



Digital Transformation and Tourism Promotion: Application of the Diffusion of Innovation Theory in Carnival Calabar, Nigeria

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ABSTRACT

Background: Digital transformation has shifted tourism promotion from traditional media to interactive digital platforms, making digital marketing essential for promoting cultural tourism events such as Carnival Calabar.

Objective: This study examined digital change in contemporary tourism through the Diffusion of Innovations Theory, focusing on the adoption and effectiveness of digital marketing strategies in promoting Carnival Calabar, Nigeria.

Method: A mixed-methods design was adopted. Data were collected from 231 stakeholders through structured questionnaires and documentary sources and analyzed using descriptive statistics and qualitative interpretation.

Results: Online advertisements, event websites, and influencer promotions were the most effective digital platforms influencing attendance. Content quality, internet access, influencer engagement, and funding enhanced digital promotion, whereas high campaign costs, ineffective influencer collaborations, and poor internet connectivity constrained its effectiveness.

Conclusion: Digital marketing is indispensable for promoting Carnival Calabar, but its success depends on the effective diffusion and adoption of digital innovations among stakeholders.

Unique Contribution: The study extends the application of the Diffusion of Innovations Theory to cultural tourism promotion in Nigeria by providing empirical evidence on digital tourism transformation.

Key Recommendation: Increased investment in digital infrastructure, stakeholder capacity building, strategic collaborations with influencers and media organizations, and culturally relevant digital content is recommended to enhance sustainable tourism promotion.

Keywords: Digital Change, Contemporary Tourism promotion, Diffusion of Innovation Theory, Carnival Calabar.



INTRODUCTION

In the contemporary digital communication era, promotion of cultural events has undergone a significant transformation driven by the rapid expansion of digital technologies and the growing dominance of online platforms in everyday social interaction. Traditional modes of event publicity, which previously relied on print media, radio, television, and physical outreach, are increasingly replaced or complemented by digitally mediated strategies that enable real-time engagement, global reach, and interactive communication. This shift has positioned digital marketing as a central instrument for visibility, audience engagement, and experiential branding within the events and tourism industry.

In Nigeria, this transformation is particularly evident in major cultural festivals such as Carnival Calabar, which has evolved into one of Africa's most prominent cultural tourism events. The carnival relies heavily on visibility, audience participation, and sustained media attention to maintain its relevance and international appeal. In recent years, digital platforms such as Facebook, Instagram, X (Twitter), YouTube, and TikTok have become central to its promotion, enabling organizers to showcase performances, costumes, street parades, and cultural expressions to both local and global audiences. These platforms also facilitate participatory engagement, allowing audiences to share, comment, and co-create promotional content.

Despite this growing reliance on digital tools, the adoption of digital marketing strategies in promoting Carnival Calabar remains uneven among stakeholders. Variations in digital literacy, institutional readiness, access to technological infrastructure, and perceived benefits of innovation influence this disparity. While some stakeholders, including digital marketing agencies, tourism boards, and influencers, readily adopt emerging tools, others integrate them more gradually due to structural and resource constraints. Against this backdrop, the study is anchored on the Diffusion of Innovation Theory, which provides a useful framework for understanding how digital marketing innovations are introduced, communicated, and adopted among stakeholders involved in Carnival Calabar promotion.

LITERATURE REVIEW

Digital Change in Contemporary Tourism

Digital change has become one of the most influential forces shaping contemporary tourism by transforming destination marketing, tourist engagement, and service delivery. The literature generally agrees that digital technologies have restructured the tourism value chain by enhancing accessibility, interactivity, and personalization. Rather than relying primarily on traditional intermediaries such as travel agencies, tourists increasingly obtain travel information, make reservations, and share experiences through digital platforms. This shift reflects a broader transition from provider-controlled tourism communication to digitally mediated and user-driven interactions. Although scholars agree on the transformative role of digital technologies, they differ in their emphasis on the mechanisms driving this transformation. Gretzel (2023) foregrounds the growing significance of artificial intelligence and big data analytics, arguing that predictive algorithms, recommendation systems, and chatbots enable tourism organizations to



anticipate visitor preferences and deliver personalized services. In contrast, Sigala (2024) focuses on the communicative dimension of digital transformation, maintaining that social media platforms have fundamentally altered destination branding by encouraging user-generated content, interactive storytelling, and real-time engagement. While both perspectives acknowledge the importance of digital technologies, Gretzel emphasizes operational intelligence and service optimization, whereas Sigala highlights communication, participation, and consumer influence.

Similarly, Xiang (2024) extends the discussion by examining the emergence of smart tourism technologies such as the Internet of Things (IoT), augmented reality, and virtual reality. Unlike studies that concentrate primarily on marketing and communication, Xiang argues that these technologies create immersive tourism experiences and contribute to sustainable destination management. Collectively, these studies demonstrate that digital transformation is multidimensional, encompassing technological innovation, marketing communication, visitor experience, and destination governance rather than representing a single technological development. Methodologically, however, much of the existing literature relies on quantitative surveys, technology adoption models, and consumer behaviour analyses. While these approaches provide valuable insights into technology acceptance, user satisfaction, and marketing effectiveness, they pay comparatively less attention to the linguistic and discursive processes through which tourism destinations construct digital identities and engage audiences. Consequently, the communicative dimensions of digital tourism remain underexplored despite the increasing dominance of digital media. Within the Nigerian context, emerging studies indicate that cultural tourism initiatives such as the Carnival Calabar and the Idoma International Carnival have increasingly adopted digital promotional strategies to expand audience reach and enhance destination visibility (Ogolekwu, et al, 2025). Nevertheless, these studies largely evaluate the effectiveness of digital marketing campaigns without critically examining how language, multimodal resources, and digital discourse shape audience perception, cultural representation, and tourist engagement.

Digital Promotional Ecosystems in Contemporary Event Management

Digital promotional ecosystems in contemporary event management represent an integrated network of platforms and strategies that have transformed how events are marketed, experienced, and evaluated. Unlike traditional promotional models, event marketing today operates within a dynamic digital environment characterized by interconnectivity, real-time engagement, and data-driven decision-making. Social media platforms such as Facebook, Instagram, X (formerly Twitter), and LinkedIn serve as central hubs for event promotion. These platforms enable organizers to disseminate visual and interactive content, including countdown campaigns, influencer collaborations, live updates, and storytelling strategies. Such approaches generate anticipatory engagement, especially for culturally rich events like Carnival Calabar, where visual spectacle is central to audience attraction (Wertime, 2021). Moreover, audiences actively participate in content circulation by sharing and commenting, thereby expanding organic reach.



Email marketing remains a key component of structured digital communication. According to Ogolekwu and Abochol (2026), digital convergence enhances cultural visibility by linking multiple platforms for audience engagement. Email communication allows organizers to send personalized updates, reminders, and promotional offers to segmented audiences, improving retention and conversion rates. Search engine optimization (SEO) and search engine marketing (SEM) are essential for ensuring event discoverability. SEO improves organic visibility in search results, while SEM targets users actively searching for related events through paid advertising strategies (Adegboyega, 2021). These tools enhance visibility in competitive digital spaces. Content marketing further strengthens engagement through blogs, videos, documentaries, and storytelling. Such narratives build emotional connection and credibility, particularly for cultural festivals like Carnival Calabar. Influencer marketing also plays a significant role in expanding reach and building trust by leveraging established online audiences (Chacon, 2021). Mobile technologies and event applications integrate ticketing, scheduling, navigation, and real-time updates into unified systems, improving user experience and participation (GSMA, 2022). Together, these tools form a cohesive ecosystem that enhances visibility, engagement, and participation. Digital promotional ecosystems reflect a shift toward integrated, participatory, and data-driven event marketing systems that redefine how cultural events are promoted and experienced.

Actor Networks and Stakeholder Interactions in Digital Event Promotion

Digital event promotion functions within a complex network of interconnected stakeholders whose interactions determine the success and reach of promotional campaigns. These stakeholders include event organizers, audiences, digital platforms, influencers, sponsors, government agencies, and media institutions. Each actor contributes uniquely to the production, circulation, and reception of promotional messages (Kotler et al., 2021). Event organizers occupy a central coordinating role within this network. They translate cultural and experiential values into compelling digital narratives that attract diverse audiences. Ogolekwu et al. (2022) argue that social migration networks mirror digital migration processes, where social mechanisms are used to promote experiential values. Organizers rely on integrated strategies combining social media, email marketing, content creation, and paid advertising.

Audiences are no longer passive recipients but active participants in promotional processes. Through liking, sharing, commenting, and user-generated content, they significantly influence message diffusion and visibility. In many cases, audience-generated content is perceived as more authentic than official promotions, increasing its persuasive power (Armstrong et al., 2020). Digital platforms such as social media networks and search engines function as intermediaries that regulate content visibility through algorithmic systems. These systems prioritize engagement, relevance, and user behavior, thereby shaping how promotional messages circulate (Kingsnorth, 2022). This introduces a technological layer of mediation in communication. Sponsors contribute financial resources in exchange for visibility and brand association, linking commercial interests with cultural expression (Eventbrite, 2020). Government institutions regulate digital communication through policies on data protection, advertising ethics, and public communication standards, ensuring accountability (Berman, 2021). In Nigeria and West Africa,



rapid digital adoption and mobile connectivity further shape these interactions (Boso et al., 2021). Digital event promotion operates as a networked system in which meaning, visibility, and engagement are co-produced through continuous stakeholder interaction.

Digital Media Convergence and the Transformation of Event Visibility

Digital media convergence refers to the integration of multiple communication channels that collectively enhance promotional reach, interaction, and audience engagement. In contemporary event promotion, convergence has transformed marketing from isolated communication efforts into synchronized, multi-platform systems that operate simultaneously across digital environments. Social media platforms enable continuous interaction loops in which users share, comment on, and remix content. This participatory culture significantly increases content visibility and viral potential (Ellis-Chadwick & Doherty, 2012). Email marketing complements this by providing structured communication through reminders, updates, and personalized messages that guide audience engagement (Järvinen & Taiminen, 2016). Search engines further enhance visibility by linking user intent to relevant content.

SEO improves organic ranking through keyword optimization, while SEM uses paid strategies to target users actively searching for related events (Chaffey & Smith, 2013). Content marketing strategies such as videos, live streaming, and storytelling deepen emotional engagement. Video content is especially effective for visually rich events like Carnival Calabar due to its high engagement potential (Statista, 2020). Mobile applications and event platforms integrate ticketing, scheduling, and updates into unified systems, improving user experience and participation (Luck & Lancaster, 2013). Comparative studies show differences in adoption patterns across regions. Developed countries such as the United States and the United Kingdom demonstrate structured and systematic integration of digital tools, while developing countries like Nigeria experience rapid but uneven adoption driven by mobile-first usage and youth engagement (Pew Research Center, 2019). In Nigeria, social media platforms dominate the promotional landscape, enabling real-time interaction and cultural storytelling for events such as Carnival Calabar (Alabi & Irefin, 2022). Audience engagement varies by demographic: younger users prefer Instagram and TikTok, while older audiences rely more on Facebook and email communication (Ayo & Okonkwo, 2021). Campaign effectiveness is typically measured through engagement rates, conversion metrics, ROI, and retention levels, supported by analytics tools such as Google Analytics (Eze et al., 2023). Despite challenges like algorithmic fluctuations and resource limitations, growing digital literacy and influencer collaboration continue to strengthen digital marketing diffusion in Nigeria's cultural and tourism sectors (Okafor, 2023).

THEORETICAL FRAMEWORK

This study is anchored on the Diffusion of Innovations (DOI) Theory developed by Everett Rogers (1962), which explains how new ideas, technologies, and practices are communicated and adopted within a social system over time. The theory provides a suitable framework for examining the adoption of digital marketing innovations in the promotion of Carnival Calabar, Nigeria. In this study, digital tools such as social media platforms, influencer marketing, event



websites, search engine optimization, and mobile engagement applications are conceptualized as innovations whose effectiveness depends on stakeholder awareness, communication channels, and willingness to adopt them. Rogers identifies five innovation attributes such as relative advantage, compatibility, complexity, trialability, and observability that influence adoption decisions. The theory also categorizes adopters into innovators, early adopters, early majority, late majority, and laggards, reflecting the varying pace at which tourism stakeholders embrace digital marketing strategies. Despite criticisms of its linear orientation, the DOI Theory remains appropriate for explaining how digital innovations enhance tourism promotion, audience engagement, and the visibility of Carnival Calabar within Nigeria's evolving digital tourism landscape.

METHODOLOGY

This study adopted a mixed-methods research design, integrating quantitative and qualitative approaches to examine digital change in contemporary tourism within the framework of the Diffusion of Innovation Theory, focusing on Carnival Calabar, Nigeria. Primary data were gathered through structured questionnaires on digital marketing strategies, stakeholder roles, impacts, challenges, platform effectiveness, and socio-demographic variables, while secondary data were sourced from official records and relevant literature. The population comprised 695 stakeholders, including government agencies, media organizations, and hospitality operators, with a sample size of 232 selected using cluster and simple random sampling. Data were analyzed using descriptive, inferential, and qualitative methods. Three hypotheses were tested using Pearson Product Moment Correlation. This is mathematically represented as:

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{[(N\sum x^2) (\sum x)^2] [N\sum Y^2 - (\sum Y^2)]}}$$

Where: r= Correlation Coefficient.

X= Number of variables

Y²= Square of Y variables

N= Number of variables

∑ =Summation

∑X= Sum of X (independent variable)

∑y = Sum of Y (dependent variable)

x = (Digital marketing strategies variables).

y = (Impact of digital marketing variables)

The data collected from the field was analyzed using SPSS (Statistical Package for the Social Sciences). The rationale for adopting the SPSS in this research is that, it's a widely utilized software tool for statistical analysis in research, offering a variety of features suitable for quantitative data analysis, which makes it indispensable across numerous disciplines. Additionally, SPSS facilitates efficient data entry and organization, allowing researchers to input and structure data systematically in a tabular format.



DATA PRESENTATION AND DISCUSSION

This chapter presents and discusses the findings of the study on the role of digital marketing in the promotion of Carnival Calabar. The results are organized according to the study objectives and analyzed using frequency and percentage distributions. The discussion is anchored on the Diffusion of Innovation Theory to explain how digital marketing strategies influence tourism promotion and participation.

Influence of Digital marketing on Carnival Calabar participation

This section presents and discusses the empirical findings of the study on the role of digital marketing platforms in influencing attendees’ decisions to participate in Carnival Calabar. It focuses on the patterns of response generated from the field data, highlighting the most and least influential digital channels used in the promotion of the event.

Table 1. Digital marketing strategies platforms that influenced decision to attend the Carnival Calabar

s/n	Digital marketing strategies platforms that influenced decision	Frequency	Percentage
1	Facebook	5	2.16
2	Instagram	6	2.60
3	Twitter/X	13	5.63
4	LinkedIn	7	3.03
5	TikTok	7	3.03
6	WhatsApp	11	4.76
7	YouTube	9	3.89
8	Event website	45	19.48
9	Email newsletters	20	8.66
10	Online ads	69	29.87
11	Influencer promotions	29	12.55
12	Others (please specify), Google Ads, Online press release, Mobile Apps	10	4.33
	Total	231	100

Source: Fieldwork (2025)

The findings presented in Table 1 reveal the digital marketing platforms influencing attendance at Carnival Calabar within the context of digital transformation and the Diffusion of Innovation Theory. The results show a clear dominance of specific digital channels, particularly online advertisements, the official event website, and influencer-driven promotions, indicating that awareness and persuasion are largely driven by highly visible and strategically targeted digital innovations. Online advertisements emerged as the most influential platform (29.87%), suggesting that paid digital media campaigns remain the most effective means of reaching a broad tourism audience. Within the Diffusion of Innovation framework, online ads function as key communication channels that accelerate awareness and encourage early adoption of tourism events. The event website also recorded a significant influence (19.48%), highlighting the importance of centralized digital information sources in tourism decision-making. This suggests that potential attendees increasingly rely on official platforms to verify authenticity, access schedules, and make informed choices, aligning with the theory’s emphasis on information accessibility in adoption processes. Influencer promotions (12.55%) further demonstrate the growing role of opinion leaders as change agents who shape perceptions, reduce uncertainty, and encourage participation through social proof.



Moderately influential channels such as email newsletters (8.66%), Twitter/X (5.63%), and WhatsApp (4.76%) support sustained engagement and direct communication, facilitating movement from awareness to decision stages in innovation adoption. Lower-ranking platforms including YouTube (3.89%), LinkedIn (3.03%), TikTok (3.03%), Instagram (2.60%), and Facebook (2.16%) indicate that while social media remains relevant, its influence is more fragmented, with decision-making driven more by structured promotional tools than passive content exposure. The 4.33% attributed to Google Ads, online press releases, and mobile applications reflects emerging digital tools that enhance visibility and accessibility. Overall, the findings show that Carnival Calabar promotion operates within a hybrid digital ecosystem where advertisements, official websites, and influencers play dominant roles in accelerating diffusion, reducing uncertainty, and facilitating tourism adoption in Nigeria's evolving digital landscape.

Challenges faced in digital marketing strategies and promotion of Carnival Calabar

This section presents and discusses the major challenges affecting the implementation of digital marketing strategies in the promotion of Carnival Calabar. It highlights the key constraints identified from respondents and explains how these challenges influence the effectiveness of digital tourism promotion. The discussion is further situated within the framework of the Diffusion of Innovation Theory to show how such barriers impact the communication, adoption, and overall success of Carnival Calabar as a contemporary tourism innovation.

Table 2. Challenges faced in digital marketing and promotion of the carnival Calabar

s/n	Challenges faced when engaging in digital marketing	Frequency	Percentage
1.	Limited access to digital platforms	6	5.59
2.	Lack of sufficient knowledge or skills	16	6.93
3.	High cost of running digital marketing campaigns	69	29.87
4.	Difficulty in targeting the right audience	15	6.49
5.	Over-saturation of event promotions online	7	3.03
6.	Ineffective influencer or partner collaborations	39	16.88
7.	Poor internet connectivity or technical issues	32	13.85
8.	Insufficient time to manage digital marketing tasks	19	8.25
9.	Lack of audience engagement despite promotions	10	4.33
10.	Difficulty in measuring the success of campaigns	9	3.89
11.	Inconsistency in brand messaging	6	2.59
12.	Others (please specify), collecting online feedback, managing the carnival's website etc	3	1.30
	Total	231	100

Source: Fieldwork (2025)



The findings presented in Table 2 highlight the key challenges encountered in implementing digital marketing strategies for the promotion of Carnival Calabar within the broader context of digital transformation in contemporary tourism and the Diffusion of Innovation Theory. The results show that despite increasing adoption of digital platforms, several structural, technical, and managerial constraints continue to limit campaign effectiveness. The most significant challenge is the high cost of running digital marketing campaigns (29.87%). While digital platforms offer wide reach and efficiency, sustaining visibility through paid advertisements and sponsored content remains financially demanding. Within the Diffusion of Innovation Theory, this cost barrier slows diffusion by reducing continuous exposure and limiting sustained communication necessary for widespread adoption. Ineffective collaboration with influencers or partners (16.88%) also emerged as a major constraint, reflecting weak coordination between tourism promoters and digital opinion leaders. This reduces message credibility and weakens influencer impact as change agents in innovation adoption. Poor internet connectivity and technical issues (13.85%) further highlight infrastructural limitations in Nigeria, disrupting content delivery and real-time engagement.

Other challenges include insufficient time for digital marketing management (8.25%), lack of adequate skills (6.93%), and difficulty targeting the right audience (6.49%). These indicate gaps in human capacity and strategic segmentation, which hinder effective message diffusion. Limited platform access (5.59%) and low audience engagement (4.33%) also point to accessibility and interaction barriers. Furthermore, difficulty in measuring campaign success (3.89%) and over-saturation of online promotions (3.03%) reduce the ability to evaluate impact and contribute to audience fatigue. Inconsistency in brand messaging (2.59%) and operational issues such as feedback collection and website management (1.30%) further demonstrate weak integration of digital marketing strategies. The findings reveal that although digital marketing is central to promoting Carnival Calabar, its effectiveness is constrained by financial, technical, infrastructural, and managerial challenges. From the perspective of the Diffusion of Innovation Theory, these barriers collectively slow communication flow, reduce exposure, and hinder the full adoption of Carnival Calabar as a leading cultural tourism innovation in Nigeria.

Determinants of effectiveness digital marketing strategies and promotion on Carnival Calabar

This section presents the key determinants influencing the effectiveness of digital marketing strategies in the promotion of Carnival Calabar. The findings highlight a range of factors that shape how digital tools and platforms are utilized to enhance tourism promotion. These determinants reflect both technological and human elements that contribute to the successful diffusion of digital innovations within the tourism sector, particularly in line with the objectives of the study on contemporary tourism transformation.



Table 3. Determinants of effectiveness of digital marketing strategies for promoting carnival Calabar

s/n	Effectiveness of digital marketing strategies	Frequency	Percentage
1.	Access to internet social media	35	15.1
2.	Quality of content	48	20.78
3.	Use of influencers	31	13.42
4.	Social media engagement	10	4.33
5.	Training of promoters	12	5.19
6.	Availability of funds	28	12.12
7.	Use of local languages and culture	16	6.93
8.	Partnering with media and business	13	5.63
9.	Understanding the audience	11	4.76
10.	Feedback monitoring	9	3.90
11.	Timing of promotion	12	5.19
12.	Others (please specify), use of multiple platform, mobile friendly content e.t.c	6	2.60
	Total	231	100

Source: Fieldwork (2025)

The determinants of the effectiveness of digital marketing strategies in the promotion of Carnival Calabar, as presented in Table 3, reflect key factors influencing the adoption and success of digital innovations within the framework of the Diffusion of Innovation Theory. The findings indicate that the quality of content constitutes the most significant determinant, accounting for 20.78 percent of responses. This suggests that engaging, visually appealing, and culturally relevant content plays a central role in driving audience interest and enhancing the visibility of Carnival Calabar within digital tourism spaces. Closely related to this is access to the internet and social media, which recorded 15.15 percent. This highlights the critical role of digital infrastructure in facilitating the diffusion of tourism-related innovations, as stakeholders and audiences must have reliable connectivity to engage with promotional materials. The use of influencers (13.42 percent) further demonstrates the growing importance of opinion leaders in accelerating adoption, consistent with Rogers' assertion that interpersonal channels significantly influence the rate of innovation diffusion.

In addition, availability of funds (12.12 percent) emerged as a key determinant, indicating that financial capacity directly affects the scale and sustainability of digital marketing campaigns. Cultural relevance also plays a notable role, as 6.93 percent of respondents emphasized the use of local languages and cultural elements. This reflects the importance of contextual adaptation in tourism promotion, ensuring that digital content resonates with both local and international audiences. Other contributing factors include partnerships with media and businesses (5.63 percent), training of promoters (5.19 percent), and timing of promotions (5.19 percent), all of which enhance coordination and strategic delivery of digital campaigns. Furthermore, audience understanding (4.76 percent) and feedback monitoring (3.90 percent)

underscore the importance of responsiveness and iterative improvement in digital engagement strategies. Finally, the use of multiple platforms and mobile-friendly content (2.60 percent) highlights the need for platform diversification and mobile optimization in contemporary digital tourism marketing. Collectively, these findings demonstrate that the effectiveness of digital marketing for Carnival Calabar is shaped by a combination of technological access, content quality, financial capacity, cultural relevance, and strategic communication practices, all of which align with the principles of diffusion of innovation in contemporary tourism promotion.

RESULT

The findings indicate that digital marketing significantly influences attendance at Carnival Calabar. Online advertisements, event websites, and influencer promotions are the most effective channels, enhancing visibility, credibility, and audience engagement for tourism decisions. Social media platforms are used but are less influential, suggesting structured tools are more impactful. Effectiveness depends on content quality, internet access, funding, influencer engagement, and cultural relevance. However, high costs, poor collaboration, limited skills, and infrastructural challenges constrain outcomes. Strategic communication and resource availability are essential.

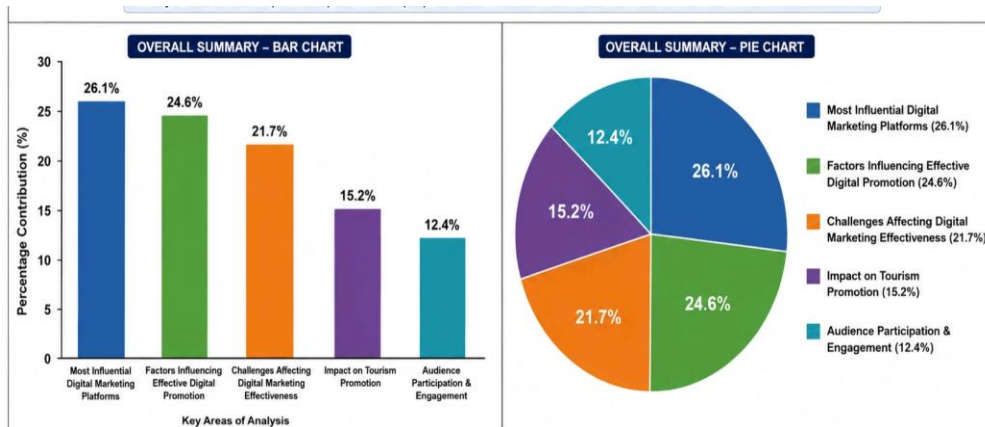


Figure 1. Consolidated Overview of the Role of Digital Marketing in the Promotion of Carnival Calabar

The charts present a consolidated overview of the study findings on the role of digital marketing in promoting Carnival Calabar. The bar chart shows the comparative contribution of key thematic areas, with most influential digital marketing platforms recording the highest influence, followed closely by factors affecting effective digital promotion and challenges limiting effectiveness. Lower but still significant contributions are seen in impact on tourism promotion and audience participation and engagement. Similarly, the pie chart illustrates the proportional distribution of these same findings, confirming that platform influence and enabling factors dominate overall responses, while challenges and audience engagement account for smaller but meaningful shares. Overall, both charts indicate that digital marketing plays a strong, multi-



dimensional role in shaping awareness, participation, and the success of Carnival Calabar, consistent with the Diffusion of Innovation Theory.

CONCLUSION

Digital change in contemporary tourism has significantly enhanced the promotion of Carnival Calabar through the effective use of online advertisements, event websites, and influencer marketing. These platforms emerged as the most influential communication channels, underscoring the growing importance of targeted digital strategies in reaching and engaging tourism audiences. The study found that content quality, internet accessibility, adequate funding, and influencer engagement are critical determinants of successful digital promotion. Despite the increasing adoption of digital marketing innovations, several challenges persist, including high campaign costs, weak stakeholder collaboration, limited digital skills, and poor internet connectivity. Consistent with the Diffusion of Innovation Theory, the findings indicate that successful adoption of digital marketing tools depends on effective communication channels, stakeholder readiness, and the perceived benefits of innovation. The study concludes that strengthening digital infrastructure, investing in quality content, enhancing stakeholder partnerships, and improving digital competencies are essential for sustaining the global competitiveness and tourism appeal of Carnival Calabar.

Ethical Clearance

Ethical approval for this study was obtained from the Department of Tourism Studies, University of Calabar, Nigeria. Participation was voluntary, and informed consent was obtained from all respondents prior to data collection. Participants were informed that the study was conducted solely for academic purposes, and confidentiality and anonymity were maintained throughout the research process.

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Conflict of Interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.



Author's Contribution

Theresa Azin Mbu conceived and designed the study, collected and analyzed the data, interpreted the findings, prepared the manuscript, and approved the final version for publication. The author accepts full responsibility for the content, originality, and integrity of this manuscript.

Artificial Intelligence (AI) Use Disclosure

During the preparation of this manuscript, the author used ChatGPT (OpenAI) to assist with language editing, grammar refinement, readability improvement, and organizational structure. All AI-generated suggestions were carefully reviewed, revised, and verified by the author, who accepts full responsibility for the accuracy, originality, and integrity of the manuscript.

Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request.

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REFERENCES

- Adegboyega, F. (2021). The importance of SEO in promoting large-scale events in Nigeria. *Journal of Digital Strategies in Africa*, 4(2), 88–97.
- Alabi, F., & Irefin, I. (2022). Social media advertising effectiveness in Nigeria: A focus on Facebook and Instagram. *Journal of Digital Marketing in Africa*, 4(1), 33–49.
- Ayo, B., & Okonkwo, C. (2021). Enhancing email marketing effectiveness through segmentation: A Nigerian perspective. *Journal of Digital Marketing & Strategy*, 5(3), 75–89.
- Berman, S. J. (2021). Regulating digital marketing: Challenges and compliance under GDPR and CCPA. *Journal of Digital Law & Policy*, 14(1), 25–39.
- Boso, N., Adeleye, I., & Ibeh, K. (2021). Digital marketing capabilities and international performance of African SMEs. *Thunderbird International Business Review*, 63(3), 245–256.
- Chacon, A. (2021). Influencer marketing in global fashion events: A strategic overview. *Global Media Journal*, 19(1), 101–115.



- Chaffey, D., & Smith, P. R. (2013). *E-marketing excellence: Planning and optimizing your digital marketing*. Routledge.
- Ellis-Chadwick, F., & Doherty, N. F. (2012). Web advertising: The role of e-mail marketing. *Journal of Business Research*, 65(6), 843–848.
- Gretzel, U. (2023). Artificial intelligence and smart tourism: Current developments and future directions. *Information Technology & Tourism*, 25(1), 1–12.
- GSMA. (2022). The Mobile Economy: Sub-Saharan Africa 2022. <https://www.gsma.com/mobileeconomy/sub-saharan-africa/>
- Järvinen, J., & Taiminen, H. (2016). Harnessing marketing automation for B2B content marketing. *Industrial Marketing Management*, 54, 164–175.
- Kingsnorth, S. (2022). *Digital marketing strategy: An integrated approach to online marketing* (3rd ed.). Kogan Page.
- Kotler, P., Armstrong, G., Harris, L. C., & Piercy, N. (2021). *Principles of marketing (8th European ed.)*. Pearson.
- Ogolekwu, O., & Abochol, S. I. (2026). Semantic shifts in cross-linguistic translation: A lexico-syntactic study of Idoma and English. *Academic Journal of Interdisciplinary Studies*, 15(1), 144. <https://doi.org/10.36941/ajis-2026-0099>
- Ogolekwu, O., Innocent, O., & Innocent, O. (2025). Lexical formation: A socio-onomastic analysis of disease terminologies in the Idoma language. *Ahyu: A Journal of Language and Literature*, 8, 16–39. <https://doi.org/10.56666/ahyu.v8i.170>
- Ogolekwu, O., Jibrin, M. A. & Agu, E. C. (2022). *Effects of Language Variations on Gender Communication: A Study of Idoma Language*. Ibadan: Agunbay Publishers.
- Okafor, O. (2023). The role of multimedia content in social media event marketing in Nigeria. *Nigerian Journal of Media and Communication Studies*, 6(2), 84–97.
- Pew Research Center. (2019). *Social media use in developing and developed countries*. <https://www.pewresearch.org> (Retrieved on 09/06/2026)
- Sigala, M. (2024). Social media and digital transformation in tourism marketing: Emerging trends and implications. *Journal of Hospitality and Tourism Management*, 58, 45–54.



Statista. (2020). *Most effective types of content for video marketing worldwide*.
<https://www.statista.com/statistics/870925/video-marketing-effective-content-types-worldwide/> (Retrieved on 09/06/2026)

Wertime, D. (2021). *Digital marketing trends: Leveraging platforms for brand engagement*.
Harvard Business Review. <https://hbr.org/2021/03/digital-marketing-trends>

Xiang, Z. (2024). *Smart tourism technologies and destination competitiveness in the digital era*.
Tourism Management Perspectives, 49, 101173.