

THE ETHICAL IMPACTS OF AI ON SOCIAL MEDIA: POTENTIAL RISKS FOR A RESPONSIBLE DIGITAL ENVIRONMENT

Rev. Fr. Barnabas E. Izegege, PhD
 Department of Philosophy, Faculty of Arts,
 University of Delta, Agbor.
 Email: barnabas.izegege@unidel.edu.ng

Abstract

Artificial intelligence is having a dramatic impact on a variety of industries, including marketing and marketing communications. Its use enables the optimization of marketing activities and increases efficiency not only within large corporations, but also in small and micro businesses. On social media, AI plays a significant role in content creation, post scheduling, campaign analysis and other aspects. The study explores the intersection of artificial intelligence (AI) and social media, examining the philosophical implications of AI-driven algorithms on human experience, agency, and ethics. Implementing AI tools into social media management can be a key element for improving the performance and effectiveness of marketing communications. It investigates how AI-powered social media platforms shape online interactions, influence user behavior, and impact our understanding of reality. The study highlights the need for a nuanced understanding of the complex relationships between AI, social media, and human experience, and argues for prioritizing ethics, transparency, and human values in AI development and deployment. It explores the ethical implications of AI in social media, focusing on issues such as misinformation, privacy, user manipulation, algorithmic bias, and the responsibilities of platform developers. The analytic method of philosophy was employed in this study.

Keywords: Artificial intelligence, Social media, Technology, personalization, machine learning.

Introduction

The rise of AI in social media has fundamentally altered how individuals and communities interact online. Social media platforms, driven by sophisticated algorithms, shape public discourse and influence user behavior. With the recent advancement in technology, Artificial Intelligence has gained ground across every field of human endeavours,¹ and social media domain are not left out in this technological innovation. As work becomes more tasking by the day, People tend to exploit the strength of Artificial Intelligence to ease the stress of workers while increasing their output. Artificial intelligence (AI) is the cognitive science that deals with intelligent machines which are able to perform tasks heretofore only performed by human beings. It is mainly concerned with applying computers to tasks that require knowledge, perception, reasoning, understanding, and cognitive abilities.² AI tools can be trained to leverage individual behaviors, preferences, beliefs, and interests to personalize experiences. They can teach machines to be like humans. They can provide them the ability to see, hear, speak, move, and write.

The philosophy of AI explores the ethical, social, and conceptual implications of artificial intelligence, while its relationship to social media is characterized by the use of AI algorithms to enhance user experience, automate processes, and analyze data. Social media has become a cornerstone in modern communication, playing a crucial role in shaping public opinion, fostering relationships, and facilitating a platform for businesses to engage with customers. The integration of artificial intelligence for analytics has significantly enhanced the ability of companies to understand and improve the customer journey, providing personalized experiences through data- driven insights.³ Novel

algorithms are continuously developed to meet the evolving demands of social media,⁴ ensuring that content delivery and ad targeting are more relevant and effective. However, the use of AI in this context raises ethical concerns, such as privacy breaches, the potential for bias in algorithmic decisions, and the manipulation of user behavior, especially with the complexities of sincerity in the modern world.

The rapid development of Artificial Intelligence (AI) has transformed the way we interact with technology, particularly on social media platforms. As AI-powered algorithms increasingly shape our online experiences, it's essential to examine the philosophical implications of this intersection. This paper will explore the relationship between AI, social media, and human experience, raising questions about the nature of reality, agency, and ethics in the digital age. As philosopher John Searle notes, "the structure of intentionality, the structure of our mental life, is a biological phenomenon".⁵ However, AI-driven social media platforms increasingly shape our mental life, influencing our perceptions, emotions, and relationships.

Social media, which is now very essential in human activities is also one of the main areas that have greatly benefitted from Artificial Intelligence. It has tremendously improved the performance and efficiency of marketers as they use it as a channel to reach out to the consumers. The emergence of social media has enabled interaction among many people through different platforms such as X (formerly Twitter), Tiktok, Facebook, Instagram, etc.⁶ Social media, through the use of Artificial intelligence is currently used in inferring social behaviors and deduction of tendencies, in collaboration with big-data analysis tools.⁷ This is made possible to its ability to gather and analyses data pertaining to people's activities on social media.

Social media have become an indispensable part of life. They constantly engage with platforms such as Facebook, Twitter, LinkedIn, Pinterest, and Instagram.⁸ Social media is one of the major sectors where marketers can both skyrocket performance and efficiencies by using AI. Companies are better leveraging social media through AI. With the help of AI, data about your activity on social media is continuously being compiled and analyzed. Social media is currently being used to infer social behavior and derive tendencies, in combination with big-data analysis tools.⁹ Social media platforms rely heavily on AI-powered algorithms to personalize user experiences, often creating biases and limit exposure to diverse perspectives.¹⁰ This phenomenon raises concerns about the impact of AI on human agency, autonomy, and critical thinking. As Sherry Turkle argues, "we are lonely, but we are afraid of intimacy"¹¹ highlighting the complex relationships between technology, human connection, and emotional experience.

This study explores the philosophical implications of AI in social media, examining the complex relationships between technology, human experience and ethics. By investigating the intersections of AI, social media, and human experience, this research aims to contribute to a more nuanced understanding of the digital age and the future of human intersection.

Social media platforms rely heavily on AI-powered algorithms to curate content, predict user behavior, and optimize engagement. These algorithms can create "filter bubbles" that reinforce existing biases, limiting exposure to diverse perspective.¹² Moreover, A-driven social media can perpetuate the commodification of personal data, raising concerns about surveillance capitalism and the exploitation of users.¹³

The Nature of AI and Social Media

Social media is one of the main industries where marketers can use artificial intelligence to improve both performance and efficiency. According to Sadiku et al.,¹⁴ artificial intelligence is a fundamental part of how today's social networks work. AI technologies offer the ability to increase productivity, identify new trends, reach a wider audience, find out what works for your niche, track performance and optimize campaigns in real time.

According to Kaput,¹⁵ AI is a fundamental part of how today's social networks work. This is why AI-based tools are so widely used in marketing. Facebook uses a variety of AI tools to enhance each user's experience. Instagram uses artificial intelligence to identify and suggest visuals and images. Snapchat uses AI technology in the form of computer vision to monitor facial features and then apply filters to the face in real time. LinkedIn uses the power of AI to recommend connections, suggest job openings, provide specific posts in the feed and suggest people to follow. According to Sadiku et al.,¹⁶ the use of artificial intelligence in social media is growing at an unprecedented rate and is constantly transforming social media. Many authors (e.g. Agnihotri, 2020; Chintalapati and Shivendra, 2022; Huang and Roland, 2021) point to the growing importance of artificial intelligence in marketing and social media.¹⁷ According to Sarmiento,¹⁸ AI is used to continuously collect and analyze data on social media activity. According to Chui et al.,¹⁹ AI will continue to influence social media networks as the technology develops and evolves.

The combination of AI and social media is proving to be highly beneficial for businesses. Anandvardhan,²⁰ emphasizes that AI is playing a dominant role in defining how social media works today. Argan et al.,²¹ point out that AI algorithms can predict consumer expectations and desires at scale, and can apply consumer behavior theories and variables to improve advertiser-user interactions.

According to Quadros,²² the benefits that AI can bring to social media include: (1) increased audience engagement, (2) greater efficiency, (3) smarter advertising, (4) refined content targeting, (5) reduced marketing costs with better return on investment, (6) AI-powered chatbots, (7) increased security, (8) cost reduction, (9) increased revenue, and (10) a competitive tool. According to Resqi,²³ there has been an increase in the number of publications dealing with marketing communication in the period 2015 to 2022. The author emphasizes that marketing communication studies over the last two years refer to marketing through social media.

we can find several examples of the influence of AI on social media. Pariser,²⁴ talks about personalized content. This includes recommending posts and advertisements that are relevant to each individual user. Examples are personalized views on platforms such as Facebook or YouTube. An example is Netflix's algorithm that suggests movies and shows based on the user's viewing history. Go et al.,²⁵ talk about sentiment analysis. AI analyses the sentiment of comments and posts on social media to measure public opinion. Gao et al.,²⁶ talk about bots and chatbots. Artificial intelligence can be used to create bots and chatbots that can interact with users on social media. Davidson et al.²⁷ talk about content filtering. AI is used to filter content on social media to remove inappropriate or dangerous posts. Castillo et al.,²⁸ talk about trend prediction. AI analyses social media data to predict trends and viral events. Goodfellow et al.,²⁹ talk about ad management. AI helps you better target your social media ads and maximize their effectiveness. Amidst all these accelerations, the following concerns must be checked.

Enhancing User Experience: AI technologies, including machine learning and natural language processing, enhance user experiences by personalizing content and improving engagement. Algorithms analyze user data to deliver tailored recommendations,

resulting in increased satisfaction and retention.³⁰ However, this personalization can also lead to unintended consequences, such as reinforcing existing biases and limiting exposure to diverse viewpoints.³¹

Content Moderation: AI plays a critical role in content moderation by automatically detecting and filtering harmful content, such as hate speech and misinformation. While these systems can efficiently identify problematic posts, they often struggle with context and nuance, leading to ethical dilemmas around censorship and freedom of expression.³² Recent studies have shown that AI moderation can inadvertently silence marginalized voices, raising questions about the fairness of automated systems.³³

The Impact of AI on Human Experience

Identifying potential risks for a responsible digital environment

Artificial Intelligence is a polysemous discipline, encompassing different efforts channeled towards better understanding of human intelligence by recreating human mind in machines and implementing technologies capable of performing tasks associated with some level of human intelligence.³⁴ Applying Artificial Intelligence in digital communication and social media provides organizations with better understanding of customers' viewpoints, feelings, and responses to brands and products in order to effectively reach a good number of people. Artificial Intelligence boosts organizations' efficiency, increases their revenues while reducing their expenses. It also helps in safeguarding the privacy of user data as well as making social media marketing more profitable. Furthermore, the strength of the current computing technology lies in their sophisticated compendium of algorithms and social media landscape are built on these algorithms.

These algorithms play a crucial role in ascertaining how to improve and manage communication, knowledge and networking in an online platform. Presently, social media strongly utilize artificial intelligence-based algorithm in order to make the platform more engaging for the consumers.³⁵ The integration of artificial intelligence-based algorithm into social media has remarkably enhanced social media services, making it more palatable for both the producers and consumers. Social media has been totally transformed by artificial intelligence, as all its basic functions such as searching, predicting, recommending, content creating and filtering are all performed through artificial intelligence algorithm.³⁶ Researchers have shown that our daily consumption of information on social media is made possible by the use of artificial intelligence powered algorithms.³⁷

Social media has moved away from its traditional role of being a platform where humans interact and connect with each other. Today, smart companies are using social media for ecommerce, customer service, marketing, public relations, and more. The applications of artificial intelligence in social media companies are many. Examples of how AI is used on social media platforms include analyzing text, analyzing pictures, detecting spam, social insights, advertising, and data gathering. Some of these applications are discussed as follows.³⁸ The intersection of AI and social media has significant implications for human experience. As we increasingly interact with AI-mediated platforms, we must consider the effects on our relationships, self-perception, and understanding of reality. For instance, social media can create curated person, blurring the lines between authenticity and performance.³⁹

Ethical Implications of AI in Social Media

AI in social media raises several ethical concerns, including algorithmic bias, data privacy, manipulation of behavior, and the spread of misinformation. These issues require careful

consideration and mitigation to ensure responsible AI deployment.

Misinformation and Disinformation: AI can be used to create realistic deep-fakes and spread misinformation, undermining public trust and eroding democratic processes and this can sometimes erupt social and political stability.

The Spread of False Information: AI-driven algorithms can inadvertently promote misinformation by prioritizing engagement over accuracy. For instance, sensational content often garners more interaction, leading to the amplification of false narratives.⁴⁰ A recent study found that during major events, such as elections or pandemics, misinformation outpaces factual information, which poses significant risks to public understanding and trust.⁴¹ One example of this was the **COVID-19 Misinformation**; during the COVID-19 pandemic, social media platforms faced challenges in combating misinformation. Research indicated that algorithms amplified misleading content about the virus, resulting in public health risks.⁴² Furthermore, a meta-analysis revealed that exposure to misinformation negatively impacted health behaviors and attitudes toward vaccinations.⁴³

Bias in Algorithms: AI models trained on biased data can perpetuate and amplify existing societal biases, leading to discriminatory outcomes in areas like content recommendations, advertising targeting, and content moderation.

Fairness and Equity: Ensuring that AI systems are fair and equitable for all users is crucial, requiring careful consideration of diverse user groups and potential biases in data and algorithms.

Data Privacy and Surveillance: Social media platforms collect vast amounts of user data to train AI algorithms, raising concerns about user consent, data privacy, and how data is used.

Transparency and Accountability: Users should be informed about how their data is being collected, used, and shared, and there should be mechanisms for users to control and access their data.

Manipulation of Behavior and Misinformation: Personalized Experiences and Manipulation:

AI-driven personalization can be used to manipulate users' behavior, leading to echo chambers and the spread of misinformation.

Transparency and Accountability: It's important for users to understand how AI algorithms make decisions, especially in areas like content moderation and recommendation systems.

Accountability for Harm: Who is accountable when AI systems make mistakes or cause harm, such as misjudging content or spreading misinformation is a concern yet to be addressed.

Social Impact and Job Displacement: AI-powered content moderation and automation can impact journalistic integrity and the diversity of information.

Job Displacement: The use of AI in social media can lead to job displacement in areas like content moderation and customer support.

Privacy Concerns: Social media platforms collect vast amounts of user data to train AI algorithms. This raises ethical questions about user consent and data privacy. Many users are unaware of the extent to which their data is collected and utilized.⁴⁴ Recent legislation, such as the General Data Protection Regulation (GDPR), aims to address these concerns, yet enforcement and compliance remain challenging.⁴⁵

The Right to be Forgotten: The concept of the "right to be forgotten" has emerged as a significant ethical issue. Users often struggle to erase their digital footprints, leading to ongoing debates about data ownership and individual rights.⁴⁶ A recent court ruling in the EU emphasized the importance of this right, reinforcing users' control over their personal data.⁴⁷

Transparency and Explainability: Providing users with clear and understandable information about how AI algorithms make decisions, and allowing users to control their data, can foster trust and accountability.

Addressing the Ethical Concerns: Diverse Data and Algorithm Design:

Training AI models on diverse and representative data sets, and

designing algorithms with fairness in mind, can help mitigate bias.

Regulation and Governance: Developing clear regulations and ethical guidelines for the use of AI in social media can help ensure responsible and ethical deployment.

User Education and Awareness: Educating users about the ethical implications of AI in social media can empower them to make informed choices and participate in shaping the future of AI.

The young and the AI Usage: The young, especially the under aged are exposed to gadgets and are expose to these accessories and this exposure is will certainly influence the nature ability.

By addressing these ethical concerns, social media platforms can harness the power of AI to create a more positive and trustworthy online experience for users, while also fostering responsible innovation.

Conclusion

In conclusion, the philosophy of AI and its relationship to social media are intertwined, as it reveals a complex and multifaceted landscape, with both areas raising important questions about the future of technology and its impact on society. As AI-driven algorithms increasingly shape our online interactions, it is essential to prioritize ethical principles and practices, transparency, and human values in AI development and deployment for moral alignment. Understanding the ethical and social implications of AI is crucial as it becomes increasingly integrated into our daily lives, especially through social media platforms. By recognizing the potential risks and benefits of AI in social media, we can work towards creating a more responsible and equitable digital environment. The relationship between AI and social media is complex and dynamic, offering both significant benefits and potential risks. While AI has the potential to enhance social media experiences, it is crucial to address the ethical concerns and challenges associated with its use as the godfather of AI Dr.

Geoffrey Hinton recently shares his worries on the bad use of AI and the need for a moral alignment. This requires a balanced approach that prioritizes responsible implementation, ethical considerations, and human oversight to ensure that AI serves as a tool for positive social impact.

References

1. Campolo A, et al. (2017), AI Now 2017 report. Report, AI Now, New York. Available at: <https://ainowinstitute.org/reports.html>.
2. Sadiku, M. N. O. (1989) "Artificial intelligence", IEEE Potentials, pp. 35-39.
3. Yousef J. Alawneh, Taghreed Al-Momani, Falsten N. Salman, Suleiman D. Al- Ahmad, Thair A. Kaddumi. (2023). A Detailed Study Analysis of Artificial Intelligence Implementation in Social Media Applications, in: 2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), IEEE, pp. 1191–1194.
4. Balaji, T.; Annavarapu, C. S. R.; Bablani, A. (2021) Machine learning algorithms for social media analysis: a survey, *Comput. Sci. Rev.* 40 100395, <https://doi.org/10.1016/j.cosrev.2021.100395>.
5. Searle, J. R. (1980). Minds, brains, and programs. *Behavioral and Brain Sciences*, 3(3), pp.417-424.
6. Sadiku M. N. O. et al 2021, "Artificial Intelligence in Social media". *International journal of scientific Advances*.
7. Sarmiento H., 2020. "How artificial intelligence can benefit the social media user," <https://medium.com/clyste/how-artificialintelligence-can-benefit-the-social-media-useraeafd24e0a7>
8. Sadiku, M. N. O.; Tembely, M. and Musa, S. M. (2018)" Social media for beginners," *International Journal of Advanced Research in Computer Science and Software*

- Engineering, vol. 8, no. 3, pp. 24-26.
9. Sarmiento, H. (2020) "How artificial intelligence can benefit the social media user," <https://medium.com/clyste/how-artificial-intelligence-can-benefit-the-social-media-user-aeaefd24e0a7>
 10. Pariser, E. (2011). *The filter bubbles: What the internet is hiding from you*. Penguin Press.
 11. Ibid.
 12. Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Public Affairs.
 13. Turkle, S. (2015). *Reclaiming conversation: The power of talk in a digital age*. Penguin Press.
 14. Sadiku, M. N. O., Ashaolu, T. J., Ajayi-Majebi, A., & Musa, S. M. (2021). Artificial Intelligence in Social Media. *International Journal of Scientific Advances*, 2(1), 2708-7972.
 15. Kaput, M. (2022). What Is Artificial Intelligence for Social Media? Marketing AI Institute. Retrieved March 27, 2022, from <https://www.marketingaiinstitute.com/blog/what-is-artificial-intelligence-for-social-media>.
 16. Sadiku et al (2021) Op. Cit.
 17. Agnihotri, R. (2020). Social media, customer engagement, and sales organizations: A research agenda. *Industrial Marketing Management*, 90, 291–299. <https://doi.org/10.1016/j.indmarman.2020.07.017> A.; Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, 64(1), 38–68. <https://doi.org/10.1177/14707853211018428>; Huang, M.-H., & Rust, R. T. (2021). Engaged to a robot? The role of AI in service. *Journal of Service Research*, 24(1), 30–41. <https://doi.org/10.1177/1094670520902266>.
 18. Sarmiento, H. (2020, May). How artificial intelligence can

- benefit the social media user. Clyste. <https://medium.com/clyste/how-artificial-intelligence-can-benefit-the-social-media-user-aeaefd24e0a7>
19. Chui, M., et al. (2018, November 28). Applying artificial intelligence for social good. Retrieved from <https://www.mckinsey.com/featured-insights/artificial-intelligence/applying-artificial-intelligence-for-social-good>.
 20. Anandvardhan. (2021). Role of Artificial Intelligence in Social Media Marketing. *International Journal of Business Analytics & Intelligence*, 9(1 & 2), 34–40.
 21. Argan, M., Dinc, H., Kaya, S., & Argan, M. T. (2022). Artificial Intelligence (AI) in Advertising: Understanding and Schematizing the Behaviors of Social Media Users. *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal Regular Issue*, 11(3), 331-348.
 22. Quadros, M. (2020, September). Artificial intelligence in social media marketing. Retrieved from <https://www.socialbakers.com/blog/ai-in-social-media>.
 23. Resqi, M. (2022). Marketing Communications: A Bibliometric Study In The Use Of Technology And Social Media For Marketing [Komunikasi Pemasaran: Studi Bibliometrik Dalam Penggunaan Teknologi Dan Media Sosial Untuk Pemasaran]. Volume 3, (October), 4194–4203.
 24. Pariser, E. (2011). *The Filter Bubble: What the Internet is Hiding from You*. Penguin.
 25. Go, A., Huang, L., Bhayani, R., & Huang, L. (2009). Twitter sentiment classification using distant supervision. CS224N Project Report, Stanford.
 26. Ibid.
 27. Davidson, T., Warmesley, D., Macy, M., & Weber, I. (2017). Automated hate speech detection and the problem of offensive language. In *Proceedings of the 11th*

- International AAAI Conference on Web and Social Media (ICWSM'17), Vol. 17 (pp. 512–515).
28. Castillo, C., Mendoza, M., & Poblete, B. (2013). Predicting information credibility in time-sensitive social media. *Internet Research*, 23(5), 587-617. DOI:10.1108/IntR-05-2012-0095.
 29. Goodfellow, I., Bengio, Y., Courville, A., & Bengio, Y. (2016). *Deep Learning*. MIT Press Cambridge.
 30. Davenport, T., & Ronanki, R. (2018). *Artificial Intelligence for the Real World*. Harvard Business Review.
 31. Eslami, M., et al. (2022). Algorithmic Personalization in Social Media: Effects on Engagement and Trust. *Journal of Information Technology*.
 32. Gorwa, R. (2020). The Governance of AI in Social Media: A Research Agenda. *Journal of Digital Media & Policy*.
 33. Gillespie, T. (2020). *Custodians of the Internet: Platforms, Content Moderation, and the Hidden Decisions That Shape Social Media*. Yale University Press.
 34. Broussard M. (2018), *Artificial Unintelligence: How Computers Misunderstand the World*. Cambridge: MIT Press.; Frankish K and Ramsey WM (2014), *The Cambridge Handbook of Artificial Intelligence*. Cambridge: Cambridge University Press.
 35. Ibert O, Oechslen A, Repenning A, Schmidt S. (2022). Platform ecology: a user-centric and relational conceptualization of online platforms. *Global Netw.* 22(3):564–79. <https://doi.org/10.1111/glob.12355>
 36. Zhang C, Lu Y. (2021). Study on artificial intelligence: the state of the art and future prospects. *J Ind Inf Integr.* 23: 100224. <https://doi.org/10.1016/j.jii.2021.100224>
 37. Kang H, Lou C. (2022). AI agency vs. human agency: understanding human–AI interactions on TikTok and their implications for user engagement. *J Comput Mediat C o m m u n : z m a c 0 1 4 .* <https://doi.org/10.1093/jcmc/zmac014>.; Manoharan S,

- Senthilkumar R., (2020). An intelligent fuzzy rule-based personalized news recommendation using social media mining. *Comput Intell Neurosci*. 1–10. <https://doi.org/10.1155/2020/3791541>.
38. Kaput, M. (2020) “AI for social media: What you need to know,” <https://www.marketingainstitute.com/blog/ai-for-social-media>; Hogan, M. (2020) ”How artificial intelligence influences social media,” May 2020, <https://www.adzooma.com/blog/how-artificial-intelligence-influences-social-media/>
 39. Bostrom, N., & Yudkowsky, E. (2014). Ethics of artificial intelligence. In Bostrom N. & Yudkowsky E. (Eds), *The Cambridge Handbook of Artificial Intelligence*, Cambridge University Press, pp. 316-334.
 40. Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Science*.
 41. Chadwick, A., et al. (2022). Misinformation, Political Polarization, and Social Media: A Global Perspective. *Journal of Communication*.
 42. Cinelli, M., et al. (2020). The COVID-19 Social Media Infodemic. *Scientific Reports*.
 43. Roozenbeek, J., et al. (2022). Misinformation and its Effects on Health Behaviors during COVID-19: A Systematic Review. *Health Communication*.
 44. Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.
 45. Tufekci, Z. (2022). The Role of Legislation in Data Privacy: Balancing Rights and Responsibilities. *Journal of Law and Cyber Warfare*.
 46. González Fuster, G. (2019). The Right to be Forgotten: A Comparative Perspective. *Data Protection Law Journal*.
 47. Court of Justice of the European Union. (2022). Ruling on the Right to be Forgotten