Insight of Twitter Ban: Student's Perspectives in Higher Education

Aderinsola E. Kayode, Durban University of Technology, South Africa Oluwaleke I. Iyiola, Ajayi Crowther University, Nigeria

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Abstract

Twitter appears to be a platform for the elites, with abuse, misuse, misinformation, and disinformation. Twitter bans in various countries, including Nigeria, have raised worries about freedom of expression and information access. This study examines Nigeria's Twitter ban's reasons, effects, and alternative measures The research study was carried out using a quantitative method that takes into account the research objectives and questions for this study. A survey was given to University of Ibadan undergraduates in five faculties to collect data was drawn using the Taro Yamane Sample formula to determine a reliable sample size formula with a 95% confidence level. 385 questionnaires were administered to all undergraduate students from year 1 to 4 (level 100–400), while only 235 from the responses were valid for data analysis. The ban on Twitter led to information deprivation, poor decision-making, the end of long-distance family relationships, and the loss of online colleagues for undergraduate students. According to technological determinism and social responsibility theories, the Nigerian federal government's Twitter ban has left a bad impression on residents. The study found that the Nigerian government and its citizens must acknowledge that authority has limits and act within those limits without violating others' rights. The study suggested alternate platforms to help students access learning resources and engage with academic peers for quality education in sustainable development Goal-4.

Keywords: Twitter Ban, Freedom of Expression, Student's Quality Education

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Introduction

The perceived of students and teachers in higher education in Nigeria towards the ban of twitter by the Nigerian government. On 5th June, 2021 and The Federal Government of Nigeria lifted the ban of the Twitter operations in Nigeria on 13th January, 2022 (Moemeke & Mormah, 2022; Anyanwu, Ukpong & Nkechi, 2022).

The tweeter is part of media with interaction among people in which they create, share and exchange information and ideas in virtual communities and networks. It is an internet-based form of communication that allows users to have conversations, share information and create web content. Alagbe and Seriki, (2022) stressed that social media as a computer-based technology facilitates the sharing of ideas thoughts, and information through the building of virtual network and communities. It gives users quick electronic communication of contents, such as personal information, documents, videos, and photos. (Yamini & Pujar 2022).

Social media is often referred to as the new media which involves interactive participation. Hence, the development of media is divided into three main types of news media: print media, broadcast media, and the Internet (interactive). Radio and TV, Newspaper Houses, or movie production studios disseminate messages to their heterogeneous audience and feedback is often indirect, delayed, and impersonal (Zhang et.al., 2022). Individuals can now speak to many and instantly get feedback made possible through the Internet. The Internet has brought exciting developments to news gathering and dissemination (Heleem et.al. 2022; Pawan & Raghavendra, 2018).

Research Questions

In other to examine the Insight of Twitter Ban: Student's Perspectives In Higher Education, the following questions were raised:

- 1. To what extent has the Twitter ban affected the undergraduate students of the University of Ibadan?
- 2. To what extent do the undergraduate students of the University of Ibadan believe that the Twitter ban is justifiable?
- 3. What are the alternative measures engaged in by the undergraduate students of the University of Ibadan in response to the Twitter ban in Nigeria?
- 4. What are the suggestions of the undergraduate students of the University of Ibadan on how to prevent a future ban of Twitter in Nigeria?

The Nigerian Federal Government suspended the operations of the micro-blogging and social networking service Twitter in Nigeria (Essien, Muoghalu & Sulaimon, 2022). The Twitter ban in Nigeria created major education challenges. Therefore, this was vital for educators and students to share ideas and resources. It was sudden absence hindered information flow and collaborative learning, requiring alternative communication methods. The ban highlighted online freedom and its impact on education, highlighting the need for diverse communication for seamless teaching and learning. It is, therefore, against this backdrop, that this study seeks to investigate the perception of Nigerians on the Federal government's ban on Twitter.

Literature Review

Twitter is a social platform that allows users to follow one another and send messages that are limited to 140 characters. Relationships on Twitter may be entirely one-sided, unlike on other social networking platforms. For example, one user may follow another without the latter being obligated to follow the first. Twitter burst onto the scene in March 2006, owing to the situation simple user interface, which stood in sharp contrast to its rivals, who were allowing users complete customization of their pages at the time, resulting in a crowded, gaudy appearance (Experian, 2009).

Twitter Ban

Twitter is a free social networking micro-blogging service that allows registered members to broadcast short posts called tweets. Twitter members can broadcast tweets and follow other users' tweets by using multiple platforms and devices, thereby facilitating the swift dissemination of information. According to the Twitter help Center, Tweets and replies to tweets can be sent by cell phone text messages, a desktop client, or by posting on the Twitter website (Paredes-Corvalan et.al., 2023).

In other words, Twitter promotes social interaction and public participation in various issues of human concern. As a result, the unrestricted interactive nature of Twitter has provided numerous opportunities for the public to interact with various issues in their society. Regardless of Twitter's significant role and opportunities, some countries around the world have banned its use in their societies, including Turkey, Turkmenistan, the United Kingdom, North Korea, Iran, China, and, most recently, Nigeria (Miller, 2022; Moemeke & Mormah, 2022).

Students Perspectives on Twitter as an Educational Tool

Prior to the ban, Twitter had gained importance as a valuable tool in higher education (Alley & Hanshew, 2022). Researchers have highlighted the potential that Twitter has for enhancing student's activities by promoting peer-to-peer learning and facilitating collaboration between educators and learners (Hassell et.al., 2023).

The understanding of student perspective is crucial to comprehending the full impact of the Twitter ban (Mujahid, et.al., 2021). It has been observed that students in Nigeria were actively using Twitter for academic purposes, including sharing class-related resources, engaging in intellectual discussions, and seeking assistance from instructors. The Twitter ban potentially left students feeling disconnected and disadvantaged in their learning journey (Dindar & Muukkonen, 2022).

Digital Freedom and Educational Access

The ban on Twitter also raised broader concerns about digital freedom and access to information (Vidyarthi & Hulvey, 2021). In a digital era, where technology is integrated into various aspects of life, restricting access to a platform like Twitter can have profound implications for education (Ramzan, Javaid & Fatima, 2023). Limitations on digital platforms could potentially hinder students' ability to engage with a global discourse, access diverse perspectives, and stay updated on current academic trends (Duggan, 2023; Kaddoura & Al Husseiny, 2023).

Disruption and Challenges

The abrupt ban on Twitter in Nigeria had immediate consequences on the educational sectors. (Vahedi, Z., Zannella, L., & Want, S. C. (2021). Students, who were adapted to leveraging the platform for communication with peers and educators, experienced a sudden interruption in their learning routines. This interruption disrupted the flow of information sharing, collaborative learning, and academic discussions that had become essential to the higher education in teaching and learning activities.

Theoretical Framework

Technological Determinism Theory

The Technological Determinism theory, conceived by Marshall McLuhan in 1962, asserts that technology shapes communication and societal interactions. Also known as the medium theory, it contends that technology determines how individuals engage with society. Its argue that technology's influence is socially determined, co-evolving with structures. Amidst ongoing debates, the rise of social media, including Twitter, Facebook, Instagram, exemplifies the profound impact of technology on human life. According to the "Digital 2022: Global Overview Report" by Data Reportable, the global population reaches 7.91 billion in January, 2022, with a projected growth of to 8billion by mid-2023. Mobile phone users reached 5.31 billion, and global internet users rose to 4.95 billion by 2022, fostering connectivity. Social media's immense growth, spurred by the COVID-19 pandemic, underscores technology's transformative role (Lugo-Fagundo, Weisberg, Kauffman & Fishman, 2022).

Social Responsibility Theory

The Social Responsibility theory, formulated by Siebert, Peterson, and Schramm in 1949, bridges the gap between authoritarian and libertarian theories. It allows media freedom but with external checks. The press under this theory is privately owned, shifting from "Objective" to "Interpretative" reporting, promoting investigative journalism. While ensuring accurate news, the theory advocates analyzed and interpretative reporting. The researcher, Uzuegbunam, 2013 stressed that it promotes a free press while subjecting content to public discussion, avoiding interference or self-regulation. An extension of libertarianism, it asserts press freedom tied to responsibilities, maintaining high standards of accuracy and objectivity. This theory contributes to professionalism by emphasizing accuracy and information. It also guides media through self-regulation within the legal framework. The theory's significance lies in promoting responsible media practice, leading to the establishment of codes of conduct, journalism standards, and safeguarding journalistic interest, with penalties for violations.

Methodology

Research Design

The goal of this study is to study "the perceptions of the undergraduate students on the Twitter ban in Nigeria." As a result, this study was carried out using a quantitative method that considers the research objectives and questions for this study. Data were gathered using a survey research method in which a questionnaire was administered to the undergraduate of the University of Ibadan in five faculties. this method was chosen because it provides for the

easiest collecting of a large amount of data from a diverse group of people, due to the nature of the study. The survey research method is dependable, cost-effective, extensive, and flexible (Flynn & Korcuska, 2018).

Research Population

The population of this study consists of the undergraduate students of the University of Ibadan, drawn from five different faculties namely Art, Social Sciences, Education, Law, and Economics. These five faculties were chosen purposively by the researcher.

Sample and Sampling Techniques

Wimmer & Dominick (2011) define a sample as a subset of the population that is representative of the entire population. It's simply a systematically selected part of a population that infers its result on the population. In essence, it is that part of a whole that represents the whole and its members share characteristics like similitude (Udoyen, 2019).

The research samples for this study were drawn from the undergraduate students of five various faculties of the University of Ibadan. Out of the total population of 10917 (Art- 3263, Social Sciences- 1868, Education- 4177, Law- 1056, and Economics- 553) for the five faculties, the total sample of 385 (three hundred and eighty-five) was drawn using the Taro Yamane Sample formula to determine a reliable sample size (Yamane, 1973) formula with a 95% confidence level.

The calculation formula of Taro Yamane is presented as follows.

$$n = \frac{N}{1 + N(e)2}$$

Where:

 \mathbf{n} = sample size required \mathbf{N} = number of people in the population \mathbf{e} = allowable error (%)

Substitute numbers in the formula:

1+10,917(0.05)2

n = 385 (Approximately).

After calculating the sample size by substituting the numbers into the Yamane formula, the number of samples is 385.8619775558893 persons. To obtain reliable data, the researcher decreased the sample size to 385 for participants. 385 questionnaires were administered to all undergraduate students from year 1 to 4 (level 100–400), while the researcher was only able to retrieve 235 from the respondents which was valid for the data analysis of this study.

Findings and Discussion

Items	Frequency	Percent
Deprivation of information	119	50.6
Loss of online collaboration/Networking	48	20.4
Lack of communication	68	28.9
Total	235	100

Table 1: To what extents was the Twitter ban on you?

Above table reveals the result of the effect of twitter ban on respondents. The result revealed that 50.6% of the respondents agreed that twitter ban led to deprivation of information; 20.4% Loss of online collaboration/Networking; 28.9% agreed it led to lack of communication. This shows that the ban of twitter led to deprivation of information, Lack of communication, and Loss of online network to undergraduate students at the university of Ibadan.

Items	Fr	equency	Percent
No	21	1	89.8
Yes	24		10.2
Total	23:	5	100

Table 2: Do you think Government's decision to ban Twitter in Nigeria is justifiable?

Above table shows the opinions of the undergraduate students of the University of Ibadan on the government's justification of the Twitter ban. The result reveals that majority (89.8%) of the respondents denied the Government's decision to ban Twitter in Nigeria is justifiable whereas the remaining (10.2%) thought otherwise. This shows that the undergraduate students at the University of Ibadan opined, the Government has no justification of the Twitter ban.

Items	Frequency	Percent
Yes	95	40.4
No, I used a VPN or other means to have access	90	38.3
to my Twitter account		
Yes, but I use other social media in place of	49	20.9
twitter (Facebook, Instagram)		
Others	1	0.4
Total	235	100

Table 3: Did you stop using Twitter even after the ban or you find alternative measures?

The table above shows the result of options engaged in by the undergraduate students of the University of Ibadan in response to the Twitter ban in Nigeria. The result revealed that majority (40.4%) agreed they stopped using twitter after the ban, 38.3% used a VPN or other means to have access to my Twitter account, 20.9% used other social media such as Facebook and Instagram in place of twitter whereas the remaining minute (0.4%) engaged

other platforms. This shows that VPN or other means to have access to Twitter account; other social media such as Facebook and Instagram were the options engaged in place of twitter by the undergraduate students at the University of Ibadan in response to the Twitter ban in Nigeria.

	Frequency	Percent
Respect for freedom of Expression by the government	69	29.4
Government should Implement laws devoid of breach on civil liberties	34	14.5
Inciting statements and Defamation should be avoided by the Users	41	17.4
Twitter's Terms of Service should be strictly adhered to by all users	50	21.3
Users must be factual when twitting	41	17.4
Total	235	100

Table 4: Which of these do you think will prevent a future ban on Twitter in Nigeria?

Table above shows the result of the suggestions of the undergraduate students of the University of Ibadan on how to prevent a future ban of twitter in Nigeria. The result revealed that 29.4% % of the respondents agreed that Respect for freedom of Expression by the government, 14.5% government Implementation of laws devoid of breach on civil liberties, 17.4% respondents agreed that the inciting statements and Defamation by the Users. (21.3%) and lastly, (17.4) respondents agree to users must be factual when twisting.

The study revealed the twitting constitute the suggestions of the undergraduate students of the University of Ibadan on how to prevent a future ban of Twitter in Nigeria.

Summary

The findings of this study show that the ban on Twitter is against the use of social responsibility theory which lies between both authoritarian theory and libertarian theory because it gives total media freedom on one hand but external control in the other hands. It proposes that press freedom should be exercised responsibly. It states that the media should serve the public and to do so, should remain free of all forms of interference.

Nigerian government's action on Twitter ban proves further that it embraces the authoritarian theory, as the government capitalized on the power vested on her which never allowed the look at the purpose of Twitter's platform before banning the operation of Twitter in Nigeria because of Twitter deleting the president's Twit for violation of the Twitter community rules. It is therefore, imperative for the government to prioritize the well-being of the citizens who entrusted them with their mandate, placing their interests before their own.

Conclusion

The Twitter ban in Nigeria significantly impacted higher education by disrupting established communication channels and collaborative learning opportunities. The study concluded that Twitter ban affects the students in their collaboration and networking among students (Moemeke & Mormah, 2022).

It was revealed that the Twitter ban by the Federal Government has left a negative perception in the minds of citizens. To fully comprehend the ramifications of this ban, further research is required to capture the nuanced perspectives of students. This literature review underscores the urgency of examining the ban's effects on education and calls for proactive strategies to ensure the continuity of learning in a dynamic digital integration in higher education.

Recommendation

This study recommended that the Nigerian government should consider never to ban Twitter and all other media platform in the future as it is seeing to be an infringement on the fundamental human rights of Nigerians citizens which is a total freedom of expression as stated by the 1999 constitution of the Federal Republic of Nigeria. Also, government policies and the self-regulatory features of the media should conform or align with the constitutional guarantees on the freedom of expression.

Lastly, both the Nigerian government and its citizens should understand that there's a limit to power and so, all must operate within the confined of the power accrue to them and must not violate other people's rights while exercising theirs.

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References

- Alagbe, A. A., & Seriki, J. E. (2022). The Use of Grammatical Concord in the Written English of Facebook Users in the Federal Capital Territory. Voices: A Journal of English Studies, 7, 61-78.
- Alley, A., & Hanshew, J. (2022). A long article about short videos: A content analysis of US academic libraries' use of TikTok. *The Journal of Academic Librarianship*, 48(6), 102611.
- Anyanwu, B. J., Ukpong, E. N., & Nkechi, O. L.(2022). Implications of Nigeria's Twitter Ban and Use of Virtual Private Networks (VPNs) on Freedom of Speech and Expression.
- Anyim, W. O. (2021). Twitter Ban in Nigeria: Implications on Economy, Freedom of Speech and Information Sharing. Library Philosophy and Practice, 0_1-13.
- Apuke, O. D. (2016). An evaluative study of the Freedom of Information Act on journalism practice in Nigeria. *New Media and Mass Communication*, 53(1), 11-22.
- Baele, S. J., Boyd, K. A., & Coan, T. G. (Eds.). (2019). ISIS propaganda: A full-spectrum extremist message. Oxford University Press. pp. 155–87. ISBN 9780190932480. Archived from the original on 21 November 2020. Retrieved 1 June 2020.
- Bola, S. A., Enueshike, P., Akinwumi, O., Adamu, S., Oyinloye, B. F., Oyinloye, Y. G., & Onibiyo, R. E., (2022), *Impact of ban on Twitter on human security in Nigeria: Evidence from economic, health and political security*. Infokara research (e-journal) volume 11, issue 4, 2022. Http://infokara.com/
- Bowles, N. & Buckley, C. (2017). "Rose McGowan's Twitter Account Locked After Posts About Weinstein." *The New York Times*. Archived from the original on 29 February 2020. Retrieved 3 March 2022.
- Brandom, R., (2016). "Revived lawsuit says Twitter DMs are like handing ISIS a satellite phone." *The Verge*. Archived from the original on 31 August 2016. Retrieved 31 August 2016.
- Castillo, C., Mendoza, M., & Poblete, B. (2011, March). Information credibility on twitter. In *Proceedings of the 20th international conference on World wide web* (pp. 675-684).
- Chinaemerem, A. C., & Vivian, O. A. (2022). Social media as an avenue for youth mobilization for national security: a study of the endsars protest in Nigeria. Sau journal of management and social sciences, 3, 15-23.
- Codrea-Rado, A., &Tsang, A. (2017). "Twitter Users Split on Boycott Over Plaform's Move Against Rose McGowan." *The New York Times*. Archived from the original on 4 January 2022.
- Denia, E. (2020). The impact of science communication on Twitter: The case of Neil deGrasse Tyson. Comunicar, 28(65), 21–30. https://doi.org/10.3916/C65-2020-02.

- Dindar, M., Çelik, I., & Muukkonen, H. (2022). # WedontWantDistanceEducation: a thematic analysis of higher education students' social media posts about online education during Covid-19 pandemic. *Technology, Knowledge and Learning*, 27(4), 1337-1355.
- Duggan, J. (2023). Using TikTok to teach about abortion: Combatting stigma and miseducation in the United States and beyond. *Sex Education*, 23(1), 81-95.
- Essien, E., Muoghalu, M., & Sulaimon, Y. (2022). Newspaper Framing of Twitter Ban in Nigeria: A Retrospective Perspective. American Journal of Arts and Human Science, 1(3), 28-36.
- Feinberg, A. (2017). "Twitter's Never Going to Ban Donald Trump." *Wired*. Archived from the original on 7 November 2017. Retrieved 29 October 2017.
- Flynn, K. (2017). "Twitter to neo-Nazis: you have until December 18". Mashable. Archived from the original on 18 December 2017. Retrieved 19 December 2021.
- Flynn, S. V., & Korcuska, J. S. (2018). Credible phenomenological research: a mixed methods study. Counselor Education and Supervision, 57(1), 34-50.
- Gasparėnienė, L., Matulienė, S., & Žemaitis, E. (2021). Opportunities of job search through social media platforms and its development in Lithuania. *Business: Theory and Practice*, 22(2), 330-339.
- Gershman, J. (2016). "Can Twitter Be Liable for ISIS Tweets?" *The Wall Street Journal*. Archived from the original on 21 January 2016. Retrieved 20 January 2016.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. Sustainable Operations and Computers, 3, 275-285.
- Hassell, L. A., Absar, S. F., Chauhan, C., Dintzis, S., Farver, C. F., Fathima, S., ... & Bui, M. (2023). Pathology education powered by virtual and Digital transformation: Now and the future. *Archives of Pathology & Laboratory Medicine*, 147(4), 474-491.
- Hebrang G, I. (2022). Newspapers published by Croats in New South Wales: from print environment to social networking sites. Journal of the Australian Library and Information Association, 1-16.
- Heikkilä, R., Leguina, A., & Purhonen, S. (2022). The stratification of media usage in Finland, 2007–2018: Signs of socio-political polarization? *new media & society*, 24(5), 1053-1075.
- Holt, K. (2012). "Dirty digital politics: How users manipulate Twitter to silence foes." *The Daily Dot*. Archived from the original on 12 December 2018. Retrieved 4 November 2017.
- Kaddoura, S., & Al Husseiny, F. (2023). The rising trend of Metaverse in education: challenges, opportunities, and ethical considerations. *PeerJ Computer Science*, 9, e1252.

- Kirungu, M. (2021). Contribution of parliamentary watchdog committees In promoting national security: a case of Kenya's national assembly departmental committee on administration and security (doctoral dissertation, Africa Nazarene university).
- Koh, Y. (2016). "Lawsuit Blames Twitter for ISIS Terrorist Attack". *The Wall Street Journal*. Archived from the original on 17 January 2016. Retrieved 16 January 2016.
- Liang, B., & Wang, Y. (2021). Conceptualizing an ecological model of Google search and Twitter data in public health. In *Empowering Human Dynamics Research with Social Media and Geospatial Data Analytics* (pp. 185-202). Springer, Cham.
- Livsey, A. (2017). "Rose McGowan suspended from Twitter after Ben Affleck tweets." *The Guardian*. ISSN 0261-3077. Archived from the original on 12 October 2017. Retrieved 13 March 2022.
- Lugo-Fagundo, E., Weisberg, E. M., Kauffman, L., & Fishman, E. K. (2022). Radiology Without Borders: Identifying Global Reach of Radiology Social Media in Africa. *Current Problems in Diagnostic Radiology*, 51(6), 852-857.
- Malayo, K. A. (2012). An Evaluative Study of the Freedom of Information Act and Media Practice in Nigeria. *MA Re Research Project. Department of Mass Communication, Faculty of Arts. University of Nigeria, Nsukka.*
- Matthew A. R. (2014), Mining the Social Web, Second Edition. O'Reilly Publisher. USA (pp. 6-12).
- Mbaka, C. A., Udeh, K., & Onyeberechi, G. C. (2022). Social media utilization for news gathering by print media journalists in lagos metropolis: avoiding the fake news. *Sau journal of management and social sciences*, *3*, 87-97.
- McCullagh, D. (2019). "Deplatforming Is a Dangerous Game." *Reason*. Archived from the original on 31 March 2019.
- Merrin, W. (2018). *Digital War: A Critical Introduction*. Routledge. pp. 311–12. ISBN 9781317480402. Archived from the original on 21 November 2020. Retrieved 1 June 2020.
- Moemeke, C. D., & Mormah, F. O. (2022). Pre-Service Science Teachers' Perceived Effect of Twitter Ban on Learning and Communication. *TechTrends*, 1-11.
- Mujahid, M., Lee, E., Rustam, F., Washington, P. B., Ullah, S., Reshi, A. A., & Ashraf, I. (2021). Sentiment analysis and topic modeling on tweets about online education during COVID-19. *Applied Sciences*, 11(18), 8438.
- Naylor, D. (2017), Famous People Who Have Been Banned from Twitter. The Hook. Archived from the original on 29 October 2017. Retrieved 29 October 2017.
- Ncube, M. (2021). Social Media and Democracy in Africa: A Case Study of the Zimbabwe 2018 Harmonised Elections.

- Neate, R. (2018). "Twitter stock plunges 20% in wake of 1m user decline". *The Guardian*. Associated Press. ISSN 0261-3077. Archived from the original on 20 September 2020. Retrieved 5 March 2022.
- Obar, J. A. & Wildman, S. (2015). "Social media definition and the governance challenge: An introduction to the special issue." *Telecommunications Policy*. 39(9): 745–750. doi:10.2139/ssrn.2647377. SSRN 2647377.
- Obiora, A., & Akpunonu, A. (2019). Freedom of information act 2011: a veritable instrument for the enhancement of legislative oversight in Nigeria. *International review of law and jurisprudence (IRLJ)*, *1*(1), 99-105.
- Ohlheiser, A. (2016). "Here's what it takes to get banned from Twitter. "*The Hamilton Spectator*. Archived from the original on 7 November 2017. Retrieved 29 October 2017.
- Omotayo, F. O. (2015). The Nigeria freedom of information law: Progress, implementation challenges and prospects. *Library Philosophy and Practice*, 12119.
- Paredes-Corvalan, D., Pezoa-Fuentes, C., Silva-Rojas, G., Rojas, I. V., & Castillo-Vergara, M. (2023). Engagement of the e-commerce industry in the US, according to Twitter in the period of the COVID-19 pandemic. *Heliyon*.
- Pawan K. & Raghavendra M. (2018) Print and Online Newspapers: An Analysis of the News Content and Consumption Patterns of Readers. Communicator Journal, Volume LIII (1), 2018.
- Philip T. D. (2021), Lessons from The Ban of Twitter in Nigeria: A Tale of Two Wrongs and A "Lose-Lose" Situation. EPRA International Journal of Research and Development (IJRD) Volume: 6, Issue: 9, September 2021 https://doi.org/10.36713/epra8490.
- Ramzan, M., Javaid, Z. K., & Fatima, M. (2023). Empowering ESL Students: Harnessing the Potential of social media to Enhance Academy.
- Ramzan, N., Shar, B. K., Abro, S., & Nadeem, M. (2022). Exploring Natural Ventilation in Building Design: A Case Study of Qasimabad, Hyderabad. *Journal of Art, Architecture* and Built Environment, 5(1).
- Reinhardt, W. (2009, May). How people are using Twitter during conferences. 5th EduMedia Conference, 4-5 May 2009, Salzburg, Austria.
- Reynolds, G. H. (2018). "When Digital Platforms Become Censors." *The Wall Street Journal*. Archived from the original on 30 March 2019.
- Ridho, W. F. (2022). Comparison of Social Media as a Platform for Financial Literacy Source. *Jurnal Aplikasi Manajemen dan Bisnis*, 3(1), 1-14.
- Romano, A. (2017). "At long last, Twitter has begun banning (some, not all) Nazis." *Vox.* Archived from the original on 19 December 2017. Retrieved 19 December 2021.

- Roth, Y. (2019). "Empowering further research of potential information operations." Twitter. Archived from the original on 21 February 2019. Retrieved 18 February 2019.
- Spangler, T. (2018). "Big Twitter Accounts See Follower Numbers Drop After Fake-User Purge". *Variety*. Archived from the original on 22 April 2020. Retrieved 24 May 2022.
- Stewart, E. (24 April 2019). "What's up with Twitter's follower counts, explained for everyone — including Trump." Vox. Archived from the original on 17 May 2020. Retrieved 24 May 2020.
- Swaine, J. (2018). "Twitter admits far more Russian bots posted on election than it had disclosed." *The Guardian*. Archived from the original on 31 May 2020. Retrieved 24 May 2022.
- Szayna, S., Larson V., O'Mahony, A., Robson, S., Schaefer, A.G., Matthews, M., Welser (IV),
 W. (2016). "Examining ISIS Support and Opposition Networks on Twitter." Considerations for Integrating Women into Closed Occupations in U.S. Special Operations Forces. Rand Corporation. p. 30. ISBN 9780833092670. Archived from the original on 21 November 2020. Retrieved 1 June 2020.
- Taecharungroj, V. (2023). "What Can ChatGPT Do?" Analyzing Early Reactions to the Innovative AI Chatbot on Twitter. *Big Data and Cognitive Computing*, 7(1), 35.
- Timberg, C. & Dwoskin, E. (2020). "Twitter is sweeping out fake accounts like never before, putting user growth at risk." *The Washington Post*. Archived from the original on 28 May 2020. Retrieved 24 May 2020.
- Twitter For Business: How To Use Twitter For Your Marketing https://usergrowth.io/blog/twitter-marketing/
- Twitter Inc. (2021). "Permanent suspension of @realDonaldTrump." *Twitter*. Retrieved 14 January 2022.
- Ulaga, W., Kleinaltenkamp, M., Kashyap, V., & Eggert, A. (2021). Advancing marketing theory and practice: guidelines for crafting research propositions. AMS Review, 1-12.
- Vahedi, Z., Zannella, L., & Want, S. C. (2021). Students' use of information and communication technologies in the classroom: Uses, restriction, and integration. Active Learning in Higher Education, 22(3), 215-228.
- Vidyarthi, A., & Hulvey, R. (2021). Building Digital Walls and Making Speech and Internet Freedom (or Chinese Technology) Pay for It: An Assessment of the US Government's Attempts to Ban TikTok, WeChat, and Other Chinese Technology. *Indian JL & Tech.*, 17, 1.
- Visser, M., Hoving, M., Koops, D., van der Kooi, B., & van Brug, R. (2021). Customer acquisition: recruiting visitors through paid channels. In *Digital Marketing Fundamentals* (pp. 276-344). Routledge.

- Wakeford, L. & Smith, L. (2019). "Islamic State's Propaganda and Social Media: Dissemination, Support, and Resilience."
- Wu, S., Hofman, J. M., Mason, W. A., & Watts, D. J. (2011, March). Who says what to whom on twitter. In Proceedings of the 20th international conference on World wide web (pp. 705-714).
- Yamini, P., & Pujar, L. (2022). Personal factors influencing social media addiction of emerging adults. The Pharma Innovation Journal 2022; S P-11(1): 302-305.
- Zhang, Y., Yu, R., Shi, X., & Hong, K. (2022). Visual communication design in print advertising under new media environment. *Wireless Communications and Mobile Computing*, 2022.

Contact email: aderinsolaK@dut.ac.za aderini2002@gmail.com oluwalekeisrael@gmail.com