-powered surveillance are on the increase and gaining widespread application. In both appropriate contexts (e.g., in Government Houses, Public spaces, work places to monitor workers, airport and major junctions), and at inappropriate locations, (e.g., some products could be impregnated with always-on microphones and sold for home uses), but it has to be understood that the use of AI products to assist authoritarian regimes to identify and oppress their citizens cannot be ruled out. In fact, one of such inappropriate use of I is the notorious AI-assisted computer-hacking and lethal autonomous weapons systems (LAWS), or “killer robots. This places on us all the need for caution because of the various examples of its obvious negative usages.

Examining the safety and ethical dimensions of AI integration in Nigerian workplaces through the prism of John Stuart Mill's logic emphasizes the imperative of prioritizing societal well-being while minimizing harm and injustice. This analysis underscores the critical need for robust regulatory frameworks, heightened awareness, and ethical practices, particularly in response to instances of AI misuse in academic and job-seeking realms. Central to cultivating a more ethical and secure AI landscape in Nigerian workplaces are measures such as ensuring data security, mitigating algorithmic bias, and promoting transparency in AI implementation. As the Nigerian workplace increasingly embraces artificial intelligence, navigating the ethical terrain becomes a complex challenge, prompting a critical exploration of the delicate equilibrium between safety protocols and ethical values.

The Contribution of the Study:

This study contributes to the expanding corpus of information about the moral implications of artificial intelligence in the workplace. Through the integration of modern safety measures with John Stuart Mill's utilitarian theory, the research attempts to offer a comprehensive viewpoint on the responsible application of AI. It looks at how Mill's emphasis on the greatest benefit for the greatest number and the need to protect people's safety and wellbeing at work could work together.

Key Findings:

The study produced a number of important conclusions that clarified the complex interplay between ethics, safety, and AI in Nigerian workplaces. First, it was noted that a framework for the ethical application of AI can be created by balancing Mill's logic with safety precautions. This integration minimises potential harm and guarantees that the advantages of AI are spread fairly.

Second, the study emphasised how crucial it is for AI systems to communicate clearly and transparently. A lack of knowledge regarding AI's workings might breed distrust and raise moral questions. Thus, encouraging transparency and offering sufficient training on AI technology become essential components in handling ethical issues.

Research Methodology:

The research gains a complex and interpretive component from the application of a hermeneutic approach to investigate perspectives on AI ethics and safety across Nigerian industries. Hermeneutics, which is based on the notion of comprehending and interpreting human experiences, is very useful for exploring difficult and individualised subjects like artificial intelligence ethics. Hermeneutics makes it easier to evaluate data holistically and assists scholars in combining many points of view to create thorough knowledge. This can be crucial in developing guidelines and suggestions that take the larger social context into account.

The hermeneutic approach used in this study provides a thorough and comprehensive examination of Nigerian attitudes towards safety and ethics in AI. Beyond simple analysis, it offers a deeper comprehension of the environmental, cultural, and industry-specific elements affecting how professionals perceive and handle the ethical implications of AI.

Implications of the Study:

This research holds practical consequences for policy-making, business, and technological development in addition to the academic sphere. With a balance between ethical responsibility and technological growth, organisations can use the insights gathered to improve their AI deployment strategy. Expert advice on how to create laws that support AI progress without sacrificing moral principles could be helpful to legislators.

Recommendations and Suggestions:

Building on the results of the study, it is advised that businesses fund thorough employee AI ethics training courses. This will raise awareness and provide staff with the tools they need to actively use AI technologies in a morally responsible way. Furthermore, norms and standards that support responsible AI use must be established through cooperation between industry players, governmental organisations, and ethical AI experts.

The recommendation for a "thoughtful and sophisticated approach" highlights the significance of giving considerable thought to and implementing a well-balanced plan. This entails protecting the cultural values, diversity, and dignity that are intrinsic to the Nigerian workplace, in addition to optimising the advantages of AI. Any incorporation of AI should respect and represent the rich and diverse cultural fabric of Nigeria, abstaining from any kind of prejudice or discrimination.

It is our recommendation that through the integration of safety procedures and the adoption of Mill's philosophy into its integration into the Nigerian work and examination space, the objective of charting for itself a pathway towards a morally peaceful and feasible future will be attained with ease. According to this, AI will be a tool for empowerment that advances workplace technology while retaining our human element. The focus on dignity indicates a dedication to making sure AI technologies do not compromise people's basic rights and dignity at work.

Also, the research recommends a cautious approach to implementing AI in Nigerian workplaces, taking safety precautions and utilitarian considerations into account. In the end, it envisions a future where AI acts as a beneficial force for empowerment and technical growth in a socially responsible manner. This calls for a nuanced approach that respects cultural values, diversity, and dignity. The research also recommends the submission of AI systems to audit, traceability, to avoid conflicts with human rights, and the level of their transparency and explainability (T&E) should be made appropriate to their context to guarantee the citizen's privacy and safety. It is also proposed that AI actors should promote social justice, fairness and non-discrimination by taking an all-inclusive approach to AI ethics training and that AI systems do not displace ultimate human responsibility and accountability before we wake up one morning and hear that AI has stolen all the money that was in the vault of the Central bank of Nigeria.

Therefore, this study adds to the current discussion on AI ethics by examining how safety procedures and John Stuart Mill's philosophy are combined in Nigerian workplaces. A peaceful and sustainable future for AI integration requires striking a balance between safety precautions and ethical norms as technology continues to transform the professional scene.

Conclusion

The study emphasises how difficult it will be to implement artificial intelligence (AI) in Nigerian workplaces while taking reasonable precautions and ethical issues into account. The allusion to Mill's logic points to a focus on utilitarian principles, according to which maximising utility and general well-being is the ultimate goal. But this needs to be weighed against the practicality of safety precautions, taking into account the possible hazards and repercussions of implementing AI.

We have also reviewed the fact that there is a grave concern about the effect of AI on causing mass unemployment, which according to Frey and Osborne, 2013, would likely put "a substantial share of employment, across a wide range of occupations, at risk in the near future." It is well known that AI is already being employed in health care delivery services, manufacturing, energy, finance, transportation and space exploration. In military expeditions, AI has come handy as there now

exist in use unmanned drones and vehicles which are programmed to carry out functions that were formerly performed by man. Although we are in the early stages of AI innovation, so if the fears being expressed about the adverse fall out of AI is anything to go by, then, it is certain that the employment of AI, robots and digital facilities would go a long way to displace a significant number of white and blue collar jobs. This prompts us to call for some mitigating measures to halt the downward turn towards arresting the foreseeable increase in the number unemployable people, and invariably, a consequential breakdown in law and order. (Smith and Anderson, 2014).

The integration of AI in Nigerian workplaces should attempt to improve productivity, efficiency, and general societal welfare in line with Mill's theory, which emphasises the greatest benefit for the greatest number of people. But this needs to be done in a way that respects safety procedures, recognising and resolving any potential hazards, biases, and ethical dilemmas related to AI technologies.

References

- Abayomi, O. K., Adenekan, F. N., Abayomi, A. O., Ajayi, T. A., & Aderonke, A. O. (2021). Awareness and perception of the artificial intelligence in the management of university libraries in Nigeria. *Journal of Interlibrary Loan, Document Delivery & Electronic Reserve*, 29(1-2), 13-28.
- Akinpelu, D. A., & Akintola, S. O. (2023). Navigating the Legal and Ethical Terrain of Artificial Intelligence in Enhancing Patient Safety in Nigeria. *Journal of Intellectual Property and Information Technology Law (JIPIT)*, 3(1), 169-200.
- Brokensha, S., Kotzé, E., & Senekal, B. A. (2023). *AI in and for Africa: A Humanistic Perspective*. CRC Press.
- Colonna, L. (2021). Legal Implications of Using AI as an Exam Invigilator. *Faculty of Law, Stockholm University Research Paper*, (91).
- Devillers, L., Fogelman-Soulié, F., & Baeza-Yates, R. (2021). AI & Human Values: Inequalities, Biases, Fairness, Nudge, and Feedback Loops. *Reflections on Artificial Intelligence for Humanity*, 76-89.
- Ewuoso, C., & Hall, S. (2019). Core Aspects of Ubuntu: A Systematic Review. *South African Journal of Bioethics and Law*, 12(2), 93-103.
- Frey, C, B. and Osborne, M, A. (2013). The Future of Employment: How Susceptible Are Jobs to Computerisation? Oxford Martin Programme on the Impacts of Future Technology' in *The Ethics Of Artificial Intelligence: Issues And Initiatives*, 2020.

Hariri, R. H., Fredericks, E. M., & Bowers, K. M. (2019). Uncertainty in big data analytics: survey, opportunities, and challenges. *Journal of Big Data*, 6(1), 1-16.

Hosmer, Tone Hosmer. (1994). *Moral Leadership in Business*. Chicago: Irwin Professional Publishing.

Idoniboye, O. & Nyeenenwa, S.L.W. (2023). “Risk Management Strategies in the Nigerian Oil Industry: A Logical Analysis Using John Stuart Mill's Canons of Inductive Reasoning” in *Nigerian Journal of Oil & Gas Technology*

Jena, O. P., Patra, S. S., Panda, M., Polkowski, Z., & Balamurugan, S. (Eds.). (2022). *Industrial Transformation: Implementation and Essential Components and Processes of Digital Systems*. CRC Press.

Kaplan-Rakowski, R., Grotewold, K., Hartwick, P., & Papin, K. (2023). Generative AI and Teachers’ Perspectives on its Implementation in Education. *Journal of Interactive Learning Research*, 34(2), 313-338.

Khanna, S., & Srivastava, S. (2021). AI Governance in Healthcare: Explainability Standards, Safety Protocols, and Human-AI Interactions Dynamics in Contemporary Medical AI Systems. *Empirical Quests for Management Essences*, 1(1), 130-143.

Makridakis, S. (2017). The forthcoming Artificial Intelligence (AI) revolution: Its impact on society and firms. *Futures*, 90, 46-60.

Meretoja, H. (2018). *The ethics of storytelling: Narrative hermeneutics, history, and the possible*. Oxford University Press.

Mill, J. S. (1998). *On liberty and other essays*. Oxford University Press, USA.

Mill, J. S. (2015). *On liberty, utilitarianism, and other essays*. Oxford University Press, USA.

Mill, J. S. (2016). Utilitarianism. In *Seven masterpieces of philosophy* (pp. 329-375). Routledge.

Mill, J. S., & Bentham, J. (1987). *Utilitarianism And Other Essays*. Penguin UK.

Nassar, A., & Kamal, M. (2021). Ethical Dilemmas in AI-Powered Decision-Making: A Deep Dive into Big Data-Driven Ethical Considerations. *International Journal of Responsible Artificial Intelligence*, 11(8), 1-11.

Nozick, Robert. “The Experience Machine” in *ETHICAL THEORY: An Anthology*, 2nd Edition, Russ Shafer-Landau (Ed.), (Wiley - Blackwell Inc., West Sussex, UK, 2013), pp. 264 – 265.

Nsude, I. (2022). Artificial Intelligence (AI), the media and security challenges in Nigeria. *Communication, Technologies et Développement*, (11).

Olubukola, A., & Bankole, O. (2015). Reducing examination malpractices in Nigerian schools through effective continuous assessment techniques as an alternative to one-shot examination in Osun State, Nigeria. *American Journal of Educational Research*, 3(6), 783-789.

Panel for the Future of Science and Technology (STOA), *The Ethics Of Artificial Intelligence: Issues And Initiatives*, by European Parliamentary Research Service Scientific Foresight Unit (STOA) PE 634.452 – March 2020. Accessed on 12th January, 2024 from <http://www.europarl.europa.eu/stoa> (STOA website).

Rawls, J. (2017). A theory of justice. In *Applied Ethics* Routledge. pp. 21-29.

Ross, W. D. “What Makes Right Acts Right?” in *ETHICAL THEORY: An Anthology*, 2nd Edition, Russ Shafer-Landau (Ed.), (Wiley - Blackwell Inc., West Sussex, UK, 2013), pp. 756 – 762.

Saka, L., Adebisi, O. M., & Bakare, A. R. (2023). John Locke, Jean Jacques Rousseau and Social Contract Theory Implications for Contemporary Nigerian Politics. *Classical Theorists in the Social Sciences: From Western Ideas to African Realities*, 67.

Smith, A., & Anderson, J. (2014). AI, Robotics, and the Future of Jobs. Pew Research Center, in *The Ethics Of Artificial Intelligence: Issues And Initiatives*, 2020.

UNESCO publication available at – unesco.org/en/artificial-intelligence/recommendation-ethics and accessed on the 12th January, 2024.

White, M. D. (2009). In defense of deontology and Kant: A Reply to van Staveren. *Review of Political Economy*, 21(2), 299-307.