

Analysis of Interactive Features in Nigerian Online Newspapers

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Abstract

This paper is a content analytical study of the top ten Nigerian online newspapers to identify the interactive elements featured and those not featured in the newspapers. The unit of analysis was all individual straight news stories on the web pages of the sampled online newspapers. Content categories were adopted from Chung's (2008) typology of interactive features. Inter-coder reliability was calculated using Holsti's formula and produced reliability co-efficient of 0.79. Findings showed that Nigerian online newspapers possessed interactive features, but significantly interactive features of high functionalities. The newspapers lacked interactive features that give concession to users and allow users to be part of the news creation process. It was recommended that news organisations and journalists should take into cognizance the value of users and as such avail them every opportunity to express and be part of the news process, and that online newspaper websites should be structured in simple, beautiful and easily comprehensible manner, to allow users have a hitch free experience of the platform. Similarly, news organisations should employ a hybrid of both professional journalists (who would take care of the content) and ICT professionals (who would take care

of the technology that would drive the content to ensure proper implementation of interactive features).

Keywords: Interactive Elements, Digital Technologies, World Wide Web (WWW), Online Newspapers, Interactive Media, News Websites

Introduction/Background

The emergence of digital technologies has brought about online interactive communication which has become a subject of inquiry (Morris & Organ, 1996). The capabilities of interactivity have provoked scholars from numerous disciplines to investigate the notion that has made its mark in the communication arena. The employment of interactive elements on the web possesses the potential to trigger a shift in the communication direction. With the multidimensional waft of messages, the audience can now actively opt for the information they need and even participate within the construction of knowledge. Biocca (1988) parallels this phenomenon to individuality and independence in step with liberal democratic beliefs.

Consequently, many newspaper organisations have invested in creating a digital presence. These news websites do not only disseminate information; they also serve as a place to engage users in ways not available through traditional media channels, such as the use of emails, hyperlinks, comment sections, polls, and social media buttons (e.g. a Facebook button that enables you to like or share an article). The advent of these novel features raised the opinion that the long existing “filter first publish second” theoretical concept was experiencing transformation (Stroud, Joshua, & Alexander, 2013; Frohlich, Ely, Moore, Golsteijn, Egglestone, Milk, Rogers, Metcalf, Stone, & Menicou, 2017). The traditional media were evolving due to the perceived shared abilities between reporters and the audience. Now, not only could the audience have interaction expressly with journalists, reporters, and news organisations' staff via digital means; they also could influence and modify news contents for personal consumption and for others, thus causing changes on a news website and making it different from how it looked prior to their visit, for instance, a user's comment on a news story.

At the early stage of the use of interactive features in news sites, some audience members expressed optimism on the promise of features and others were pessimistic that this promise has gone largely unfulfilled. It is clear that only a few news outlets found it worthwhile integrating the promising interactive features in their operational practices. A reason for this was that certain limitations beclouded the atmosphere of interactivity at this period. First, there was the problem of finding people with requisite programming skills capable of creating and managing these novel features. Second, there was the cost implication of creating a digital online presence, that is,

purchasing hardware and software, hiring people proficient in the new medium. Therefore, economic and labour factors suggested that only buoyant news organisations were able to stretch their boundaries into the online realm and adopt innovative interactive features (Greer & Mensing, 2004).

Another factor is that editors feared that poor comments may tarnish their organisational brand if users were given control of what happens on a site (Loke, 2012). There was also the issue of worries over having to reallocate and spend much time and money from reporting to monitoring news sites. Although not all news outlets shared these hesitations, many wary of what would happen to news product as the use of interactive features increased (Stroud *et al.*, 2013; Hassaan, 2017b). Nevertheless, as time passed many of these issues were resolved. Today, programming expertise exist in abundance, computer equipment have become relatively affordable, also pressures to remain relevant and profitable in the modern news media environment have outweighed concerns about ceding some web controls to site users (Pinto, 2016; Zwinger, & Zeiller, 2017).

As barriers to interactivity continue to recede, more and more websites began to adopt and integrate interactive features. Users could now leave comments; interact with other users by replying, voting comments “up” and “down,” follow threads, and like particular news content (Banos-Moreno, Paston-Sanchez, & Martinos-Bejar, 2017). The web is seen today as one of newspapers' key strategies in regaining readership and circulation (Barthel, 2016). A key factor responsible for adopting this strategy is the web's characteristic feature of interactivity (Chung & Yoo, 2006; Hassaan, 2017a). Journalists now engage their audience through the use of varied interactive elements. Online News Association (Chung & Yoo, 2006) reports that interactivity could be a hallmark of the digital medium, and therefore the immediate back-and-forth communication could be a new quality within the relationship between the news publications and their audiences. This suggests that the interactive nature of an online news outlet is the essence of the medium and has the potential to recreate community.

It is observed that the patronage of interactive features on news websites is increasing. However, the increase seems not to be the same across all news channels. The story of interactive features has been one of scattered, limited, adoption across news websites. But the trend is changing with barriers to interactive features dissipating steadily, rapidly, and thereby raising adoption of these features across news organisations. It is becoming more evident that the implementation of interactive features across news websites is growing rapidly. News websites in contemporary society, regardless of market size and channel, use a wide variety of interactive features (Stroud, Scacco, & Curry, 2016).

Through the use of these interactive features (comment boxes/commenting systems, online streaming facilities, online storage facilities, hyperlinks, use of robust

Interactive Features in Online Newspapers: Empirical Studies

A number of empirical studies on interactivity in online newspapers exist. Most of it points to the direction that online news sites are gradually increasing their use of interactive features. There is, however, low level use of interactive features. Keith and Mwangi (2000) analysed the content of 100 online newspapers (62 % from the United States and 38 from other countries) to ascertain whether or not the newspapers contained interactive features. Findings showed a low level of interactive features in the newspapers.

A study by Rosenberry (2005) analysed the content of 47 online newspaper sites with the aim of ascertaining how online newspapers use internet interactive technologies to improve public communication. Findings led to the conclusion that only few online newspapers adopt the internet's interactive technologies. Spyridou and Veglis (2008) in their study set out to determine the availability of structural interactive features on Greek news websites. Findings showed that Greek newspaper sites lack interactive features of high functionality.

Similarly, Rahman (2008) examined the availability of interactive options in 28 Bangladesh online newspapers. Results revealed that the newspapers provided token interactive options. The most prevalent options in the online newspaper sites were the content availability and access to the contents. Users were not empowered to add information or stories to the sites. Similarly, the newspapers did not provide options for chatting, blogging and discussion which form the real options for interpersonal communication. These findings provided a basis for the researcher to conclude that online newspapers of Bangladesh provide limited level of interactivity.

In his study of 143 Swedish newspaper websites, Anders (2012) focused on availability of interactive elements on Swedish newspaper websites and the factors that influence their availability. Using Chung's (2008) typology of interactive features, the study discerned four types of interactive features: human (features that facilitate interpersonal communication), human-medium (features that allow users to express their personal opinions), medium (features that allow users choice options in experiencing news stories), and medium-human (features that allow users to customize news to their liking) interactive features. Results indicated that the most interactive newspaper websites belong to large, national newspapers with younger web staff. Factors such as financial strength of media owners, competition between newspapers and number of web staff were found to be of little or no significance in determining the presence of interactive features on news sites. Human-medium interactive features (features that aid users to contribute with their own content) dominated the websites studied. These features include: e-mail links to journalists, reader news tip, reader blog, reader news, and pictures.

Hashim, Hasan and Sinnapan (2007) reviewed 12 Australian newspapers using web content analysis to determine the elements of interactivity. Findings showed that

content availability and choice were the most significant elements of interactivity. It was noted that majority of Australian online newspapers offer interactive functionality for expressing opinions, blogging, contests and polls.

The availability of interactive features is one thing and the use of the features is another. Anders (2011) examined the use and appreciation of interactive features by visitors on Swedish newspaper websites. The study was an online survey of 1,343 respondents who were actively involved in visiting Swedish newspaper websites. The overall results suggested low levels of both use and appreciation.

Similarly, Fortunati, O'Sullivan, Raycheva and Harro-Loit (2010) investigated the use of interactive features by newspaper readers to communicate with journalists in the newsroom. Results revealed that the use is insignificantly low. Boczkowski and Mitchelstein (2012) studied how users approach clicking, e-mailing, and commenting as interactive forms on online news sites. Results show that users made use of these interactive features on public affairs stories coming at a time of heightened political activities.

Theoretical Framework

The Media Richness theory explains the basis of this study. The theory addresses the question: how do we select the best technological tool - the best medium - to communicate a message (Schiefelbein, 2012)? Media Richness theory explains how and why certain media are designated to convey a message. In Media Richness theory, richness is defined in terms of a medium's capacity to achieve four aims: sending multiple cues, supporting language variety, providing immediate feedback, and allowing personal nature to be communicated. Others include: allowing for a diversity of cues, communication of visual symbols and images, instantaneous feedback, and high level of personalisation (Schiefelbein, 2012). Thus, Media Richness theory explains usage and presence of individual medium/interactive features used for communication, which is the concern of the present study.

Research Design

This research adopted content analysis research design. Content analysis is an appropriate design for this study because the study examines the manifest content of Nigerian online newspapers so as to determine the availability or otherwise of interactive elements in them. The population of the study comprised all Nigerian online newspapers, which according to onlinenewspapers.com as accessed at the time of the study (July, 2017) stood at 193. The study used purposive sampling technique to arrive at a sample of 10 online newspapers. These online newspapers, according to allnetinfo.com are rated as the top ten Nigerian online newspapers. They are listed in Table 1 below:

Table 1: Top ten Nigerian online newspapers and their web addresses as at July, 2017

<i>Vanguard</i>	http://www.vanguardngr.com
<i>The Punch</i>	http://www.punchng.com
<i>The Sun</i>	http://sunnewsonline.com
<i>Nigerian Tribune</i>	http://tribuneonlineng.com/
<i>Guardian</i>	www.ngrguardiannews.com
<i>ThisDay</i>	www.thisdaylive.com
<i>The Nation</i>	thenationonlineng.net
<i>Daily Times</i>	dailytimes.com.ng
<i>Daily Trust</i>	www.dailytrust.com.ng
<i>Premium Times</i>	www.premiumtimesng.com

The unit of analysis for this study is identified and defined as all individual straight news stories on the web pages of the sampled online newspapers. For content categories, the study adopted Chung's (2008) typology of interactive features. Chung classified interactive features into four basic categories. These are: Human, Human-Medium, Medium, and Medium-Human. The definitions of these categories are presented in Table 2 below:

Table 2: Summary of Chung's four-part typology of interactive features adopted for this study

Type of Interactivity	Definition	Function on Site	Examples
Human	Interactive options that promote human interactivity and facilitate user-to-user mutual communication.	Users can communicate with peers and staff.	Chat, discussion forums, "e mail a-friend" feature.
Human-Medium	Human/medium interactive features that allow users to submit customized perspectives and opinions and further provide the audience with a sense of ownership.	Users can contribute with own content.	E-mail-links to journalists, "Reader news tip", Reader blogs, Reader news, pictures etc.
Medium	Features representing medium interactivity, rely on technology to allow users to select and elicit choice options.	Users can experience content in a variety of ways.	Video streams, news graphics, mobile version of site
Medium-Human	Medium/human interactive features, or features that provide interactive tailoring, allow users to personalize information to their liking.	User customization of site looks, content and use.	Customizable content, RSS feeds, e-mail-alerts, SMS alerts.

Source: Larsson (2012)

Content analysis was used to observe the entire website of a given newspaper. Each website was accessed through its homepage, and then navigated through its various sections in search of straight news stories. Repetitive visits were made to sites in order to observe extensively features under analysis. Each site was coded for the presence or absence of specific interactive elements. Two coders were used. The coders were carefully trained. Aside simple discussion and interaction, the training employed practical coding exercises, where sample contents were examined and coded. A training guide was prepared and used in identifying coding contents, coding units, and rules for coding. The training sessions and practical exercises assisted in revising definitions, clarifying category boundaries and revamping coding sheet until the coders were contented with the materials and procedures.

Inter-Coder Reliability

After the training, a pilot study was conducted to determine inter-coder reliability. The pilot study used two coders who did not participate in the main study. The two coders were carefully trained to be familiar with the code sheet and coding instructions. The inter-coder reliability was calculated using Holsti's (1969) formula cited in Wimmer and Dominick (2011). Each of the two coders identified 82 units, and agreed on 56 coding decisions. The reliability co-efficient was thus computed to be 0.79, indicating acceptable inter-coder reliability.

Results

The results of the content analysis of the news websites of the selected newspapers are presented below and further analysed to make sense of the findings.

Interactive Elements Featured in Nigerian Online Newspapers

Table 3: Interactive elements identified in the newspapers studied

Newspaper	Interactive Elements				
	Human F(%)	Human-Medium F(%)	Medium F(%)	Medium-Human F(%)	Total F(%)
<i>Vanguard</i>	325(27.6)	307(26.1)	395(33.6)	150(12.7)	1,177(100)
<i>Punch</i>	480(49.5)	200(20.6)	142(14.6)	150(15.4)	927(100)
<i>The Sun</i>	245(36.3)	180(26.7)	118(17.5)	132(19.5)	675(100)
<i>Nigerian Tribune</i>	100(21.0)	125(26.3)	101(21.2)	150(31.5)	476(100)
<i>Guardian</i>	100(21.7)	125(27.2)	115(25.0)	120(26.1)	460(100)
<i>ThisDay</i>	140(20.4)	176(25.7)	182(26.6)	187(27.3)	685(100)
<i>The Nation</i>	91(19.2)	87(18.3)	117(24.6)	180(37.9)	475(100)
<i>Daily Times</i>	320(42.7)	200(26.7)	175(23.3)	55(7.3)	740(100)
<i>Premium Times</i>	148(24.1)	185(30.2)	147(24.0)	133(21.7)	613(100)
<i>Daily Trust</i>	268(33.7)	192(24.1)	181(22.8)	154(19.4)	795(100)
Total	2,217(31.3)	1,777(25.1)	1,673(23.6)	1,411(19.9)	7,078(99.9)

F = Frequency

It can be deduced from Table 3 that a total of 7,078 interactive features were identified from the ten Nigerian online newspapers studied. Of the total number of interactive elements identified, 31.3 per cent (2,217) were of the human interactive features category, 25.1 per cent (1,777) were of the human-medium interactive features category, while 19.9 per cent (1,411) were of the medium interactive features category and 23.6 per cent (1,673) were within the medium-human interactive category.

Table 4: Human interactive features in the newspapers studied

Newspaper	Human Interactive Features				Total F(%)
	BB/MB F(%)	CF F(%)	SA/SASM F(%)	RS F(%)	
<i>Vanguard</i>	30(9.2)	80(24.6)	185(56.9)	30(9.2)	325(99.9)
<i>Punch</i>	100(20.8)	115(23.9)	200(41.7)	65(13.5)	480(99.9)
<i>The Sun</i>	45(18.4)	60(24.5)	85(34.7)	55(22.5)	245(100)
<i>Nigerian Tribune</i>	15(15.0)	30(30.0)	40(40.0)	15(15.0)	100(100)
<i>Guardian</i>	0(0.0)	20(20.0)	80(80.0)	0(0.0)	100(100)
<i>ThisDay</i>	10(7.1)	45(32.1)	85(60.7)	0(0.0)	140(99.9)
<i>The Nation</i>	0(0.0)	11(12.1)	80(87.9)	0(0.0)	91(100)
<i>Daily Times</i>	50(15.6)	73(22.8)	182(56.9)	15(4.7)	320(100)
<i>Premium Times</i>	30(20.3)	35(23.6)	83(56.1)	0(0.0)	148(100)
<i>Daily Trust</i>	20(7.4)	55(20.5)	173(64.6)	20(7.4)	268(99.9)
Total	300(13.5)	524(23.6)	1,195(53.9)	200(9.0)	2,217(100)

BB/MB = Bulletin Board/Message Board, **CF** = Chat functions, **F** = Frequency, **SA/SASM** = Share article/share article on social media, **RS** = Referral services

From the category of human interactive elements in Table 4, *Bulletin Boards/Message Boards* maintained 13.5 per cent while features of *chat functions* had 23.13 per cent. Similarly, *share article/share article on social media* formed 53.9 per cent while *referral services* produced 9.0 per cent.

Table 5: Human-medium interactive features in the newspapers studied

Newspaper	Human-Medium Interactive Features						Total F(%)
	RN/SS F(%)	ELA F(%)	L/UA F(%)	RF/F F(%)	CF/F F(%)	SP F(%)	
<i>Vanguard</i>	0(0.0)	80(26.1)	42(13.7)	0(0.0)	183(59.6)	2(0.7)	307(100)
<i>Punch</i>	0(0.0)	80(40.0)	0(0.0)	0(0.0)	120(60.0)	0(0.0)	200(100)
<i>The Sun</i>	0(0.0)	55(30.6)	35(19.4)	0(0.0)	90(50.0)	0(0.0)	180(100)
<i>Nigerian Tribune</i>	25(20.0)	25(20.0)	0(0.0)	25(20.0)	50(40.0)	0(0.0)	125(100)
<i>Guardian</i>	0(0.0)	45(36.0)	0(0.0)	0(0.0)	80(64.0)	0(0.0)	25(100)
<i>ThisDay</i>	0(0.0)	70(39.8)	0(0.0)	0(0.0)	106(60.2)	0(0.0)	176(100)
<i>The Nation</i>	0(0.0)	37(42.5)	0(0.0)	0(0.0)	50(57.5)	0(0.0)	87(100)
<i>Daily Times</i>	0(0.0)	87(43.5)	13(6.5)	0(0.0)	100(50.0)	0(0.0)	200(100)
<i>Premium Times</i>	25(13.5)	23(12.4)	0(0.0)	0(0.0)	135(73.0)	2(1.1)	185(100)
<i>Daily Trust</i>	38(19.8)	50(26.0)	0(0.0)	0(0.0)	103(53.6)	1(0.5)	192(99.9)
Total	88(5.0)	552(31.1)	90(5.1)	25(1.4)	1,017(57.2)	5(0.3)	1,777(100)

RN/SS = Reader's news/submit stories function, **ELA** = Email link to article, **F** = Frequency, **L/UA** = Like/unlike article, **RFF** = Registration forms/feedback forms, **CFF** = Comment forms/functions **SP** = Survey/polls

In a similar context, as shown from the category of human-medium in Table 5, readers' news/submit stories features constituted 5.0 per cent; email links to article, 31.1 per cent; while like/unlike article formed 5.1 per cent. Registration forms/feedback forms made up 1.4 per cent of the total features while comment forms produced 57.2 per cent, survey/polls made up 0.3 per cent.

Table 6: Medium interactive features in the newspaper studied

Newspaper	Medium Interactive Features									
	AS F(%)	VS F(%)	VD F(%)	PG F(%)	AA F(%)	MVoS F(%)	PAF F(%)	C F(%)	SA F(%)	Total F(%)
<i>Vanguard</i>	4(2.7)	3(2.0)	11(7.3)	20(1.3)	18(12.0)	5(3.0)	32(21.3)	10(6.7)	47(31.3)	150(100)
<i>Punch</i>	0(0.0)	0(0.0)	0(0.0)	18(12.0)	32(21.3)	12(8.0)	45(30.0)	5(3.3)	38(25.3)	150(100)
<i>The Sun</i>	0(0.0)	0(0.0)	0(0.0)	21(15.9)	24(18.2)	12(8.0)	15(11.5)	30(22.7)	15(11.5)	132(100)
<i>Nigerian Tribune</i>	0(0.0)	2(1.3)	28(18.7)	12(8.0)	21(14.0)	4(2.7)	38(25.3)	20(13.3)	25(16.7)	150(100)
<i>Guardian</i>	0(0.0)	0(0.0)	0(0.0)	12(10.0)	23(19.2)	5(4.2)	45(37.5)	15(2.5)	20(16.7)	120(100)
<i>ThisDay</i>	0(0.0)	0(0.0)	23(12.3)	32(17.1)	34(18.2)	12(6.4)	43(23.0)	15(8.0)	28(15.0)	187(100)
<i>The Nation</i>	0(0.0)	0(0.0)	15(8.3)	38(21.1)	33(18.3)	10(5.6)	40(22.2)	15(8.3)	29(16.1)	180(100)
<i>Daily Times</i>	0(0.0)	0(0.0)	0(0.0)	7(12.7)	8(14.5)	0(0.0)	25(45.5)	5(9.1)	10(18.2)	55(100)
<i>Premium Times</i>	30(22.6)	0(0.0)	3(2.3)	12(9.0)	18(13.5)	6(4.5)	31(23.3)	16(12.3)	17(12.8)	55(100)
<i>Daily Trust</i>	6(3.9)	8(5.2)	22(14.3)	18(11.7)	25(16.2)	5(3.2)	45(29.2)	10(6.5)	15(9.7)	55(100)
Total	40(2.8)	13(0.9)	102(7.2)	190(13.5)	236(16.7)	74(5.2)	374(26.4)	126(8.9)	258(18.1)	1,411(100)

AS = Audio streams, **F** = Frequency, **VS** = Video streams, **VD** = Video download, **PG** = Photo galleries, **AA** = Animated adverts, **MVoS** = Mobile version of site, **PAF** = Print article function, **C** = Calendar, **SA** = Site's archive

From the medium interactive elements category in Table 6, audio streams had 2.8 per cent; video streams, 0.9 per cent while video download were 7.2 per cent. Also, photo galleries were 7.2 per cent of the features, animated advertisements constituted 13.5 per cent, and mobile version of site made up 16.7 per cent. Print article functions were 26.5 per cent, while calendars formed 8.9 per cent and site's archive produced 18.1 per cent.

Table 7: Medium-human interactive features in the newspapers studied

Newspaper	Medium-Human Interactive Features						
	SF/SSE F(%)	EU/A F(%)	RSS/ML F(%)	SSFAQ F(%)	UNC F(%)	PPPA F(%)	Total F(%)
<i>Vanguard</i>	102(25.8)	80(20.3)	90(22.7)	40(10.1)	50(12.7)	33(8.4)	395(100)
<i>Punch</i>	52(36.6)	32(22.5)	27(19.0)	0(0.0)	31(21.8)	0(0.0)	142(99.9)
<i>The Sun</i>	50(42.4)	20(16.9)	30(25.4)	0(0.0)	18(15.3)	0(0.0)	118(100)
<i>Nigerian Tribune</i>	20(19.8)	20(19.8)	20(19.8)	0(0.0)	21(20.8)	20(19.8)	101(100)
<i>Guardian</i>	37(32.2)	25(21.7)	25(21.7)	0(0.0)	18(15.7)	10(8.7)	115(100)
<i>ThisDay</i>	55(30.2)	30(16.5)	30(16.5)	22(12.1)	25(13.7)	20(11.0)	182(100)
<i>The Nation</i>	46(39.3)	30(25.6)	30(25.6)	0(0.0)	11(9.4)	0(0.0)	117(99.9)
<i>Daily Times</i>	63(36.0)	33(18.9)	35(20.0)	24(13.7)	20(11.4)	0(0.0)	175(100)
<i>Premium Times</i>	57(38.8)	25(17.0)	33(22.4)	0(0.0)	27(18.4)	5(3.4)	147(100)
<i>Daily Trust</i>	68(37.6)	28(15.5)	53(29.3)	0(0.0)	23(12.7)	9(5.0)	181(100)
Total	550(32.9)	323(19.3)	373(22.3)	86(5.1)	244(14.6)	97(5.8)	1,673(100)

SF/SSE = Search feature/site search engine, EUA = Email updates/alerts, F = Frequency, RSS/ML = Rich site summary (RSS) feeds/mailling lists, SSFAQ = Self-selected frequently asked questions, UNC = Updateable news column, PPPA = Password protected private areas

Furthermore, considering the medium-human interactive features in Table 7, search feature/site search engine constituted 32.9 per cent, e-mail updates/alerts made up 19.3 per cent, subscribe/unsubscribe to RSS feeds/mailling lists had 22.3 per cent, self-selected FAQ formed 5.1 per cent while updateable news column produced 14.6 per cent and password protected private areas made up 5.8 per cent.

Interactive Elements Not Featured in Nigerian Online Newspapers

The interactive elements not featured in the ten Nigerian online newspapers studied include: *live chats* for the human interactive features category; *submit photos function*, *reader's news tip/submit news tip function*, *audio upload*, *video upload*, and *letters-to-editor* for the human-medium interactive functions category; *audio download*, *multiple choice tests*, *guestbook/classified adverts*, *interactive games* and *puzzles* for the medium interactive features category; and *customized weather*, *customized topics*, *customized headlines*, *SMS alerts*, and *personalized podcasts* for the medium-human interactive features category.

Discussion of Findings

What kind of interactive elements are available in Nigerian online newspapers? Data presented in the Tables 3 – 7 accentuated the kind of features found, their frequency and percentages. From the data, *chat functions* (human interactive features category), *comment forms/functions* (human-medium category), *search feature/site search engine* (medium human category) and *print article functions* (medium interactive feature), elicited the highest occurrences in their various categories. Data in the tables have shown that, of the several categories of interactive features adopted in the study, interactive elements from the human interactive features category predominantly saturated the Nigerian online newspapers, as the category yielded the most features found. With regards to the individual features in their different categories, a close observation reveals that, *share article on social media* and the *comment forms/function* features maintained similar frequencies in their different categories, thus accentuating the fact that these two features are of specific predominance. *Search feature/site search engine* and the *print article function* also maintained similar trend. Also notable, is the fact that the medium interactive features category produced the least percentage of interactive elements found.

Nigeria, being a developing country with a just walking technological pace and with little or no advanced expertise in areas of novel technologies, might have been a reason for the absence or little adoption of some of the interactive features as found in this study. This is due to the fact that some of these features are resource intensive, require expertise in terms of adoption, and may have severe cost implications in terms of management and maintenance. For example managing a *video upload* database, as compared to ordinary text archive, also, providing resources for a *live chat* as compared to resources for comments and opinions.

Furthermore, most interactive features that have little or no adoption are those that cede a level of control to users, thus highlighting the online journalistic landscape of major news organizations in the country as one which relies and controls its contents through industry staff and journalists, with little or no concessions given to users. It also describes these online newspapers as more of news outlets than a collaborative platform. However, it is also considerably impressive to find that Nigerian online newspapers possess interactive features to some extent.

On the whole, findings of this study have shown that Nigerian online newspapers are not bereft of interactive elements but lack some features, notably those that lend users certain degree of control on the news websites. In a similar context, the absence and presence of certain and different interactive features in the Nigerian online newspapers may lend considerable explanation from the medium theory. The medium theory focuses on the medium as a means of

distribution and sees it as the message – thus the assertion, “the medium is the message”, and is one which accentuates certain variables as reasons which explain preferred use and availability of one feature over the others. These are: how quickly a message can be disseminated, whether learning to decode and encode in the medium is difficult or simple, how many people can attend to the same message at once, etc. This explains the considerable availability of animated advertisements and photo galleries as media over the terse presence of others like video streams and audio streams.

The Media Richness theory which focuses on how rich and expedient a medium is over other media to deliver certain messages, also highlights the interactive features landscape of Nigerian online newspapers in another perspective. The theory, describes a medium's richness based on criteria such as: availability of instant feedback, capacity of the medium to transfer multiple cues, use of natural language and the personal focus of the medium. Based on the above description, live chats, video and audio streams are very rich media, and thus since they have little or no presence from the findings of this study, the description of Nigerian online newspapers in relation to possession of rich interactive media would be judged as deprived.

Conclusion and Recommendations

The study analysed the content of 10 Nigerian online newspapers to ascertain the kind of interactive features available and unavailable in the newspapers. Most of the Nigerian online newspapers studied had interactive features predominantly of the human interactive category. Majority of them had little or no features that give concession to users. These include *audio* and *video upload*, *reader's news tip/story/photos*, *interactive games and puzzles*, *audio and video streams*, *personalized podcasts*, *customized topics and headlines* and *password protected private areas*.

It is the conclusion of this study that Nigerian online newspapers provided limited level of interactive features. Human (*share article/share article on social media*) and Human-Medium (*comment forms/functions*) are the two categories from which the most prevalent features occurred. Options and features that cede controls to users and allow significant user participation in the news creation process were significantly absent. These include *video upload*, *audio upload*, *submit stories function*, *submit photo function*, and *reader's news tip*. Also, features that are very rich dissemination means had little or no presence in the news website. These include *live chats*, *audio streams and download*, *video streams and download*.

It is not surprising that the online editions of print newspapers are journalism with a

traditional mind-set, thus only providing news/views and other contents. They are not liberal enough to get engaged in communication with audiences and provide minimum variety of interactive options. However, these online newspapers should dash their stereotyped mind-set and concentrate on providing options of interaction between a medium and its audiences. These options in fact would turn audiences into participants of the process and eventually lead to a robust culture of journalism in the age of new media.

In line with the findings of the study, the following recommendations are made to ensure that Nigerian online newspapers provide a variety of interactive features that not only increase users/audience news experience but engage the audience and make them part of the process. These recommendations seek to ensure that online newspapers become more engaging and interactive to users, such that will instigate a rather more active use of interactive features than passive appreciation of such:

1. News organisations and journalists should see the society (audience/populace) as a valued constituent of any serious journalistic endeavour and thus be apt to always provide means that foster interactive and engaging experiences for users.
2. News organisations and journalists should understand that opinions of users and the audience at large are as much valuable as opinions of editors, journalists and staff likewise, and opportunities should be provided for such to be expressed.
3. News organisations and journalists should understand that in the present age of new media, journalism is now more of a collaborative effort between citizens and journalists rather than a monopolised profession. Thus, all avenues for audience participation in the process should be readily available.
4. News organisations should employ a hybrid of both professional journalists and ICT professionals. While professional journalists take care of content, ICT professionals take care of the medium to ensure necessary adoption of interactive features.
5. News websites should not be overly crowded and packed with boring contents and unnecessary tools. They should be designed simply and beautifully with proper visible navigations and contents neatly packed and comprehensibly categorised. This is to ensure that users don't have difficulties in using the overall platform.
6. Journalists in news organisations and industry staff alike should be re-oriented and updated at regular intervals during the course of their job about latest trends in the areas of their profession, so as to keep them abreast of evolving trends and practices in their course of duty.

Limitations and Suggestion for Future Studies

This study made use of a small sample size (only 10 online newspapers). Future studies should make use of a larger sample size. The present study did not examine online newspapers from the technological advanced countries for comparison purpose. This is expedient for a clearer picture of how Nigerian online newspapers feature interactive elements. Future studies should explore this approach. The presence of interactive features in a newspaper without actual use of the features is meaningless. It is imperative therefore to know the level and manner of use of the interactive features by readers. The present study did not focus on ascertaining the use of interactive features found in the newspapers. Future studies should give attention to this area.

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