

OAK E Website (B2B ecommerce) Sales and User Behaviour Performance Analysis

INTRODUCTION

In this analysis, we aim to assess the product sale performance and user behavior on OAK E Website (B2B ecommerce) online shopping store product sales, User behavior, Market feedback, a platform specializing in online commerce. Understanding these aspects is crucial for improving the website's functionality and meeting the specific needs of our B2B clients. This analysis provides a glimpse into the performance and behavior insights for a hypothetical B2B ecommerce website, which can guide strategic decisions and improvements. This project is to identify the trend of sales between 5th, September, 2023 to 27th, September, 2023 (Three weeks Website Performance) using Microsoft Excel and Power BI.

DATA SOURCE

The dataset was gathered and collected from one of the collaboration of project management and web developers (UI/UX designers) of Team Lagos of CWW Tech Africa Bootcamp Project Team members and extracted from user interactions and performance relating to data source of Nigerian shopping websites datasets. for the KPIs and Data Metrics details according to the new ecommerce website in Nigeria, in over different Cities, which comprises of the Sales Data, Customer data, Location data and the Product data Etc.

PROCESS OF ANALYSIS

We gathered data over a three weeks period, utilizing Analytics tools and internal sales databases sources from related data sales from ecommerce website in Nigeria. We segmented the data by product categories, customer Cities, etc with respect to the time frames for a completed comprehensive analysis.

DATA CLEANING

Data wrangling and sorting was carried using excel and imported into a Power BI environment for further cleaning and filtering for completed clean data for analysis. We used Power BI Desktop platform to clean the data, statistical and analytical preparation of the Dataset for Analysis.

OVERVIEW

The OAK E Website (B2B ecommerce) online shopping store offers a wide range of products including (Clothing, Footwear, Hair & Hair Accessories, Baby Wears & Accessories, Beauty Products), to B2B customers. Our target audience comprises male and female, in Nigeria and maintenance service providers. The

analysis covers sales data and user interactions from September, 2023 to 27th, September, 2023 (Three weeks Website Performance). The analysis was carried using the following available data key points:-

- **User Demographics:** (username/ID, Gender, Location, Product IDs, Order Status (Cancelled, pending, completed and refund), payment gateway.
- **User Behavior:** Browsing behavior (pages visited, time spent), Product search queries, Products viewed, Products added to cart, Products purchased.
- **Product Data:** Product categories (Clothing, Footwear, Hair & Hair Accessories, Baby Wears & Accessories, Beauty Products), Product pricing and discounts, product prices, quantity (How many) and total prices.
- **Sales Data:** Total sales revenue, Sales by product category, Sales by product type, Sales by gender (Men, Women), Sales by location.
- **User Feedback:** Customer reviews and ratings, Customer feedback and complaints, Return and refund requests.
- **Time Analysis:** Seasonal trends in product sales, Sales trends over time (daily, weekly, monthly).

VISUALIZATION

Visualizations were done using different Visualization Tools Available in Power BI report for Business Analysis. **(See Visualization Pages Below)**

OAK E B2B WEBSITE SALES PERFORMANCE

₦ 81.97M

Total Sales

1446

Total Quantity Carted

Day of Week

All

Gender

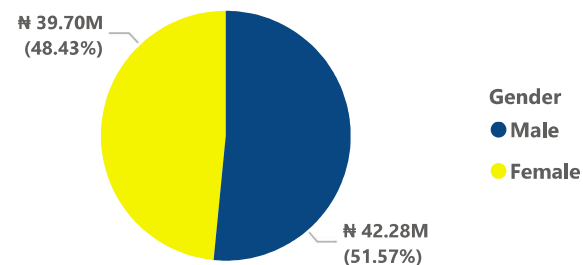
☐ Female

☐ Male

Product Category

All

Total Sales by Gender



Week of Month

All

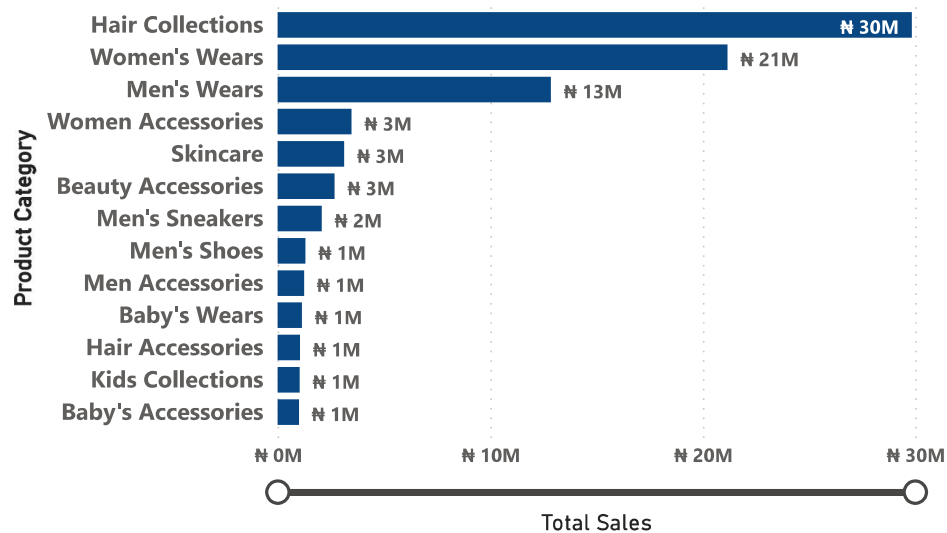
Customer City

All

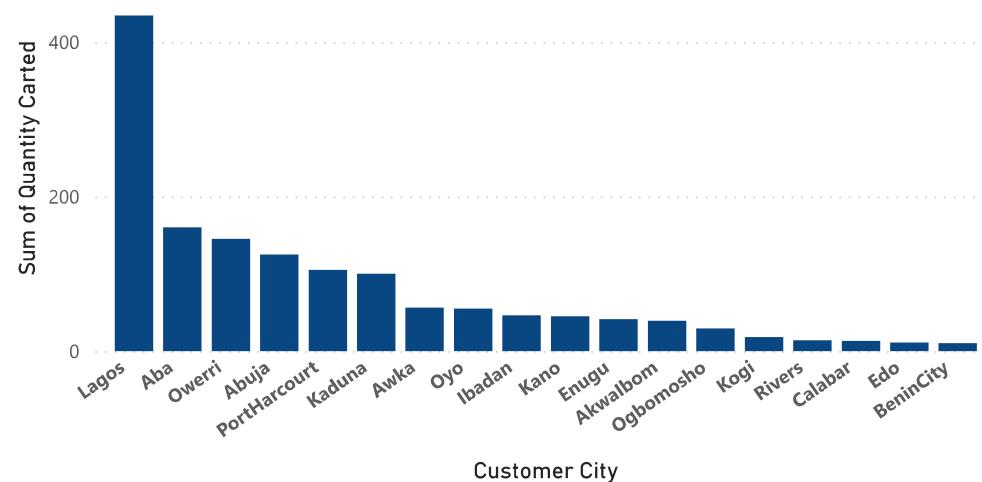
Payment Method

All

Total Sales by Product Category



Total Quantity Carted by Customer City



6391

Total website visit

5.3

Average Rating

Cart Status

All

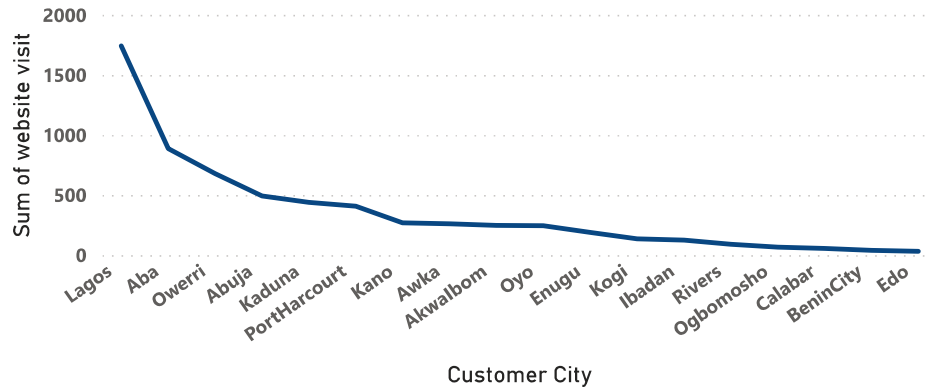
Day of Week

All

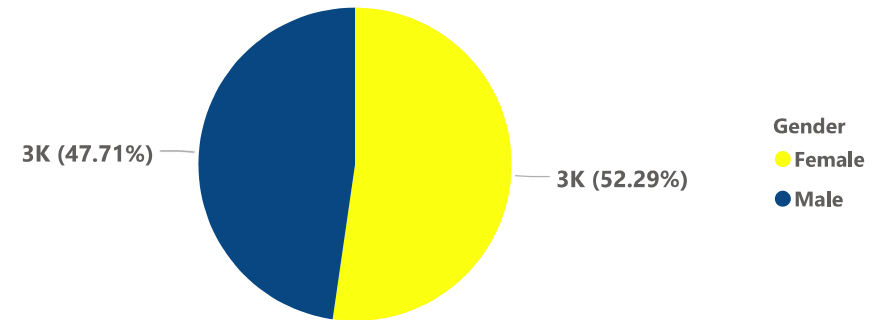
Payment Meth...

All

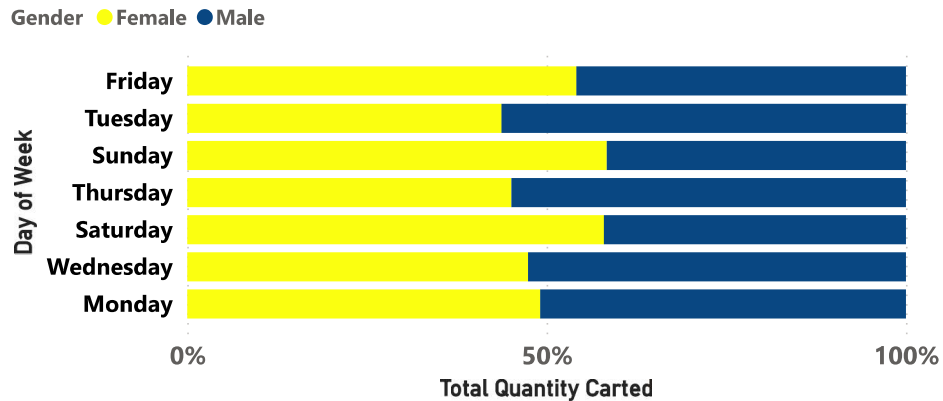
Total website visit by Customer City



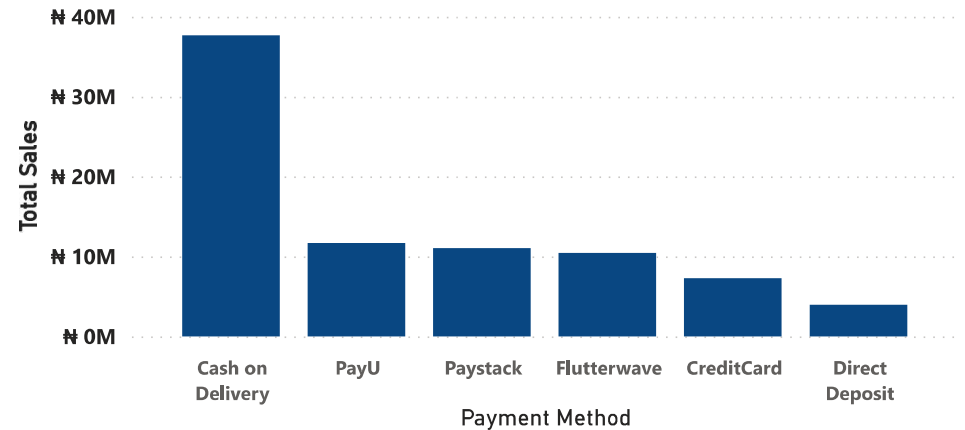
Total of website visit by Gender



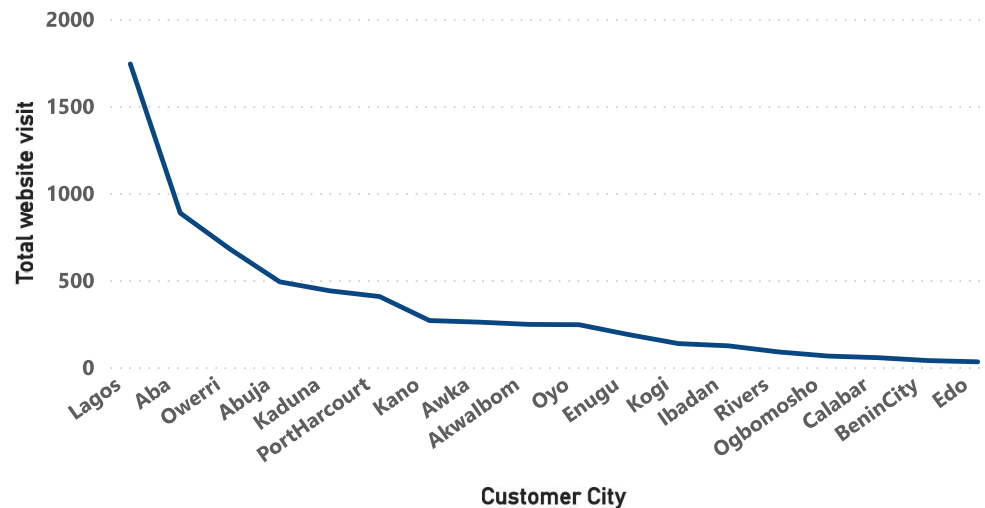
Total Quantity Carted by Day of Week and Gender



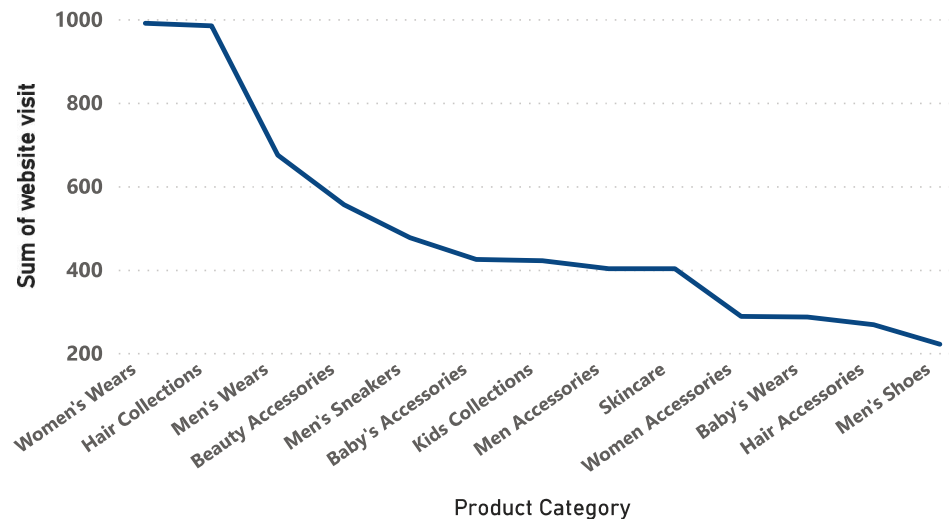
Total Sales by Payment Method



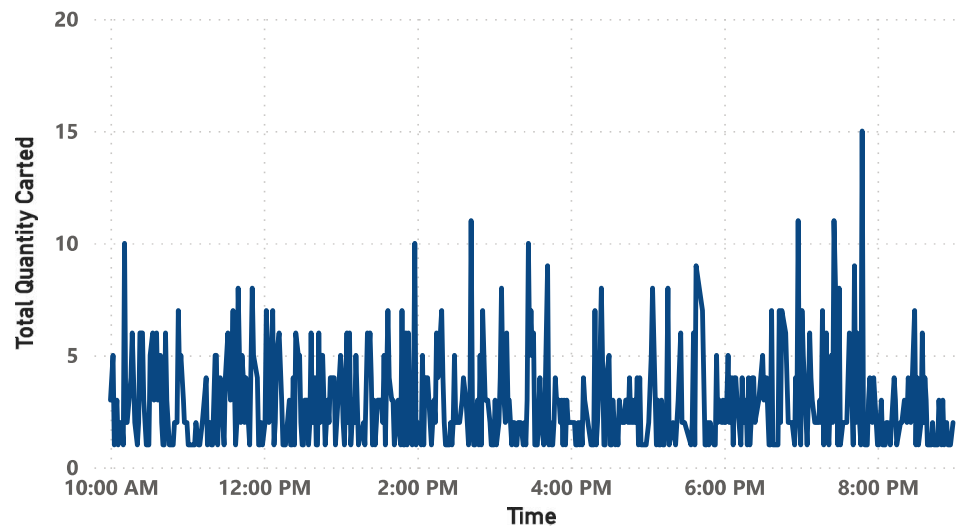
Total website visit by Customer City



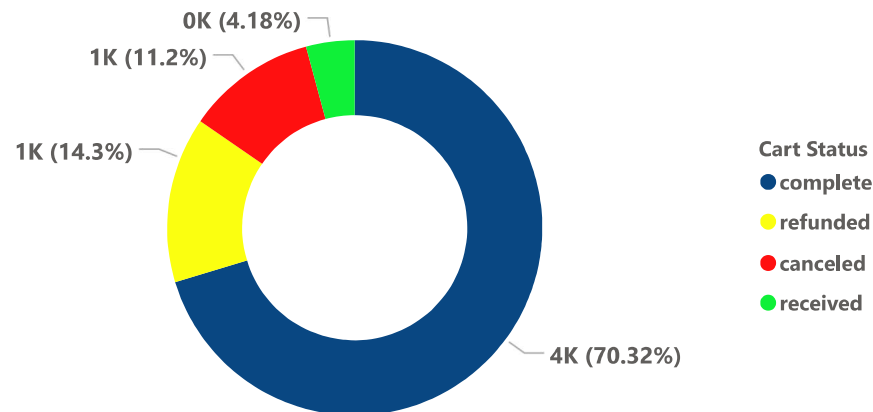
Total website visit by Product Category



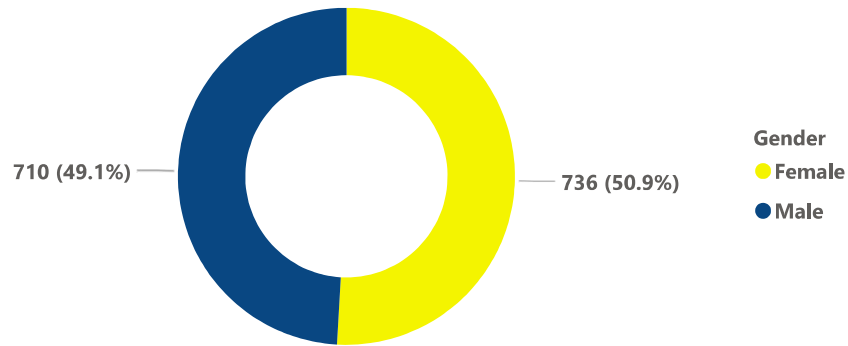
Total Quantity Carted by Time



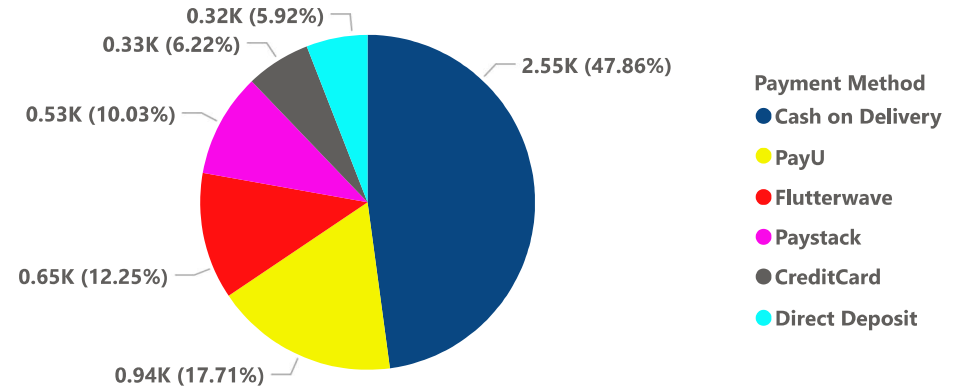
Total website visit by Cart Status



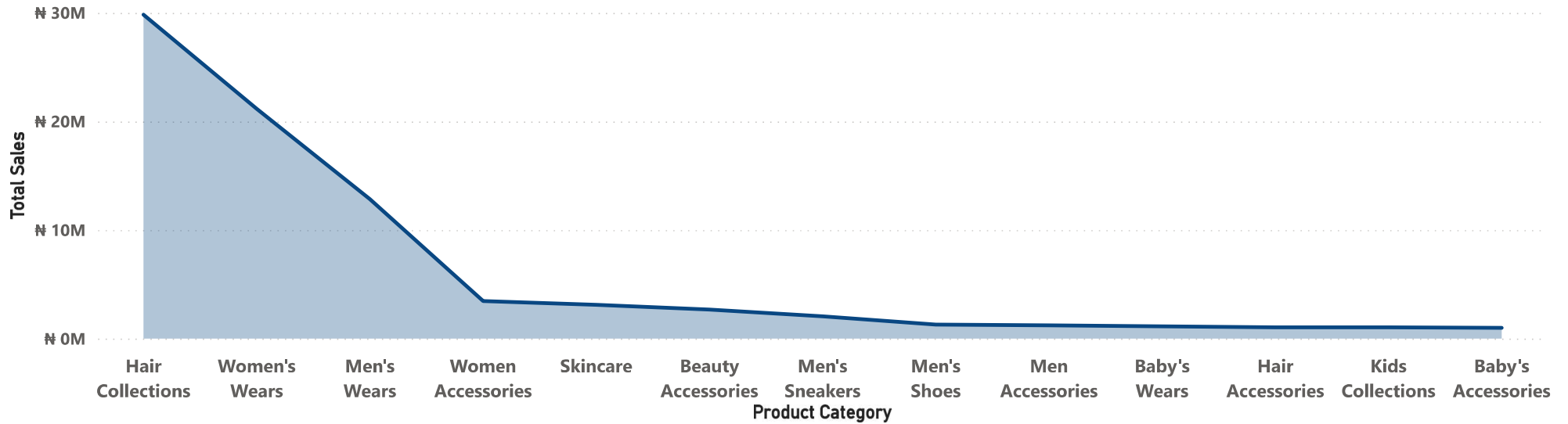
Total Quantity Carted by Gender



Total of Rating by Payment Method

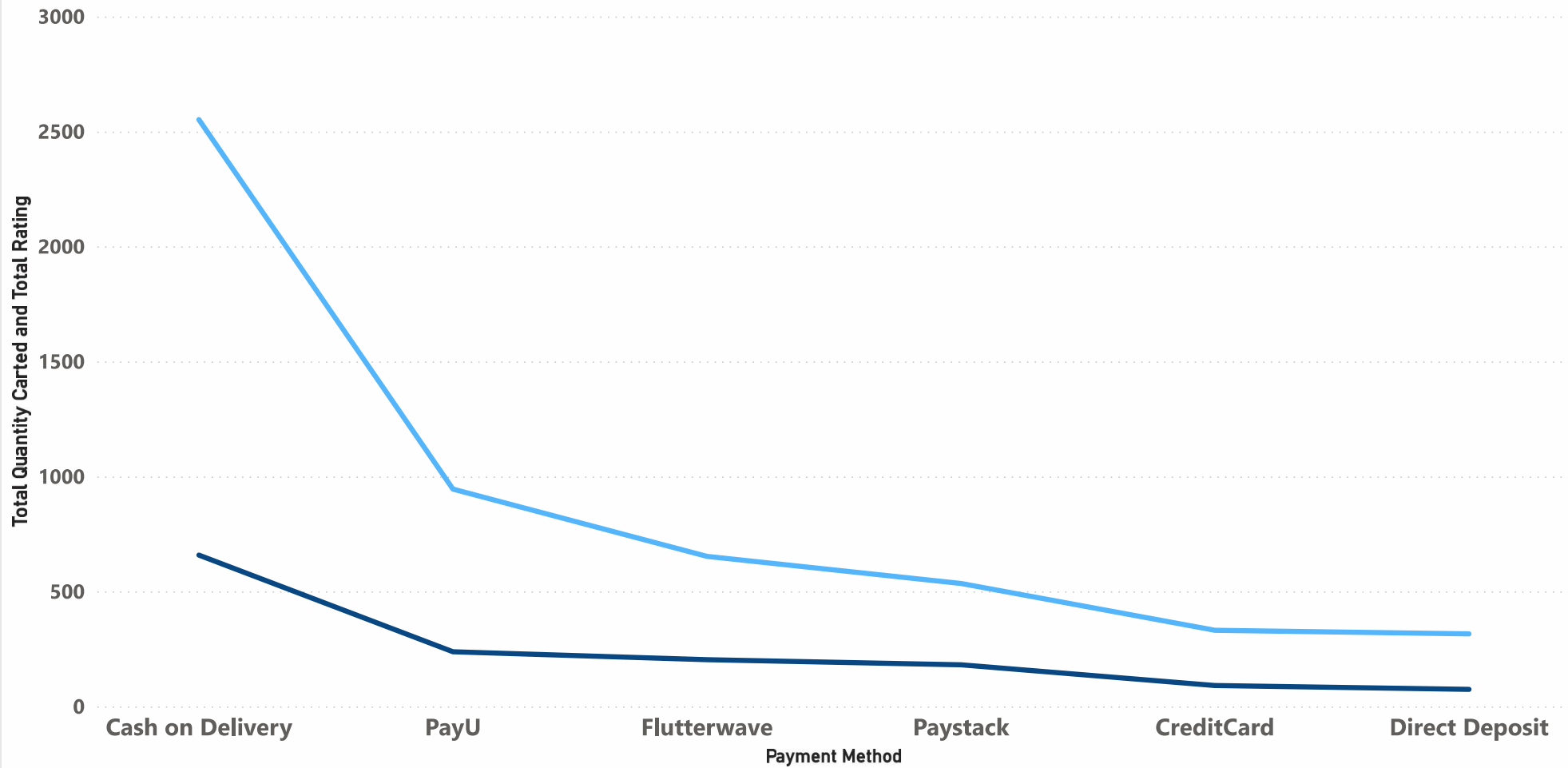


Total Sales by Product Category



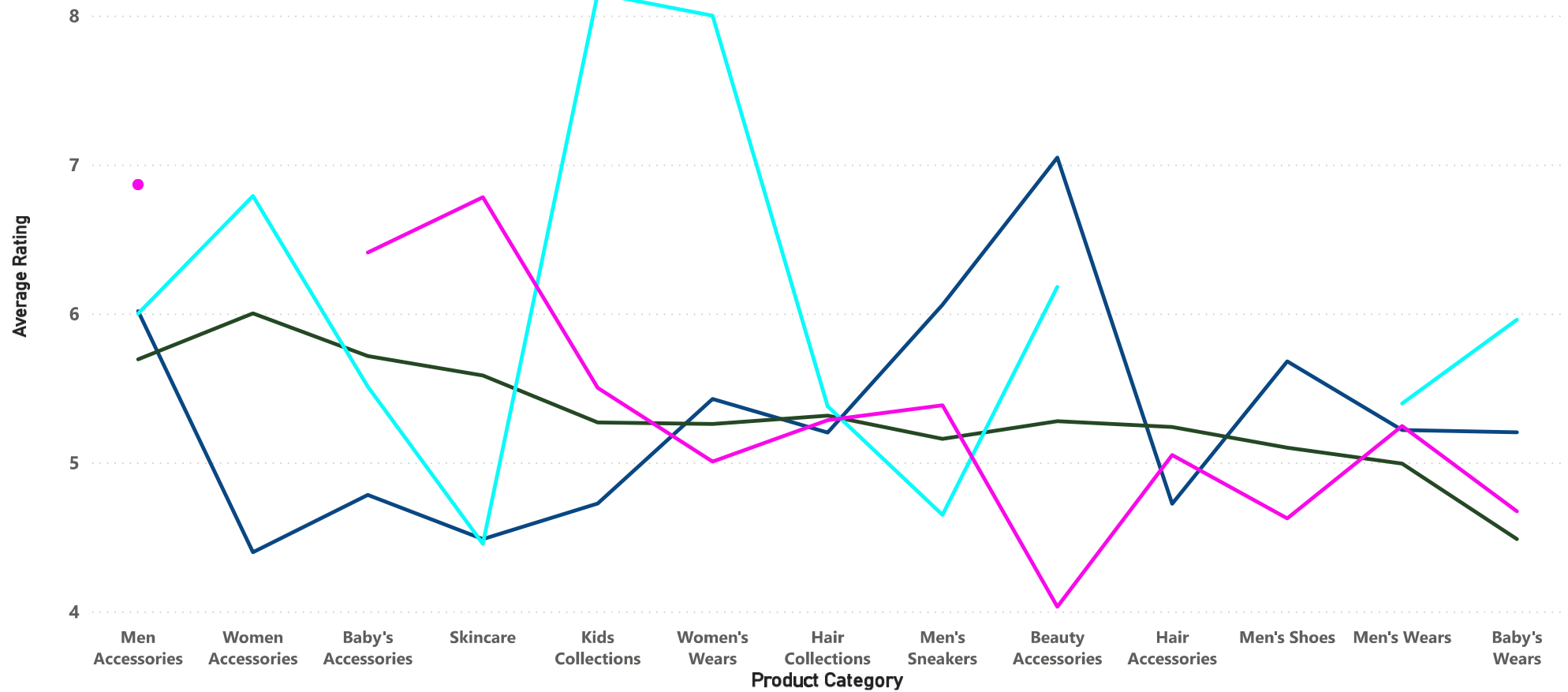
Total Quantity Carted and Total of Rating by Payment Method

● Total Quantity Carted ● Total Rating



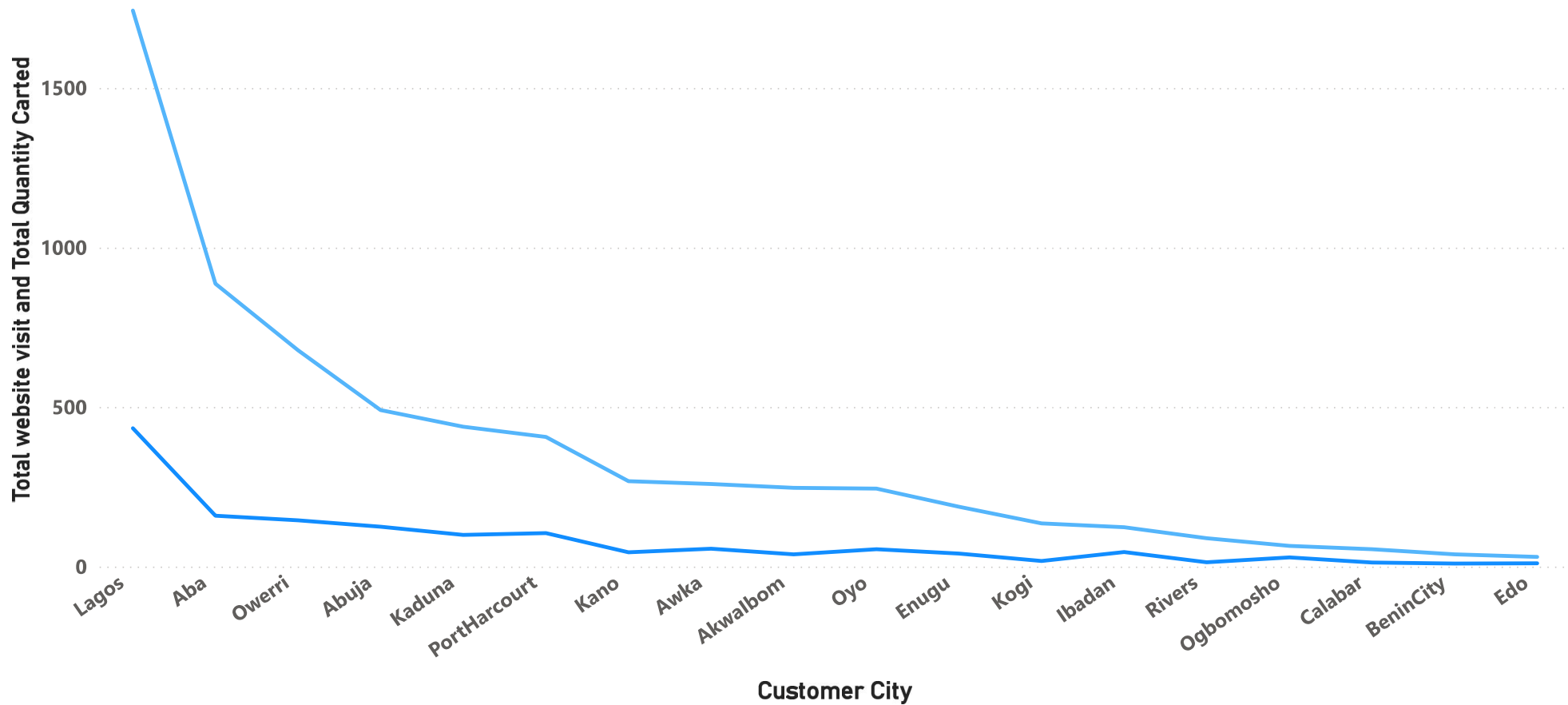
Average Rating by Product Category and Cart Status

Cart Status ● canceled ● complete ● received ● refunded



Total website visit and Total Quantity Carted by Customer City

● Total website visit ● Total Quantity Carted



KEY FINDINGS AND INSIGHTS FROM THE ANALYSIS

- ✓ The total sales within three weeks in OAK E Website are over #81.97M, at total order of 1,446 with an average rate of over 5.3/10 and total website visit of 6,391.
- ✓ At ₦ 29,833,300.00, Hair Collections had the highest Total Sales and was 2,886.82% higher than Baby's Accessories, which had the lowest Total Sales at ₦ 998,830.80. Hair Collections accounted for 36.39% of Total Sales. Across all 13 Product Category, Total Sales ranged from ₦ 998,830.80 to ₦ 29,833,300.00.
- ✓ At 434, Lagos had the highest Sum of Quantity Carted and was 4,240.00% higher than BeninCity, which had the lowest Sum of Quantity Carted at 10. Lagos accounted for 30.01% of Sum of Quantity Carted. Across all 18 Customer City, Sum of Quantity Carted ranged from 10 to 434.
- ✓ Total Sales for Male (₦ 42,276,884.80) was higher than Female (₦ 39,697,396.30). Male accounted for 51.57% of Total Sales.
- ✓ At 1743, Lagos had the highest Sum of website visit and was 5,522.58% higher than Edo, which had the lowest Sum of website visit at 31. Lagos accounted for 27.27% of Sum of website visit. Across all 19 Customer City, Sum of website visit ranged from 31 to 1743.
- ✓ Total of website visit for Female (3342) was higher than Male (3049). Female accounted for 52.29% of Total of website visit.
- ✓ Total Total Quantity Carted was higher for Female (736) than Male (710). Friday in Gender Female made up 8.99% of Total Quantity Carted. Average Total Quantity Carted was higher for Female (105.14) than Male (101.43). Total Quantity Carted for Female and Male diverged the most when the Day of Week was Sunday, when Female were 35 higher than Male.
- ✓ Total of website visit for Female (3342) was higher than Male (3049). Female accounted for 52.29% of Total of website visit.
- ✓ At ₦ 37,654,835.80, Cash on Delivery had the highest Total Sales and was 854.47% higher than Direct Deposit, which had the lowest Total Sales at ₦ 3,945,084.40. Cash on Delivery accounted for 45.93% of Total Sales. Across all 6 Payment Method, Total Sales ranged from ₦ 3,945,084.40 to ₦ 37,654,835.80.
- ✓ At 1743, Lagos had the highest Total website visit and was 5,522.58% higher than Edo, which had the lowest Total website visit at 31. Lagos accounted for 27.27% of Total website visit. Across all 19 Customer City, Total website visit ranged from 31 to 1743.
- ✓ At 990, Women's Wears had the highest Sum of website visit and were 347.96% higher than Men's Shoes, which had the lowest Sum of website visit at 221. Women's Wears had the highest Sum of website visit at 990, followed by Hair Collections and Men's Wears. Men's Shoes had the lowest Sum of website visit at 221. Women's Wears accounted for 15.49% of

Sum of website visit. Across all 13 Product Category, Sum of website visit ranged from 221 to 990.

- ✓ Total Quantity Carted trended down, resulting in a 33.33% decrease between Saturday, December 30, 1899 and Saturday, December 30, 1899. Total Quantity Carted started trending up on Saturday, December 30, 1899, rising by 50.00% (3) in 2 minutes. Total Quantity Carted jumped from 6 to 9 during its steepest incline between Saturday, December 30, 1899 and Saturday, December 30, 1899.
- ✓ Complete had the highest Total website visit at 4494, followed by refunded, canceled, and received. Complete accounted for 70.32% of Total website visit.
- ✓ Total Quantity Carted for Female (736) was higher than Male (710). Female accounted for 50.90% of Total Quantity Carted.
- ✓ Cash on Delivery accounted for 47.86% of Total of Rating. Compared to credit card and direct deposit which was the lowest.
- ✓ At ₦ 29,833,300.00, Hair Collections had the highest Total Sales and was 2,886.82% higher than Baby's Accessories, which had the lowest Total Sales at ₦ 998,830.80. Hair Collections accounted for 36.39% of Total Sales. Across all 13 Product Category, Total Sales ranged from ₦ 998,830.80 to ₦ 29,833,300.00.
- ✓ At 658, Cash on Delivery had the highest Total Quantity Carted and was 777.33% higher than Direct Deposit, which had the lowest Total Quantity Carted at 75. Total Quantity Carted and total Total Rating are positively correlated with each other. Cash on Delivery accounted for 45.50% of Total Quantity Carted. Total Rating and Total Quantity Carted diverged the most when the Payment Method was Cash on Delivery, when Total Rating was 1894 higher than Total Quantity Carted.
- ✓ Kids Collections in Cart Status received made up 3.03% of Average Rating. Received had the highest average Total Rating at 6.04, followed by refunded, complete, and canceled.
- ✓ At 1743, Lagos had the highest Total website visit and was 5,522.58% higher than Edo, which had the lowest Total website visit at 31. Total website visit and total Total Quantity Carted are positively correlated with each other. Lagos accounted for 27.27% of Total website visit, Total website visit and Total Quantity Carted diverged the most when the Customer City was Lagos, when Total website visit were 1309 higher than Total Quantity Carted.

SUMMARY

The analysis of OAK E Website's performance over three weeks reveals significant trends and patterns. Key findings include the total sales exceeding ₦81.97M with 1,446 orders and an average rating of 5.3/10. The highest total sales were from the Hair Collections, and Lagos showed the highest website visits. Furthermore, gender-wise analysis indicates higher total sales by males, while females had more website visits and total quantity carted.

CONCLUSION

The analysis underscores the importance of understanding product category performance, gender preferences, and location-specific behavior to optimize the website's sales potential. Cash on Delivery emerged as a popular payment method, and the correlation between cart status, payment method, and total quantity carted emphasizes the significance of smooth transaction processes. The data also implies potential for targeting and tailoring marketing efforts to specific product categories and geographic locations.

RECOMMENDATIONS

- **Product Category Strategy:** Tailor marketing and promotional efforts towards high-performing product categories like Hair Collections. Develop strategies to enhance the visibility and desirability of lower-performing categories such as Baby's Accessories.
- **Payment Method Optimization:** Capitalize on the popularity of Cash on Delivery by ensuring a seamless payment experience. Consider offering incentives to encourage the use of other payment methods like Direct Deposit.
- **Gender-Centric Approach:** Design marketing campaigns targeting gender-specific preferences to boost sales. Optimize product offerings and website experience to cater to both male and female audiences effectively.
- **Geographic Targeting:** Leverage the geographical insights, particularly the high website visits from Lagos. Devise location-specific marketing strategies to capitalize on regional preferences and behaviors.
- **Customer Engagement:** Implement engagement strategies to enhance total quantity carted, focusing on increasing website visits and conversion rates. Personalize recommendations and incentives to encourage customers to cart more items.
- **User Experience Enhancement:** Continuously monitor and optimize the website's user interface, ensuring a seamless and enjoyable browsing experience. This is expected to result in increased website visits and improved conversion rates.
- **Feedback and Review Management:** Encourage customers to leave reviews and ratings, especially for successful transactions. Monitor and respond to reviews, addressing concerns promptly to build trust and improve overall ratings.

Finally, by strategically implementing these recommendations, OAK E Website can enhance its overall performance, improve customer satisfaction, and drive higher sales.