MILITARY-MEDIA RELATIONS in POST-COLONIAL NIGERIA

Clashes, Ethics, and Prospects

Edited by Olunifesi Suraj *and*
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Chapter 2
Investigating Robot Journalism, National Security and the Future of Military-Media Relations in Nigeria

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Introduction

The field of journalism and media practice cannot be complete without the use of technology. This is because technology shifts have always had an impact on journalism way back from the print era to the electronic upgrade for radio and Television. The battle seems to be on with the aggressive unfolding of digital technologies in Nigeria. Consequently, journalists in the country have been plagued with other challenges such as insurgency, content generation, legal cases, kidnapping, harassment and assaults, thereby making it even more difficult for journalists to cover certain crisis zones in the northeast.

Okon and Eleba (2013) opine that many journalists have tried to manage through some of these challenges personally by using their smartphones and multi-media accessories to make work easier. Yet, just as valid knowledge is necessary for journalists to report with precision about climate change news, sports, politics, health, conflicts and more (Amu & Agwu, 2013), Dwivedi et al. (2021) expressed that it is important for media outfits to employ technology that can be used to mobilise or encourage

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people to embrace a particular programme or impression. It has become pertinent to reduce the exposure of humans to the risks associated with news coverage; for example, "On July 22, 2019, Precious Owolabi, 23, a general assignment reporter for the privately owned broadcasting Channels TV, was shot while covering a confrontation between Shiite Muslim protesters and Nigerian police and died the same day after being taken to a hospital" (CPJ, 2019). Africa Program coordinator for the Committee to Protect Journalists, Tom Rhodes, has also submitted that "Working as a local journalist in Nigeria is becoming an increasingly hazardous profession" (China Daily, 2010).

One may say the military and journalists have always been at loggerheads when it comes to the issue of military coverage and reportage. Nigeria's military and media have been faced with so much of the sector controlled or influenced by political interests where the media have poorly paid reporters, and the military personnel are careful to keep intelligence received. The present case of insecurity around the globe is among the deadliest for journalists reporting from conflict situations as they face a number of assaults, arrests and attacks which have been on a constant rise which, according to Düsterhöft (2013), are increasing threats of armed conflicts. This has made being a war reporter, even in Nigeria, an inherently dangerous task.

On the other side, technological tools have also seen significant developments, including equipment for news coverage and distribution, linear editing, audio recorders with highly sophisticated voice capture, and the internet, which has given rise to new media tools. These technological shifts have afforded media agencies ease of work and wider reach. One such advancement in technology that is changing the dynamics of journalism practice in the West is Robot Journalism which in some parlance is referred to as automated journalism. Little wonder Alan Turing, in 1951, said, "I believe that the attempt to make a thinking machine will help us greatly in finding out how we think ourselves." This statement is not far-fetched as 70 years later, one can see how media houses, the press and journalism not only face great competition from other media houses (where it once was broadcast media versus broadcast media, print media vs print media) but also a race on who gets to adopt the best digital technology and

use it. Once upon a time, it was all about just striving to ensure they stayed ahead with the news. This style exposed journalists to high risks by defying everything to investigate deep-waters-life-threatening news. Now, while the emergence of digital technology such as phones, laptops, Wi-Fi, internet, PDAs, etc., along with social media tools such as podcasts, blogs, and vlogs, have all transcended into supporting news writing, the media space has evolved to what is now known as automated journalism.

To understand robot journalism and its effects, one must understand what robot journalism is, and how information is gathered and reproduced as reports. In defining the term robot journalism (human-assisted journalism or automated journalism) is a technology reliant on Artificial Intelligence (AI) or software and an advanced Natural Language Generation (NLG), which robotically generates articles in near real-time and in human-readable ways (Antonopoulou & Kyriazis, 2018). Automated journalism, like a mirror, allows the journalist to understand the technological challenges facing the profession. The art of journalism and media practice in Nigeria, like anywhere around the world, requires a constant upgrade in Information Technologies (ITs) with essential media tools that support the reporting and interpretation of current events through various media which include newspapers, radio, television, the internet, and its accompanying social networks, which supports the journalism profession. Harper (2010) notes that journalists still face several issues as a result of the information and communication technology (ICT)-driven shift of the mass media landscape. This can be seen with the advent of new media where the availability of data from a variety of news sources is exposing Nigerians themselves to mostly international content and, for this reason, it is even possible now to read news about Nigeria on international outlets such as Sahara, BBC and CNN which is posing a strong decline in patronage of Nigerian media outlets.

Not only is technology acquisition important but also training and usage when it comes to the issues of gathering intelligence. The introduction of robot journalism may cause further conflicts or create tension if the existing gaps between the military and the journalists are not addressed. The journalists, due to technology, now have wider access which questions the narrative from the military because there have been instances where the

journalist cannot ascertain the veracity of a reportage coming from the communications department of the military. However, with AI, it becomes possible, and this can raise a whole lot of questions and concerns where the military would want to protect certain information that need not be exposed at the national level. This is why the concept called 'the need to know' must be balanced with 'the right to know'. The Spread of news and information without caution through the use of robot journalism could further widen the gulf between the media principle of the "right to know" and the military attitude of the "need to know". With automated journalism, the territorial access to journalists and many other areas where ordinarily the media would not have access to because of insurgency, civil unrest, and even natural disasters, will now be made possible and a lot safer for journalists even in previously militarized zones.

For the military, AI could be used in conjunction with drone technology to survey a given location before setting or settling in. Automated journalism, as the future of the media, means that a new vista will be opened for journalism in Nigeria.

This paper was borne out of interactions at the postgraduate unit as the researcher was curious to explore the state of the News Media in Nigeria and the technological advancements adopted especially by the military and news agencies (Television, Radio and Print). This paper examines how robot journalism, an emerging development in the West, has changed the world and the future of journalism and news organisations in Nigeria. Furthermore, it did critique how this new phenomenon will construct and deconstruct the already frosty-bitter-sweet military-media relations in the context of national security debates, heightened by the present issues of insurgency, civil unrest, armed banditry and separatist agitations bedevilling the nation. This work investigates historical practices of journalism in Nigeria; in other words, the future of mass media as a result of the possible adoption using the Sociotechnical Systems theory and Media Richness Theory.

Literature Review

The first examples of robot journalism were by news providers such as the Associated Press, Forbes, ProPublica, and the Los Angeles Times (Montal & Reich, 2017) which covered stories that could be understood through numbers – and early adoption by the media industry has focused on productivity and efficiency improvements (Cohen, 2015). Monti traces the history of automated journalism to an AI, first employed in a newsroom by the New York Times (NYT) in a project named 'Editor'. Usually, to make an article searchable over the web, keywords known as tags are highlighted. The AI was programmed to sort and apply these tags to the already-written news articles (Monti, 2019).

The use of AI is a current reality even in the world of science where underwater robots, according to Lovett (2010), are saving researchers the trouble of going into the field to retrieve samples. This is because just like in any field, the amount of time required to generate data is painstaking and to increase efficiency, Linden (2017) says even the field of journalism requires stories, reports and research in the newsroom which can be made easier through automated news, automation of monotonous and error-prone routine tasks which increases not just efficiency but job satisfaction. One such early algorithm was the RSS. The Really Simple Syndication popularly referred to as RSS files are easily read by a computer called XML files that automatically updates information about financial news, sports and weather (Dickinson & Miller, 2005). This made the task of finding news sources easier. In 2016, it was reported at the International Press Communications Council's (IPTC) Spring Meeting that Mittmedia, which owns 19 Swedish Newspapers in Sweden, was successfully developing and incorporating AIPs, automation tools and robots into workflows to enhance the capabilities of newsrooms. Mittmedia Company began their first robot journalism where they were able to produce weather news as the AI was programmed to pull in data from the Swedish Meteorological and Hydrological Institute (Finnäs & Tjernström, 2016). The likes of Mittmedia go a long way to show how AI in news media is being used in new ways, from speeding up research to accumulating and cross-referencing data and beyond (Corinna, 2019). Also, United Robots, an AI company in Malmo, Sweden, says robot journalism does not threaten newsroom jobs, the firm

has been automating journalism in Sweden since 2015 (Martinez n.d.). The editor who receives the news can then choose to edit or publish it like that (Cant, 2018)

Earlier in 2006, Thomson Reuters announced its switch to automated journalism to generate financial news stories on its online news platform (Dalen, 2012). By 2016, Reuters had implemented an Interactive Data Visualisation (IDV) platform across a spectrum of topics including entertainment, sports, and news, thereby enabling news agencies and publishers to access the data via Reuters Open Media Express (Shahzad 2020).

To achieve an easier workflow, the BBC News Labs developed a news aggregation and content extraction API called 'the Juicer' which takes news content, automatically tags it, and then provides a fully featured API to access this content and data (BBCNewsLabs, 2021). Shahzad (2020) notes that 'The Juicer', has been used to also extract more than 1000 global news outlets' RSS feeds.

Similarly, the Associated Press (AP) began using AI to write corporate earnings stories on public companies and it was necessary to stay ahead because with over 4,000 public companies in the US, their staff could not possibly write about all every three months. However, by using AI, Associated Press produced more than 3,700 corporate earnings stories per quarter in 2015 (Gopalan, 2017). This feat by AP was achieved principally because AI performed the writing of the more routine corporate earnings accounts. Then in 2018, MittMedia's Newest Automation *the Homeowners Bot* was reported to have written 10,000 articles in four months of House Sales (Govik, 2018). In that same year, an algorithm named Dreamwriter was designed by one of the largest Chinese Internet establishments, Tancent, which released the first piece of Chinese automated news (Jung, et al, 2017).

Another sophisticated use of AI in news writing was when the Washington Post (WP) created a software, called Heliograf, to cover the 2016 Olympic Games in Rio. What this AI did, was to auto-circulate stories on the Rio

Olympics by collecting data related to the events, such as the schedule, the results, and medals awarded (Antonopoulou & Kyriazis, 2018).

One cannot write about automated journalism without adding how an algorithm called Quakebot was used by the Los Angeles Times to publish a story about a 2014 California earthquake on their website within three minutes after the quake (BBC, 2014).

The Question of National Security

After the invasion of the regional offices of the Daily Trust newspapers (Abuja and Maiduguri) and the arrest of two press staff, the army defending its action said it took the step in the interest of national security by alleging that the newspaper published stories that undermined the ongoing insurgency war (Kupoluyi, 2019). This action, the military claimed, became necessary when the newspaper disclosed classified security information which amounted to a breach of national security and ran contrary to Sections 1 and 2 of the Official Secrets Act of 1962. According to them, the publication afforded the Boko Haram terrorists prior notice of plans and served as an early warning to prepare against the Nigerian military by sabotaging their planned operations.

In a communiqué issued at the end of a two-day conference on *enhancing the media-military relationship for an effective fight against terrorism and insurgency in Nigeria*, held in 2019, the recommendations from the event hinged around national security which supersedes all interests; however, its protection should be the shared responsibility of both the military and media professionals, since terrorists are common enemies of the Nigerian State. The question of national security and news, in a situation where the institutionalisation of robot journalism comes into function, it might pose a wider threat. The use of algorithms as content creators for news sourcing by professional journalism means a transformation that presents a novel ethical challenge around who should be held liable for what is published. When adopted by news agencies in Nigeria to cover the war-torn zones, who then will the military hold accountable for information termed as a threat to national security? The question of authorship also raises ethical issues around liability which Montal (2016) and Caswell and Dörr (2018)

say, is a drawback in robot journalism because there is often confusion about who should be attributed as the author. Should it be credited to the programmer or the news organisation or the news editor? In a participants' study on algorithmic authorship, Montal (2016) reports that while some respondents may have ascribed the credit to the coder, others supposed that the news organisation should serve as the author because teamwork was required for success.

Hence it is necessary that for the purpose of national security, Journalists should be professionally trained and continuously retrained for them to sufficiently understand the dynamic connections between media reporting using AI and national security. This will keep them equipped with best practices on context sensitivity in reporting war against terrorism and insurgency (Amaka, Emmanuel, Hajiya, & Olaniyi, 2019).

Cases of Military-Media Conflicts

The media plays an important role in times of conflict because the way the media tells the story influences the public and their actions (Haigh, 2012). According to Erdle (1991), the military-media relationship is seriously tainted as there has been mistrust between the two parties due to cultural differences, the perception of biased reporting; misunderstanding and ignorance, and speculation. This biting relationship has left the journalist quite helpless when it comes to military reportage and the practice of investigative journalism in Nigeria which poses great threat to the journalism profession (Anyadike, 2013).

The application of Automated Journalism has been described by some experts as a necessary posthuman future for digital news collection and distribution (Carlson, 2016). Leppänen, Munezero, Granroth-Wilding and Toivonen (2017) emphatically state that we are in a data-driven news generation where automated journalism can increase content for newsrooms. Yet the same Automated journalism could increase the friction between the military and the media. This friction was once subtle as reported by Layefa and Johnson (2016) who opines that even some notable Nigerian journalists believe that the Nigerian press was freer than the democratic civilian governments of the country's First and Second

Republics. What is underscored is that despite the media's vital role in national security, the military and the media occasionally seem to hold opposing views on what constitutes national security. The military, due to the sensitive nature of its duties, views secrecy not as a "crime," but rather as a crucial, tactical attribute (Kaplan, 2013), while the media, known as the "fourth estate of the realm," thinks that the general populace must be aware of everything and even expect the military to be transparent every step of the way (Pantti, 2019). The reason why military-media relations are so sensitive is that the same media can be used positively to promote peace or resolve conflicts, but then, like a double-edged sword, it can also be used negatively to initiate, escalate, and sustain conflict secretly and blatantly (Akpan, Ering, & Adeoye, 2013). This confirms why Akpan et.al (2013) states that the mass media is a powerful tool of communication in peace and conflict situations.

Consequently, some of the media reports on the military in Nigeria have been around the fight against insurgency in Nigeria's Northeast, describing gloom and doom, while the news on the military websites and what is reported from their quarters describes victory and success.

There have been cases where journalists have published reports, and then the military has come out to debunk or refute such reports from both international and local news agencies. But Carlson (2015) in his paper titled The Robotic Reporter, notes that the ability of machine-written news texts, heralds new possibilities for an expansive terrain of news content far exceeding the production capabilities of human journalists which no military can refute or they have to go to the first source.

Research Method

The findings are based on a survey conducted in July 2021. The research instrument was the questionnaire consisting of a series of questions for the purpose of gathering information from respondents. The Population consisted of journalists in Nigeria. According to data received from the Nigerian Union of Journalists, the total number of registered journalists in Nigeria as of July 6, 2021, was twenty thousand eight hundred and sixty-eight (20,868). The sample size, (N = 389) drawn from past and practising

media practitioners, was purposefully sampled. Although the sample size of 378 was determined using a digital sample size calculator (which is a similitude of Cochran's formula) with a Confidence Level of 95%, allowing for a 5% Margin of Error, we had room for 378 or more surveys to have a confidence level of 95%. This is as long as the real value is within ±5% of the measured/surveyed value, or, the researcher worked with a 389 responses-sample size. A purposive sampling method was employed to support the researcher in identifying registered media practitioners and journalists across Nigeria through the media houses and the regulatory bodies (Nigerian Union of Journalists, NUJ) in Nigeria. Media practitioners were selected from across the six (6) geopolitical zones in Nigeria to ensure the results were a fair representation of the North Central (NC), North East (NE), North West (NW), South West (SW), South East (SE) and South-South (SS).

Data Analysis

The questionnaire was designed to get data around the three research questions, and the findings are presented below. Data gathered were presented using tables from data extracted from the Excel spreadsheet.

Media Sector	**Number of Male Media Practitioners**	**Number of Female Media Practitioners**	**Undisclosed gender**
Online Media	13	10	3
Print	49	14	
Radio	75	36	2
Radio & Television	40	26	2
Television	54	45	
Other	12	5	3
Total	**243**	**136**	**10**

Table 1: *Respondents disaggregated by media sector and sex*

Table 1 shows that a total of 389 responses were received from 243 males and 136 females as shown above. 10 participants did not disclose their gender. For the question on the media sector, a majority of the respondents

(111) were from radio followed by 99 practitioners from television. 10 participants preferred not to disclose their gender.

Variables	Frequency	Percentage (%)
Professional Ethics	209	53.7
Online Media Rivalries	182	46.8
Banditry	104	26.7
Insurgency	130	33.4
Libel	79	20.3
Censorship	167	42.9
Sexual Harassment	66	17
Tight Budget	160	41.1
Harassment from Security Personnel	223	57.3
Unlawful Arrest	163	41.9
Poor Renumeration	3	0.8
Poor conditions of service	1	0.3
Difficulty in accessing information	1	0.3
Kidnapping	1	0.3
Copyright	1	0.3

Table 2: *Challenges faced by journalists in Nigeria*

A total of 389 responses were received for the question regarding emerging challenges which journalists are currently confronted with. The table above shows that 223 (57.3%) of respondents noted that harassment from security personnel was an emerging challenge with 209 (53.7%) of media practitioners who agreed that professional ethics was one of the challenges facing journalists; 182 (46.8%) of the respondents highlighted online media rivalries as a major setback for journalists, followed by censorship selected by 167 (42.9%) of the respondents. 163 (42.9%) of the respondents admitted that unlawful arrests were a challenge faced by journalists, followed by 'tight budget' selected by 163 (41.9%) of the respondents.

Less than half of the respondents thought that insurgency was an emerging challenge as it was only selected by 130 (33.4%) of the respondents. Issues of banditry, libel and sexual harassment were noted by 104 (26.7%), 79 (20.3%) and 66 (17%) of the respondents, respectively.

Variable	Agree	Strongly agree	Neutral	Disagree	Strongly disagree	Total
Communication arm of the military involved in Propaganda	156	90	78	54	11	389
Percentage (%)	40.1	23.1	20.1	13.9	2.8	100
Military Thrive on Misinformation/Fake News	109	33	113	105	29	389
Percentage (%)	28	8.5	29	27	7.5	100
Cordial relationship between the media and the military	174	36	82	89	8	389
Percentage (%)	4.7	9.3	21.1	22.9	2.1	100
The lack of advanced technology has impeded journalists reporting national security issues	184	150	25	27	3	389
Percentage (%)	47.3	38.6	6.4	6.9	0.8	100

Table 3: *Perception of media practitioners on military-media relations*

Table 3 above shows that 156 (40.1%) of respondents agreed that the communication arm of the military is mostly involved in propaganda, with 90 (23.1%) strongly agreeing, while a total of 61 (37%) disagreed with the perception.

The perception about the Nigerian Military thriving on misinformation and fake news was shared by 33 (8.5%) of the respondents while 109 (28%) agreed with this statement. This quite does not justify the percentage of media practitioners who are saying that the communication by the military was mostly propaganda. This means that media practitioners see a difference between fake news and propaganda.

More than half, 210 (54%) of the respondents, agreed that there was a cordial relationship between the media and the military. The table above

also shows that a majority of the respondents (85.9%) agreed that the lack of advanced technology has impeded journalists from reporting national issues.

Variable	Agree	Strongly agree	Neutral	Disagree	Strongly disagree	Total
Nigeria media industry positioned to adopt robot journalism	54	13	156	109	57	389
Percentage (%)	13.9	3.3	40.1	28.0	14.7	100
Private	26	5	86	57	26	200
Percentage (%)	6.7	1.3	22.2	14.7	6.7	8
Federal government	19	4	33	24	16	96
Percentage (%)	4.9	1.0	8.5	6.2	4.1	
State Government	9	4	36	27	14	90
Percentage (%)	2.3	1	9.3	7	3.6	
International body				1		1
Percentage (%)				0.3		

Table 4: *Media industry positioned to adopt robot journalism disaggregated by media ownership*

Disaggregated by media ownership, responses from the Federal Government-owned media practitioners showed that a majority of 33 (8.5%) did say the media industry was not well positioned to adopt robot journalism. From both the Private and State Government-owned media, 84 (42.5%) of practitioners did also disagree that the media industry was ready for robot journalism.

Credible News Source	Frequency	Percentage (%)
Mainstream media	287	73.8
Social Media source	48	12.3
Others	27	6.9
Military source	27	6.9
Grand Total	**389**	**100**

Table 5: *Perception of credible news source*

In view of credible information sources, the table above shows that only 27 (6.9%) of respondents selected military sources as credible news sources. 287 (73.8%) of the respondents perceive that the mainstream media is a more credible news source. Further results indicate that 43 (12.3%) of respondents perceived social media to be a more credible source of news as opposed to mainstream media.

How comfortable are you covering military-related issues?	Frequency	Percentage (%)
I don't feel comfortable	128	32.9
I am not sure	99	25.4
I am comfortable	99	25.4
I feel highly uncomfortable	33	8.5
I feel highly comfortable	30	7.7
Grand total	**389**	**389**

Table 6: *Perception of journalists on covering military-related issues.*

Table 6 above shows a total of 33.1% of the respondents reported they were comfortable covering military-related events and of that number, only 7.7% of the media practitioners stated that they were highly comfortable covering military-related issues. A total of 41.4% were not comfortable covering military-related stories. While a total of 25.4% of the respondents were unsure about how they felt when it came to covering military-related news.

Aware of the concept of robot journalism?	Frequency	Percentage (%)
Yes	206	53
No	183	47
Grand Total	**389**	**100**

Table 7: *Media Practitioners and Knowledge of Robot Journalism*

Table 7 above shows that more than half 206 (53%) of the media practitioners surveyed) said they were familiar with the concept of robot journalism.

Perception	highly likely	unlikely	even chance	very unlikely	certain	Grand Total
Automated journalism will be welcomed by the Nigerian military.	128	127	74	30	30	389
Percentage (%)	32.9	32.6	19	7.7	7.7	100
The Nigerian military will look for ways to counter government's approval of automated journalism.	138	85	106	16	44	389
Percentage (%)	35.5	21.9	27.2	4.1	11.3	100

Table 8: *Perception of media practitioners on military action on automated journalism*

The pivot table above shows that 158 (46.6%) of the respondents perceive that automated journalism will be welcomed by the Nigerian Military while 17 (19%) of the respondents said there was an even chance that the military would either welcome or reject it. This could explain why 182 (46.8%) of media practitioners are of the opinion that the Nigerian military will also look for ways to counter government approval of automated journalism.

Perception	Frequency	Percentage (%)
Robot journalism will not increase journalists' voice in news coverage and dissemination.	131	33.7
News coverage through robot journalism is necessary for the achievement of increased news coverage and data collection	189	48.6
There is need for close collaboration between journalists and software experts.	281	72.2
There should be media training on robot journalism for all journalists.	280	72
Political action will be required to address the problems behind information technology adoption.	184	47.3
Robot journalism is necessary to reduce the workload of human journalists.	194	49.9
Robot journalism would help to provide better and improved journalistic service to news agencies.	187	48.1
Human journalists should continue to cover news in order to save true journalism.	247	63.5
Robot journalists will make the audience to be more responsive while providing information needs.	114	29.3
Journalists are not to be blamed for the low coverage news.	189	48.6
War and Conflict report is of high news worthiness.	226	58.1
Robot journalism does not require any special training anyone with a phone can do it.	61	15.7
Robot journalism will make human journalism to be boring.	101	26
Robot journalism will increase journalist socio-economic status.	83	21.3
Human journalists cannot be available at all times for every breaking news, hence there is need to adopt robot journalism.	190	48.8
Media owners/editors are slow to appreciate and adopt technology and innovation.	169	43.4
Many media agencies do not have funds to purchase modern technologies that support the work of journalists.	248	63.8
Adoption of robot journalism will lead to loss of employment for human journalists.	203	52.2

Perception	Frequency	Percentage (%)
Adopting robot journalism on a long-term basis, will mean committing professional suicide.	139	35.7
Actually, I do not care much about robot journalism because it will not increase journalist's productivity.	107	27.5
There is need for legislation on the adoption of robot journalism in Nigeria.	166	42.7
The communications department of the military and military reporters need to be trained to use robot journalism	239	61.4

Table 9: *The perception of media practitioners*

From the table above, 203 (52.2%) media practitioners agreed with the statement 'Adoption of robot journalism will lead to loss of employment for human journalists' while 83 (21.3%) agreed that Robot Journalism will increase journalists' socio-economic status.

About 101 (26%) journalists selected the statement 'robot journalism will make human journalism boring' with 131 (33.7%) who said Robot Journalism will not increase journalists' voice in news coverage and dissemination and 139 (35.7%) believe that 'adopting Robot Journalism on a long-term basis, will mean committing professional suicide.' As such a total of 247 (63.5%) respondents said that human journalists should continue to cover news in order to save true journalism. This could account for a total of 107 (27.5%) media practitioners who said, 'Actually, I do not care much about robot journalism because it will not increase journalists' productivity.'

In terms of positive feedback around the adoption of robot journalism, 114 (29.3%) respondents were of the opinion that robot journalists will make the audience to be more responsive while providing information needs, while a total of 187 (48.1%) media practitioners did add that 'Robot journalism would help to provide better and improved journalistic service to news agencies.' Indeed, 166 (42.7%) media practitioners agreed that there was a need for legislation on the adoption of robot journalism in Nigeria. This means that, just like the selection by 184 (47.3%) media practitioners, political action will be required to address the problems behind

information technology adoption. 189 (48.6%) media practitioners agreed that news coverage through robot journalism was necessary for the achievement of increased news coverage and data collection as did 189 (48.6%) respondents who believed that Journalists were not to be blamed for the low coverage of news, with 190 (48.8%) respondents who added that Human Journalists cannot be available at all times for every breaking news, hence there is need to adopt robot journalism. 194 (49.9%) media practitioners noted the statement that Robot journalism was necessary to reduce the workload of human journalists.

While 280 (72%) are of the opinion that there should be media training on robot journalism for all journalists, a total of 239 (61.4%) added that the communications department of the military and military reporters need to be trained to use robot journalism. Also, 281 (72.2%) said there was a need for close collaboration between journalists and software experts. But 61 (15.7%) respondents did say Robot journalism did not require any special training, as anyone with a phone can do it. 248 (63.8%) said many media agencies did not have the funds to purchase new technologies that support the work of journalists. This may be the reason why media owners/editors are slow to appreciate and adopt technology and innovation as noted by 169 (43.4%) media practitioners.

Discussion of Findings

This study sought to investigate the perception of journalists on the concept, usage and adoption of automated journalism in Nigeria and also examine the ways that robot journalism bridges the gap in military-media relations, especially in the context of national security debates.

R1. To what extent are the present practices of journalism in Nigeria able to address present and emerging issues facing the industry?

Findings showed that the following emerging issues were present but not affecting every media practitioner: Issues such as banditry, libel and sexual harassment emerged in 26.8%, 20.4% and 17% of the responses respectively. Others were copyright, kidnapping, low remuneration, poor conditions of service and access to information which accounted for a total of 2.6% of the responses. The insurgency in Nigeria's Northern sphere,

which is reported to be affecting journalists in performing their duties effectively emerged as a challenge by 33.5% of the respondents. 223 respondents, which is the highest frequency, stated that harassment from security personnel was one of the challenges facing journalists. For the solution, 28% of the respondents affirmed that the present practice of journalism in Nigeria is adequate enough to address these emerging issues while 18.7% said it was very adequate.

Indeed, it is safe to say that journalism practice in Nigeria has experienced a paradigm shift to which journalists are tagging slowly, but which is also facilitated by the fear surrounding coverage of military news around story sourcing, gathering, writing, editing and dissemination. To elucidate the implications and activities of non-professionalism in news reportage, findings from this study showed that professional ethics was one of the challenges facing journalists. This supports Talabi and Ogundeji (2012) position that the Nigerian press today is being accused of engaging in non-professional activities and this has been the bane of journalism in Nigeria.

R2. What is the perception of journalists on the concept, usage and adoption of automated journalism?

Findings showed that 53% of media practitioners were aware of the concept of robot journalism, but an average of 42% of media practitioners from the federal and private and state government-owned media agreed that the media industry was not ready for robot journalism. The majority of media practitioners, 52.2%, submitted that the adoption of robot Journalism was going to lead to loss of employment for human journalists while 21.3% of media practitioners agreed that Robot Journalism will increase journalists' socio-economic status. This means that the remaining 78.7% did not believe that robot journalism would contribute to the socioeconomic status of journalists.

The continuous mundane task of gathering stories around beats such as sports, finance, and weather are some of the tasks that can be delegated to automation which could explain why 74% did not believe 'Robot Journalism will make human journalism boring', with 66.3% who did not agree that 'Robot Journalism will not increase journalists' voice in news coverage and dissemination. This means that a majority of the respondents

believe that Robot Journalism will increase journalists' voice in news coverage and dissemination. This is because as they get the time to handle other beats, the time that would have been spent on sourcing some news will yield more. This validates the media richness theory as robot journalism is able to enrich journalism to make the process of news even more exciting.

Indeed, Robot journalism is an innovation in information technologies. This paper does not only seek to report it but also proposes its usage. We see that journalism in Nigeria needs to experience a regeneration when it comes to adoption and not just reportage. This confirms what Okon and Eleba (2013) said that technologies and new media forms are unfamiliar to Nigerian society. Precisely, media houses and journalists ought to try as much as possible to acquire the required skills so as to adopt and adapt to global standards in gathering, packaging, and disseminating news and other relevant information to the public.

R3. How can robot journalism bridge the gap in military-media relations in the context of national security debates?

In response to research question 3, a total of 40.6% of the respondents agreed that automated journalism will be welcomed by the Nigerian military while 19% said there was an even chance that the military may accept or reject it. Robot journalism constitutes a national security issue, serving as an amplifier of the existing strained media–military relationship. This explains why 46.8% of media practitioners are of the opinion that the Nigerian military will also look for ways to counter government approval of automated journalism. There is a general agreement with the notion of media relations as the management of relationships between interacting organisations and the media. Journalists use media tools to report military information to viewers and readers of the media. To address the issues of military media conflicts and improve military-media relations, the relationship between media relations practitioners and the Nigerian military needs to be factored as an important element for both agencies to work in sync. However, a review of relevant literature finds little to assist those charged with responsibility for managing that relationship.

In a study by Ledingham and Bruning (2007) the authors examined media audit as a means for managing media relationships. Holtzhausen and Roberts (2009), suggested that what was most critical in crisis management was to employ image repair strategies such as crisis communication to change the perspectives of the institution and the media over the crisis period. Findings show that 85.9% of the respondents believe that the lack of advanced technology has impeded journalists reporting national issues. This can be seen where digital tools employed by international media enable news agencies such as Reuters, BBC, and Sahara Reporters to create a majority of the reports on war and crises in Nigeria. Some of the headlines are 'Boko Haram Giwa barracks attack: Nigerian army 'killed hundreds' (BBC 2014), 'Nigeria army 'knows where Boko Haram are holding girls' (BBC 2014), Nigerian Army Facing Questions as Death Toll Soars After Prison Attack (Nossiter, 2014).

Conclusion

We took a systematic look into the perceived purpose of robot journalism, searching specifically for opportunities for journalists and the military. Journalists, like all civilians, need military protection, especially in war reporting which were highlighted as very important by 58.1%. There is general agreement with the notion of media relations as the management of relationships between interacting organizations and the media. Journalists use media tools to report military information to viewers and readers of the media. However, a review of relevant literature finds little to assist those charged with responsibility for managing that relationship. While it seems easier to raid physical locations, the military has a mandate, as stated above, to maintain order and restore peace in the country. In terms of maintaining positive military-media relations, some experts have recommended conducting a media audit as a means of managing media relationships (Ledingham & Bruning, 2008). Yet other scholars, such as Holtzhausen & Roberts (2009), have suggested that what was most critical in crisis management was to employ image repair strategies such as crisis communication to change the perspectives of the institution and the media over the crisis period.

There is also no doubt that the popularity of digital technologies in our everyday lives is today changing the face of journalism globally and in particular the Nigerian media industry. There is therefore a need to follow suit. As posited by Talabi (2011), no new medium can send an old one to oblivion; it will only be an extension of the old medium. Therefore, because the robot journalism technology concept is still novel to media practitioners, media houses and journalists ought to try as much as possible to acquire the required skills to adopt and adapt to global strategies in gathering, packaging, and disseminating news and other relevant information to the public.

Findings also showed that maintaining professional ethics was a major challenge for journalists. Therefore, a journalist needs to make editorial and ethical judgement which could pave way for the adoption of automated journalism, as robots hold no emotions and can only apply "ethics" that have been encoded in them.

Recommendations

The following are recommendations that emerged from the study:

1. To address the issues of military media conflicts and improve military-media relations, the relationship between media relations practitioners and the Nigerian military needs to be factored as an important element for both agencies to work in sync.
2. To build cordial military-media relations there should be access to dialogue with the military followed by retraining of journalists to better work with the military.
3. Media houses should be open to change and train their staff on online journalism, while government should provide an enabling environment for the continuous flow of information.
4. The FRCN Broadcast Academy, which offers courses in Basic, Intermediate and Advanced Information and Communication Technology, should work to include robot Journalism and military news coverage as part of the courses or even make it a department on its own.

5. The introduction of courses in automated journalism and military-media relations will broaden the knowledge of journalists and practitioners on the use of advanced technologies and their application even to national security.

References

Akpan, F., Ering, S. O., & Adeoye, A. O. (2013). The media and conflicts in Nigeria. *International journal of Asian social science, 3*(11), 2279-2287. Retrieved from http://aessweb.com/pdf-files/ijass 3(11) -2279-2287.pdf

Amaka, A., Emmanuel, D., Hajiya, S., & Olaniyi, O. (2019, January 28). *A Communique on Media-Military Relationship*. Retrieved from PR Nigeria: https://prnigeria.com/2019/01/28/communique-media-military-relationship/

Amu, C. J., & Agwu, A. E. (2013). Attitude and knowledge of print media journalists towards reporting of climate change news in Nigeria. *The Journal of Agricultural Extension, 16*(2), 52-67. Retrieved from https://ajol.info/index.php/jae/article/view/84520

Antonopoulou, P., & Kyriazis, A. (2018). Potential applications of algorithmic (robot) journalism for the Greek Sport Media. *New media and mass communication, 67*, 27-30. Retrieved from https://iiste.org/journals/index.php/nmmc/article/view/41242

Anyadike, D. O. (2013). Problems and prospects of investigative journalism in Rivers State, Nigeria: A study of the Tide and Hard Truth Newspapers. *New media and mass communication, 17*, 59-64. Retrieved from https://iiste.org/journals/index.php/nmmc/article/view/7726

BBC. (2014, 5 27). *BBC News*. Retrieved from Nigeria army 'knows where Boko Haram are holding girls': https://www.bbc.com/news/world-africa-27582873

BBC. (2014, 3 31). *Boko Haram Giwa barracks attack: Nigerian army 'killed hundreds'*. Retrieved from https://www.bbc.com/news/world-africa-26819965

BBCNewsLabs. (2021.). *BBC*. Retrieved from https://bbcnewslabs.co.uk: https://bbcnewslabs.co.uk/projects/juicer/

Cant, P. (2018, 3 23). *Robots in the Newsroom*. Retrieved from https://medium.com/up-in-the-air-by-oxygen/sxsw-robots-in-the-newsroom-e087d825cc72

Carlson, M. (2015). The robotic reporter. *Digital Journalism, 3*(3), 416–431. doi:10.1080/21670811.2014.976412

Carlson, M. (2016). *Automated journalism: A posthuman future for digital news?* Retrieved from https://taylorfrancis.com/books/e/9781315713793/chapters/10.4324/9781315713793-23

Caswell, D., & Dörr, K. (2018). Automated journalism 2.0: Event-driven narratives. From simple descriptions to real stories. *Journalism Practice, 12*(4), 477-496. Retrieved from https://tandfonline.com/doi/full/10.1080/1751 2786.2017.1320773

China Daily. (2010, 4 27). *Nigeria: 3 journalists killed in weekend violence*. Retrieved from chinadaily: http://www.chinadaily.com.cn/world/2010-04/27/content_ 9780460.htm

Cohen, N. S. (2015, May 15). Pink slips to pink slime: Transforming media labor in a digital age. *The Communication Review*. doi:10.1080/10714421.2015.1031996

Corinna, U. (2019, 11 17). *Emerj Artificial Intelligence Research*. Retrieved from https://emerj.com/: https://emerj.com/ai-sector-overviews/automated-journalism-applications/

CPJ. (2019). *Committee to Protect Journalists*. Retrieved from http://www.huffingtonpost.com/committee-to-protect-journalists/

CPJ. (n.d.). *Committee to Protect Journalists*. Retrieved from https://cpj.org: https://cpj.org/data/people/fidelis-ikwuebe/

Dalen, A. V. (2012, 3 30). The algorithms behind the headlines; How machine-written news redefines the core skills of human journalists. *Journalism Practice*. doi:10.1080/17512786.2012.667268

Dickinson, R. L., & Miller, M. (2005). *RSS feed generator*. Retrieved from https://patents.google.com/patent/us20070156809a1/en

Düsterhöft, I. (2013). The protection of journalists in armed conflicts: How can they be better safeguarded? *Utrecht Journal of International and European Law, 29*(76), 4-22. Retrieved from https://doaj.org/article/35d4e9cad1744838ad736cc48482a14c

Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. International Journal of

Information Management, 59, 102168. https://doi.org/10.1016/j.ijinfomgt.2020.102168

Erdle, M. P. (1991). *The news media and military operations*. Retrieved 7 15, 2021, from https://apps.dtic.mil/dtic/tr/fulltext/u2/a236278.pdf

Finnäs, J., & Tjernström, M. (2016). *MittMedia & journalism: Integrate robots into publishing processes.* International Press Communications Council.

Gopalan, R. (2017, 9 22). *How AI is fuelling our on-demand media needs.* Retrieved from https://digit.fyi: https://digit.fyi/ai-creative-industries/

Govik, R. (2018, 2 12). *MittMedia.* Retrieved from Medium: https://medium.com/mittmedia/the-homeowners-bot-36d2264e2d34

Haigh, M. M. (2012). *The Relationship between the Media, the Military, and the Public*. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/9781444361506.wbiems119

Harper, R. A. (2010). The social media revolution: Exploring the impact on journalism and news media organizations. *Inquiries Journal, 2*(03). Retrieved 7 4, 2021, from http://inquiriesjournal.com/articles/202/the-social-media-revolution-exploring-the-impact-on-journalism-and-news-media-organizations

Holtzhausen, D. R., & Roberts, G. F. (2009). An investigation into the role of image repair theory in strategic conflict management. Journal of Public Relations Research, 21(2), 165-186.

Jung, J., Song, H., Kim, Y., Im, H., & Oh, S. (2017). Intrusion of software robots into journalism: The public's and journalists' perceptions of news written by algorithms and human journalists. *Computers in Human Behavior*.

Kaplan, F. (2013). The Insurgents: David Petraeus and the Plot to Change the American Way of War. Simon & Schuster.

Kupoluyi, A. (2019, 1 23). *Embarrassing Military Brutality*. Retrieved from Guardian Newspapers: https://guardian.ng/opinion/embarrassing-military-brutality/

Layefa, G., & Johnson, W. A. (2016). The quest for press freedom in Nigeria: Not a forlorn struggle. Journal of Research and Development (JRnD), 2(10), 22. Retrieved from www.arabianjbmr.com

Ledingham, J. A., & Bruning, S. D. (2007). The media audit: A tool for managing media relationships. Journal of Promotion Management, 13(3-4), 189-202.

Leppänen, L., Munezero, M., Granroth-Wilding, M., & Toivonen, H. (2017). *Data-driven news generation for automated journalism*. Retrieved from https://aclweb.org/anthology/w17-3528

Linden, T. C. (2017). *Algorithms for journalism: The future of news work*. Retrieved from https://journals.uio.no/index.php/tjmi/article/view/2420/4150

Lovett, R. A. (2010). Underwater robot automates ocean testing. *Nature*. Retrieved from http://nature.com/news/2010/100224/full/news.2010.89.html

Martinez, M. (n.d.). *AI: Threat to journalists and a free press? Not in Sweden.* Retrieved from https://www.computer.org/publications/tech-news/trends/ai-robots-journalism-sweden

Montal, T., & Reich, Z. (2017). I, Robot. You, Journalist. Who is the author? *Digital journalism, 5*(7), 829-849. Retrieved from https://tandfonline.com/doi/full/10.1080/21670811.2016.1209083

Monti, M. (2019). *Automated journalism and freedom of information: ethical and juridical problems related to AI in the press field*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3318460

News - Nigerian Air Force. (n.d.). Retrieved from http://www.airforce.mil.ng/news

Nigerian Army- Official Website. (n.d.). Retrieved from http://www.army.mil.ng/

Nossiter, A. (2014, 3 20). *Nigerian army facing questions as death toll soars after prison attack*. Retrieved from https://www.nytimes.com/2014/03/21/world/africa/nigerian-army-facing-questions-as-death-toll-soars-after-prison-attack.html

Okon, G. B., & Eleba, T. (2013). Information technology and journalism practice in Nigeria: A survey of journalists in Portharcourt Metropolis. *Review of European Studies, 5*(5), 111. Retrieved from http://ccsenet.org/journal/index.php/res/article/view/31163

Pantti, M. K. (2019). Journalism and witnessing. The handbook of journalism studies.

Shahzad, K. (2020, 2 22). *Artificial intelligence and modern journalism*. Retrieved from Daily Times: https://dailytimes.com.pk/562326/artificial-intelligence-and-modern-journalism/

Talabi, F. O. (2011). The internet and journalism practice in Nigeria. *Global Journal of Human-Social Science Research, 11*(10). Retrieved from https://globaljournals.org/gjhss_volume11/3-the-internet-and-journalism-practice-in-nigeria.pdf

Talabi, F. O., & Ogundeji, B. K. (2012). Effects of non-professionalism in Nigeria journalism. *Journal of Mass Communication and Journalism, 2012*(7), 1-6. Retrieved from https://omicsonline.org/open-access/effects-of-non-professionalism-in-nigeria-journalism-2165-7912.1000117.pdf

Vanguard. (2010, September 30). (Vanguard Media Limited, Nigeria.) Retrieved from Vanguard: https://www.vanguardngr.com

Zheng, Y., Zhong, B., Zhong, B., & Yang, F. (2018). When algorithms meet journalism: The user perception to automated news in a cross-cultural context. *Computers in Human Behavior, 86*, 266-275. Retrieved from https://sciencedirect.com/science/article/pii/s0747563218302103