Contribution of Carnival Calabar to Hotel Occupancy Rates and Revenue Generation in Calabar Municipality, Cross River State, Nigeria

[1]Izaye, Paul; [2]Eja, Iwara Eja.; [3]Anake, Clement Bekongfe.; [4]Offionor, Felix Odey & [5]Echeng, Kitu Evale

Department of Hospitality and Tourism Management

University of Calabar

Corresponding Email: izayepaul@yahoo.com

DOI: https://doi.org/10.60787/tjesds.vol2no1.116

Abstract

This study examined the contribution of Carnival Calabar to hotel occupancy rates and revenue generation in Calabar. The study specifically assessed the extent to which the carnival influences hotel occupancy and revenue growth within the hospitality sector. A descriptive survey research design was adopted for the study. Data were collected from hotel managers, administrative staff, and frontline employees drawn from selected registered hotels in Calabar Municipality. The study population comprised 1,521 respondents, while a sample size of 384 was determined using the Saunders, Lewis, and Thornhill finite population formula. Stratified and purposive sampling techniques were employed, while questionnaires, interviews, and documentary review served as instruments for data collection. Data were analyzed using descriptive statistics and Pearson Product-Moment Correlation Coefficient. Findings revealed that Carnival Calabar significantly increases hotel occupancy rates, with 52.1% of respondents indicating high or very high increases in occupancy during the carnival period. The street parade emerged as the peak booking period, accounting for 31.0% of hotel patronage. Revenue generation also increased considerably, as 70.1% of respondents reported varying levels of revenue growth during the carnival season. Correlation analysis further revealed a significant positive relationship between carnival activities and hotel revenue growth ($r = 0.412$, $p < 0.001$). The study concludes that Carnival Calabar serves as a major catalyst for hotel industry growth and tourism development in Calabar Municipality. The study therefore recommends improved carnival programming, enhanced tourism marketing, and quality service delivery by hotel operators to sustain increased patronage and revenue generation.

Keywords: Carnival Calabar, hotel occupancy, revenue generation, hospitality industry, Calabar Municipality, Cross River State.

INTRODUCTION

Carnival events have increasingly become strategic drivers for the growth and development of the hotel industry, particularly in regions that leverage cultural celebrations as key tourism attractions. Events such as the Calabar Carnival in Nigeria exemplify how large-scale, well-managed cultural festivals can stimulate demand for hospitality services, attract domestic and international tourists, and generate substantial revenue for local hotel establishments. According to Mpuon, Etim, Offiong, and Enouh (2021), Carnival tourism has emerged as a major catalyst for hospitality and hotel industry development worldwide, providing both economic stimulus and cultural visibility for host cities. In developed nations, large-scale carnival and festival events such as Rio de Janeiro's Carnival in Brazil, Venice Carnival in Italy, and Patras' Carnival in Greece have demonstrated the capacity of festivals to attract millions of international visitors, generate substantial revenue for local hotels, and create temporary employment opportunities in the hospitality and service sectors (Pappa, Didaskalou, Kontogeorgis, & Filos, 2022).

In Nigeria, the Calabar Carnival has become a flagship example of how a tourism festival can influence both city development and the growth of the hotel industry. The event draws thousands of domestic and international tourists annually, significantly boosting hotel occupancy rates and generating revenue streams that support the expansion of hospitality services (Ntamu, Akawu, & Agum, 2023). Within Cross River State, particularly in Calabar Municipality, the Carnival Calabar event has demonstrated tangible impacts on hotel industry development and community livelihoods. Empirical studies show that the influx of visitors during the festival stimulates hotel occupancy, enhances revenue generation, and fosters employment both directly within hotels and indirectly through associated tourism services (Balogun & Nkebem, 2022; Ntamu et al., 2023). The local government's involvement in festival management, coupled with strategic marketing and collaboration with hotel operators, has reinforced the city's reputation as a leading tourism destination in Nigeria. This symbiotic relationship underscores the capacity of festival tourism to catalyze infrastructural investments in the hospitality industry, including hotel expansions, renovations, and service quality improvements (Okwajie et al., 2024).

Beyond operational concerns, the broader socio-economic implications of Carnival Calabar for hotel operators, employees, and the host community remain insufficiently explored. While the carnival is widely regarded as a catalyst for job creation and local income generation, there is a need to critically examine the depth and distribution of these benefits. Questions persist regarding whether gains are equitably shared among hotel owners, workers, and surrounding communities, and whether the economic effects are temporary or contribute to sustained local development.

Despite their importance, these factors have not been comprehensively analyzed in relation to hotel performance during the carnival. Without such analysis, it is difficult to determine how these variables interact to shape tourists' experiences and future demand for hospitality services in Calabar Municipality. It is foregoing that the study seeks to evaluate the festival's contribution to hotel occupancy and revenue generation in Calabar municipality, Cross River State, Nigeria.

Objectives of the study

1. Examine the contribution on carnival Calabar to hotel occupancy rate in Calabar Municipality
2. Assess the contribution of carnival Calabar to the revenue generation in Calabar Municipality

Literature review

Impact of Carnival on hotel occupancy and revenue

Carnival events have consistently been recognized as significant drivers of hotel occupancy and revenue generation across various global contexts. Festivals create temporal spikes in tourist arrivals, which hotels leverage to optimize room rates and maximize income. For instance, Beck et al. (2021) highlight that cruise line brands that align their itineraries with major carnival events are able to strategically manage room inventory and pricing, resulting in optimized revenue streams. The study demonstrates that well-timed event participation allows hospitality operators to capture high-paying tourists while managing occupancy efficiently, emphasizing the economic potential of festival-driven tourism. Similarly, Nguyen, Yu, and Lirn (2022) assert that revenue efficiency in the cruise and hospitality sectors is strongly influenced by seasonal events, with cultural and leisure festivals acting as catalysts for higher room demand and ancillary service utilization.

In European contexts, carnivals and large-scale events have been shown to significantly influence hotel key performance indicators. De Sousa Bento (2023) analyzed the Lisbon Carnival and observed substantial increases in hotel occupancy and average daily rates during festival periods, with some establishments reporting occupancy levels exceeding ninety percent. The study highlighted that not only do hotels benefit from higher room utilization, but restaurants, bars, and event venues within hotel premises also experience a surge in patronage. Bento, Almeida, and Jiménez-Caballero (2022) further illustrated the impact of the Web Summit in Lisbon, where hotels reported marked increases in revenue per available room (RevPAR), demonstrating that well-promoted events create predictable demand spikes that allow hotels to adopt dynamic pricing strategies. These findings underscore the critical relationship between event tourism and revenue maximization in urban hotel markets.

Cultural festivals, beyond their immediate economic impact, also offer opportunities for strategic revenue management and long-term occupancy optimization. Piga and Melis (2021) examined cultural events in Italy and found that hotels with effective pre-event marketing, package deals, and partnerships with event organizers consistently experienced higher occupancy and revenue during festival periods. Their study highlighted the importance of aligning hotel promotional strategies with the event calendar, including leveraging early bookings, group packages, and targeted marketing to tourists. This coordination not only increases occupancy but also enhances revenue predictability, enabling hotels to better plan staffing, inventory, and service delivery during peak periods.

In the African context, carnival events have similarly demonstrated strong impacts on hotel performance. Adanse, Khayiya, and Maranga (2024) studied three-to five-star hotels in Ghana and observed that hotels implementing optimal room occupancy strategies during high-demand festivals were able to maximize revenue, even during slack periods surrounding the events. Hotels that combined flexible pricing with targeted promotions for both local and international tourists achieved higher RevPAR and total revenue, highlighting the importance of proactive revenue management in festival-driven hospitality markets. This suggests that African cities hosting carnivals, including Calabar, can leverage festival periods to optimize hotel operations, attract diverse visitor segments, and strengthen the local tourism economy.

Tourist expenditure patterns during carnival events also play a critical role in revenue generation for hotels. Almeida and Garrod (2022) noted that visitors attending events tend to spend more on accommodation, dining, and entertainment when the event is culturally significant or internationally recognized. Their study emphasized that hotels located near festival venues or integrated with event activities capture higher room rates and increased patronage for food and beverage services. This illustrates the cascading economic benefits of festivals, where hotel revenue growth is complemented by ancillary service utilization, creating a comprehensive impact on hospitality profitability.

Integrated revenue strategies have been identified as essential for sustaining hotel profitability during carnival events. Pons, Noone, and Johns (2025) demonstrated a data-driven approach for the Park Hotel, where forecasting demand linked to local events enabled better pricing, inventory management, and service delivery. By analyzing historical occupancy trends and visitor demographics, hotels can anticipate demand surges, adjust rates dynamically, and optimize room allocation to maximize revenue. Collectively, these studies highlight that carnivals, whether in Europe, Africa, or globally, consistently influence hotel occupancy and revenue, providing both immediate financial gains and long-term strategic opportunities for the hospitality industry.

Event Portfolio Theory by Getz, D. (2005)

Event Portfolio Theory is a framework that conceptualizes the strategic management of multiple events within a destination to achieve a range of economic, social, cultural, and environmental benefits. The theory defines an event portfolio as a collection of diverse but interrelated events that are planned and managed in a coordinated manner to enhance the destination's overall appeal, stimulate tourism demand, and promote sustainable development. It emphasizes that the combined impact of multiple events can be greater than the sum of individual events, as synergies between events can optimize resource use, attract repeat visitors, and generate consistent economic activity throughout the year. The theory also underscores the importance of balancing event types, sizes, and themes to cater to diverse market segments while ensuring alignment with the destination's strategic objectives.

Basic Assumptions of Event Portfolio Theory:

1. Events within a destination are interdependent and should be strategically coordinated rather than managed in isolation.
2. A diversified portfolio of events enhances destination competitiveness, tourism demand, and socio-economic benefits.
3. Events contribute to both short-term economic gains (e.g., hotel occupancy, revenue) and long-term development goals (e.g., community engagement, cultural preservation).
4. Effective event portfolio management requires stakeholder collaboration, integrated planning, and alignment with broader destination strategies.

Event Portfolio Theory is highly relevant to the study of Carnival Calabar and its impact on hotel industry development. By framing Carnival as a core component of a wider portfolio of events within

Calabar Municipality, the theory helps explain how the festival can drive hotel occupancy, revenue generation, and socio-economic benefits for the host community. Its emphasis on strategic coordination aligns with the need for effective marketing, infrastructure planning, and service quality management in accommodating tourists. The theory has been widely accepted in tourism and event management scholarship, although critics argue that its application can be complex in practice, requiring high levels of stakeholder coordination and data-driven decision-making that may be challenging in resource-limited contexts. Nonetheless, its principles are suitable for this study, as they provide a structured approach to understanding how Carnival Calabar interacts with the hotel sector, tourism demand, and community development, offering both theoretical and practical insights into maximizing the benefits of festival tourism.

Methodology

Research Design

This study adopted a descriptive research design with a survey-based approach, which is suitable for examining the impact of Carnival Calabar on hotel occupancy, revenue, and related operational factors in Calabar Municipality.

Study area

The study focuses on Calabar Municipality, located in the southern part of Cross River State, Nigeria, between latitudes 4°57′N and 5°12′N and longitudes 8°19′E and 8°35′E. As the state capital and a major urban center in the South South geopolitical zone, Calabar serves as the administrative, economic, and cultural hub of Cross River State. Its strategic location, near the Atlantic Ocean and bounded by the Great Kwa River to the northeast and the Calabar River to the south, positions it as a prime destination for tourism and hospitality development.

Population and sample size of the Study

The population of this study comprises stakeholders directly involved in or affected by Carnival Calabar and the hotel industry within Calabar Municipality. Specifically, the population was derived from selected registered and operational hotels in the municipality, covering high-end, mid-range, and budget establishments. These include Hogis Luxury Suites, Monty Suites Calabar, Axari Hotel & Suites, Metropolitan Hotel, Channel View Hotel, Marian Hotels Limited, Tinapa Lakeside Hotel, UGWIS Hotels & Suites, Dannic Hotel Calabar, Orange Resort, Hotel Icon, Global Dreams Hotel, Achieves Hotel, Planet Guesthouse, Boston Hotel Annex, Joranny Hotel, Petesville Hotels, and De Grand Hotel and Rooftop. From these establishments, hotel managers, administrative staff, and frontline employees formed a core part of the study population, as they are directly responsible for hotel operations, service delivery, marketing, and revenue management during the Carnival period. The estimated study population is approximately 1,521. While the sample size was determined Using the Saunders, Lewis and Thornhill finite population determinant arriving at 384 sample size for the study.

Methods of data collection and analysis

The study employed a combination of questionnaires, interviews, and documentary review to collect data relevant to the objectives. Data for this study were collected through both primary and secondary sources. This study adopted a stratified and purposive sampling technique in line with how the population was derived from selected hotels in Calabar Municipality. Data collected for this study were analyzed using both descriptive and inferential statistical techniques. Descriptive statistics, such as percentages, frequencies while hypothesis was tested using Pearson Product-Moment Correlation Coefficient.

Result

Demographic characteristics of respondents

Table 1 presents demographic information of respondents. The age distribution reveals that most respondents are within the youthful and economically active brackets of 26–35 years (27.9 per cent) and 18–25 years (23.2 per cent). These groups represent a vibrant workforce and active participants in tourism and hospitality, reflecting the role of young people in both service provision and consumption during Carnival Calabar. The middle-aged categories of 36–45 years (19.5 per cent) and 46–55 years (15.9 per cent) also feature strongly, highlighting the involvement of more experienced personnel and business owners in the hospitality sector. Respondents aged 56 years and above (13.5 per cent) provide perspectives rooted in experience and long-term participation in the industry. Gender distribution shows that male respondents (54.9 per cent) slightly outnumber females (45.1 per cent), which suggests that while both genders are significantly represented, men are more engaged in the tourism and hospitality activities linked to Carnival Calabar.

Educational qualifications of respondents further enhance the reliability of the study's findings. The data reveal that the majority hold a Bachelor's degree (31.0 per cent), followed by diploma or NCE holders (21.6 per cent) and those with postgraduate qualifications (21.4 per cent). This high level of educational attainment reflects a pool of respondents who are well informed and capable of providing thoughtful and analytical responses to issues relating to hotel performance and the socio-economic impact of Carnival Calabar. Respondents with secondary education (15.9 per cent) and primary education (10.2 per cent) also form part of the study, representing individuals with practical, ground-level experiences within the hospitality sector.

Table 1: Demographic characteristics of respondents

Demography	Options	Frequency	Percentage
Age group	18–25 years	89	23.2
	26–35 years	107	27.9
	36–45 years	75	19.5
	46–55 years	61	15.9
	56 years and above	52	13.5
	Total	384	100.0
Gender	Male	211	54.9
	Female	173	45.1
	Total	384	100.0
Level of education	Primary school	39	10.2
	Secondary school	61	15.9
	Diploma/NCE	83	21.6
	Bachelor's degree	119	31.0
	Postgraduate degree	82	21.4
	Total	384	100.0

Source: Researcher's fieldwork, 2025.

Contribution of Carnival Calabar to Hotel Occupancy Rates

Analysis in figure 1 presents information on carnival contribution to hotel occupancy rate. The findings indicate that a significant proportion of respondents perceive a strong impact, with 26.8 per cent reporting a very high increase and 25.3 per cent noting a high increase. Together, this accounts for more than half of the responses, suggesting that Carnival Calabar serves as a critical driver of demand for hotel accommodation in the city. A further 21.6 per cent of respondents rated the increase as moderate, highlighting that even where the impact is not at its peak, the Carnival still positively influences occupancy levels. However, 15.4 per cent reported low effects, and 10.9 per cent indicated no noticeable change.

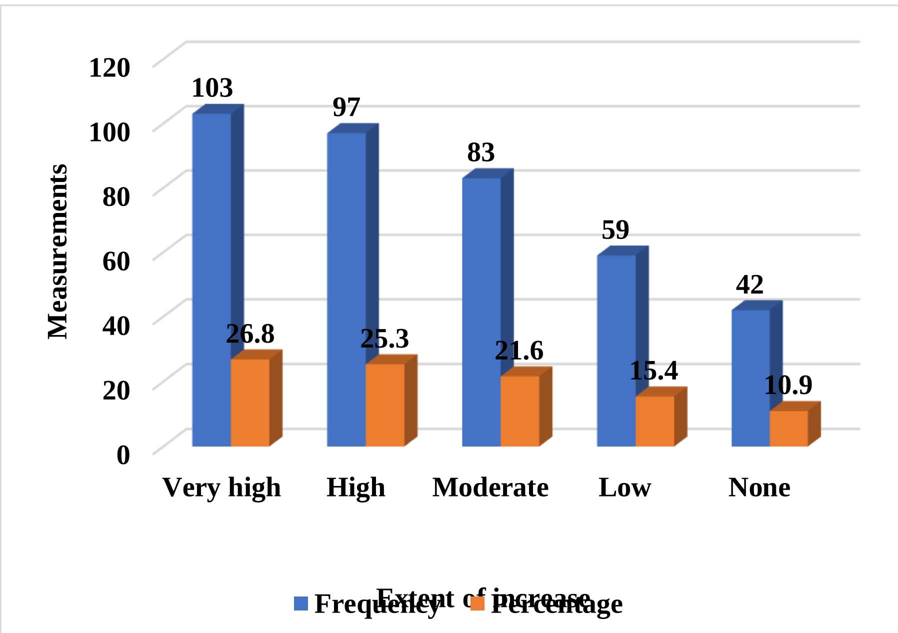

FIG. 1: Extent of increase in hotel occupancy rates
Source: Researcher’s fieldwork, 2025.

Figure 2 shows respondents’ views on the period during Carnival Calabar that records the highest hotel bookings in Calabar Municipality. The results reveal that the street parade is the peak period, with 31.0 per cent of respondents identifying it as the time of greatest hotel patronage. This is followed by musical shows at 21.1 per cent and the cultural parade at 20.1 per cent, both of which also attract significant tourist inflows. The opening ceremony accounted for 15.9 per cent, while the closing ceremony contributed the least at 12.0 per cent. These findings highlight that the core performance days and entertainment-driven events attract the highest concentration of visitors, as tourists often plan their stays to coincide with the most exciting aspects of the Carnival.

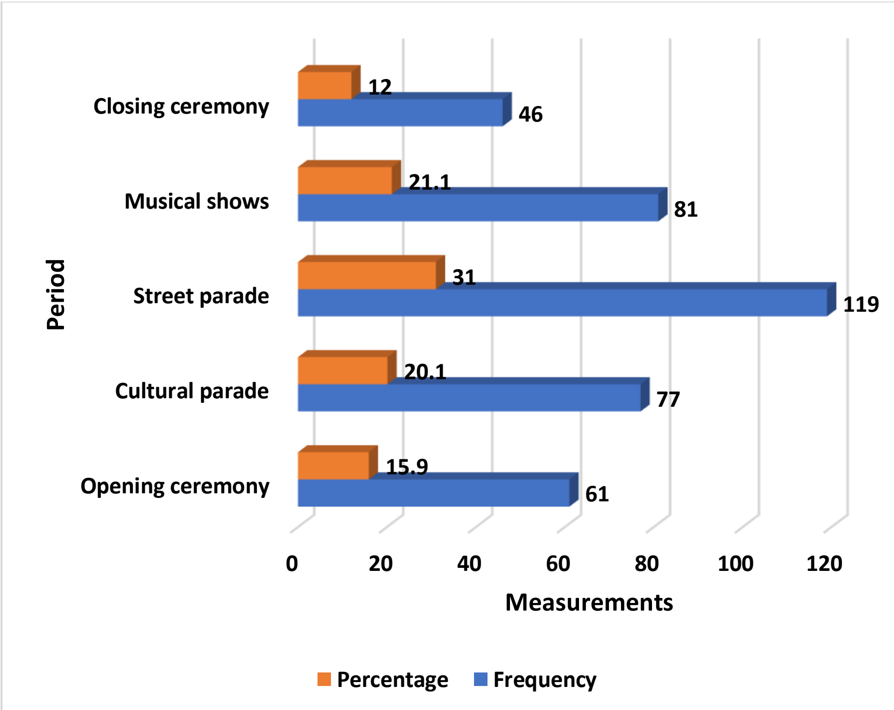

FIG. 2: Period during Carnival with highest hotel bookings
Source: Researcher's fieldwork, 2025.

Revenue generation during carnival Calabar season

Figure 3 outlines respondents' views on the reasons Carnival Calabar contributes to hotel revenue growth in Calabar Municipality. The results show that high tourist arrivals were identified by the largest share of respondents (25.8 per cent), indicating that the sheer influx of visitors is the most direct driver of hotel income during the festival. Increased spending (20.6 per cent) and the option "all of the above" (21.4 per cent) also received high responses, reflecting the combined effect of multiple factors on revenue generation. Longer stays were highlighted by 18.5 per cent, suggesting that tourists who extend their visit contribute significantly to hotels' financial performance. Group bookings accounted for the least at 13.8 per cent, yet this still represents an important revenue stream for hotels catering to families, cultural troupes, or organized travel groups. Collectively, the distribution demonstrates that Carnival Calabar generates revenue growth through diverse channels, with visitor volume being the foundation supported by extended stays, higher expenditures, and group arrangements.

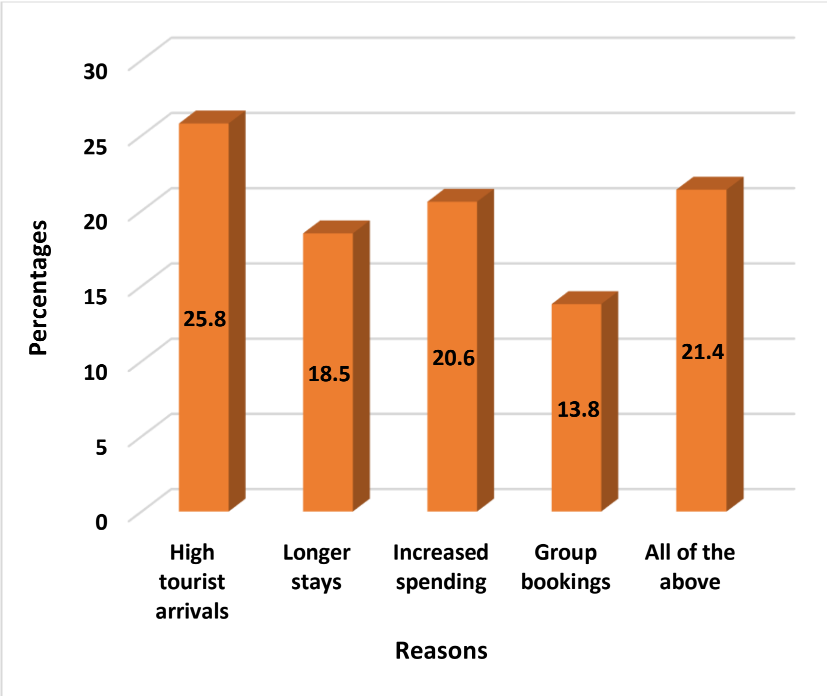

FIG. 3: Reasons Carnival Calabar contributes to hotel revenue growth
Source: Researcher's fieldwork, 2025.

Figure 4 highlights the trend in hotel revenue during the Carnival period compared to regular months, revealing a strong positive impact on the hospitality sector. Out of 384 respondents, 111 representing 28.9 per cent reported a significant increase in hotel revenue, while 87 respondents representing 22.7 per cent indicated a moderate increase. Additionally, 71 respondents accounting for 18.5 per cent observed a slight increase in revenue. In contrast, 63 respondents representing 16.4 per cent reported no change, while 52 respondents representing 13.5 per cent noted a decrease. These figures show that although a majority of hotels experienced increased revenue during the Carnival, a notable proportion of establishments either did not benefit substantially or experienced revenue declines, possibly due to factors such as location, service quality, or intense competition.

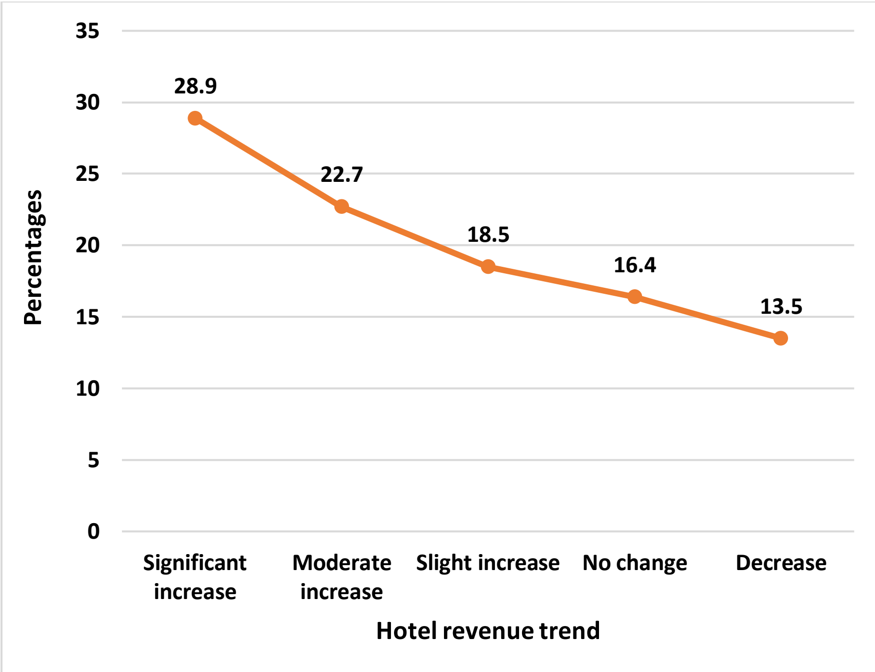

FIG. 4: Hotel revenue trend during Carnival compared to regular months
Source: Researcher's fieldwork, 2025.

The correlation results in Table 2 provide deeper insight into the relationship between the two variables. The Pearson correlation coefficient was found to be r = 0.412 with a significance level of p = 0.000, which is well below the accepted threshold of 0.05. This statistical evidence means that the null hypothesis (H0), which assumed no relationship, was rejected, while the alternative hypothesis (H1) is supported. In practical terms, this demonstrates a clear and statistically significant positive relationship between the scale of Carnival activities and hotel revenue growth. The finding confirms that the more vibrant and large-scale the Carnival events are, the more hotels benefit through higher occupancy rates and increased income.

Table 2: Correlation (Pearson)

Statistic	Value
Pearson r (Carnival_Activity_Level vs Hotel_Revenue_Trend)	**0.412**
Sig. (2-tailed)	**0.000**
N	384

Discussion

The descriptive findings clearly show that Carnival Calabar generates a substantial surge in hotel demand. A combined 52.1 per cent of respondents (26.8 per cent very high and 25.3 per cent high) reported that the Carnival results in high or very high hotel occupancy. This rise in occupancy is also reflected in hotel revenue trends: 28.9 per cent of respondents reported a significant increase in revenue, while 22.7 per cent recorded a moderate increase and 18.5 per cent a slight increase. Taken together, 70.1 per cent of hotels experienced some level of revenue gain during Carnival months, highlighting the festival's importance as a major driver of hotel performance. Importantly, the street parade alone accounted for 31.0 per cent of peak bookings, making it the most powerful attraction for overnight stays and confirming the direct role of headline spectacles and event timing in determining demand.

The inferential analysis supports this descriptive picture. A Pearson correlation test revealed a moderate, positive, and statistically significant relationship between Carnival activity levels and hotel revenue trends ($r = 0.412$, $p < 0.001$). This finding means that as Carnival activities expand in scale and intensity, hotel revenues increase in a measurable way. The strength of the correlation suggests that event investment and larger audience draws are linked to real economic benefits for hotels. Thus, enhancing high-profile events such as the street parade or headline concerts is a strategy with proven economic payoff, ensuring that hotels capture more occupancy and revenue during the Carnival season.

These findings align with a study by Almeida and Garrod (2022), they emphasized that visitor expenditure is shaped by event-related activities and the scale of participation across different events. In the context of Carnival Calabar, hotels positioned closer to event venues or those offering tailored services may experience higher occupancy compared to others. The concentration of respondents indicating very high and high increases supports the notion that major cultural festivals stimulate accommodation demand, thereby boosting the local hospitality sector. At the same time, the variation in responses also points to disparities in the distribution of economic benefits, echoing Almeida and Garrod's finding that event portfolios do not impact all stakeholders equally. This suggests that while Carnival Calabar is a powerful catalyst for increased hotel occupancy, strategic positioning, service quality, and proximity to activities are key determinants of the extent to which hotels capitalize on the event.

Conclusion

The findings of this study clearly demonstrate that Carnival Calabar plays a significant role in driving hotel industry development within Calabar Municipality. The event stimulates hotel occupancy, increases revenue, and enhances the visibility of the hospitality sector by attracting both domestic and international tourists. The descriptive data revealed that a majority of hotels reported noticeable increases in patronage and revenue during Carnival months, while the inferential analysis confirmed that Carnival activities and hotel revenues are positively and significantly correlated.

Recommendations

1. The Ministry of Culture and Tourism should enhance Carnival Calabar's attractions and scheduling to increase hotel occupancy and revenue.
2. Hotel managers should ensure that quality services are provided for continue patronage which attract more revenue generation.

References

Adanse, J., Khayiya, R., & Maranga, V. (2024). Influence of optimal room occupancy strategies on revenue maximization during slack periods in selected 3-to 5-star hotels in Ghana. *Research in Hospitality Management*, *14*(1), 57-69.

Almeida, A., & Garrod, B. (2022). Determinants of visitors' expenditure across a portfolio of events. *Tourism Economics*, *28*(8), 2099-2125.

Balogun, B. K., & Nkebem, V. (2022). Host community's perception on the socio-cultural effects of carnival Calabar festival and tourism development in Calabar city, Nigeria. *International Journal of Hospitality and Tourism Studies*, *2*(2), 149-159.

Beck, J., Harvey, J., Kaylen, K., Sala, C., Urban, M., Vermeulen, P., ... & Mital, P. (2021). Carnival optimizes revenue and inventory across heterogenous cruise line brands. *INFORMS Journal on Applied Analytics*, *51*(1), 26-41.

Bento, C., Almeida, P., & Jiménez-Caballero, J. L. (2022). The impact of the Web Summit on hotel performance, the case of Lisbon. *Journal of Revenue and Pricing Management*, *21*(5), 564-577.

de Sousa Bento, C. I. S. (2023). *The Impact of Events on Key Performance Indicators in the Hotel Industry: The Case of Lisbon* (Doctoral dissertation, Universidad de Sevilla).

Mpuon, J. A., Etim, G. S., Offiong, A. I., & Enouh, R. O. (2021). The role of event marketing in entrepreneurship development of firms in hospitality industry. *International Journal of Hospitality and Tourism Systems*, *14*(2), 25.

Nguyen, M. A. T., Yu, M. M., & Lirn, T. C. (2022). Revenue efficiency and its drivers in the cruise industry. *Maritime Policy & Management*, *49*(7), 1010-1026.

Ntamu, F. O., Akawu, F. A., & Agum, C. (2023). Impact of Calabar Carnival on the Economic Development of Cross River State, Nigeria. *IOSR Journal of Humanities and Social Science 28 (4): 44*, *53*.

Okwajie, F. A., Undie, G. I., Igbang, V. O., & Chibuogwu, D. E. (2024). Management of Calabar Carnival and the Socio-Economic Development of Cross River State, Nigeria. *Sch J Econ Bus Manag*, *11*(10), 283-300.

Piga, C., & Melis, G. (2021). Identifying and measuring the impact of cultural events on hotels' performance. *International Journal of Contemporary Hospitality Management*, *33*(4), 1194-1209.

Pons, S. T., Noone, B., & Johns, M. (2025). Integrated revenue strategy for the Park hotel: a data-driven approach to strategy development and evaluation. *Journal of Hospitality & Tourism Cases*, *13*(1), 29-44.