



Big Data Analytics for Publishing Development: Prospects and Challenges in the Nigerian Book Industry

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Abstract

Studies on the growth of the Nigerian book publishing industry in the multimedia landscape reiterate the need for the deployment of innovative marketing practices, given the observed decline in book publishing performance over the years. By adopting big data analytics, publishers are able to leverage on user-generated data (UGD) for product development and online marketing. However, the adoption of big data in the Nigerian book publishing industry remains an uncharted pathway to development. This study explores big data adoption in the Nigerian book publishing industry through a literature review of studies on technology innovation adoption in the context of book publishing, with a focus on big data. A literature search was conducted in Google Scholar, and relevant studies selected for review and analysis. Findings reveal the use of big data for publishing development in a number of developed nations, including the use of big data analytics in publishing houses' book development processes. Big data analytics also give book publishers the boost they need for distribution, sales, and advertising as well as price optimization. However, there is no clear proof that Nigeria's publishing sector has adopted big data for book publishing processes, although results show that big data analytics can help publishers increase the effectiveness of their book publishing operations. Given the potential to improve productivity and profitability, implementing big data analytics in the Nigerian book publishing sector as a new avenue to development that has to be explored further.

Keywords: Book Publishing; Big Data; Digital Marketing; Marketing Strategy; Nigeria

Introduction

For the reason that books are seen as the means of development, the state of the publishing industry in developing nations has always been a topic of interest. A number of years ago, Smith (1975) asserted that publishing is acknowledged as a fundamental mechanism of development in the sense of the relationship between book availability and literacy, the relationship between increased rates of economic development and literacy, and the influences of an indigenous literary tradition on cultural growth. These factors support Smith's claim that an established and prosperous book industry will drive the development of publishing in Asia and Africa by allowing these developing nations to take advantage of emerging technological opportunities and engage in creative innovation. Altbach (1983) also reiterated this viewpoint. In other words, it is believed that the growth of the publishing sector is a significant contributor to the society and nations of the third world.

The volume of publishing activities in a nation can indicate how that nation's publishing industry is making progress. Uwalaka (2000) examined the success of the Nigerian book publishing sector between 1975 and 1995 using this evidence. According to Christopher (2004), who cites the specifics of Uwalaka's (2000) study, the results showed that the performance of book publishing throughout the

time period under consideration continually dropped. Uwalaka (2000) encouraged the use of cutting-edge marketing techniques in book publishing, among other things. The study noted that handling the issues facing Nigeria's book industry from a marketing viewpoint is crucial to achieving publishing business success through market expansion. In essence, the publishing performance of Nigerian book publishers depend greatly on their marketing performance. While the role of marketing and distribution in improving the performance of the book publishing industry in African countries like Nigeria has been stressed well enough (Christensen *et al.*, 1999; Zell, 2001; Chakava, 1997; Christopher, 2010) there is a dearth of knowledge on the adoption of innovation technologies to boost publishing performance in developing African countries, Nigeria inclusive.

Big data is one of the innovation technologies widely adopted to improve marketing performance in businesses. However, in spite of the many benefits of big data, many small and medium enterprises (SMEs) in Nigeria often fail to successfully implement technological and analytical frameworks in order to harness some of its potentials (Ogbuokiri, Udanor & Agu, 2015). Given the potential of big data in improving publishing performance in Nigeria, this study explores the prospects and challenges of big data adoption in the country's book industry based on the following research questions: i) to what extent is big data impacting publishing development across the world? ii) what are the challenges to big data adoption in the Nigerian publishing industry?

Literature Review

Publishing Development

The development of needed books and their successful marketing and sales to end users is crucial to publishing performance. According to Uwalaka (2000), book publishing performance refers to publishers' perception of their accomplishments with respect to number of manuscripts developed, book output, sales turnover, volume of sales and profit. Highpoints from Uwalaka's (2000) study reveal not just a decline in publishing performance in Nigeria in the period 1975-1995, but also that all the phases of the book publishing process: manuscript development, production, marketing and even management were plagued by many problems. More worrisome is the observed lopsidedness in book publishing activities in Nigeria. It was reported that educational books are the live wire of publishing and bookselling business in Nigeria, approximating 80% of publishers' and booksellers' major activities (and investment). As Christopher (2004) submits, this lopsidedness in book publishing output and bookselling indicates, among other things, that readership is underdeveloped, and book publishing scope is narrow. She notes further that the book industry needs a new lease of life, given that the economics of publishing in Nigeria in the twenty (20) years covered by the study reveals an industry struggling to stay alive in a competitive multimedia environment. The way forward, she notes, lies in publishing development through innovative digital-driven marketing. In another study, Christopher (2010) emphasized that achieving publishing business growth and development through market expansion depends greatly on approaching the problems of the book industry in Nigeria from a marketing perspective. In other words, publishing development hinged on innovative product development and marketing is the panacea to the survival thriving of the nation's book publishing sector.

Big Data Analytics as Innovation in Small Businesses

Big data, as noted by Aalabaf-Sabaghi (2020), can be defined in many ways, and this, the scholar argues, is probably why it still remains a really difficult concept to grasp. From the array of big data technologies encompassing data storage, data mining, data analytics and visualization, the focus of this study is big data analytics. According to Dong and Yang (2020), big data analytics (BDA) are specific applications for managing, prioritizing, and analyzing big data for business purposes. The importance of big data analytics for increasing firm competitiveness has been generally acknowledged, but the researchers point out that big data analytics are still not frequently used in many nations and areas. In terms of small businesses, one barrier to adoption at the early stages of the innovation was the high infrastructure investment required. However, as noted by Ogbuokiri, Udanor and Agu (2015), SMEs now face less of a constraint on upfront investment due to the availability of well-supported and well-documented open source data systems. The challenges now revolve around making appropriate

decision and selecting a scalable choice that meets the unique requirements of a SME. However, most small businesses are hesitant to implement big data strategies into their operations or fail to make use of BDA investments, which is mostly due to a lack of understanding and knowledge about big data and a lack of human resources to fully leverage big data (Maroufkhani, Wan Ismail & Ghobakhloo, 2020).

Theoretical Framework

Diffusion of Innovation Theory (DIT)

Everret Rogers proposed the DIT (also known as the Innovation Diffusion Theory), as a theory to guide research on innovation diffusion and adoption. An innovation, according to Rogers' (2003) definition, is an idea, activity, or thing that a person perceives as novel or new. Additionally, Rogers (2003) describes diffusion as the process in which an innovation is communicated through certain channels over time among the members of a social system. Describing adoption as the decision to make full use of an innovation as the best course of action available, Rogers (2003) argues that the process of adoption of innovation by a person (or other decision-making unit) moves from initial knowledge of an innovation to developing an attitude toward it, to making a decision to adopt or reject it, to putting the new idea into practice, and to confirmation of this decision. On this basis, five stages of the innovation-decision process are outlined by the scholar, including; i) Knowledge stage: this happens when a person (or other decision-making unit) is made aware of an innovation and comes to comprehend how it works, ii) Persuasion stage: this is when a person (or other decision-making unit) develops a positive or negative attitude toward the innovation; iii) Decision stage: the stage when a person (or other decision-making unit) engages in actions that result in a decision to adopt or reject the innovation; iv) Confirmation stage: occurs when an individual seeks confirmation of an innovation-decision already made, but he or she may reverse this previous decision if exposed to conflicting messages about the innovation. Implementation stage: the stage when an individual (or other decision-making unit) puts a new idea into practice.

Methodology

This study is based on a literature review of studies on technology innovation adoption in the context of book publishing, with a specific focus on big data technology. Using the search string: ("big data" OR "artificial intelligence") AND "book publishing", a literature search was conducted in Google Scholar. From results obtained, relevant papers to the study were selected for review and analysis.

Results

RQ 1: To what extent is big data impacting publishing development across the world?

Available evidence suggests the use of artificial intelligence and big data for publishing development in a number of developed countries. For example, Huang (2019) report the adoption of artificial intelligence (AI) and big data by book publishers in China. According to the researcher, AI adoption is crucial in the process of digital book publishing. It helps to set up a "data bridge" between publishers and sales channels by i) providing full process services for publishers, ii) helping publishers and content providers distribute digital books to different sales channels all over the world, and iii) meeting readers directly. Equally, Upshall (2019) provides insights on how AI impacts academic publishing in the United States. He notes that the benefits of AI solutions are not for publishers alone; authors can also adopt AI solutions as submission tools to assess their manuscripts for submission readiness. Similarly, Wang *et al.* (2019) established that machine learning can be employed to accurately predict sales and to discover which features are the most influential in determining the sales of the book in the US market.

In addition, Ashok, Feng, and Choi (2013) proved that data analytics can be effective in discriminating successful literature by providing insights on: lexical and syntactic elements of successful styles, the connection between successful writing style and readability, the connection between sentiment /connotation and the literary success, and last but not least, comparative insights between

successful writing styles of fiction and nonfiction. Together, the various studies show the application of big data analytics in the book development processes of publishing houses.

Apart from enabling product development in book publishing, big data analytics provide the needed boost for price optimization, distribution, sales and promotion for book publishers. By leveraging on big data from customers and the market to find the most effective price point for the product or service, price optimization can maximize sales and revenue for book publishers (Peukert & Reimers, 2022). With regards to leveraging big data for distribution, evidence suggests book publishing firms are reaping great benefits (Zhang *et al.*, 2022). The impact of big data on promotion through in personalized marketing and targeted advertising has also been reported by researchers such as Zhang *et al.* (2022), and Saniuta, Zbucheá and Bogdan (2022).

RQ 2: What are the challenges to big data adoption in the Nigerian publishing industry?

There is no clear evidence of the adoption of big data for book publishing operations in Nigeria's publishing industry. However, the adoption challenge is a general issue with SMEs in Nigeria, thus not a peculiarity of the publishing industry. According to Akpan, Udoh, and Adebisi (2022), SMEs, not only in Nigeria but across developing countries, are faced with the challenges of big data adoption, especially in terms of technical capacity and skill development and management support. According to KPMG (2019) report, only four out of ten Nigerian organizations are interested in using artificial intelligence in their decision making, and to enhance their operations. For context, the study was focused on over 100 organizations encompassing financial service providers, consumer markets, energy and natural resources and the public sector. So, if there is a low rate of big data adoption even in large organizations, then the adoption level with SMEs in the country is less assured. Nevertheless, there is a glimmer of hope that some enterprises in Nigeria are gradually taking up data analytics in their operations. For example, a study by Greco & Aiss (2021) identified data analytics such as Google Analytics as tools adopted by SMEs to measure the success of their social media marketing campaigns. In another instance, a study by Oluwunmi, Role and Umeh (2022) on the adoption of big data for property marketing in Nigeria confirmed the usage of the innovation, although not at an optimal level. According to respondents, the key hindrances are lack of expertise and security concerns. Notwithstanding the rays of hope reflected in the cited studies, businesses in Nigeria appear to be lagging behind when it comes to adopting data analytics.

Although, there are no documented evidence of big data adoption in the Nigeria book publishing industry, the available evidence is indicative of an enabling environment that sets the stage for its adoption. Going by the report of Christopher & Ifeduba (2014), there is an established readiness for the adoption of digital publishing innovations by book publishers in Nigeria. This stance is supported by the study of Adebite-Badmus and Folayan (2020).

Discussion

Based on the review of extant literature on innovation adoption in the context of book publishing in the global environment, it comes to light that big data usage has gained considerable traction in developed economies like the United States, and China. On the flip side, there is no established usage of the innovation in publishing industries in Nigeria, which is the focus of this study. This outcome, maybe disappointing, is not surprising given previous discourse in innovation adoption literature on the barriers to the uptake of big data in the SMEs of developing countries. In their contribution to the discourse, Shah, Soriano and Coutroubis (2017) advance the stance that the implementation of big data by SMEs should be driven by a strategy focused on actualizing specific growth objectives of their business. Essentially, this position aligns with the precepts of Rogers' diffusion of innovation theory, which conceptualizes adoption as the "decision to make full use of an innovation as the best course of action available" (Rogers, 2003). Here, emphasis is on the phrase, "the best course of action available". In other words, by making use of innovation technologies, businesses are seeking to leverage on innovation to achieve certain outcomes within available resources. This can be exemplified with two examples from the book publishing industry in Nigeria.

The first example is the study of Oni and Olatunji (2021) on the adoption of information and communication technology (ICT) for book editing in the nation's book industry. Focused on editors and top management officers in publishing houses in south-west Nigeria, the study affirmed the widespread adoption of ICT for book editing in the country. As Oni and Olatunji (2021) report, the need to speed up the editing process and subsequently, book output, account for the adoption. Apparently, adoption of ICT is as per the business needs of publishers.

To give a background to the second example, it is necessary to mention that the thrust of the marketing strategy of book publishers in Nigeria is the use of sales representatives to sell directly to government, schools and sometimes bookstores (Shercliff, 2015), thus more focus is on ICT adoption for communications with clients and for customer relations. This background explains the study of Igudia and Ogunsina (2021) on the use of social media for book marketing in Nigeria. According to the researchers, there is an established ease of use of social media by sales and marketing staff of surveyed publishing firms for purposes such as promoting books and authors, engagement with readers, monitoring conversations about their firms, and customer services. Without doubt, the adoption of social media for book marketing in Nigeria, driven by the need to boost book sales among sales representatives, is supported. But it needs mentioning that this approach to book marketing is largely business-to-business (b2b), with so much marketing communications revolving around personal communication with decision makers in purchasing institutions, such as schools, government establishments, etc.

However, if the clarion call for publishing development through market expansion (Irele, 1972; Uwalaka, 2000) is to be taken seriously by Nigerian publishers, then they need to go beyond educational publishing into market segments such as trade publishing and academic/scholarly publishing. Consequently, there will be need to explore a business-to-consumer (b2c) marketing approach built on selling books through online channels. Faced with such a business model, the need for digital marketing strategies in terms of planning, execution, monitoring and measuring becomes inevitable in boosting the marketing performance of book publishers. Trade and scholarly publishers are largely specialized or niched because of their highly segmented market, and the value of digital marketing in these segments are inestimable. According to Davies and Balkwill (2011), by adopting digital marketing, specialist publishers are enabled to be ultra-focused publishers and to be less dependent on booksellers (in terms of sales) and reviewers in newspaper publishing houses (in terms of publicity). In particular, social media was highlighted as a crucial aspect of specialist publishers' digital marketing strategy. As they note, the word-of-recommendations characteristics of social media are crucial to the marketing success of publishers. Since the hub of digital marketing activities is analytics, the recourse to big data analytics becomes inevitable for book publishers. So, premium attention must be given to data analytics as affirmed by Choi *et al.* (2014), and Singaraju and Niininen (2020).

How Can Big Data Adoption be Enhanced in Nigeria's Book Publishing Industry?

Against the established readiness for adoption of digital publishing innovations in Nigeria, Christopher and Ifeduba (2014) advocate for government support to promote the adoption of digital publishing innovations. They argue that by implementing a book policy that addresses concerns that impact profitability such as content development, marketing and copyrights protection, publishers are assured of return on investments, which ultimately impact their decisions to invest in innovations such as big data.

Another way to promote big data adoption is through training and professional development, especially the aspect that is relevant to the immediate marketing needs of book publishers in the country, which is digital media analytics. From the viewpoint of Roger's IDT, the vital role of communication in the process of innovation adoption is emphasized. According to Rogers (2003), various forms of media should be deployed to convey information about an innovation to users, which is essentially all about creating awareness through knowledge dissemination. He argues that technological innovations create some elements of uncertainty for potential adopters, and education is a vital tool in resolving these uncertainties for adoption to be enhanced.

The actionable recommendation for promoting big data adoption through training and professional development include One, as charity begins at home, a proposed inclusion of big data in the digital publishing module on the HND book publishing programme of the Department of Book Publishing, Yaba College of Technology. Equally, the development of a module in digital marketing should also be a priority. Two, a professional development short course tagged “Big data for book publishers” should be considered by the Department of Book publishing, Yaba College of Technology. The success of developing and running such will depend greatly on collaborations with the Department of Computer science, the Department of Marketing and the Centre for Open Distance and Flexible e-learning at Yabatech. A collaboration with the Nigerian Publishers’ Association (NPA) will also be of great value. Three, there is need for research on the unexplored area of digital marketing for publishing in Nigeria, especially on the role of data analytics in the marketing success of niche publishers in developing countries. Some of the literature relevant to such endeavour include Abate (2016), Maharjan *et al.* (2017), Maity, Panigrahi and Mukherjee (2017), Maharjan *et al.* (2018); Maity, Panigrahi, and Mukherjee (2019), Finch and Buchmesse (2019); Khalifa and Islam (2020). In simple terms, digital media data analytics as an enabler in improving book marketing efficiency of publishers in Nigeria is a mine waiting for exploration.

Conclusion

Big data is one of the cutting-edge technologies that firms are using to boost marketing efficiency. This innovation can be used to enhance publishing performance in the context of the Nigerian book publishing sector. The evidence from this review points to the use of big data for publishing development in a number of developed nations, including the use of big data analytics in publishing houses' book development processes. Big data analytics also give book publishers the boost they need for distribution, sales, and advertising as well as price optimization. But there is no clear proof that Nigeria's publishing sector has adopted big data for book publishing processes. However, available evidence shows a supportive atmosphere that creates the conditions for its acceptance. On this basis, government support is encouraged to promote the adoption of digital publishing innovations in Nigeria, given the well-established importance of big data analytics in expanding book publishing businesses throughout the world. The necessity of fostering big data adoption through professional development and training is also emphasized. Together, these results show that big data analytics can help publishers in Nigeria increase the effectiveness of their book publishing operations. Given the potential to improve productivity and profitability, implementing big data in the Nigerian book publishing sector is still a new avenue to development that has to be explored.

Conflict of Interest

The authors declare that they have no conflict of interest.

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References

- Aalabaf-Sabaghi, M. (2020). An Introduction to Data, Everything You Need to Know About AI: Big Data and Data Science. <https://doi.org/10.1111/rssa.12604>
- Abate, M. A. (2016). *The big smallness: Niche marketing, the American culture wars, and the new children's literature*. Routledge. <https://doi.org/10.4324/9781315668871>
- Adegbite-Badmus, T. A., & Folayan, B. J. (2020). Prospects of electronic publishing in Nigeria. *International Journal of Library and Information Science*, 12(2), 46-55. <https://doi.org/10.5897/IJLIS2020.0967>
- Akpan, I. J., Udoh, E. A. P., & Adebisi, B. (2022). Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the COVID-19 pandemic. *Journal of Small Business & Entrepreneurship*, 34(2), 123-140.

- Altbach, P. G. (1983). Key Issues of Textbook Provision in the Third World. *Prospects: Quarterly review of education*, 13(3), 315-25. <https://doi.org/10.1007/bf02220426>
- Ashok, V. G., Feng, S., & Choi, Y. (2013, October). Success with style: Using writing style to predict the success of novels. In *Proceedings of the 2013 conference on empirical methods in natural language processing* (pp. 1753-1764).
- Chakava, H. (1997). Selling books in Africa: A publisher's reflections. *Logos*, 8(3), 159-164. <https://doi.org/10.2959/logo.1997.8.3.159>
- Choi, G., Bolan, P., Hutchinson, K., & Mitchell, R. (2014). Social media implementation by SMEs: overcoming the challenges of measurement. *British Academy of Management (BAM), London*.
- Christensen, L. P., Ljungman, C. M., Ikoja-Odongo, J. R., Sow, M., & Fredericksen, B. F. (1999). Strengthening publishing in Africa: an evaluation of APNET. *Sida evaluation*, 99(2).
- Christopher, N. M. (2004). Book Publishing in Nigeria: The Journey so far and the way forward. *Publisher*, 11(1), 25.
- Christopher, N. M. (2010). Applying Marketing Concepts to Book Publishing in Nigeria. *Journal of International Social Research*, 3(11).
- Christopher, N. M., & Ifeduba, E. C. (2014). Engendering Sustainable Development through the Adoption of Digital Publishing Innovations. In *Green Technology Applications for Enterprise and Academic Innovation* (pp. 118-132). IGI Global. <http://dx.doi.org/10.4018/978-1-4666-5166-1.ch008>
- Davies, G., & Balkwill, R. (2011). *The professionals' guide to publishing: A practical introduction to working in the publishing industry*. Kogan Page Publishers.
- Dong, J. Q., & Yang, C. H. (2020). Business value of big data analytics: A systems-theoretic approach and empirical test. *Information & Management*, 57(1), 103124. <https://doi.org/10.1016/j.im.2018.11.001>
- Finch, G., & Buchmesse, F. (2019). The Future Impact of Artificial Intelligence on the Publishing Industry. *Livre blanc*.
- Greco, A. N., & Aiss, C. G. (2015). University presses in the twenty-first century: The potential impact of big data and predictive analytics on scholarly book marketing. *Journal of Scholarly Publishing*, 46(2), 105-140. <https://doi.org/10.3138/jsp.46.2.01>
- Igudia Dr, O. E., & Ogunsina Mr, S. T. (2021). Effort Expectancy and Use of social media for Marketing by Staff of Selected Publishing Firms in South-West, Nigeria.
- Irele, A. (1972). The African Publisher. *Publishing in Nigeria*, 5-12. <https://doi.org/10.1177/001132557500800403>
- Khalifa, M., & Islam, A. (2020). Will your forthcoming book be successful? Predicting book success with CNN and readability scores.
- KPMG. (2019). Assessing the Maturity of Data & Analytics Capabilities in Nigeria. *KPMG Data and Analytics*. Available from: <https://assets.kpmg.com/content/dam/kpmg/ng/pdf/advisory/Assessing-the-Maturity-of-D&A-Capabilities-in-Nigeria.pdf>
- Maharjan, S., Arevalo, J., Montes, M., González, F. A., & Solorio, T. (2017, April). A multi-task approach to predict likability of books. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics: Volume 1, Long Papers* (pp. 1217-1227).
- Maharjan, S., Kar, S., Montes-y-Gómez, M., González, F. A., & Solorio, T. (2018). Letting emotions flow: Success prediction by modeling the flow of emotions in books.
- Maity, S. K., Panigrahi, A., & Mukherjee, A. (2017, July). Book reading behavior on goodreads can predict the amazon best sellers. In *Proceedings of the 2017 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining 2017* (pp. 451-454). <https://doi.org/10.1145/3110025.3110138>
- Maity, S. K., Panigrahi, A., & Mukherjee, A. (2019). Analyzing social book reading behavior on goodreads and how it predicts amazon best sellers. *Influence and Behavior Analysis in Social Networks and Social Media*, 211-235. <https://doi.org/10.48550/arXiv.1809.07354>

- Maroufkhani, P., Wan Ismail, W. K., & Ghobakhloo, M. (2020). Big data analytics adoption model for small and medium enterprises. *Journal of Science and Technology Policy Management*, 11(4), 483-513. <http://dx.doi.org/10.1108/JSTPM-02-2020-0018>
- Ogbuokiri, B. O., Udanor, C. N., & Agu, M. N. (2015). Implementing bigdata analytics for small and medium enterprise (SME) regional growth. *IOSR Journal of Computer Engineering*, 17(6), 35-43. <https://doi.org/10.9790/0661-17643543>
- Oluwunmi, A. O., Role, B. A., & Umeh, O. L. (2022). Estate Surveyors and Valuers' Perception of the Role of Big Data in Property Marketing in Lagos, Nigeria. *International Journal of Real Estate Studies*, 16(1), 79-86. <https://doi.org/10.11113/intrest.v16n1.123>
- Oni, M. & Olatunji, R. (2021). Digitisation and book publishing in Nigeria. In Pate, U. (ed). *Journalism, communication and society: Festschrift in honour of his academic eminence Prof. Ralph Afolabi Akinfeleye*; 272-291. Lagos: University of Lagos Press.
- Peukert, C., & Reimers, I. (2022). Digitization, Prediction, and Market Efficiency: Evidence from Book Publishing Deals. *Management Science*, 68(9), 6907-6924. <https://doi.org/10.1287/mnsc.2021.4237>
- Rogers, E. M. (2010). *Diffusion of innovations*. Simon and Schuster.
- Saniuta, A., Zbucea, A., & Hrib, B. (2022). Innovation in the Book Market Retail. Preferences Among Romanian Readers. *Management Dynamics in the Knowledge Economy*, 10(2), 179-209. <https://doi.org/10.2478/mdke-2022-0013>
- Shah, S., Soriano, C. B., & Coutroubis, A. D. (2017, December). Is big data for everyone? The challenges of big data adoption in SMEs. In *2017 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)* (pp. 803-807). IEEE.
- Shercliff, E. (2015). Publishing in Nigeria: Context, challenges, and change. *Logos*, 26(3), 51-60. <https://doi.org/10.1163/1878-4712-11112083>
- Singaraju, S., & Niininen, O. (2021). Understanding Big Data and its application in the digital marketing landscape. *Contemporary Issues in Digital Marketing*, 9.
- Smith Jr, D. C. (1975). The bright promise of publishing in developing countries. *The ANNALS of the American Academy of Political and Social Science*, 421(1), 130-136. <https://doi.org/10.1177/000271627542100113>
- Upshall, M. (2019). Using AI to solve business problems in scholarly publishing. *Insights*, 32(1). <http://doi.org/10.1629/uksg.460>
- Uwalaka, N. M. E. (2000). Book publishing performance in the Nigerian economic environment. *Unpublished PhD Thesis, University of Ibadan*.
- Wang, X., Yucesoy, B., Varol, O., Eliassi-Rad, T., & Barabási, A. L. (2019). Success in books: predicting book sales before publication. *EPJ Data Science*, 8(1), 1-20. <https://doi.org/10.1140/epjds/s13688-019-0208-6>
- Zell, H. (2001). *Book marketing and promotion: A handbook of good practice*. Oxford: International Network for the Availability of Scientific Publications.
- Zhang, L., Qu, J., Jie, J., & Liang, N. (2022). The Impact of Big Data on Traditional Publishing. In *China's Publishing Industry in the Era of Big Data* (pp. 55-76). Singapore: Springer Singapore.