SOCIAL MEDIA MARKETING AND PERFORMANCE OF PHARMACEUTICAL INDUSTRY IN ANAMBRA STATE

Okoli, Ifeanyi E. Nuel PhD.
Department of Entrepreneurial Studies,
Nnamdi Azikiwe University Awka, Anamabra State.
Email: ie.okoli@unizik.edu.ng
&
Okafor Ndu Bibian PhD.
Department of Entrepreneurial Studies,
Nnamdi Azikiwe University Awka, Anamabra State.
Email: bn.okafor@unizik.edu.ng
&
Ezeonuegbu Chukwunonso Ejike
M.Sc. Student, Department of Entrepreneurial Studies,
Nnamdi Azikiwe University Awka, Anamabra State.
Email: wisenoncy@gmail.com

Abstract
This study examined the influence of social media marketing on the performance of the pharmaceutical industry in Anambra State, focusing on content marketing, social media advertising, and influencer marketing. It explored how content marketing influences customer engagement, social media advertising affects product development, and influencer marketing impacts customer satisfaction. Using Social Influence and Social Exchange theories, a sample of 246 staff from a population of 548 pharmaceutical firms was surveyed, with data collected through validated and reliable questionnaires. Both descriptive and inferential statistics were employed to analyze the data, with hypotheses tested at a 5% significance level. Results revealed that content marketing significantly influences customer engagement, and social media advertising has a significant impact on product development. However, influencer marketing showed no significant influence on customer satisfaction. The study concluded that social media marketing substantially impacts the performance of the pharmaceutical industry in Anambra State. It recommended that pharmaceutical firms develop targeted content to address the informational needs of healthcare professionals and patients, while healthcare professionals should engage with pharmaceutical companies on social media. Additionally, patients and caregivers were urged to seek credible health information and verify pharmaceutical endorsements on social media platforms.

Keywords: Social media marketing, Content marketing, Social media advertising, Influencer marketing, Customer engagement, Product development, Customer satisfaction.

1. Introduction

The global pharmaceutical industry has long contributed significantly to advancements in human health, with innovations leading to increased longevity, improved health outcomes, and enhanced cost savings in healthcare systems. For example, studies indicate that pharmaceutical innovations have contributed to reducing workdays lost due to illness and school hour losses, and have made medications more accessible by reducing healthcare costs (Lichtenberg, 2016). The pharmaceutical industry's role in vaccine development has been transformative, eradicating diseases such as smallpox and nearly eliminating others, including measles and rubella, in various parts of the world (United Nations AIDS, 2019). Further, advancements in HIV/AIDS treatment have reduced global mortality from the disease, from 2.4 million deaths in 2004 to 1.1 million in 2018 (United Nations AIDS, 2019). Moreover, research-based pharmaceutical companies continue to focus on educating patients, strengthening healthcare capacity, and researching diseases that primarily affect developing countries (Lichtenberg, 2016).

The pharmaceutical industry's contribution to public health has also advanced the United Nations Sustainable Development Goals (SDGs), particularly in poverty reduction and gender equality. The industry's efforts to make medications affordable contribute to reducing inequalities, a key objective of the SDGs (Lakner, 2019). By improving

health outcomes, pharmaceutical innovations not only enhance individual well-being but also support economic productivity by reducing poverty and promoting gender equality (Pachura, 2017). As Solesvik (2017) notes, the pharmaceutical sector plays an instrumental role in enhancing population capacities, motivating individuals, and contributing to poverty reduction. Through these innovations, the industry not only supports healthcare but also economic growth, creating a positive feedback loop that aligns with global sustainability objectives.

The rise of Information and Communication Technology (ICT) has revolutionized marketing practices, particularly with the emergence of social media as a powerful tool for engaging consumers. Social media platforms such as Facebook, Twitter, and Instagram offer pharmaceutical companies an unprecedented opportunity to engage directly with patients and healthcare providers, sharing vital information and promoting products (Paquette, 2013). Social media marketing allows companies to connect with a global audience and influence consumer behavior through peer interactions and targeted communication strategies (Vinerean et al., 2013). These platforms have transformed how businesses, including those in the pharmaceutical industry, interact with consumers, enabling them to market more efficiently and effectively in today's digital age (Li, 2019).

In Nigeria, the pharmaceutical industry faces numerous challenges, including regulatory constraints and resource limitations, but social media marketing offers potential solutions. Research indicates that about 60% of drug manufacturing in the ECOWAS region occurs in Nigeria, with the Nigerian pharmaceutical sector being one of the most promising in West Africa (Wakeel & Ekundayo, 2016). However, despite its growth potential, the industry is weighed down by challenges that impede its development. Social media marketing, which has become essential in engaging consumers and promoting products, could significantly enhance the performance of the pharmaceutical sector in Nigeria (Ogbonna, Ukpabi, & Chinedu-Eze, 2019). Leveraging these digital platforms can help the sector navigate its complex market environment, increase brand visibility, and improve customer engagement.

In Anambra State, where the healthcare market is expanding, social media marketing can play a critical role in improving the performance of the pharmaceutical industry. The widespread use of social media in Nigeria presents a unique opportunity for pharmaceutical companies to market their products and connect with consumers more effectively (Ogbonna et al., 2019). The industry's ability to utilize these platforms for marketing could help overcome the limitations it faces, such as resource constraints and regulatory challenges, by increasing outreach and brand awareness. Despite limited research on social media marketing's impact on the pharmaceutical industry in Anambra State, there is growing recognition of its potential to drive performance improvements and meet the healthcare needs of the local population.

2. Literature Review
2.1 Theoretical Underpinning
This study is anchored on Social Influence Theory.
Social Influence Theory, introduced by Kurt Lewin in 1943, explores how individuals' thoughts, feelings, and behaviors are shaped by their social environment. The theory identifies three primary types of influence: informational, normative, and referent. Informational influence occurs when individuals conform to the beliefs or actions of a group, perceiving the group as a source of superior knowledge, especially in uncertain situations. Normative influence stems from the human need for social approval and the desire to fit into societal norms, often leading to conformity to avoid rejection. Lastly, referent influence highlights how individuals emulate role models or admired figures, striving to adopt their behaviors and values. This aspect plays a significant role in shaping personal development and social integration through identification with admired individuals.

In social media marketing, Social Influence Theory is highly relevant, particularly for the pharmaceutical industry. Platforms like Facebook, Twitter, and Instagram function as virtual environments where users are exposed to peers and influencers, amplifying the effects of social proof and authority on consumer behavior (Cialdini, 2007). The pharmaceutical industry has leveraged these platforms to engage with consumers, share information, and influence perceptions of health and wellness. Kietzmann et al. (2011) emphasize the role of social media in shaping consumer behavior, while Liang et al. (2017) demonstrate that strategies incorporating social influence, such as testimonials and patient success stories, are effective in driving engagement and brand loyalty. By applying social influence principles, pharmaceutical companies can enhance their marketing performance in the digital landscape.

Multidisciplinary Journal of Management and Social Science (MJMSS)
Volume 1 Number 2, 2024 ISSN: 3043-6427, E-ISSN: 3043-6419
Online publication with Google Scholar indexing, Email: mjmss242@gmail.com

2.2   Social Media Marketing

Social media marketing represents a dynamic and influential approach employed by businesses and individuals alike to propagate their products, services, or personal brands across a spectrum of social media platforms. Its significance within contemporary marketing strategies cannot be overstated, owing to its pervasive adoption and demonstrated efficacy in engaging with precise target demographics (Felix, 2016). In an era characterized by digital interconnectedness and the ever-growing prominence of online communities, social media marketing serves as an indispensable tool for enhancing brand visibility, fostering customer engagement, and ultimately achieving organizational objectives (Smith, 2018). As highlighted by Felix (2016), it facilitates real-time interactions with a global audience, allowing for tailored content delivery and immediate feedback. Furthermore, the fluid nature of social media platforms necessitates continuous adaptation to emerging trends and technologies, underscoring the need for a strategic and agile approach (Brown, 2019). Consequently, the integration of social media marketing into comprehensive marketing strategies remains paramount for businesses and individuals seeking to thrive in today's dynamic digital landscape.

Social media platforms have billions of active users, making them a prime space for businesses to increase their brand visibility and reach a broader audience. According to a study by Statista, the number of social media users worldwide is expected to grow to 4.41 billion by 2025 (Statista, 2021). Social media platforms offer sophisticated targeting options that allow businesses to reach specific demographics, interests, behaviors, and locations. This level of precision helps optimize and spend and ensures that the content reaches the right audience. A study by the Pew Research Center (2019) found that 72% of U.S. adults use Facebook, which remains one of the most popular platforms for targeted advertising. Social media enables direct communication with customers, fostering engagement and building relationships. Brands can respond to queries, gather feedback, and address concerns promptly. According to a survey by Sprout Social, 40% of consumers expect brands to respond within the first hour of reaching out on social media (Sprout Social, 2021). Compared to traditional advertising methods, social media marketing often offers a more cost-effective approach. Setting up profiles is generally free, and paid advertising options can be tailored to fit different budgets.

2.3   Social Media Marketing and Performance

Organizations face unique challenges in marketing due to strict regulations, complex products, and sensitive content (Smith, 2021). Social media has emerged as a powerful tool to navigate these challenges and reach a wider audience. Organizations are increasingly leveraging social media platforms to communicate information about their products, initiatives, and corporate values (Johnson, et al., 2020).

One of the primary benefits of social media marketing is its ability to enhance brand awareness. By creating engaging content and leveraging social media algorithms, pharmaceutical companies can significantly increase the visibility and recognition of their brands (Smith, 2021). Social media platforms enable direct engagement between companies and their customers. Through interactive posts, live chats, and informative content, pharmaceutical companies can educate their audience about health conditions, treatments, and preventive measures, thereby fostering a more engaged customer base (Johnson, et al., 2020).

Maintaining a positive reputation is crucial for organizations. Social media can serve as a platform for swift crisis communication and reputation management. By responding promptly to customer inquiries and concerns, organizations can mitigate negative publicity and demonstrate their commitment to transparency (Rios & Lee, 2018). The pharmaceutical industry operates within stringent regulatory frameworks, particularly regarding advertising and promotion. Social media marketing efforts need to be tailored to comply with various regulations, including those imposed by the FDA and other regulatory bodies (FDA Guidelines on Social Media Marketing, 2021). Measuring the impact of social media marketing on the pharmaceutical industry's performance is essential. Metrics such as engagement rates, click-through rates, and conversion rates are commonly used to assess the effectiveness of social media campaigns and calculate their return on investment (Greenfield, 2019). Social media marketing in the pharmaceutical industry raises ethical concerns regarding privacy, data security, and direct-to-consumer advertising. Pharmaceutical companies must adhere to ethical guidelines and prioritize the privacy and consent of their social media followers (Ethical Considerations in Social Media Marketing, 2022).

While social media marketing offers numerous opportunities, it also presents challenges for the pharmaceutical industry. Negative user-generated content, misinformation, and platform algorithms can pose significant obstacles. Embracing emerging trends, such as influencer marketing and augmented reality experiences, may shape the future of social media

marketing in the pharmaceutical sector (Johnson et al., 2020). The relationship between social media marketing and the performance of the pharmaceutical industry is multifaceted. Social media can positively impact brand awareness, customer engagement, and reputation management, but it also poses unique regulatory and ethical challenges. By adopting a well-crafted social media strategy and staying compliant with regulations, pharmaceutical companies can harness the full potential of social media to enhance their overall performance.

2.4   Content Marketing and Customer Engagement

Content marketing through social media plays a significant role in shaping customer engagement in the pharmaceutical industry. The tailored content shared across platforms like LinkedIn, Facebook, and Twitter allows pharmaceutical companies to connect directly with patients and healthcare professionals (HCPs). By leveraging personalized content, these companies can improve how they convey information about treatment options, leading to enhanced trust and stronger engagement. Studies have shown that patients in online communities, when engaged with targeted content, experience better treatment adherence and outcomes, such as a 72% improvement in drug adherence in oncology patients (BioPharma Dive, 2019). Moreover, social media provides pharmaceutical companies a platform to educate and listen to patient concerns, further enhancing their brand's visibility and trustworthiness (IQVIA, 2024).

Customer engagement strategies that integrate content marketing also have a direct impact on the performance of pharmaceutical companies. Digital engagement not only improves patient outcomes but also aids in the optimization of business operations by enabling companies to gather real-time feedback and data. These insights allow companies to refine their marketing approaches, increase the effectiveness of drug launches, and better understand consumer needs. Personalized and data-driven engagement strategies are pivotal in driving competitive advantage within the industry (PharmaExec, 2024). Moreover, by overcoming barriers such as outdated legacy systems and regulatory challenges, companies are now investing in digital tools to ensure scalable customer engagement solutions that can meet the evolving expectations of patients and healthcare providers (BioPharma Dive, 2019; PharmaExec, 2024).

2.5   Social Media Advertising and Product Development

Social media advertising has emerged as a pivotal component of modern marketing strategies, profoundly impacting product development and overall business performance. By leveraging the vast reach and engagement capabilities of platforms like Facebook, Instagram, and Twitter, companies can effectively target and engage with their audience, thereby influencing product development decisions and enhancing performance metrics. According to a study by Smith and Zook (2020), social media advertising allows businesses to gather valuable insights into consumer preferences, behavior, and sentiment, facilitating the development of products tailored to meet market demands. This underscores the crucial role of social media advertising as an indicator of social media marketing effectiveness in driving product innovation and development.

Moreover, social media advertising serves as a catalyst for enhancing brand visibility and awareness, which directly impacts product performance. Research by Chen et al. (2021) highlights how strategic advertising campaigns on platforms like Instagram can significantly increase brand exposure and consumer engagement, leading to improved product sales and market share. This indicates that effective utilization of social media advertising not only influences product development but also contributes to overall business performance by driving customer acquisition and retention. However, while social media advertising offers numerous benefits for product development and performance, its effectiveness is contingent upon various factors such as target audience demographics, content relevance, and platform algorithms. A study by Kim and Yang (2023) suggests that the success of social media advertising campaigns relies heavily on the alignment between the advertised product and the preferences of the target audience. Failure to resonate with consumer interests can result in suboptimal campaign performance and limited impact on product development and sales.

2.6   Influencer Marketing and Customer Satisfaction

In recent years, influencer marketing has emerged as a prominent strategy within the realm of social media marketing, significantly influencing consumer behavior and brand perception. A study by Munnukka, Karjaluoto, and Mahlamäki (2020) explored the relationship between influencer marketing and customer satisfaction, highlighting the role of influencers in shaping consumer perceptions and fostering positive brand experiences. The findings revealed a strong correlation between influencer endorsements and increased levels of customer satisfaction, as consumers tend to perceive products recommended by influencers as more credible and trustworthy.

Moreover, influencer marketing has been shown to enhance brand engagement and loyalty among consumers. According to a study by Jin and Phua (2021), influencers act as relatable figures to their followers, creating authentic connections that resonate with consumers on a personal level. This authenticity fosters a sense of trust and rapport, leading to heightened levels of customer satisfaction and loyalty towards the endorsed brands. Consequently, brands leveraging influencer marketing strategies can cultivate long-term relationships with their target audience, ultimately driving performance metrics such as repeat purchases and positive word-of-mouth recommendations. However, the effectiveness of influencer marketing in driving customer satisfaction is contingent upon various factors, including the credibility and authenticity of the influencers involved. Research by Li and Luo (2020) emphasized the importance of selecting influencers whose values align with those of the brand, as incongruence may lead to skepticism and distrust among consumers. Additionally, the relevance of the influencer's content and audience demographic plays a crucial role in shaping consumer perceptions and purchase intentions. Brands must carefully assess these factors to ensure the success of their influencer marketing campaigns and maximize customer satisfaction outcomes.

2.7 Gap in Literature

Despite the growing interest in the intersection of social media marketing and the pharmaceutical industry, a significant research gap persists regarding the specific presence and dynamics of social media marketing within various regions of Nigeria, notably Anambra State. While diverse business models have emerged and thrived in this region, the precise influence of social media marketing on the performance of the pharmaceutical industry remains largely unexplored. This gap highlights the need for a comprehensive study aimed at quantifying the direct influence of social media marketing on the pharmaceutical industry's performance in Anambra State, Nigeria. By addressing this gap, we can uncover valuable insights that will not only benefit academia but also provide actionable knowledge for strategic decision-making within the pharmaceutical sector.

This research study seeks to fill this critical gap by conducting a thorough investigation that examines the intricate influence of social media marketing on performance of the pharmaceutical industry in Anambra State. By focusing on this specific region, the study will shed light on the unique regional and organizational characteristics and constraints at play. Furthermore, the insights gathered from this study will serve as a blueprint for understanding the broader implications of social media marketing on the pharmaceutical industry's performance.

3. Methodology

This study employed a correlation research design to explore the relationship between social media marketing and performance of pharmaceutical industry in Anambra State, Nigeria. The correlation research design, a quantitative approach, was selected to facilitate a robust and reliable analysis of the sample data from the target population. Anambra State, known for its economic significance and high population density, was chosen due to its relevance and accessibility to pharmaceutical firms. The population comprised 548 skilled workers from 13 pharmaceutical firms in the state, specifically those in administrative, marketing, and production departments. A sample size of 246 was determined using Taro Yamane's formula and allocated proportionally among firms using Bowley's technique. Data was collected through a structured, validated questionnaire, which was distributed personally to respondents to ensure accuracy. The validity of the instrument was confirmed through expert evaluations, and reliability was assessed using a Cronbach's Alpha coefficient of 0.85, indicating high consistency. Data analysis was performed using descriptive statistics and linear regression in SPSS version 24. Hypotheses were tested based on p-values, with a significance level set at $p \leq 0.05$ to determine acceptance or rejection.

4. Results

4.1 Hypothesis 1

Content marketing of social media marketing does not have any significant influence on customer engagement of the pharmaceutical industry in Anambra state.

Table 1: Linear regression on content marketing of social media marketing does not have any significant influence on customer engagement.

N	Cal. r	Df	Cal. T	p-value	α	Remark
246	0.77	244	8.08	0.001	0.05	Significant

Table 1 indicated that at 0.05 level of significance and 244 df, the calculated t 8.08 with p-value 0.001 which is less than 0.05 ($r(244) = 0.77$, $p < 0.05$), the null hypothesis is rejected. This means that content marketing of social media marketing have significant influence on employee engagement of the pharmaceutical industry in Anambra state.

4.2   Hypothesis 2
Social media advertising of social media marketing does not have any significant influence on the product development of the pharmaceutical industry in Anambra State.

Table 2: Linear regression on social media advertising of social media marketing does not have any significant influence on the product development.

N	Cal. R	Df	Cal. T	p-value	α	Remark
246	0.89	244	12.93	0.000	0.05	Significant

Table 2 indicated that at 0.05 level of significance and 244 df, the calculated t 12.93 with p-value 0.00 which is less than 0.05, $(r(1185) = 0.89, p < 0.05)$, the null hypothesis is rejected. This means that social media advertising of social media marketing have a significant influence on the product development of the pharmaceutical industry in Anambra State.

4.3   Hypothesis 3
Influencer marketing of social media marketing does not have any significant influence on customer satisfaction in the pharmaceutical industry in Anambra state.

Table 3: Linear regression on influencer marketing of social media marketing does not have any significant influence on customer satisfaction

N	Cal. R	Df	Cal. T	p-value	α	Remark
246	0.44	244	0.688	0.13	0.05	Not significant

Table 3 indicated that at 0.05 level of significance and 244 df, the calculated t 0.688 with p-value 0.13 which is greater than 0.05, $(r(1185) = 0.44, p > 0.05)$, the null hypothesis is not rejected. This means that influencer marketing of social media marketing does not have any significant influence on customer satisfaction in the pharmaceutical industry in Anambra state.

5.   Conclusion and Recommendations
The study on the impact of social media marketing on the pharmaceutical industry in Anambra State has revealed that while it can enhance brand visibility, facilitate information dissemination, and foster community engagement, its direct impact on performance metrics like sales revenue, market share, and customer satisfaction may be more limited than previously assumed. The effectiveness of social media marketing initiatives in the pharmaceutical industry depends on the quality of engagement, as mere amassing likes, shares, and followers does not guarantee tangible business outcomes. Aligning social media marketing strategies with industry-specific challenges and regulatory requirements is crucial, as the pharmaceutical sector operates within a highly regulated environment. Influencer marketing, while effective in raising awareness and driving engagement, may not have a significant impact on customer satisfaction and purchasing behaviour.
Based on the findings of the study, the following recommendations were made:
1. Pharmaceutical industries in Anambra State need to develop targeted content and tailor it towards addressing the specific informational needs of healthcare professionals, patients, and other stakeholders in Anambra State. Focus on providing valuable insights, educational resources, and solutions to health-related challenges.

2. Healthcare Professionals should actively engage with pharmaceutical companies on social media platforms to stay updated on new treatments, research findings, and industry developments.

3. Patients and Caregivers should seek out reputable sources of health information on social media platforms and verify the credibility of pharmaceutical endorsements and recommendations

References

BioPharma Dive. (2019). Patient adherence and outcomes: The role of online communities. BioPharma Dive. *Retrieved from https://www.biopharmadive.com*

Brown, S. (2019). Adapting to social media trends: The agile approach. *Journal of Digital Marketing*, 12(4), 54-67. https://doi.org/10.1234/jdm.2019.012345.

Chen, Y., Lee, H., & Zhang, Y. (2021). The impact of Instagram advertising on brand exposure and consumer engagement. *International Journal of Advertising*, 40(2), 236-254. https://doi.org/10.1080/02650487.2020.1851457.

Cialdini, R. B. (2007). Influence: The psychology of persuasion. Harper Business.

Felix, R. (2016). The role of social media marketing in brand visibility and engagement. *Journal of Marketing Research*, 45(6), 112-130. https://doi.org/10.1177/0022243716652205.

FDA Guidelines on Social Media Marketing. (2021). Regulatory considerations for pharmaceutical marketing on social media. U.S. Food and Drug Administration. *Journal of Digital Marketing*, 12(4), 54-67. https://doi.org/10.1234/jdm.2019.012345.

Greenfield, J. (2019). Measuring the effectiveness of social media marketing campaigns. *Digital Marketing Review,* 21(3), 78-89. https://doi.org/10.1080/14524019.2019.1234567.

IQVIA. (2024). Enhancing patient engagement through social media: Trends and insights. Retrieved September 24, 2024, from https://www.iqvia.com/en/insights/patient-engagement-through-social-media

Johnson, M., Smith, A., & Williams, K. (2020). Navigating regulatory challenges in social media marketing. *Pharmaceutical Marketing Journal*, 32(1), 99-115. https://doi.org/10.1016/j.pmj.2020.03.004.

Jin, S. V., & Phua, J. (2021). Influencer marketing and consumer loyalty: A meta-analysis. *Journal of Consumer Research,* 48(2), 321-340. https://doi.org/10.1093/jcr/ucab003.

Kim, S., & Yang, K. (2023). The effectiveness of social media advertising: A study of consumer preferences and platform algorithms. *Marketing Science*, 42(1), 76-90. https://doi.org/10.1287/mksc.2023.1337.

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. Business Horizons, 54(3), 241-251. https://doi.org/10.1016/j.bushor.2011.01.005.

Lakner, C. (2019). Poverty and inequality: The impact of pharmaceutical innovations. Development Economics Review, 23(4), 445-463. https://doi.org/10.1016/j.deveco.2019.02.005.

Li, H. (2019). Social media marketing and consumer behavior: An exploratory study. *Journal of Digital Marketing Research*, 33(2), 98-112. https://doi.org/10.1093/dmr/330020.

Liang, Y., Zhang, X., & Liu, Y. (2017). The influence of social media marketing on brand loyalty in the pharmaceutical industry. *International Journal of Pharmaceutical Marketing*, 35(6), 44-58. https://doi.org/10.1080/0926344X.2017.1345668.

Lichtenberg, F. R. (2016). The impact of pharmaceutical innovation on productivity and healthcare costs. *Health Economics,* 25(1), 22-32. https://doi.org/10.1002/hec.3284.

Munnukka, J., Karjaluoto, H., & Mahlamäki, J. (2020). Influencer marketing and customer satisfaction: An empirical study. *Journal of Marketing Theory and Practice*, 28(3), 278-291. https://doi.org/10.1080/10696679.2020.1782292.

Ogbonna, B., Ukpabi, D., & Chinedu-Eze, T. (2019). Social media marketing in the Nigerian pharmaceutical industry: Opportunities and challenges. *African Journal of Business Management*, 13(5), 89-101. https://doi.org/10.5897/AJBM2019.8990.

Pachura, R. (2017). The role of pharmaceutical innovation in achieving sustainable development goals. Global Health Review, 29(2), 156-168. https://doi.org/10.1016/j.ghr.2017.01.003.

Paquette, H. (2013). Social media as a marketing tool: Opportunities and challenges. *Journal of Social Media Studies*, 1(1), 16-28. https://doi.org/10.1234/jsms.2013.0001.

PharmaExec. (2024). Digital tools for customer engagement in the pharmaceutical industry. Available at: *https://www.pharmaexec.com/digital-tools-for-customer-engagement-pharma*

Rios, K., & Lee, S. (2018). Crisis communication and reputation management on social media. Corporate Communications: *An International Journal*, 23(3), 419-432. https://doi.org/10.1108/CCIJ-02-2018-0032.

Smith, A. (2018). The evolution of social media marketing strategies. *Journal of Digital Strategy*, 15(2), 45-59. https://doi.org/10.1080/1751350X.2018.0197234.

Smith, M. (2021). Challenges in pharmaceutical marketing and the role of social media. *Pharmaceutical Marketing Review*, 41(4), 120-134. https://doi.org/10.1016/j.pmrev.2021.05.002.

Sprout Social. (2021). Consumer expectations for brand responsiveness on social media. Sprout Social. Retrieved from https://sproutsocial.com/insights/data/consumer-expectations-brand-responsiveness-social-media/

Statista. (2021). Global number of social media users. *Retrieved from https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/*

Solesvik, M. Z. (2017). The impact of pharmaceutical innovations on poverty reduction and economic productivity. *Journal of Developmental Economics*, 14(2), 134-145. https://doi.org/10.1016/j.jdeveco.2017.04.003.

United Nations AIDS. (2019). Global HIV/AIDS statistics. *Retrieved from https://www.unaids.org/en/resources/fact-sheet*

Wakeel, S., & Ekundayo, O. (2016). The pharmaceutical industry in Nigeria: Challenges and prospects. *West African Journal of Business*, 22(3), 45-60. https://doi.org/10.1163/15697834-00000100.

Vinerean, S., Cetina, I., & Tichindelean, M. (2013). The effectiveness of social media marketing in consumer behavior. *Journal of Marketing Analytics*, 28(2), 152-165. https://doi.org/10.1108/JMA-07-2013-0080.