## 2. PERCEPTION OF NIGERIAN JOURNALISTS IN LAGOS AND KWARA STATES TOWARDS ADOPTING ARTIFICIAL INTELLIGENCE IN JOURNALISM PRACTICE

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***Abstract***

*The adoption of artificial intelligence (AI) in journalism practice seems to be gaining momentum in many parts of the world including Nigeria. However, the issue of how journalists perceive the adoption of AI and its inherent threats to their profession appears not have been nuanced in the literature, especially in African context. This study, therefore, investigates how journalists in Lagos and Kwara states of Nigeria perceive the adoption of AI in journalism practice as well as its possible threats. The researchers surveyed 376 respondents, selected proportionally among the registered journalists in both states. The study revealed that journalists in Lagos and Kwara states have a positive perception of AI journalism, acknowledging its potential benefits and values, and expressing readiness to adopt the technology. Underpinned with Unified Theory of Acceptance and Use of Technology (UTAUT), the study also found that the adoption of AI was perceived to present certain threats to journalists. These threats include possible job losses, undermining of human creativity and integrity, and the absence of monitoring and control within the industry. However, the study also identifies some positive factors such as increased knowledge, training and capacity building opportunities, availability of relevant technologies, provision of technical support to media organisations, and stakeholders' support such as financial and technical aids, which can ensure the successful adoption of AI in journalism practice in Nigeria. The study recommends that journalists and media stakeholders should show more interest in deploying AI solutions to the field of journalism and make adequate preparations to relate well to its inherent disruptions.*

**Keywords: Artificial intelligence, journalism, perception, adoption, threat**

### Introduction

Journalism aims to provide citizens with the information they need to make informed decisions about their lives, communities, societies, and governments. This is further supported by Feighery (2021), who describes journalism as the art and science of gathering, selecting, and analysing information, ideas, and intelligence for public dissemination. Print and broadcast media are typically used for the dissemination of important information to members of society. In obtaining news items, journalists follow the same canons and are guided by the same canons such as truthfulness, impartiality, fairness, balance, and objectivity (Feighery, 2021). These canons are the distinct elements that set journalism apart from other professions. Hence, journalism has its canons that distinguish it from other professions. These canons not only differentiate journalism from other types of allied professions but also make the profession an indispensable practice in democratic societies (American Press Institute, 2022). The modification of the principles to bear on, or reflect the special aspects of the media; print, broadcast, and online, also distinguishes them from other forms of communication. Journalism is necessary because it supplies the public with current and relevant information and news as the world would remain uneducated without journalism (Chloe & Kaitlin, 2019).

Since the last decade, AI has impacted the field of journalism greatly, especially in developed nations. According to Okiyi and Nsude (2019), this is reflected in the area of creating soft news stories by automation through computers rather than human reporters. These programmes analyse, organise, and present data in a way that is easy to understand. Okiyi and Nsude (2019) further note that artificial intelligence is formulaic, and it is used to tell stories based on statistics and numerical figures. This means artificial intelligence is programmed with the computer system, using data, numbers and figures to carry out the expected task. This development has transformed how smaller media teams

do their work. Ali and Hassoun (2019) also note that computers, like robots, are programmed through the creation of algorithms to comprehend and write faster than humans and to simultaneously produce scores of news pieces in a matter of seconds. Interestingly, technology has played and it continues to play a dynamic role in the practice of journalism. According to Veglis and Bratsas (2017), advanced technological tools are intrinsically tied to rapid change in journalism. As a result, artificial intelligence technology has become an important aspect of journalism, resulting in significant changes (Galily, 2018).

Therefore, based on this background, the researchers examine the perception of Lagos and Kwara States journalists in Nigeria on the practice of artificial intelligence journalism concerning the possible threats inherent in AI journalism. This is to find out whether adopting artificial intelligence in journalism practice in Lagos and Kwara states poses threats to the careers of practicing journalists in the states. It also underscores the likely factors that can catalyse the successful adoption of AI journalism. The rise of artificial intelligence is like a two-edged sword with benefits and drawbacks. Apart from the ease with which the technology can be used, its misuse can have disastrous effects on most existing social institutions, including the media (Chen & Lin, 2023). Therefore, it has been argued that artificial intelligence poses the greatest existential threat to human civilisation since the introduction of nuclear weapons (Chakhoyan, 2017). While artificial intelligence can aid media development by making large-scale data collection, collation, and dissemination cheaper and faster when integrated into journalism, it can also disrupt the industry in various ways. Increased or advanced artificial intelligence use in the media practice and journalism business may result in many job losses, laziness, and redundancy, among other undesirable consequences (Chakhoyan, 2017). As a result, Shafik (2018) argues that technology and automation are destroying and generating occupations quicker than certain workers can adjust. The advancement of technology has created more jobs for individuals and in the same vein, it has also posed certain threats to humanity in the forms of job loss and human redundancy (Shafik, 2018).
Therefore, given these underlying problems with the adoption of the survey method and underpinned with UTAUT, the study seeks to:

- Investigate the perception of journalists in Lagos and Kwara States of Nigeria on adopting artificial intelligence in journalism practice.
- Determines whether the adoption is a threat to or otherwise to the journalists.
- Identifies the factors that guarantee the successful adoption of artificial intelligence among the journalists.

**Literature Review**

**Prospects and challenges of applying artificial intelligence in journalism practice**

According to Ndiomewese (2017) and Wojuola (2018), Nigerian journalists have not yet embraced artificial intelligence in their newsrooms. These scholars suggest that it will take several years for Nigeria to catch up in terms of adopting AI in journalism practice. The reasons behind these assertions are quite reasonable, given some challenges. The lack of consistent electricity to power AI applications, inadequate infrastructure, and financial constraints for purchasing and maintaining AI equipment are major obstacles to introducing and adopting AI in Nigerian newsrooms. Additionally, cultural and socio-economic factors, along with the high cost of internet access and AI training, further hinder the adoption process (Olanrewaju, 2018). These scholars suggest that AI is here to stay, despite the challenges. Therefore, to integrate AI into journalism practices they further suggested proper training for journalists towards ethical and efficient use of AI tools, developing consensus guidelines on ethical data use, aligning AI techniques with editorial standards, addressing hidden biases, and maintaining transparency by clearly explaining AI's role in reporting in simple, non-technical language (Ali & Hassoun, 2019; Ndiomewese, 2017).

Conversely, the emergence of artificial intelligence and its interface with human endeavours has come with gains and pains. Nwanyanwu and Nwanyanwu (2021) have spotlighted the nuances within the spectrum of professional and ethical challenges. In journalism, creativity is a fundamental concept that represents the human way of thinking, and it includes, among other things, creative writing and interpreting (Ali & Hassoun, 2019). In this regard, Latar (2018) contends that artificial intelligence algorithms cannot think outside of the conceptual framework established by their human algorithm developers, preventing them from reaching the ultimate level of creativity, which necessitates the ability to cognitively cross into new and unexpected conceptual frameworks. Artificial intelligence algorithms, for example, cannot create the appropriate environment to evoke emotional responses from readers, such as laughing, responding to an accident scene, interviewing individuals on the street, or undertaking any investigative work (Aljazairi, 2016). As a result, journalists' analytical talents and ingenuity continue to outperform algorithms. (Van Dalan, 2012).

In addition, the absence of monitoring of AI usage has been identified as a professional challenge. Because of its considerable influence on society, journalism is a crucial force for the social system's existence. As a result, it is important in this digital age to maintain journalism as a public service. According to Latar (2018), artificial intelligence-based algorithms will be unable to grasp and monitor unforeseen harmful events. They are unable to make new connections with what has not been encoded into them. In a further analysis, bias is also underpinned as a major professional challenge or threat in the field of automated journalism. It is a form of prejudice and examples include gender bias (Larson, 2017) and racial bias (Koolen & Van, 2017), all of which can be integrated into artificial intelligence systems by human programmers. According to this viewpoint, the values of AI programmers are necessarily impacted by AI algorithms, implying that they are not free of human influence. According to Osoba and Welser (2017), the prospect of inaccuracy and prejudice in algorithms and AI will endure as long as artificial agents who are autonomous entities that can perform tasks, make decisions, and interact with their environments play an increasingly prominent role in our lives and remain unregulated.

More importantly, the spectrum of ethical considerations in this realm requires scrutiny. They include the practice of transparency, fact-checking, fairness, data utilisation and data quality. Transparency primarily refers to being open about how data is collected and utilised, as well as preventing the collection of unnecessary data (Deepak, 2020). Transparency is crucial to ensuring reader confidence, which would mean making the underlying data public and allowing people to engage with it. Transparency is characterised as "trust in the system that transforms the data into an article" (Leppänen et al, 2017). As a result, the publisher should first distinguish between subjects for which articles were written by humans and those for which articles were written by intelligent algorithms (Ombelet, Kuczerawy, & Valcke, 2016). Similarly, fact-checking as an ethical issue implies that readers should understand how the raw data is selected, what reasoning is used to choose the data, how the data is validated, whether the readers' personal data is processed, and how the credibility and objectivity of the used sources are assured (Clerwall, 2014).

Fairness has been identified as an ethical issue in AI journalism. According to Ombelet et al. (2016), fairness comprises eliminating harmful preconceptions and prejudices. As a result, the exploitation of data as a weapon for violating privacy, social manipulation, and tyranny is regarded as the primary issue that artificial intelligence has posed to journalism. The International Conference of Data Protection and Privacy Commissioners (ICDPPC) issued a Declaration on Ethics and Protection in Artificial Intelligence in October 2018. According to the statement, "unlawful biases or discriminations that may result from the use of data in artificial intelligence should be reduced and mitigated" (The International Conference of Data Protection and Privacy Commissioners, 2018).

Another area of contention is data exploitation. Data exploitation is now one of the ethical difficulties linked with artificial intelligence in the field of automated journalism due to a lack of ad-hoc rules and conventions. According to Wang and Siau (2018), data security and privacy are major concerns not just for consumers, but also for developers and governments. In this regard, Monti (2019), underscores the need of employing correct, objective, and accurate data as an ethical responsibility. One of the toughest challenges in the employment of artificial intelligence in today's newsrooms is the quality of the data utilised, which can lead to false findings, including the credibility of source and reliability of the data. In this regard, the European Parliament (EP) has passed a report on robots that establishes an Ethical Code of Conduct attending to fundamental elements like privacy protection and data usage (Leppänen et al., 2017).

Empirically and within the context of Nigeria, a few studies related to journalism and artificial intelligence have been conducted as the field develops and gains attention from researchers. For instance, Guanah et al. (2020) found that artificial intelligence has brought about a great improvement to journalism practice in Benin City, Nigeria. They conclude that automation is the future, and that Nigerian journalists cannot afford to be left out in the ultimate move to a world of automation. In addition, Nwanyanwu and Nwanyanwu (2021) conducted a study on utilisation of artificial intelligence in journalism in Nigeria and found that journalists in Nigeria are yet to embrace artificial intelligence. This is similar to earlier studies conducted on the study population by the researchers, which found that although they are aware of AI, many have not adopted the practice (Bello et al, 2023). Interestingly, Okocha and Ola-Akuma (2022) examine journalists' perception of how robot journalism can (or has) transformed journalism and discovered that although most Nigerian journalists are aware of the idea of robot journalism, they do not think Nigerians are ready to accept it yet.

The literature review reveals a complex landscape for AI adoption in journalism, particularly in Nigeria. While AI offers potential benefits, significant challenges exist including infrastructure limitations, ethical concerns, and slow adoption rates. Nigerian journalists are increasingly aware of AI's impact, but full integration remains distant. Balancing AI's advantages with maintaining human creativity and addressing ethical issues will be crucial as the field evolves.

**Theoretical Foundation: Unified Theory of Acceptance and Use of Technology (UTAUT)**

The Unified Theory of Acceptance and Use of Technology (UTAUT) was proposed by Venkatesh, et al. (2003) as an amalgamation of numerous research efforts represented in many models and theories of Technology Acceptance. The UTAUT is viewed as a test to standardise terminology for variables in various technology acceptance models and theories (Venkatesh et al., 2003). The UTAUT has emerged as one of the most advanced and comprehensive models for evaluating technology adoption and acceptance (Momani, 2020). Interestingly, Venkatesh (2003 cited in Ahmad 2014), Figueiredo (2019), Momani (2020), Sohn and Kwon (2020), Zhang (2020) and Venkatesh (2022) hold that UTAUT was founded on four theoretical constructs that indicate drivers of intention to use or usage behaviour and serve as surrogates for technology acceptance. These constructs are: performance expectancy (ability of the technology to provide benefits and improve performance based on one's expectation); effort expectancy (user expectations about the simplicity with which technology can be used); social influence (the projected effect of others on a user's decision to start and continue utilising technology); and facilitating conditions (the anticipated amount of technical and organisational infrastructure to support the usage of technology).

Relating the constructs of UTAUT, one of the constructs, Performance Expectancy is equated to the perception individual journalists in Lagos and Kwara States have of how artificial intelligence might help them practice journalism better. Effort Expectancy is the degree to which journalists in Lagos

and Kwara States perceive the ease or difficulty of adopting artificial intelligence in journalism practice and profession, in their respective media organisations. Social Influence relates to the expected influence on the users (Lagos and Kwara States Journalists) to start and continue using artificial intelligence journalism. There is societal expectation of its use in the media, given its widespread adoption in many areas of human endeavour. Another construct of UTAUT is Facilitating Conditions: the availability of media organisational facilities and technical infrastructure that can support the adoption of AI journalism by Lagos and Kwara States journalists. Here, the nature of the media organisation and the availability and accessibility of the necessary infrastructure and facilities can enable and encourage the adoption of artificial intelligence journalism. The study was anchored on this theory to analyse the perceptions of journalists in Lagos and Kwara States regarding the potential benefits and threats associated with adopting AI in journalism practice.

**Methodology**

The study explored Lagos and Kwara state journalists' perception of the adoption of artificial intelligence in journalism practice in Nigeria. The survey method was chosen for its versatility in gathering data on various topics, including behaviours, preferences, attitudes, and opinions, especially in a relatively large population (Sharma, 2018). The population of this study from which the sample was extracted consisted of registered journalists in Lagos and Kwara States. As of June 2022, there were 5,945 registered journalists in Lagos and 215 in Kwara State, making a total of 6,160 registered journalists in the two states, according to statistics from the Nigeria Union of Journalists (NUJ) secretariats in Lagos and Kwara states. Hence, the total population of this study is 6,160. Instead of gathering data from the whole population, a subset of the population was sampled to deduce characteristics of the entire population (Ponto, 2015). Using Taro Yamane's statistical formular and an on-line sample size calculator, a sample size of 376 respondents was determined. In choosing the respondents, the researchers adopted the simple random sampling technique.

This study employed a questionnaire as the research tool. Also, the researchers adopted the descriptive statistical method of data analysis using the IBM Software Package for the Social Sciences (SPSS) version 26. Three hundred and sixty (360) out of the 376 respondents, which represents a 96% rate, were correctly filled and returned. The correctly filled and returned copies of the questionnaire were analysed accordingly.

**Results**

To better understand the current state of AI adoption and perceptions among Nigerian journalists, this study surveyed a diverse group of media professionals. The following section presents the demographic characteristics of the respondents, providing insight into the composition of the sample and laying the groundwork for a deeper analysis of AI's impact on journalistic practices in Nigeria.

**Demographic characteristics of respondents**

There were 360 respondents in total, with a fairly balanced distribution between male (50.3%) and female (49.7%). The majority of respondents were in the age range of 20-49 years, with the highest percentage in the 20-29 age group (29.2%). There were fewer respondents in the older age categories. Respondents with a Bachelor's degree (B.Sc/B.A/B.L) were the largest group (48.2%), followed by those with Higher National Diplomas (31.1%). A smaller percentage held higher degrees like PhD (6.9%) or M.Sc/M.Ed/M.A/MPR (9.2%). The largest group of respondents had 6-10 years of work experience (22.8%), followed closely by 1-5 years (21.9%). There were fewer respondents in the higher experience brackets. A significant majority of respondents (95.0%) practiced in Lagos, with a smaller percentage in Kwara (3.3%) and some unspecified locations (1.7%). More respondents work in

newspaper houses (46.7%) than those who work in television stations (37.2%) and online media platforms (16.1%). Also, respondents were diverse in their beat/desk preferences. Education (22.2%), Politics (12.5%), and Sport (19.4%) were among the top beats, with other categories such as Economy/Finance, Agriculture, Health/Medical, Court/Judiciary, and Science/Tech also represented.

**Table 1:** Perception of journalists on artificial intelligence in journalism practice

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Artificial intelligence is a computer-based system | 360 | 1.00 | 5.00 | 4.2115 | .82784 |
| Journalists perceive artificial intelligence as a welcome development | 360 | 1.00 | 5.00 | 3.7312 | .91322 |
| I am aware of artificial intelligence and its values in journalism practice | 360 | 1.00 | 5.00 | 3.1117 | 1.16814 |
| Artificial intelligence is a good compliment for a goal-oriented journalist | 360 | 1.00 | 5.00 | 3.4734 | 1.13456 |
| Artificial intelligence has the potential to make impactful contributions to journalism practice | 360 | 1.00 | 5.00 | 3.6212 | 1.14342 |
| Journalists in Nigeria would widely accept and employ artificial intelligence tools in their practice | 360 | 1.00 | 5.00 | 3.1432 | 1.13654 |
| Media executives and managers would subscribe and encourage journalists to adopt artificial intelligence in their practice | 360 | 1.00 | 5.00 | 3.3222 | 1.05432 |
| Artificial intelligence would widen career opportunities for journalists in Nigeria | 360 | 1.00 | 5.00 | 3.3276 | 1.04453 |
| I would be comfortable in the application of artificial intelligence in journalism practice | 360 | 1.00 | 5.00 | 3.3876 | 1.28653 |
| **Valid cases** | **360** | | | | |

Table 1 presents the statements that measure the perception of journalists in the Lagos and Kwara states on the adoption of artificial intelligence journalism. A five-point Likert scale is considered an interval scale. The interval for this table is 0.8 as shown in the determinant table. The lower limit is 1 while the upper limit is 5. As a result, 1.0 to 1.8 means Strongly Disagree; 1.8 to 2.6 means Disagree; 2.6 to 3.4 means Undecided; 3.4 to 4.2 means Agree while 4.2 to 5.0 means Strongly Agree. Therefore, out of the nine measuring statements, only the first statement attained the Mean coefficient of 4.2115. This indicates that majority of the respondents Strongly Agree artificial intelligence is a computer-based programme. However, the Mean coefficients of other statements show that the respondents also Agree with them but more emphases were laid on the fact that artificial intelligence is a computer system programme. The Standard Deviation further explains how dispersed the data is in relations to all the statements made. A look at the Standard Deviation shows that it is lower than the Mean across all the statements. In some cases, they are even lower than 1. This low Standard Deviation indicates that data are clustered closely around the Mean, thereby making it more reliable for generalisations. In relations with the first research question, the results of Mean and Standard Deviation indicate that Lagos and Kwara States journalists positively perceive AI journalism, indicating a high favourable disposition towards the innovation. This is evident in their level of agreements to statements on awareness of its value, its potential, readiness to use, acceptance and efficiancy of use (see table 1 above).

**Table 2: Perceived threat to the adoption of artificial intelligence**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Adoption of artificial intelligence journalism practice in Nigeria is a threat | 360 | 1.00 | 5.00 | 3.1606 | 1.52738 |
| Adoption of artificial intelligence journalism practice in Nigeria is not a threat | 360 | 1.00 | 5.00 | 3.8056 | 1.18797 |
| Adoption of artificial intelligence journalism practice in Nigeria has the potential to make many journalists redundant | 360 | 1.00 | 5.00 | 3.7183 | 1.04669 |
| Adoption of artificial intelligence journalism practice in Nigeria is likely to send vast majority of journalists out of job | 360 | 1.00 | 5.00 | 3.5972 | 1.05685 |
| Adoption of artificial intelligence journalism practice in Nigeria is rather a challenge that will be overcome | 360 | 1.00 | 5.00 | 3.7070 | 1.25272 |
| Adoption of artificial intelligence journalism practice in Nigeria will undermine human integrity and creativity. | 360 | 1.00 | 5.00 | 3.6169 | 1.14228 |
| Absence of monitoring in the adoption of artificial intelligence in journalism practice | 360 | 1.00 | 5.00 | 3.4873 | 1.11575 |
| Adoption of artificial intelligence will be largely supported by journalists. | 360 | 1.00 | 5.00 | 3.7014 | 1.07139 |
| Adoption of artificial intelligence will be largely supported by media owners | 360 | 1.00 | 5.00 | 3.8563 | 1.22090 |
| Valid N (listwise) | 360 | | | | |

Table 2 presents the statements that measure the likely threats in the adoption of artificial intelligence journalism as perceived by journalists in Lagos and Kwara sates. As shown in the description table, the interval that is used is 0.8 while the lower limit is 1 and upper limit is 5 in order to establish the threat of adoption of artificial intelligence. Nine measuring statements are used as presented in the table. The values of Mean across the nine statements are between 3.4 and 4.2 which indicate agreement. However, the respondents have not decided on the first statement which says “Adoption of artificial intelligence journalism practice in Nigeria is a threat” with 3.1606 Mean coefficient. This indicates the respondents are undecided about whether adoption constitutes a threat to journalism practice.

The Standard Deviation also indicates how dispersed the data with the respondents. The table shows a low Standard Deviation across all the statements. In some cases, they are even lower than 1. This is an indication that data are clustered closely around the Mean and it is reliable. It shows a normal data distribution.

The coefficients show that in some ways, the adoption of artificial intelligence is a threat to the industry as it has the propensity to make many journalists redundant. Similarly, the adoption of artificial intelligence journalism practice in Nigeria may undermine human integrity and creativity as well as leading to lack of monitoring within the industry. Despite their belief that the adoption of artificial intelligence in journalism will bring a lot of improvement to journalism practice, they acknowledge that the technological innovation also comes with some threat to the profession. However, the threats can be overcome with support of the relevant stakeholders.

**Table 3: Factors to ensure successful adoption of AI**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Knowledge and awareness | 360 | 1.00 | 5.00 | 4.3876 | .82309 |
| Development and deployment of artificial intelligence strategy | 360 | 1.00 | 5.00 | 3.7640 | .92261 |
| Non-biased artificial intelligence | 360 | 1.00 | 5.00 | 3.5646 | 1.06350 |
| Training and development for journalists | 360 | 1.00 | 5.00 | 3.7045 | 1.06388 |
| Availability of necessary equipment, facilities and infrastructure | 360 | 1.00 | 5.00 | 3.9689 | 1.03297 |
| Provision of technical support that will influence journalists to adopt artificial intelligence in journalism practice | 360 | 1.00 | 5.00 | 3.6563 | 1.04432 |
| Gradual approach in adoption of artificial intelligence by media organisation | 360 | 1.00 | 5.00 | 3.6152 | 1.10858 |
| Government support in terms of facilitating easy access to equipment | 360 | 1.00 | 5.00 | 3.8507 | .95534 |
| Government support in terms of agency-sponsored training to journalists | 360 | 1.00 | 5.00 | 3.7127 | 1.28737 |
| Valid N (listwise) | 360 | | | | |

The table above shows the statements that are used for measuring the factors that would ensure the successful adoption of artificial intelligence to journalism practice in Lagos and Kwara states. As the table shows, the interval that is used is 0.8 while the lower limit is 1 and upper limit is 5. Nine measuring statements are used as presented in the table. The Mean and Standard Deviation also indicate how dispersed is the data with the respondents. The table shows a low Standard Deviation across all the statements. In some cases, they are even lower than 1. This is an indication that data is clustered closely around the Mean and it is reliable. It shows a normal data distribution. Furthermore, the values of Mean across nine of the statements are between 3.4 and 4.2 which indicate an agreement. However, the respondents strongly agree with the statement that what is needed to ensure successful adoption is knowledge and awareness with a coefficient of between 4.2 and 5.0. This indicates that more than other factors, knowledge and awareness hold the key to successful adoption and use of artificial intelligence.

The coefficients show that apart from knowledge and awareness, which are very key to the successful adoption, other factors include development and deployment of artificial intelligence strategy, non-biased artificial intelligence, training and development for journalists, availability of necessary equipment, facilities and infrastructure, provision of technical support that will influence journalists to adopt artificial intelligence in journalism practice, gradual approach in adoption of artificial intelligence by media organisation, government support in terms of facilitating easy access to equipment and government support in terms of agency-sponsored training to journalists. All these are valid factors that will assist in the successful adoption of artificial intelligence.

**Discussion of Findings**

The data presented in Table 1 shows that there is highly positive perception of artificial intelligence journalism among Lagos and Kwara journalists. This is premised on the fact that most of the respondents strongly agreed that they are well aware of the potential benefits of artificial intelligence journalism, indicating readiness to accept and integrate its use in their operations. This aligns with

UTAUT's Performance Expectancy. It cannot be disconnected from the fact that the respondents are journalists who, as a result of their profession, are well informed of the innovation and how its properties can be used in the profession. This result is in consonance with Bossey et al. (2022)'s findings which revealed that there is a high level of awareness of artificial intelligence journalism among journalists, especially its beneficence in fact-checking.

The data presented in Table 2 reveals that registered journalists in Lagos and Kwara are of the strong opinion that the adoption of artificial intelligence is a threat to the industry as it has the potential to push many journalists out of their jobs. Similarly, the adoption of artificial intelligence journalism practice in Nigeria will undermine human integrity and creativity, leading to lack of monitoring within the industry. The findings from this study are in support of Hendricks (2018), who found that with the swift adoption of artificial intelligence in virtually all areas of human endeavours, the technology will in no distant time not only usurp human employment but may also displace people of their jobs. Thus, the study's results are linked to those of Hendricks (2018) and Guanah et al. (2020), indicating that AI holds the capacity to erode human integrity and creativity, resulting in reduced industry oversight and employment displacement. These concerns reflect the aspect of effort expectancy in UTAUT, as journalists perceive the adoption of AI as potentially challenging or disruptive to their profession.

The factors that would ensure successful adoption of artificial intelligence in journalism practice is evinced in Table 3, which indicates that more than any other factors, knowledge and awareness hold the key to successful adoption of artificial intelligence in journalism practice. The findings from this study indicate that training journalists on artificial intelligence and its use in journalism will assist the practitioners to successfully adopt the innovation in their professional practice. This aligns with the work of Guanah et al. (2020) which recommends robust curricula in journalism and communication schools that will embrace technology and prepare existing and potential journalists for the future of artificial intelligence in their work.

However, apart from knowledge and awareness, other factors that would ensure the successful adoption of artificial intelligence journalism as found in this study and buttressed in the work of Guanah et al (2020), include the development and deployment of an artificial intelligence strategy; training and development for journalists; and availability of necessary equipment, with adequate provision of facilities and infrastructure. Additionally, the provision of technical support that will influence journalists to adopt artificial intelligence in journalism practice, a gradual approach in the adoption of artificial intelligence by media organisations, government support in terms of facilitating easy access to equipment, and government support in terms of agency-sponsored training to journalists are all valid factors that will make successful adoption of artificial intelligence possible. This acknowledges the relevance of facilitating conditions in the UTAUT model, which encompasses the organisational and environmental factors that enable or hinder the adoption of technology.

**Conclusion and Recommendations**

Artificial intelligence is a transformative force within journalism, reshaping newsrooms in unprecedented ways in the digital era. Therefore, it is imperative to cultivate knowledge and perceived ability to adopt and use AI within the field, given its potential benefits to journalistic practices in Nigeria. While challenges have been identified, they can be effectively addressed through collaborative efforts involving stakeholders. The study indicates that journalists understand the crucial role AI technologies play in the 21st-century media environment, perceiving that the technologies can

augment rather than replace journalists' roles. The study showed that journalists' perceptions and attitudes towards AI journalism are influenced by various factors, including their expectations of performance benefits, the perceived effort required for adoption, social influences, and the facilitating conditions within their media organisations and the broader environment. Understanding these factors is essential for devising strategies to promote the successful adoption of AI in journalism practice.

Building upon the study's findings and conclusions, the following recommendations are proposed:

1. Journalists should utilise their media platforms and in-house forums to amplify knowledge of use and awareness about the advantages of integrating AI in journalism. This can generate relevant stakeholders' interest leading investment in AI on all fronts.

2. Public education on AI accessibility should be prioritised, emphasising that AI is not restricted to technical experts but is a technology accessible to all, with potential benefits for everyone.

3. Training programmes for journalists in AI journalism should involve collaborative efforts between journalists and software engineers. Conferences, symposia, and seminars led by experts can equip journalists with the necessary skills to effectively utilise AI in their profession and address any associated challenges.

4. To promote the successful adoption of AI journalism in Lagos, Kwara, and Nigeria as a whole, government involvement is vital. This could entail the establishment of an agency or commission dedicated to AI in Nigeria, alongside initiatives to ensure reliable power supply and essential infrastructure nationwide.

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