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Chinese Digital Platform: “We Write What the Algorithm Wants”

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ABSTRACT

This study examines Nigerian journalists’ perception of the affordances of recommendation algorithms in news production and distribution on Opera News Hub. The study uses a triangulation of methods involving content analysis, a semi-structured interview, and a focus group discussion (FGD) with content creators, who have been trained in traditional media practices in Lagos, Nigeria. The findings indicate news stories published on the Hub contravene the platform’s publishing guidelines. The Hub’s recommender system is underpinned by “metricisation” of gatekeeping, which affords soft news over hard news. Hence, content creators of hard news compromise their journalistic autonomy and take on a new professional identity in which they engage in a constant struggle to produce sensational content that will attract audience engagement on Opera News Hub. However, there are indications that Opera News Hub may enhance media sustainability and the welfare of journalists in Nigeria.

KEYWORDS

Audience metrics; digital intermediaries; journalistic autonomy; metricisation of gatekeeping; Nigerian journalists; Opera News Hub; soft news and hard news

Introduction

In 2019, Opera News Hub, a Chinese content-sharing platform that uses recommendation algorithms for gatekeeping and distribution of media content, was launched in Nigeria. The platform uses recommendation algorithms that help content creators “target audience and helps users find the content that matches their interests” (Operahub 2019). Opera News Hub is arguably the first digital platform in sub-Saharan Africa that uses recommendation algorithms to review stories before they are published on a digital platform. The Hub uses an automated gatekeeping process in which the recommendation algorithm reviews content before it is published:

Every post must first go through the Opera News Review System before it can reach millions of Opera News users. Our Review System ensures that we provide all users with high-quality content and a premium experience. Each post published on Opera News is first examined by machines and human editors against our content standards (Operahub 2019).

As a way to create content that appeals to the Nigerian audience, Opera recruited senior editors and journalists, who had been trained in traditional media practices as content creators for Nigerian audiences. The journalists come from diverse journalistic backgrounds which include society and entertainment, politics, investigative reporting, and business. This study focuses on this category of content creators because it seeks to illuminate the perception of African journalists who are experiencing, first-hand, the role of algorithms in news distribution and production. Studies on the role of algorithms in news production and distribution have been largely carried out in countries in the Global North where there is an advanced form of democracy. While it has been suggested that digital media will play key roles in sub-Saharan Africa, their evolution remains debatable, if not unpredictable (Paterson 2013; Mabweazara 2018). Studies focusing on the role of algorithms in journalism in sub-Saharan Africa have been limited to the influence of audience metrics in news production and distribution. Bunce (2015, 2019), for example, has examined how audience metrics influence the selection and development of news stories by foreign correspondents in Africa, as well as how audience metrics can be used to monitor and discipline journalists. Moyo, Mare, and Matsilele (2019) interrogate the influence of web analytics on editorial decisions and advertising negotiations in newsrooms in three African countries. The present study is a novel attempt to bridge this gap in the academic literature on the role of algorithms in news production and distribution on a digital platform in a transitional democracy such as Nigeria, where journalists are still grappling with the intrusion of digital intermediaries on traditional norms of journalism.

This article begins with a review of the literature on the role of algorithms in news production and distribution. The section that follows provides an insight into the Nigerian media landscape as well as the business model of Opera News Hub. The last section discusses the findings of this study in terms of the themes that emerge from the analysis of data.

Role of Algorithms in News Production and Distribution

In traditional media, news production and distribution are vertically integrated. The advent of the Internet upset this arrangement between production and distribution. The introduction of digital platforms such as aggregators, search engines and social media platforms further upended production and distribution. These digital platforms now act as intermediaries that “filter or suppress the news during its journey from news producer to news consumer” (Napoli 2019, 59).

Selection of News

Studies focusing on gatekeeping have evolved over time from White’s (1950) conceptualization of gatekeeping as an individual judgment of news selection to internal and external factors that influence the selection of news (Shoemaker and Reese 1996). These forces – markets, audiences, advertisers, financial markets, sources, public relations, governments, interest groups, other media and news consultants – are central to gatekeeping theory (Shoemaker and Vos 2009, 76). The rise of digital media with audiences functioning as both consumers and producers of media content has raised

questions about the continued relevance of gatekeeping theory because the values informing news selection in journalistic gatekeeping are largely different from those of non-journalistic gatekeepers (Wallace 2018). In this regard, scholars have argued that gatekeeping is in “transit” (Heinderyckx and Vos 2016) and requires rethinking (Vos 2015). To account for gatekeeping in digital spaces, Barzilai-Nahon (2008, 1493) suggests that a “theory of network gatekeeping” that accounts for the interactions between multiple actors is needed. In this networked environment, audiences are involved in “gatewatching” in which they have access to multiple sources of information and no longer depend on journalistic sources of information (Bruns 2005). The function of gatekeeping is taken over by people outside the newsroom, a situation akin to Singer’s (2014) concept of secondary gatekeeping in which audiences play important roles in the gatekeeping process. Shoemaker (2020) proposes that gatekeeping theory should instead consider the entire web of gatekeepers or the system composed of elements (gatekeepers), interactions (relationships among them) and a goal or function. For his part, Wallace (2018, 280) proposes a digital gatekeeping model that involves two stages: the gatekeeper’s selection process and the gatekeeping mechanism. The model identifies journalists, individual amateurs, strategic professionals, and algorithms as “gatekeepers that differ in access, selection criteria and the framing of information, and the publication choice” (Wallace 2018, 288). Furthermore, publication spaces are conceived as platforms where gatekeepers operate within these platforms, either applying centralized or decentralized gatekeeping mechanisms. However, “this new gatekeeping model is outside the control of journalism just as traditional gatekeeping was mainly outside the control of audiences” (Russell. 2019, 632). For instance, Tandoc (2014,571) observes that the “metricisation” of gatekeeping could influence the selection and de-selection of stories by editors. Similarly, Vos and Russell (2019, 2343) suggest that Silicon Valley’s “algorithmic gatekeeping power influences decisions by journalists or news organizations about what stories to pursue”.

According to Wallace (2018, 280), algorithms select and process information based on “predefined lines of code”. They afford quantity over quality and “where humans may apply an individual sense of quality, algorithmic selection struggles to recognize normative factors”. In comparison to human beings, algorithm gatekeepers are more efficient and reliable and can perform better at scale (Nechushtai and Lewis 2019, 298). Carlson (2018, 1775), however, explains that “algorithm judgment presents a fundamental challenge to news judgment based on the twin beliefs that human subjectivity is inherently suspect and in need of replacement, while algorithms are inherently objective and in need of implementation”. For their part, Nechushtai and Lewis (2019, 304) point out that gatekeeper algorithms should not be evaluated against the normative standards of journalistic gatekeeping because there are no agreed-upon standards for gatekeeping in journalism. Similarly, Wallace (2018, 303) contends that “judging an algorithm by journalistic norms is just as problematic as ignoring the difference between journalists and the individual amateurs”. However, Napoli (2015) counters that gatekeeper algorithms should be infused with professional codes of conduct that advance the public interest. While these studies have made a useful contribution to the “algorithmification” of gatekeeping, they have been limited to the Global North, with a limited focus on sub-Saharan Africa.

News Distribution

Digital platforms such as Google, Facebook, and Twitter use algorithms in news production and distribution, a process that has been described as the “algorithmification of gatekeeping” (Heinderyckx 2015, 257). These algorithms “assign relevance, value, and prominence of knowledge to blend a cocktail of news, information, and entertainment tailored to individual users” (Hermida 2020, 476). On digital platforms, “algorithms select hashtags for Twitter trending topics, highlight certain headlines atop Google search results, and determine which items appear prominently in Facebook News Feeds” (Nechushtai and Lewis 2019, 299). One of the ways in which US journalists resist being subjected to algorithmic gatekeeping is to cooperate with “Facebook’s algorithm in terms of how they frame the story, tweaking headlines to be more engaging to readers, and being deliberate about the photos and videos they post alongside the stories” (Peterson-Salahuddin and Diakopoulos 2020, 34). In the same vein, Bandy and Diakopoulos (2020) conclude that the algorithmic curation of content on Apple’s news privileges soft news over hard news. In order to satisfy the “workings of digital platforms, news producers create content that is more emotive and shareable” (Wilding et al. 2018, 2).

Nechushtai and Lewis (2019, 300), however, point out that there are two interrelated issues critical to the role of algorithms as gatekeepers of distributed news, namely, news personalization and news diversity. The former could result in a “narrower range of news content thereby isolating individuals from a broader set of information that might challenge their beliefs by giving personalized recommendations based on past history”. Bodó et al. (2019), Thurman et al. (2019), Möller et al. (2018) and Trielli and Diakopoulos (2020) have studied news recommendation systems through diverse lenses. Bodó et al. (2019, 206) show that quality news organizations that pursue reader loyalty and trust have a strong incentive to implement personalization algorithms. For their part, Möller et al. (2018, 959) conclude that “basing recommendations on user histories can substantially increase topic diversity within a recommendation set”. In this regard, Trielli and Diakopoulos (2020) show that the Google search engine partly neutralizes differentiation by providing common results of people from different ideological backgrounds. These studies are focused on the algorithmic gatekeeping of distributed news on digital platforms. There is, however, limited academic research on algorithmic gatekeeping of media content produced by journalists before publication on a digital platform. This is the unique example of Opera News Hub, which uses recommendation algorithms to select news produced by content creators for publication on a digital platform. Opera’s digital platform has been introduced at a time when the affordances of digital technology are reshaping the processes of news production, consumption, and distribution in Nigeria. Obalanlege (2015) and Apuke (2016) point out that the affordances of digital technology have transformed the way journalism is practised in Nigeria, especially in terms of sourcing, newsgathering techniques, reporting methods and the agenda-setting role of the media. Uwalaka and Watkins (2018) argue that social media has emerged as a “fifth estate” of the realm that compels the mainstream media in Nigeria to cover social protests. Similarly, Akinfemisoye (2014) explains that the affordances of digital technology have served as a link between audiences and mainstream journalists in

the coverage of key events such as the 2011 general elections, the Occupy Nigeria protests of 2012, and the EndSARS protests of the 2020. The affordances of digital technology are reshaping the work routines of mainstream journalists such that “journalists now not only have to attend to their various news beats but also have to monitor online media sites as both competitors and news-lead-providers, in a bid to produce newsworthy content as well as report what is happening off- and online” (Akinfemisoye 2014, 70). However, the affordances of digital technology have not succeeded in “deprofessionalising” journalists. Instead, “mainstream journalism in Nigeria maintains the dominant discourse by articulating and appropriating content from social media sources for subtle economic motives” (Akinfemisoye 2014, 62). This brings us to the research questions of this study:

RQ1: How do content creators perceive the role of recommendation algorithms in news production and distribution on Opera News Hub?

RQ2: How do content creators respond to algorithmic selection of news on Opera News Hub?

The Nigerian Media Landscape

The relationship between the Nigerian media and politics has its origins in the history of the Nigerian press. The early newspapers that championed the quest for Nigeria’s independence from colonial power were owned by politicians who also deployed the press to advance partisan interests and objectives. This has since become the norm in Nigeria where the “politics-journalism alliance” has become entrenched with consequences for ethics (Kolawole 2018). The result has been situations in which allegations of corruption against top government functionaries are treated with levity (Jibo and Okoosi-Simbine 2003, 193) and highly placed public officials are deliberately shielded from embarrassing questions by the media in return for favors (Jibo and Okoosi-Simbine 2003, 187). The ethnic contestations that characterize Nigerian politics are also visible in the Nigerian press, manifested in the form of regional parallelism in the coverage of corrupt practices illustrated by the two major centers of newspaper production in the country – the Lagos-Ibadan axis and the Abuja-Kaduna axis (Adebanwi 2002; Yushu’a 2010). According to Yushu’a (2010, 363), regional parallelism reflects the influence of regional, ethnic, sectional, political and religious considerations in the practice of journalism. This, he argues, is shaped by location, elites, political and business interests as well as economic imbalances in media ownership. For instance, when the Nigerian press exposes corruption, it is usually divisive in its coverage to the extent that “when a national issue enters the public domain for debate, the Nigerian media often, though not all the time, take a North-versus-South position on it” (Jibo and Okoosi-Simbine 2003, 83). The media in post-independence Nigeria has thus become “logically partisan in its reportage, agitation and agenda-setting [so] that it was easier to associate the role of the press with objective or positive nationalism in the context of the struggle against colonial rule” (Oyovbaire 2001, 4).

One of the biggest problems besetting the media in Nigeria is the failure to pay salaries to journalists promptly, and it is possible for journalists to be owed for upwards of one year (Arogundade 2010). These journalists continue to work, hoping

to thrive through unethical and corrupt practices (Jibo and Okoosi-Simbine 2003; Ibelema 2002). The situation has been complicated by the COVID-19 pandemic which resulted in the collapse of advertising revenues and a mass sacking of journalists (Krippahl 2020).

The challenges confronting journalism in Nigeria have helped foreign media organizations gain a foothold in the digital media space in the country. Foreign ownership is not alien to the Nigerian media; the Daily Times, Nigeria's most prominent newspaper was acquired by the London-based Daily Mirror Group in 1947 and was subsequently nationalized in 1974 (Chick 1996). However, in the age of digital media, foreign ownership of digital media platforms is an emerging trend. Preceding the arrival of the Opera News Hub in 2019 was *legit.ng*, owned by Gibraltar-based Genesis Media Limited, which started out as *naija.ng* in 2012, and became *naij.ng* before its transmutation into *legit.ng*. It also owns the online news portal *yen.com.gh* (Ghana), *tuco.co.ke* (Kenya) and *briefly.co.za* (South Africa). Swiss media company, Ringier AG also started Pulse.ng, a digital media news platform in 2012 and has expanded to Ghana(*pulse.com.gh*), Senegal(*pulse.sn*), Kenya(*pulselive.co.ke*), Cote d'Ivoire(*pulse.ci*), and Uganda(*pulse.ug*) (Ringier 2022).

Opera Business Model

Opera was known for its Opera Mini, a simple data compression browser that was designed for low-income countries in Africa. In 2016, a China-based tech conglomerate led by Qihoo-360 purchased a quarter of Opera's software from its Norwegian owners for \$600m. The buyers purchased Opera's browser business, its privacy and performance apps, its tech licensing and its brand name (Dent 2016). Since its purchase by the Chinese conglomerate, Opera has evolved in many ways, emerging as an octopus in the tech ecosystem in sub-Saharan Africa with interests in file sharing, news, digital payments, ride-hailing, food delivery, and news production and distribution (Williams 2020).

Opera News Hub is an app available on Android and iOS and it is estimated to have been downloaded more than 100 times on Android across Africa as of April 2021 (Olowogboyega 2021). The Hub operates a personalized news feed in which users could choose from diverse sources across several news categories such as sports, politics, entertainment, relationship, lifestyle, technology, etc. Users could also choose to access their news feed in different languages and have access to 50 news articles.

Content creators on Opera News Hub are mandated to open an account on the platform with either a Google Gmail account or through Facebook account. After the account has been confirmed, content creators are asked to provide account information, choose a username, a content category that they would want to write on, upload a profile pic and write a little about themselves in the biography section. Also, content creators are mandated to have an *OPay* account, or they won't be able to receive payment. Once an account has been successfully created on the platform, content creators are directed to the Opera News dashboard through which they interact with the platform. Herein, content creators can upload and receive feedback on their stories (Olabimji 2020).

The gatekeeping on Opera News Hub involves a news review system comprising algorithmic and human components. The recommendation algorithms select content

produced by content providers for publication on the Hub as well as distribute news to the Hub's audiences. Additionally, the Hub has an aggregator component that aggregates news from other online sources. News stories that are published on the platform are expected to meet the following criteria such as originality, professionalism, clear logic, good layout, High-definition, and good quality graphics. On the other hand, news stories are rejected if they: undermine national unity, violate editorial and writing best practices, misrepresent the country's political and legal systems, exposed sensitive state information, incite hatred or discrimination, promote violence and terrorism, pornographic content, poorly written headlines, spelling errors, incomplete or confusing headline, clickbait, Fake news, fabrication or rumors, outdated content, plagiarism, advertisement and poorly edited content (Operahub 2022).

At the outset, Opera relied solely on generating income from Google AdSense but has since readjusted its business model to placing direct advertising on the platform. When Opera started in 2019, it recruited senior editors, journalists, and social media influencers to produce content suitable for Nigerian audiences. This category of content creators had a fixed contract and earned extra income from the performance of their stories on the Hub; if their stories garnered about 100,000 clicks, they could earn as much as N3600 (\$8) and if it attracted comments on the platform, content creators also earned money. However, in recent times, things have changed dramatically. There are no longer fixed contracts for content creators and all content creators generate income from the performance of their stories. A more stringent performance model is also in place, in terms of which content creators no longer earn on the basis of clicks or comments but on how long audiences spend on their content:

In April 2020, the main factors of payment strategy were 'content clicks', 'content quality', and 'reading time'. 'Content quality', 'reading time' will be the most important considerations in the calculation. It means if your article has high quality and a long-staying time, it will receive a higher traffic fee (Operahub 2020).

The change in engagement measurement from clicks to time spent resulted in the mass resignation of journalists and influencers because "when we started you could almost predict through the traffic generated by your stories and the interactions on your dashboard what you will earn but with the change in engagement measurement, it was impossible for anyone to be sure what was going on" (FGD).

Methodology

The purpose of this study was to analyze the transformation happening in journalism in sub-Saharan Africa through the perception of content creators, who experience, first-hand, the role of algorithms in news production and distribution on Opera News Hub. A total of thirteen semi-structured interviews and one focus group discussion (FGD) were conducted in January 2020 and December 2021. First, semi-structured qualitative interviews were applied to generate responses from the interviewees' worldview rather than validating the interviewer's predetermined position (Lindlof 1995, 185). Second, the FGD has the advantage of allowing "researchers to explore group dynamics, the lifeblood of social activity, as well as to explore the constitutive power of discourse in people's lives" (Kamberelis and Dimitriadis 2013, 6). Additionally,

a representative of Opera News was also interviewed in Lagos, Nigeria to gain a working knowledge of the operation of Opera News Hub.

The first set of interviews comprised twelve participants, and the second involved a former editor of a national newspaper in Nigeria and an FGD of four participants (all male). The interviewed comprised seven content creators of hard news and six soft news while the FGD consisted of three content creators of hard news and one soft news. The first set of participants was interviewed individually at an agreed destination in Lagos, Nigeria. The interview varied between 22 min and 36 min and the interviewees agreed to be anonymous. Eleven were males and one was female. The interviews were conducted via person-to-person sessions, except for two of the interviews that were conducted with a content creator, who was a resident outside Lagos, and another who could not keep an appointment with me. The second interview and FGD were conducted virtually and lasted for 66 min and 70 min, respectively. Participants in the FGD were paid five thousand Naira (about \$12) to purchase data. The interviews were recorded, transcribed and analyzed manually. Subsequently, drawing on inductive thematic analysis, the interview transcripts were evaluated for recurrence, repetition and forcefulness. In this sense, I was observing convergence and divergence among participants (see Rakow, 2011, 423). The thirteen journalists selected for this study were drawn from four major beats which included politics, society, and entertainment, investigative, and business reporting.

A representative sample comprising fifteen articles was collected from Opera News Hub between November 9 and 11, 2022. The essence of the thematic content analysis was to determine the relationship between the Hub's publishing guidelines and news stories published on the platform (Dovbysh, Wijermars, and Makhortykh 2022, 7).

Interview Design

This study employed purposive sampling and used snowballing techniques to identify content creators. In this study, the population consisted of content creators, who had been trained in traditional media practices in Lagos, Nigeria. The interview guide consisted of questions relating to the experiences and perceptions of the role of recommendation algorithms in news distribution and production on the Opera News Hub. The goal of the interview was to use the original accounts of content creators, whose understanding of gatekeeping is informed by traditional media norms, to understand how they perceive the affordances of recommendation algorithms in news distribution and production before publication on the Opera News Hub. I asked a set of questions with the aim of comprehending participants' perceptions of the role of algorithms in the selection and distribution of news on the Opera News Hub (see Appendix 1).

Content Analysis

The study employed purposive sampling of content produced by verified content producers across the dominant news categories on the Hub such as politics, entertainment, metro, relationship, lifestyle, etc. Also, a codebook was developed for coding the thematic analysis of the fifteen articles that were collected from Opera News Hub

Table 1. Codebook for qualitative content analysis.

Themes	Manifestation in content
Misinformation	Unverifiable source, omitting facts, false information, misleading information
Plagiarism	Lacking originality, no acknowledgment of original source
Sensationalism	Sensuous, lacks depth, clickbait, appealing to emotions, intentionally controversial

(see Table 1). Additionally, an independent coder was employed who verified and validated the themes that emerged from the thematic analysis of data.

Findings

Distribution of News

Participants acknowledged that the Hub's recommender system is efficient in distributing personalized news. They mentioned that an algorithm recommendation system is a viable approach to media enterprise in the country "because it will help you to understand your target audience and provide them with the kind of content that they require, unlike the conventional media, where you have to write for everybody and most times nobody reads it" (Interview with P7). One participant said that the recommendation algorithm helped journalists to "understand the mood, the street, the market and know the kind of content that is trending in the country" (Interview with P8). Participants also pointed out that Opera's payment policy, whereby content creators were paid on the basis of the performance of their stories, was better than what obtains in traditional media, where salaries are owed in arrears and the welfare of journalists is not prioritized. According to one participant, instead of paying journalists N50,000 (about \$100) per month in the traditional media, it would be better to pay salaries according to the performance of stories:

Why not tell journalists to stay home and send stories to the media organisation; if the story is good for inside pages, we pay N5,000 (\$12) per story and if your stories make the headline, you earn N20,000 (\$40) per story. By so doing, you don't have to pay salaries every month but based on the performance of their stories. If Nigerian media organisations adopt this approach many journalists will work harder and pursue stories that are exclusive (Interview with P1).

Another participant said that what differentiates Opera news from the conventional media in Nigeria is that "they take care of their workers; provide adequate gadgets and [a] conducive environment to work" (Interview with P9). However, participants also agreed that recommendation algorithms limit the diversity of content on the Hub because it largely privileges soft news over hard news. The analysis of this section suggests that participants believed that recommendation algorithms enhance distribution of personalized news and suggested they should be adopted by traditional media organizations in Nigeria.

Selection of News

The Opera News Review System on the Hub involves two stages. First, the recommendation algorithm on Opera News Hub has access to all content produced by creators through the dashboard and selects news stories for publication on the Hub. The

selection of media content is conducted solely by the algorithm, after which human editors are expected to check through the stories for sensational and clickbaiting content. Any sensational or clickbaiting story is removed. However, this does not seem to help in any way as participants complained that, even when their stories were rejected, they found that all they had to do was to tweak the headline a bit and those stories were accepted. A senior editor explained that the human components of the gatekeeping process were not editors, but people who were recruited to manage issues arising from algorithmic selection of news for publication on the Hub. He explained that their role was to guide content creators on how to respond to feedback from the algorithm gatekeeper on the Hub. One participant explained that the role of the recommendation algorithm was to point out issues in content produced by content creators:

The algorithm points out issues of grammar and misspelling and it will return the script and highlight the reason the content was not approved. Sometimes it might be a quote that it considers too long and says it is fake news, or put a code on it. At other times, the picture you used in your story could be flagged and when you change it, the story will be approved for publication (Interview with P14).

Another participant explained that it was frustrating for him to rely on algorithms for the gatekeeping of his content on Opera News Hub:

For me, it was a bit frustrating, especially for someone who was coming from decades of experience in the newsroom, where you have strict gatekeeping, where you have to go through various processes before copies are passed; to rely on an algorithm that I felt was a bit lax in terms of getting all the right mix and variables (FGD).

These responses indicate the ways in which digital intermediaries could transform traditional norms of journalism in sub-Saharan Africa, where traditional norms of journalism are still entrenched in the media landscape. Another participant noted that the Hub's audiences do not like stories that are deep and intellectually challenging to write. He said that sometimes if you write a story that is intellectually engaging, it might seem as if you wasted your time and energy because it might attract fewer than 300 clicks on the digital platform. He, however, noted that:

When you want to do a story, for instance, to analyse the budget and compare it with previous health budgets in the last four years, it might not be appreciated by many people on the Hub. It is very frustrating because I really don't write sensational stories, I write serious things, and serious stories don't get clicks on Opera News Hub (Interview with P2).

Participants said that the recommender system on the Opera Hub affords soft news over hard news because those are the kind of news stories that attract audience engagement on the platform. This tends to reinforce the argument that the sections on Apple News curated by algorithms consist mainly of soft news, while those of human editors are hard news and serious stories (Bandy and Diakopoulos 2020). The consensus of participants is that the Hub's recommender algorithm is so limited in the selection of media content for publication on the Hub that "you will be wondering what gate is being kept" (Interview with P14). There are indications that the ranking criteria of the Hub's recommending algorithm are underpinned by audience metrics.

Platform Power and Professional Journalism

Participants described the Hub's recommender system as disregarding individual professional differences, suggesting that the "metricisation" of gatekeeping holds both content creators of soft and hard news to the same content standards. This means that content creators of soft and hard news negotiate their normative understanding of journalism against the ranking criteria of the Hub's algorithm, which is underpinned by audience metrics. For content creators of soft news, their normative understanding of journalism is biased toward the ranking criteria of the Hub's recommender algorithm, but this is not so for content creators of hard news (Bandy and Diakopoulos 2020). In this sense, content creators of hard news are confronted with the option of compromising their journalistic autonomy or holding on to the traditional values of hard news. They tend to adapt their normative understanding of journalism to conform to the ranking of the Hub's recommender algorithm by producing sensational content that will attract audience engagement on the Hub. One participant explained that it is important for him to sensationalize his report because that was the only way it would be selected by the Hub's algorithm:

You try to be a bit sensational so that your story can generate clicks on the platform because the algorithm is not interested in whether you are professionally sound. So, sometimes the body of the story may not really align with the headline but because the headline is what attracts clicks, you must find a way to ensure that you call attention to it (FGD).

Another participant said that he learned the hard way when his stories could not generate reasonable income from the Hub. He decided to readjust his normative understanding of journalism so that it could be selected by the Hub's recommender algorithm. He noted that even though he specializes in business reporting if he wants his story to be published on Opera News Hub, he has to readjust it to suit the kind of stories that the algorithm likes because the "algorithm now determines what we write; our training and our experience no longer count".

So, we can still write about health issues or budget analysis but we have to use a celebrity in the headline. Perhaps you could interview celebrities to complain about a health [issue] or the budget; it will garner clicks on the Hub. So, we can write about serious business issues but use celebrities to headline them; however, if you use activists or medical doctors to talk about health or budget, you won't get clicks on the Hub (Interview with P2).

Another investigative reporter added that he used to write investigative stories until he found out the kind of stories that generate audience engagement on the Hub:

I know what the algorithm on Opera News Hub wants; it wants sensationalism and human-interest stories. I used to write investigative stories until I realised that nobody was reading them. I came to know that the algorithm on the Hub wants those trending stories with screaming headlines. Even though the hard news stories that I wrote had some clicks, not as many as the ones I did on human interest stories (interview with P4).

One participant explained that he could not write serious stories if he wanted to maximize his presence on the Hub. He said that the monetization of clicks on the Hub "puts pressure on you". He noted that his refusal to write "what the algorithm wants" had cost him income from the Hub:

Unfortunately, I can say that 99% of the stories that I have written are things that I can defend. I did not adapt to the demand of the algorithm, but that has also cost me money because I didn't earn as much as I would have earned because of the poor performance of these stories on the Hub (P6).

However, content creators were said to have devised a means of gaming the Hub's algorithms to generate clicks and comments on stories that have been published on the Hub. Some content creators were said to have created multiple accounts on various social media platforms to generate clicks for their content:

A couple of contributors were suspended from writing over these issues. There was one content creator that was banned from contributing because he created 82 accounts on different social media platforms that he used to generate traffic for his own stories (Interview with P14).

There are indications that there is an economic logic that influences the selection of content by the Hub's recommender algorithm that derives from audience engagement with content on the Hub. This reinforces the view that audience engagement is "imbued with the corporate impulses of the companies that create these algorithms" (Peterson-Salahuddin and Diakopoulos 2020, 30).

However, the way content creators of soft news respond to the recommender system on the Hub differs from those of content creators of hard news. One participant, who writes entertainment for the Hub, said that the recommender algorithm on the Hub is only interested in trending and entertainment stories, an approach which he considers laudable:

The algorithm is doing a good job by helping us to keep a tab on trending stories in society. That is the story that the audience wants to read because they are interested in what is happening in the lives of our celebrities and society in general. I think I like that selection pattern because it does not waste time with stories that are bland (Interview with P5).

Another participant, who writes society content for Opera News Hub, said that his background in society reporting was profitable for his content on the Hub:

Writing for Opera News Hub, I realised that what particularly generates clicks is the headlines and, coming from my background in 'soft-sell' journalism, I already knew that when you give a captivating headline people will click on it even if they don't read it. So, that worked for me very well because I already have the background (FGD).

The findings of this section reinforce the argument that algorithm selection differs significantly from the human selection because, while "humans may apply an individual sense of quality, algorithmic selection struggles to recognize normative factors" (Wallace 2018, 282). The findings also justify the argument that "algorithm judgment presents a fundamental challenge to news judgment based on the twin beliefs that human subjectivity is inherently suspect and in need of replacement, while algorithms are inherently objective and in need of implementation" (Carlson 2018, 1775).

The Credibility of Information on Opera News Hub

Results from the content analysis suggest that there is a dissonance between news stories published on the platform and the Hub's publishing guidelines. Among the fifteen

Table 2. Analysis of content produced by content creators on Opera Hub.

S/N	Headline	News category	Date of publication	Classification
1	Hello Ladies – Male Organ Padlock Invented	Entertainment	10 November	Misinformation
2	The Story Mysterious Woman Who Lives Both In Land and Inside Ocean	Metro	9 November	Misinformation
3	South African Ladies Love Nigerian Men Regardless Of Their Money And Looks	Entertainment	11 November	Misinformation
4	You Think Adolf Hitler Was Terrible? There Was A Monster With More Terror Than Hitler	Metro	10 November	Plagiarism
5	Australopithecus: The Creature That Walked Like Humans, & Could Also Climb Trees Like Apes	Metro	9 November	Plagiarism
6	Things Men Do In Bed That Women Don't Like	Metro	11 November	Misinformation
7	Lady Who Jumped Into Lagos Lagoon On Thursday Identified As DSS Staff	Metro	11 November	Crude plagiarism
8	For Men: two Positive Effects of Drinking a Glass of Water Immediately After Sex	Relationship	10 November	Misinformation
9	Meet the first man who give birth to a child	Relationship	10 November	Plagiarism
10	Luckiest People in the World.	Metro	9 November	Plagiarism
11	Stunning photos of curvy African American women	lifestyle	9 November	Soft porn/nudity/ sensationalism
12	How Birth Order Affect Your Business Sucess	Business	10 November	Misinformation
13	Man in this African tribe are forced to have at least five wives, and get a house for marrying one more	Politics	10 November	Misinformation
14	Today's Headlines: APC; Tinubu Will Win 2023-Buhari, Jonathan Drafted To Reconcile Wike, Atiku-Suswam	Politics	10 November	Plagiarism
15	Video of cybercrime expert Hushpuppi with a friend surfaces the Internet	Entertainment	9 November	Sensationalism

articles analyzed, three dominant themes emerged: misinformation, plagiarism, and sensationalism (see Table 2). Among these, seven articles were repleted with misleading and false information, six were plagiarized stories from other sources including media organizations in Nigeria, and two were sensational content with some containing explicit soft porn. For instance, the news story, “Lady who plunged into Lagos Lagoon identified as DSS staff” was plagiarized from Channels Television and no effort was made to rewrite it to differentiate it from the original version that was published by Channels TV. Also, the version published on Opera News Hub has the same headline, the logo of Channels TV as well as the byline of the Channels TV reporter, Bola Frazier (see Table 2). Another plagiarized news story, “Meet the first man who give birth to a child” that was published on the Hub is an example of crude plagiarism. The story was originally published in the UK’s Guardian.com on 16 November 2020 (Booth 2020). Two years after, it was plagiarized by a verified content creator and published on Opera News Hub without any rewriting or acknowledgment of the source of the content. In another news story, “Man in this African tribe are forced to have at least five wives and get a house for marrying one more”, the content creator described the tribe that practices this tradition as the Simba people of Namibia but there is no Simba tribe in Namibia. It is either the content creator was referring to the Ovahima (Himba) or Jimba people of Namibia and

there is no such practice where a man is rewarded with a house for marrying more than five wives (Fihlani 2017). These stories published across news categories on Opera News Hub starkly contravene the publishing guidelines of Opera News Hub and thus confirm that gatekeeping of media content produced by content creators is underpinned by audience metrics.

Overall, the findings of this section reinforce the argument that “when algorithmic or personal selection criteria replace journalistic criteria, misinformation can spread through networks” (see, for instance, Wallace 2018, 307). Additionally, the findings suggest that information sourced with Opera News Hub may not be healthy for public consumption because the platform is replete with misinformation, plagiarism, clickbait, and poorly written news (see Table 2). This raises a concern for Nigeria’s fragile democracy because “information is a public good and good information is necessary for the functioning of a strong democratic state” (see, for instance, WPF, 2021).

Discussion and Conclusion

This study examined the transformation occurring in journalism in sub-Saharan Africa through the perception of content creators who are experiencing, first-hand, the role of algorithms in news production and distribution on Opera News Hub. The findings of this study suggest that the recommender system on Opera News Hub is effective in the distribution of personalized news but limited in the gatekeeping of media content produced by content producers. Participants were unanimous that introducing news personalization into the Nigerian media landscape could become a game-changer that would enhance media business and ameliorate the welfare of Nigerian journalists. However, limited diversity remains a challenge to news personalization because audiences are fed the same diet of news, even when they may want to read different content (see Nechushtai and Lewis 2019).

Content creators who have been trained in traditional media practices perceive gatekeeping as comprising factors that are internal or external to media organizations. However, in the case of the Opera News Hub, the “metricisation” of gatekeeping influences the selection and rejection of news stories produced by content creators (see, for instance, Tandoc 2014, 571). This indicates that the ranking of the recommender algorithm on Opera News Hub is underpinned by audience metrics. The influence of audience metrics on the selection and rejection of stories for publication on the Hub compels journalists to adapt their professional autonomy to the demands of the recommender algorithm (Tandoc 2014; Vos and Russell 2019; Bunce 2015, 2019; Moyo, Mare, and Matsilele 2019). However, there are differences in the way content creators of soft news and hard news respond to the “metricisation” of gatekeeping on Opera News Hub. Content creators of business, politics and investigative stories negotiate their normative understanding of journalism against the Hub’s algorithm’s news judgment, which is informed by quantification (see Carlson 2018; Wallace 2018). By contrast, society and entertainment journalists are biased toward soft news, which strikes a chord with the ranking criteria of the Hub’s recommender algorithm (see Bandy and Diakopoulos 2020). This tends to challenge the journalistic orientation of content creators, who produce hard news for the Hub’s

audiences. Hence, this category of content creators is confronted with the option of adapting their normative understanding of journalism to conform to the demands of the Hub's recommender algorithm and earning an income from the Hub or holding onto their traditional norms of journalism without deriving an income from the Hub; most content creators tend to choose the first option. Consequently, they compromise their journalistic autonomy and take on a new identity in which there is a constant struggle to provide sensational content that will attract audience engagement on the Hub. This suggests that social media intermediation tends to diminish the journalistic autonomy and authority of content creators of hard news on Opera News Hub (see, for instance, Napoli 2019, 70). Hence, there are indications that digital intermediaries are more likely to cause a transformation of norms and values of journalism in sub-Saharan Africa than in the Global North because the affordances of digital technology are yet to "de-professionalise" traditional journalists in Africa (see, for instance, Akinfemisoye 2014).

Opera News Hub shares similarities with Silicon Valley corporations (Google, Facebook, and Twitter) in that they thrive on the "metricisation" of gatekeeping of media content; thus, forcing journalists to orient media content toward audience metrics (see, Tandoc 2014; Vos and Russell 2019). However, the difference is that there is limited public scrutiny of the operations of Opera News Hub from civil society, investigative journalists, and public advocacy. This is not the same with Silicon Valley corporations that are often heckled by public advocacy activists (see Dovbysh, Wijermars, and Makhortykh 2022, 16).

Opera News Hub has expanded to six African countries: Nigeria, Egypt, South Africa, Kenya, Ghana, and Cote d'Ivoire. The expansion of Opera News Hub across Africa depicts the rising influence of Chinese digital media in the African media space. The magnitude of misinformation disseminated on the platform suggests that the platform could easily lend itself to foreign influence operations in the Nigerian media space (see Table 2). However, Opera's business model holds a bright spot for media sustainability and journalists in Nigeria and Africa. There are indications that the growing influence of Opera News Hub could influence better welfare packages for journalists and the sustainability of media enterprises in Nigeria.

The primary focus of this study is on the perception of content creators, who are working in a sociotechnical system for the first time. The aim of this study is to provide a starting point for debates on the ways in which digital intermediation could transform traditional norms and values of journalism in sub-Saharan Africa. It is anticipated that researchers could extend this research to emerging digital intermediaries in sub-Saharan Africa.

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References

- Adebanwi, W. 2002. "The Nigerian Press and the National Question." In *The National Question in Nigeria: Comparative Perspectives*, edited by A. Momoh & S. Adejumo, pp. 201–216. England: Ashgate.
- Akinfemisoye, M. O. 2014. "Negotiating Convergence: "Alternative" Journalism and Institutional Practices of Nigerian Journalists." *Digital Journalism* 2 (1): 62–76.
- Apuke, O. 2016. "The Impact of Social Media on Conventional Journalism Practice in Nigeria: A Study of Journalists' in Jalingo Metropolis." *Canadian Social Science* 12 (12): 59–65.
- Arogundade, L. 2010, April 15. Opening Remarks. Media Roundtable on the Working and Welfare Situation of Journalists in Nigeria. International Press Centre, Nigeria. Retrieved from <https://library.fes.de/pdf-files/bueros/nigeria/08021.pdf>
- Bandy, J, and N. Diakopoulos. 2020. "Auditing News Curation Systems: A Case Study Examining Algorithmic and Editorial Logic in Apple News." Proceedings of the International AAAI Conference on Web and Social Media, 14, 36–47.
- Barzilai-Nahon, K. 2008. "Toward a Theory of Network Gatekeeping: A Framework for Exploring Information Control." *Journal of the American Society for Information Science and Technology* 59 (9): 1493–1512.
- Bodó, B., N. Helberger, S. Eskens, and J. Möller. 2019. "Interested in Diversity: The Role of User Attitudes, Algorithmic Feedback Loops, and Policy in News Personalization." *Digital Journalism* 7 (2): 206–229.
- Booth, R. 2020, November 16. Trans man loses UK legal battle to register as his child's father. Guardian.co.uk. Retrieved from <https://www.theguardian.com/society/2020/nov/16/trans-man-loses-uk-legal-battle-to-register-as-his-childs-father>
- Bruns, Axel. 2005. *Gatewatching: Collaborative Online News Production: Collaborative Online News Production*. New York: Peter Lang Publishing Inc.
- Bunce, M. 2015. "Africa in the Click Stream: Audience Metrics and Foreign Correspondents in Africa." *African Journalism Studies* 36 (4): 12–29.
- Bunce, M. 2019. "Management and Resistance in the Digital Newsroom." *Journalism* 20 (7): 890–905.
- Carlson, M. 2018. "Automating Judgment? Algorithmic Judgment, News Knowledge, and Journalistic Professionalism." *New Media & Society* 20 (5): 1755–1772.
- Chick, J. 1996. "Cecil King, the Press, and Politics in West Africa." *The Journal of Modern African Studies* 34 (3): 375–393.
- Dent, S. 2016, July 18. Opera browser sold to a Chinese consortium for \$600 million. Engadget. Retrieved from https://www.engadget.com/2016-07-18-opera-browser-sold-to-a-chinese-consortium-for-600-million.html?guce_referrer=aHR0cHM6Ly9lbi53aWtpcGVkaWEub3JnLw&guce_referrer_sig=AQAAANTyYQCnsLDagV6WWQH_WhtL0eg4N5wARVzhZpa_1m8BlgHIXE-v4UugxPvkJCeW12jW-phbgZMJ3aXlwlj41wg4BzClynmMXh8lw37oRBH5j4ZBGWHk-2h7c46wvEDw9zvnVcbynjKAavywh9irAhElkTS0BmxFTIYdyTd8S8Q
- Dovbysh, O., M. Wijermars, and M. Makhortykh. 2022. "How to Reach Nirvana: Yandex, News Personalisation, and the Future of Russian Journalistic Media." *Digital Journalism* (2022): 1–20.
- Fihlani, P. 2017, 31 August. Namibia's Himba people caught between traditions and modernity. bbc.com. Retrieved from <https://www.bbc.com/news/world-africa-40247310>

- Heinderyckx, F. and T. P. Vos. 2016. "Reformed Gatekeeping." *CM: Communication and Media* 11 (38): 29–46.
- Heinderyckx, F. 2015. "Gatekeeping Theory Redux." In *Gatekeeping in Transition*, edited by T. P. Vos, & F. Heinderyckx, 253–267. New York: Routledge.
- Hermida, A. 2020. "Post-Publication Gatekeeping: The Interplay of Publics, Platforms, Paraphernalia, and Practices in the Circulation of News." *Journalism & Mass Communication Quarterly* 97 (2): 469–491.
- Ibelema, M. 2002. "The Nigerian Press and June 12: Pressure and Performance during a Political Crisis." *Journalism & Communication Monographs* 4 (4): 162–209.
- Jibo, M, and A. T. Okoosi-Simbine. 2003. "The Nigerian Media: An Assessment of Its Roles in Achieving Transparent and Accountable Government in the Fourth Republic." *Nordic Journal of African Studies* 12 (2): 180–195.
- Kamberelis, G, and G. Dimitriadis. 2013. *Focus Groups*. London: Routledge.
- Kolawole, S. 2018, April 20. Nigeria media Landscape: Overview. Retrieved from <https://medialandscapes.org/country/nigeria>
- Krippahl, C. 2020, May 14. Africa's media hit hard by COVID-19 crisis. *Deutsche Welle*. Retrieved from <https://www.dw.com/en/africas-media-hit-hard-by-covid-19-crisis/a-53427253>
- Lindlof, T. R. 1995. *Qualitative Communication and Research Methods*. Thousand Oaks, California: Sage.
- Mabweazara, H. 2018. "African Digital Media Review." *African Journalism Studies* 39 (4): 1–2.
- Möller, J., D. Trilling, N. Helberger, and B. van Es. 2018. "Do Not Blame It on the Algorithm: An Empirical Assessment of Multiple Recommender Systems and Their Impact on Content Diversity." *Information, Communication & Society* 21 (7): 959–977.
- Moyo, D., A. Mare, and T. Matsilele. 2019. "Analytics-Driven Journalism? Editorial Metrics and the Reconfiguration of Online News Production Practices in African Newsrooms." *Digital Journalism* 7 (4): 490–506.
- Napoli, P. 2019. "Algorithmic Gatekeeping and the Transformation of News Organizations." *Social Media and the Public Interest*, pp. 53–79. New York: Columbia University Press.
- Napoli, P. M. 2015. "Social Media and the Public Interest: Governance of News Platforms in the Realm of Individual and Algorithmic Gatekeepers." *Telecommunications Policy* 39 (9): 751–760.
- Nechushtai, E, and S. C. Lewis. 2019. "What Kind of News Gatekeepers Do we Want Machines to Be? Filter Bubbles, Fragmentation, and the Normative Dimensions of Algorithmic Recommendations." *Computers in Human Behavior* 90: 298–307.
- Obalanlege, A. 2015. "Journalism Practice and New Media in Nigeria: An Exploratory Analysis of Journalism Culture and Practice in Nigeria." *New Media and Mass Communication* 41: 67–78.
- Olabimji 2020. Everything you need to know about Opera News Hub. ng.operanews.com. Retrieved from <https://ng.operanews.com/en/technology/581240008433949ef54c964bebb7f04d>
- Olowogboyega, O. 2021, April 29. More Africans are reading Opera News as it adds 16 million users in Q1 2021. *Techcabal.com*. Retrieved from <https://techcabal.com/2021/04/29/operanews-q1-result/>
- Operahub. 2020, April. Payment Structure FAQ. Opera News Hub. Retrieved from <https://hub.operanews.com/announcement/639c4e5e23f64ba1b6015062b3387a66>
- Operahub. 2019, May 17. FAQ: How Can I Get More Reach? Opera News Hub. Retrieved from <https://hub.operanews.com/login?redirect=%2Fhome%2Fdashboard>
- Operahub. 2022, November. Publishing Guidelines. Retrieved from <https://hub.operanews.com/explain/guidelines>
- Oyovbaire, S. 2001. "The Media and Democratic Process in Nigeria." Lecture at the National Institute for Policy and Strategic Studies, Kuru 7.
- Paterson, C. 2013. "Journalism and Social Media in the African Context." *Ecquid Novi: African Journalism Studies* 34 (1): 1–6.
- Peterson-Salahuddin, C, and N. Diakopoulos. 2020. "Negotiated Autonomy: The Role of Social Media Algorithms in Editorial Decision Making." *Media and Communication* 8 (3): 27–38.
- Ringier. 2022, November 12. Africa. Retrieved from <https://www.ringier.com/location/africa/>

- Shoemaker, P. J. 2020, January. Gatekeeping and Journalism. In Oxford Research Encyclopedia of Communication. Retrieved from [10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-819](https://doi.org/10.1093/acrefore/9780190228613.001.0001/acrefore-9780190228613-e-819).
- Shoemaker, P. J, and T. Vos. 2009. *Gatekeeping Theory*. New York: Routledge.
- Shoemaker, P. J, and S. D. Reese. 1996. *Mediating the Message: Theories of Influences on Mass Media Content*. New York: Longman.
- Singer, J. B. 2014. "User-Generated Visibility: Secondary Gatekeeping in a Shared Media Space." *New Media & Society* 16 (1): 55–73.
- Tandoc, E. C. Jr, 2014. "Journalism is Twerking? How Web Analytics is Changing the Process of Gatekeeping." *New Media & Society* 16 (4): 559–575.
- Thurman, N., J. Moeller, N. Helberger, and D. Trilling. 2019. "My Friends, Editors, Algorithms, and I: Examining Audience Attitudes to News Selection." *Digital Journalism* 7 (4): 447–469.
- Trielli, D, and N. Diakopoulos. 2020. "Partisan Search Behavior and Google Results in the 2018 US Midterm Elections." *Information, Communication & Society* 25 (1): 145–161.
- Uwalaka, T, and J. Watkins. 2018. "Social Media as the Fifth Estate in Nigeria: An Analysis of the 2012 Occupy Nigeria Protest." *African Journalism Studies* 39 (4): 22–41.
- Wallace, J. 2018. "Modelling Contemporary Gatekeeping: The Rise of Individuals, Algorithms and Platforms in Digital News Dissemination." *Digital Journalism* 6 (3): 274–293.
- White, D. M. 1950. "The "Gate Keeper": A Case Study in the Selection of News." *Journalism Quarterly* 27 (4): 383–390.
- Wilding, D., P. Fray, S. Molitorisz, and E. McKewon. 2018. "The Impact of Digital Platforms on News and Journalistic Content." University of Technology Sydney, NSW.
- Williams, A. 2020, August 5. The China-Funded Mobile Browser That's Zeroing in on the African Market. China-Africa Project. Retrieved from <https://chinaafricaproject.com/analysis/the-china-funded-mobile-browser-thats-zeroing-in-on-the-african-market/>
- World Press Freedom Day. 2021. Information as a public good. UNESCO. Retrieved from <https://en.unesco.org/commemorations/worldpressfreedomday/2021>
- Vos, T. P, and F. M. Russell. 2019. "Theorizing Journalism's Institutional Relationships: An Elaboration of Gatekeeping Theory." *Journalism Studies* 20 (16): 2331–2348. (), (), -.
- Vos, T. P. 2015. "Revisiting Gatekeeping Theory during a Time of Transition." In *Gatekeeping in Transition*, 18–38. New York: Routledge.
- Yushu'a, M. J. 2010. "Regional Parallelism and the Reporting of Corruption in the Nigerian Press." *Journal of African Media Studies* 2 (3): 353–369.