PERCEPTION OF JOURNALISTS ON THE CHANGING DYNAMICS OF NEWSROOM PRACTICE IN THE AGE OF ARTIFICIAL INTELLIGENCE

*Basil Uche Onyeneho, *Ph.D.*[1], Raphael Abumchukwu Ekwunife, *Ph.D.*[1], Kalu, Ojiaku Joseph, *Ph.D.*[1], Nelson-Ogbaeja, Stella Adannaya., *Ph.D.*[1], Ilochi, Ferdinand Onyebuchi, *Ph.D.*[1], Israel, Lioness Chimnacherem[3], Emegharibe, Jessica Ngozi[3], & Professor Chibueze Linus Ogbuoshi[2]

[1]Department of Mass Communication Evangel University Akaeze, Nigeria.
[2]Professor of Mass Communication, Enugu State University of Science and Technology (ESUT) Enugu, Nigeria.
[1]Department of Mass Communication Evangel University Akaeze, Nigeria.

***Corresponding Author:** Basil Uche Onyeneho, *Ph.D.*

Abstract

This study examines the perceptions Enugu State-based journalists on the adoption of artificial intelligence (AI)-driven contemporary media practice. Particular attention is paid on the extent its adoption seeks to reflect on the perceived benefits, challenges, and implications for the professional journalism practice. The increasing integration of AI technologies in news production, content distribution, audience analytics, fact-checking, and multimedia storytelling continues to reshape media operation dynamics globally. However, concerns regarding ethical standards, job displacement, misinformation, credibility, and professional autonomy leave a gap in the study of developing media landscapes such as Nigeria.

Framed on the Theory of Mind (ToM) and the Digital Metamorphosis Theory (DMT), the study adopted a survey research design to investigate the attitudes and perceptions of journalists working in selected broadcast and print media organisations in Enugu State. Data were obtained from 201 practicing journalists in Enugu through structured questionnaire, while descriptive and inferential statistical tools were employed for data analysis.

Findings include that a large number of journalists operating in the state have in-depth knowledge of artificial intelligence, and its adoption in he media newsroom. By this level of awareness, the technology is not novel to them. It was also found that established the relevance of AI in the contemporary journalism practice, however will not able to obviate the human efforts in news gathering and presentation. Rather it would complement human efforts at actualizing newsroom demands. It further allays the fear inherent in the technology killing journalism practice by taking over the journalistic jobs thereby making the profession societal irrelevant.

The study concludes that the adoption of artificial intelligence in the journalism profession in Nigeria, and particularly Enugu State will sped up the transformation of journalism practice. It holds that the technology will recreate the practice, increase audience satisfaction of media content by facilitation media content creation, particularly with human-driven quest for industrial advancement.

The study recommends that every council of the NUJ should prioritize artificial intelligence skill acquisition as a means of helping their members upscale their knowledge in their chosen area of

profession. It also recommends that media owners should encourage their news men to seek avenues to acquire AI knowledge to help them remain effectively relevant for enhanced industrial performance. It further suggests increased budgeting by media organisations to aid reporters navigate through the traditional newsgathering approach to automated reporting, however propelled by the use of AI.

Key words: *Artificial Intelligence, Journalism, Newsroom, Technological shift, Human Intelligence*

Introduction

Technological metamorphosis has, more than any other time in human history, threatened professional practice around the world. These changes have long remained a contentious industrial concern to employees, as well as employers of labour, particularly in the world's developing countries. While the employees are perplexed of robotized technology taking away their jobs, employers are puzzled on how to acquire the new technology for enhanced performance to accomplish organizational goals. This is the despair surrounding the adoption of artificial intelligence into almost every aspect of human practices.

Artificial intelligence (AI) is gradually accentuating this fear; forcing the delusion to become realso soon. As the world is engulfed in employment crises, labour disasters, and paradigm shifts in professional practices, many questions are being raised as to the influence AI will have on professional practice of journalism in the emerging technological world order.

Artificial intelligence connotes a technological shift, driving the simulation of the processes of human intelligence by the use ofmachines, particularly computer systems. AI revolves around computer systems. It denotes the ability of machines to perform tasks that are typically driven by human intelligence. Tasks that engage human reasoning, learning and problem-solving. Copeland (2023) describes AI as the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. It is a machine clothed with human rationality to effectively discharge functions which are ordinarily human-oriented. It entails developing systems endowed with intellectual processes which are attributes of humans. For example, humans have the ability to reason and logically proffer solutions to puzzles, deductively or inductively discover meanings, arrive at results, generalize meanings and results, and learn from archived knowledge. AI has proven the ability to motivate such characteristics through machine-propelled instructions.

Based on this, Rouse (2023) simply defined the concept of AI as machine intelligence; hence a branch of computer science that focuses on building and managing technology that can learn to autonomously make decisions and carry out actions like humans. Contemporarily, such machines have been deployed in various areas of human endeavour such as the medical science, building and architectural engineering, sporting, banking sub-sector, the judiciary, communication and information dissemination,

teaching job and indeed in various areas of human practices. Consequently, it is beginning to glide through practices which in human thinking cannot be separated from human intelligence; leaving the trail that it might edge the professionals out of their cherished professions. Do we then envisage a huge labour crisis dangling, like an axe at the root of global practices, ready to disconnect various professionals from their age-long practices?

In a recent study on the state of AI in the media business, Lorica (2023) and his team at the O'Reilly Media in the United States found that 54 per cent of companies surveyed are still in the evaluation state of AI adoption, 57 would need to hire machine learning modelers/data scientist to lessen their skills gap while 63 per cent are currently using supervised AI technologies in business. In another study conducted by Grand View Research, the global market for AI in media and entertainment industry is estimated to reach $99.48 billion by 2030 from a growth index of $10.87 billion in 2021(Schroer, 2023). This development has the potential to tilt the attention of business interests in themedia owners to contemplate the adoption of AI in the industry.

Considering the incursion AI is making in professional practices, studies abound indicating the relevance of AI in the media industry within Nigeria and beyond (Okiyi and Nsude, 2019; Nnamdi and Nwanyanwu, 2021; Okocha and Ola-Akuma, 2022; Nsude, 2022). Notwithstanding, the need arises for intellectual inquiries to ascertain the disposition of journalists in Enugu State towards the AI innovation in global journalism practice. The benefit of this paper, therefore, is accentuated on the belief that the sensitization that the paper will create among media owners and journalism professionals in Nigeria would make for early preparation towards the envisaged paradigm shift which AI promises. This has led to several questions: will AI take over human jobs, particularly the news writing and reporting tasks of the journalist? This is the crux of this paper.

Research Questions

The study poses the following questions:

1. What is the knowledge level of journalists in Enugu State on the adoption of artificial intelligence in journalism practice?
2. What is the possibility of artificial intelligence displacing traditional human-driven news-gathering processes in journalism practice?
3. To what extent do the journalists perceive artificial intelligence paradigm shift displacing the age-long professionalpractice of news reporting?

AI is not a single technological component. It is a concept that encompasses a consortium of software applications and their hardware components that support machine-to-machine interaction, and expert systems. It is a data-driven algorithm task model. Recently, we were told of an AI-propelled womb incubating machine that can carry male semen and women's ovaries, an AI-driven house help/home manager, AI-enhanced bank receptionists, and AI-enhanced news- gathering machine. Although attempt to understand if machines could truly think began earlier the journey into AI began when John McCarthy adopted the term in an academic conference in 1956(Russell and Norvig, 2021) and further created the list processing language ((LISP) on which AI programming began. Initial development of AI encountered several challenges which tried to frustrate and inhibit its advancement (Crevier, 1993; Newquist, 1994; and McCorduck, 2004). In 1961, Alan Turing presented a paper in which he suggested that machines could be able to simulate human beings and do some intelligent things. By 1981, IBM produced the first personal computer which paved the way for the production of COG, a human-looking robot produced by Massachusetts Institute of Technology (MIT). In 2000, *Kismet*- which could use gesture and mimic movements in communication was introduced. This motivated interest and broad-based learning in the area, hence improved funding in AI techniques after 2012 elicited multiple interests which speedily advanced the knowledge for AI components. All these gave rise to the emergence of the closest robot to artificial intelligence that possess human ability and skill. Today, artificial intelligence has become an indispensable tool in societal advancement across professions and industries.

Artificial Intelligence in Journalism Practice: Benefits and Prospects

Following the Corona Virus that hit the global space towards the end of 2019, concerns were raised for media professionals around the world who had to give updates on the ravaging scourge of the virus. There was a need to take advantage of available technology to ensure that the job of newsreporting was not neglected. Practitioners resorted to the use of such as Zoom and Teams to conduct live interviews during the lockdown to observe the Covid-19 protocols. A lot of measures were taken to protect journalists from vulnerability. Yet, at the end of 2021 statistics released by the Swiss Organization Press Emblem Campaign (PEC) showed that the pandemic claimed the lives of over 600 journalists worldwide. (Okocha and Ola-Akuma, 2022).

Newsrooms all over the world are beginning to adopt various forms of artificial intelligence (AI) as part of the processes for newsgathering, production and dissemination of news contents (Kothari and Cruikshank, 2021). The western world and China are leading the innovation of AI adoption in journalistic

newsrooms. The technology employed in these countries include machine learning, automated content creation and moderation, speech-to-text programming. Despite using AI in various aspects of the society, newsrooms are bereft of the use of AI in African countries (Kothariand Cruikshank, 2021). This has a far-reaching implication in Africa, and particularly in Nigeria which is taunted to be a giant in the continent.

In countries of the west, humanoid robots are used in the journalism practice for interviewing,news writing and presentation, and even programming and content creation (Menon, 2023) Menon (2023) describes a humanoid robot as a type of robot designed to resemble and interactwith humans. It mimics human appearance and behavior, often with the ability to walk, talk, and perform tasks in a human-like manner.

A humanoid a robot structured in human body shape to provide professional services, interact with human tools and provide clients with services. Although they are made to have skin-layers and eyes, they lack flesh and bones like the human. They can talk like humans, walk like humans, and express a wide range of emotions. We have seen some of the them in banks, airports and other places where customer-relations are required. The importance of adopting this technology in the media practice cannot be over emphasized as experts have advected for its inclusion in the newsroom. For example, Mark Cuban, an American businessman and television personality recommended that whatever one does they learn it appropriately, obviously suggesting understanding deep learning of the art because otherwise the practitioners will soon become a dinosaur within three years, Shruti (2023). In the same vein, Shruti quoted Elon Musk, a technology entrepreneur who remarked that AI does not have to be evil to destroy humanity but toadvance the course of humans.

Alekhuogie (2023) writes that as an emerging technology, AI has been increasingly integrated into the newsroom in the recent years, thus bringing about changes in journalistic operations, creating new opportunities for news orgainsations to deliver information to the audiences. One of the most significant ways by which AI has been adopted in the journalism profession is its role in content creation. As a tool for content creation, it can be used to create advertising contents and the numerous news gathering and reporting roles of the journalists. For example, AI writing tools suchas GPT-3 can generate human-like texts on the prompting of the machine. News organisations canuse AI-powered tools such as Atomic Reach to analyze audience data and create content that resonates with specific groups of people in the society. AI can be employed to determine the e3ffective keywords and phrases to use in headlines and stories to improve their visibility on searchengines.

AI automation in journalism has already begun all over the world, including Africa. Okocha and

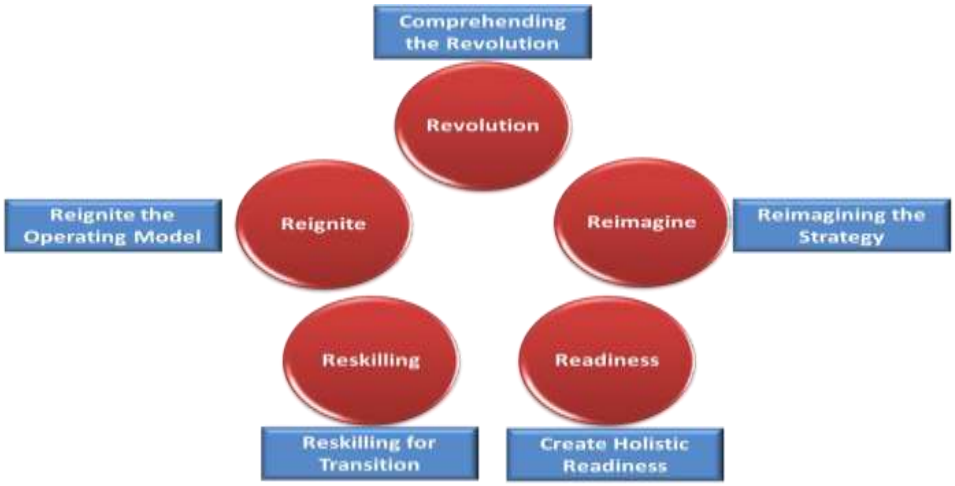
Ola-Akuma (2022) reported in a study that Namibia and Zimbabwe have introduced AI in their news reporting processes. There is *afriBOT* which simplifies reportage processes. News providers such as the Associated Press, Forbes, ProPublica, and the Los Angeles Times have adopted robot journalism in their reportage of news (Montal & Reich, 2017), to cover stories that could be understood through the use of binary numbers. The early adoption of AI by the media focused on productivity and efficiency improvements (Cohen, 2015) and this was called Editor. This was software created to make the journalistic process easier Underwood (2019).

Theoretical Framework

This study was anchored on two theories- The theory of mind and the digital metamorphosis theory. The quest for the interpretation and development of the cognitive basis of human commonsense as a theory of mind began in the early 1980s (Leslie, 2001). According to human sense, other people behave the way they do because they have mental states of various kinds which propel such behaviours, for example, intentions, desires, beliefs, and hopes. All these have contents that explain meanings; and are rooted in rationality which human intelligence projects. Wilfrid Sellars in 1956 led the study on the mind theory through his seminal essay "Empiricism and the Philosophy of the Mind". Sellars speculated that the commonsense concepts and language of mental states, particularly the propositional attitudes, are products of a proto-scientific theory which will lead to inventions. Today, the assumption of the theory has been accomplished in the emergence of artificial intelligence. It refers to the ability to attribute mental states to oneself and others based on the understanding that others have attributes that are different from one's own. Premack and Woodruff (1978) paint the picture of the theory of mind emphasizing that as humans, we assume that others want, think, believe and the like, and thereby upholding states that are not directly observable, using these states anticipatorily, to predict the behaviour of others as well as our own. These inferences, which amount to a theory of mind, are to constitute knowledge, which is universal in human adults. The theory is also referred to as commonsense psychology, mindreading, mentalizing, naïve psychology, or folk psychology.

The second theory which aptly situates this study is the technological metamorphism theory. Ramakrishnan (2023) quoted Milan Zeleny who asserted that a new economic paradigm is emerging, with a new structure, behaviour, institutions and values. He anchored this revolution in the digitalization of the global economy which is bringing in its wings industrial transformations. According to Ramakrishnan, the digital revolution will comprehensively affect the marketplace, workplace, and social networking space

which will affect current jobs and roles, rewrite competition, and change the way customers access and demand fulfillment of services. This postulation was anchored on the 5Rs- Revolution, Reimagine, Readiness, Reskilling and Reignitewhich ate the steps for technological metamorphosis in the current age.



Source: Ramakrishnan, 2023.

Ramakrishnan (2023) recommends the adoption of the theory for transition in the industrial world. He further posits thus:

> Digital Metamorphosis is real. Overnight changes are difficult, simple transformation efforts will be sub optimal and reactive projects will be counter-productive. The hardest part of all of this is that these changes must be marked by revolution in evolution. An enterprise wishing to adopt Digital Metamorphosis cannot afford to spend years tinkering with incremental process changes or siloed initiatives. Change must be quick and permanent for growth, or else it is likely doomed to failure.

In the light of the supposition of Ramakrishnan, the Nigerian media industry must innovate to align with contemporary global practice to satisfy the media audience always yearning for update and the news behind the news. This is the essence of this theory in the discussion of artificial intelligence in media practice.

Methodology

The survey research method was adopted in collecting data for this study. Consequently, Likert scale structured questionnaire was used to collect data. A sample size of 201 journalists in Enugu State was obtained using Smart Survey online calculator. Information from the office of the Nigerian Union of Journalists (NUJ), Enugu State Council showed that the council has a list of 420 members operating from different media house in the state, including correspondents and liaison officers of media houses not

domiciled in the state. The instrument was administered through research assistants, putting into consideration the broadcast media (radio and television),print media (newspaper and magazine) and online media that are represented in the state. While atotal of 121 copies of the questionnaire was administered to the broadcast media organization (Federal Radio Corporation of Nigeria, Nigerian Television Authority, Broadcasting Organisationof Nigeria, Enugu State Broadcasting Service, Dream FM, Love FM, Solid FM and Energy FM), 60 was administered to corresponding staff of print media organisations (Daily Sun, Guardian, Punch, etc). The remaining 20 copies were administered to online media representatives in the state. Of the total of 201 copies of the questionnaire administered, 192 were retrieved. During collation, 185 (92.0%) were found to be correctly filled and aligned with the demands of the study,hence used for the analysis.

The data gathered were subjected to quantitative analysis and descriptive tables were used to show the frequencies of the responses. The four-point Likert scale questionnaire was analyzed using the mean method where any mean value of 2.5 and above was accepted while a mean of less than 2.5 was rejected. The four-point Likert scale of rating adopted were strongly agree (SA), agree (A), disagree (D) and strongly disagree (SD) while corresponding rankings were SA = 4; A = 3; D =2 and SD = 1.

Data Presentation and Analysis

Research Question 1: What is the knowledge level of journalists in Enugu State on the adoption of artificial intelligence in journalism practice?

Table 1: Mean Responses on journalists' level of knowledge on the adoption of Artificial Intelligence in journalism practice

S/N	ITEM *Knowledge level of journalists on AI adoption in journalism practice*	SA	A	D	SD	FX	$\bar{X}$	Decision
1.	I have read a wide range of literature on artificial intelligence.	75	47	35	28	539	**2.91**	***Accept***
2.	I have watched movies and clips on artificial intelligence.	53	66	47	19	523	**2.83**	***Accept***
3.	News men are encouraged to acquire knowledge on artificial intelligence.	67	54	39	25	533	**2.88**	***Accept***

4.	My organization uses automated intelligence in some rudimentary aspects of journalism practice, like editing, speech-to-text, graphics, photoshopping, drone, etc.	55	80	21	29	531	**2.87**	***Accept***
5.	I have used some basic computer-driven artificial intelligence in the course of my practice.	46	51	49	39	474	**2.56**	***Accept***
Grand Mean							**14.05**	

Source: Field survey, 2025.

Data displayed on Table 1 above show that the journalists in the Enugu State Council of NUJ have knowledge of the use of artificial intelligence in the journalism practice. All the five items through which data were collected to ascertain the knowledge level of the journalists were highly ranked (above 2.5), hence were all accepted. A high grand mean of 14.05 accentuated the decision that corroborate the acceptance of the decisions. The implication of this is that generally and to a high extent, journalists in Enugu State are aware of the use of artificial intelligence in journalism practice.

Research Question 2: What is the possibility of artificial intelligence displacing traditional human-driven news-gathering processes in journalism practice?

Table 2: Mean Responses on the possibility of Artificial Intelligence displacing traditionally human-driven news-gathering processes in journalism practice

S/N	ITEM *Possibility of AI displacing traditional news-gathering processes*	SA	A	D	SD	FX	$\bar{X}$	Decision
1.	AI drives programmes initiative without human leading.	25	36	66	58	398	**2.15**	***Reject***
2.	AI possesses ability to plan programmes without human assistance	31	58	63	33	457	**2.47**	***Reject***
3.	News accuracy is guaranteed with AI.	67	33	52	33	504	**2.72**	***Accept***
4.	AI adoption will reduce news bias in the practice.	78	56	32	19	563	**3.04**	***Accept***

5.	Media audience satisfaction through content creation is guaranteed with AI.	34	47	35	69	382	**2.06**	***Reject***
Grand Mean							**12.44**	

Source: Field survey, 2025.

Table 2 presents data in response to research question 2. The table indicates that although AI wouldenhance news accuracy and reduce news bias, it will on the other hand will not drive programme initiative without human effort nor plan programmes without human assistance. Also, it is not guaranteed that the audience of the media would be satisfied through content creation induced by artificial intelligence. With a grand mean of 12.44, it is possible that AI could be used for news- gathering in the practice of journalism profession, however with limitations. This implies that although artificial intelligence has the capacity to impact on journalism practice, it does not have the capacity to completely discountenance traditional news-gathering processes.

Research Question 3: To what extent do the journalists perceive artificial intelligence taking over the professional practice of news reporting?

Table 3: Mean Responses of Journalists' perception on Artificial Intelligence taking over journalism practice

S/N	ITEM *Journalists' perception on AI taking over journalism practice*	SA	A	D	SD	FX	$\bar{X}$	Decision
1.	AI will not traverse all areas of journalism practice.	48	52	57	28	490	**2.65**	***Accept***
2.	AI regime in journalism will help recreate the practice for optimum audience satisfaction	55	62	41	27	515	**2.78**	***Accept***
3.	AI will create news differentiation and reduce competition in the industry	70	56	34	25	541	**2.92**	***Accept***
4.	AI will create new areas in journalism that will redefine the practice	78	48	40	19	555	**3.0**	***Accept***

5.	AI will blend with human skills but will not completely dispense off humans in the journalism practice.	58	72	34	21	537	**2.90**	***Accept***
Grand Mean							**14.25**	

Source: Field survey, 2025.

Table 3 above presented data on the journalists' responses on artificial intelligence taking over journalism practice in Nigeria. The analyzed shows that artificial intelligence will not traverse all areas of journalism practice, although will help recreate the practice and reduce industrial competition. Additionally, it will redefine the practice and will blend AI with human skills; not completely dispensing off human practices in the industry. Consequently, all the items were accepted depicting a grand mean of 14.25, thus implying that irrespective of the innovation AI brings on board, it does not have the capacity to completely put journalists off the track in their practices.

Discussion of Findings

The study shows that a large number of the journalists operating in Enugu State have deep knowledge of artificial intelligence. They are also aware of its adoption in the journalism practice as a good number of them affirmed that their practices and organisations have exposed them to using the rudimentary tools that artificial intelligence drives. This finding is in tandem with the position of Guanah, Agbanu and Obi (2020) wherein they found that the journalists in Benin City, Edo State think that automated journalism stimulates the current state of journalism practices. Udoh, Nsude and Oyeleke (2021) also agree with this finding that journalists, particularly those operating in Ebonyi State are aware of the adoption of AI in news reporting business. The positions of these researchers are tailored down to the belief that AI is not a new concept to journalists in Nigeria.

The study further sought to ascertain possibility of artificial intelligence displacing the traditional news-gathering processes in journalism practice. The study upheld the necessity of AI as a current trend in journalism, however would not obviate the human efforts in news gathering and presentation. Rather it would complement human efforts at actualizing the demands of journalism practice in the society. Nsude (2022) agrees that although AI will be beneficial to the Nigerian military in fighting terrorism and insurgency, it would complementarily improve the age-long traditional means of information gathering and dissemination of the journalism practice to fulfil the surveillance role of the media and help accomplish the defence objectives of the government.

It is established that the fear of AI posing threats to journalism practice in Enugu State dies not arise. Rather, it has the potentials to enhance the practice from the task of news gathering to that of reporting. It strongly dispels the fear of journalists that AI will take over their jobs and make journalism practice irrelevant in the society. This finding is at variance with the position of Guanah, Agbanu and Obi (2020) in their study where journalists in Edo State affirmed that AI-driven media applications would constitute a threat to journalism practice and by implication will lead to loss of jobs in the profession. This finding therefore reiterate the need for journalists to upscale their training in AI related skills is therefore necessary because as Olanrewaju (2018) and Ndiomewese (2017) posit, it will take Nigeria a minimum of 11 years to acquire the level of AI knowledge showcased by journalists in the advanced countries.

Conclusion

The adoption of artificial intelligence in the journalism profession in Nigeria, no doubt, will enhance journalism practice in the country. It is not also in doubt that the technology will recreate the practice, increase audience satisfaction of media content through content creation. However, one thing that is certain is that AI must be human-driven to accomplish its expected functions in the journalism profession. Since human must drive it, it calls for in-depth knowledge acquisition in that area of technological knowledge diffusion to enable the practitioners develop skills that will help them function in the AI regime of their practices. By this, AI will not completely displace the journalists by taking away their jobs, but will complementarily assist them in actualizing the demands of their profession. That means, those who refuse to adapt will be thrown off the Gard: nobody should blame artificial intelligence for their refusal to innovate.

Recommendations

Following the findings of this study, the following recommendations were made for proper guidance to journalism practitioners:

1. Every council of the NUJ should prioritize artificial intelligence skills acquisition as a means of helping their members upscale their knowledge in their chosen area of profession. This is more of necessity to help them acquire the necessary knowledge that will make them discharge their duties effectively even when AI is fully deployed in their media organization.
2. Media owners should encourage their news men to seek avenues to acquire AI knowledge that will help them remain effectively relevant and efficiently contribute in the return on investment of their organisations. By this, they would facilitate in creating endearing media contents that would satisfy the

specific media needs of the teeming audiences of the various media outlets in the country.

3. Efforts should be geared up by media organisations to upscale from holistic traditional approach to news gathering and reporting to automation driven by AI. This therefore calls for increased budgeting in this area.

4. Regulatory agencies of government should be encouraged to advance for reduced taxation in the area of acquisition of AI tools by media organisations to enable the country meet the societal needs for media use in the AI regime and upscale the practice with global best practices.

References

Alekhuogie, N. (2023). Effects of artificial intelligence in the newsroom. *Thisdaylive*. Obtained from: https://www.thisdaylive.com/index.php/2023/05/18/effects-of-artificial-intelligence-in-newsroom.

Cohen, N. S. (2015). Pink Slips to Pink Slime: Transforming Media Labor in a Digital Age. *The Communication Review*. doi:10.1080/10714421.2015.1031996

Copeland, B. J. (2023). ArtificialIntelligencehttps://www.britannica.com/technology/artificial-intelligence

Crevier, D. (1993). *AI: The Tumultuous Search for Artificial Intelligence*. New York, NY:Basic Books.

Kothari, A. and Cruikshank, A. S. (2021). Artificial intelligence and journalism: An agenda forjournalism research in Africa. *African Journalism Studies,* 43 (1): 17-33.

Leslie, A.M. (2001). *International encyclopedia of the social & behavioral sciences,* pp. 15652- 15656. https://doi.org/10.1016/B0-08 043076-7/01640-5

Lorica, B. (2023). A guide to artificial intelligence in the enterprise. https://www.techtarget.com/search-enterpriseai/pro/Ultimate-Guide-to-Ar.... Retrieved on 9/4/2023.

McCorduck, P. (2004). *Machines Who Think* (2nd ed.), Natick, MA: A. K. Peters, Ltd.

Menon, K. (2023). The top five humanoid robots. Obtained from: https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/humanoid-robots.

Montal, T., & Reich, Z. (2017). I, Robot. You, Journalist. Who is the Author? Taylor&Francis, 5(7), 829-849. https://tandfonline.com/doi/full/10.1080/21670811.2016.1209083

Newquist, H.P. (1994). *The brain makers: Genius, ego, and greed in the quest for machinesthat think*. New York: Macmillan/SAMS.

Nnamdi, C.N. and Nwanyanwu, Mercy (2021). Utilization of Artificial intelligence in journalism in Nigeria. *KTU Journal of Social Sciences,* 205-212.

Nsude, I. (2022). Artificial intelligence (AI), the media and security challenges ibn Nigeria. *Communication, technologies et développement.* http://journals.openedition.org/ctd/6788.

Okocha, D. O. and Ola-Akuma, R.O. (2022). Journalistic metamorphosis: Robot journalism adoption in Nigeria in a digital age. *Igwebuike: An African Journal of Arts and Humanities*,8(1): 255-294.

Okiyi, G. O. and Nsude, I. (2019). Adopting artificial intelligence to journalistic practices in Nigeria: Challenges and way forward. *International Journal of Communication: An Interdisciplinary Journal of Communication Studies*, 141-161.

Premack, D., & Woodruff, G. (1978). Does the chimpanzee have a theory of mind? *Behavioraland Brain Sciences, 1* (4), 515-526.

Ramakrishnan, R.S. (2023). The digital metamorphosis-transitioning successfully. https://sharedservices-forum.in/the-digital-metamorphosis-transitioning-successfully/ Retrieved on 9/24/2023.

Rouse, M. (2023). 'Artificial intelligence', Technology Dictionary. https://www.techopedia.com/contributors/margaret-rouse. Retrieved on: 9/4/2023.

Russell, S. J. and Norvig, P. (2021). *Artificial Intelligence: A Modern Approach* (4th ed.). Hoboken: Pearson.

Schroer, A. (2023). Artificial intelligence: What is artificial intelligence (AI)? And how does itwork? https://builtin.com/artificial-intelligence

Shruti, M. (2023). AI vs Machine Learning vs Deep learning: Know the differences. https://www.-simplilearn.com/tutorials/artificial-intelligence-tutorial/ai-vs-machine-learning-vs-deep-learning.

Underwood, C. (2019). Emerj Artificial Intelligence Research. https://emerj.com/ai-sector-overviews/-automated-journalism-applications/