Retail Store Sales Analysis Dashboard 2023 Enhancing Sales Performance through Data-Driven Insights

Executive Summary

The Retail Store Sales Analysis Dashboard 2023 provides a comprehensive overview of the sales performance of a retail store throughout the year. By leveraging Power BI, this dashboard visualizes key metrics such as revenue by product category, customer demographics, quantity by product category, and monthly revenue trends. The primary objective of this project is to equip decision-makers with actionable insights to optimize sales strategies, improve customer targeting, and ultimately drive revenue growth.

Business Requirements

- 1. Identify Peak Sales Period
- 2. Customer Demographics
- 3. Product Performance
- 4. Strategic Decision Making

Methodology

- 1. Data Source from the Retail Store fields including Date, Gender, Age, Product Category, Quantity, Price/Unit, Total Amount and consolidated into Excel spreadsheet.
- 2. Data Cleaning and Preparation in Excel by handling missing values and duplicate values and ensuring all columns are having accurate data and formats
- 3. Created necessary extra columns for the analysis using Excel functions and Power Bi DAX.
- 4. Build a Dashboard in Power BI using Line Charts, Pie Chart, Bar Diagram and Donut Chart
- 5. Formatting and enhancing the visuals using tool tips, interactions and data label and ensuring consistency.
- 6. Validating and testing, ensuring all the calculations and visualization are accurate.

Skills & Tools

- 1. MS EXCEL
- 2. Power BI
- 3. Al Tools



Results & Recommendations

The implementation of the Retail Store Sales Analysis Dashboard yielded the following key insights:

- 1. Peak Sales Month: May emerged as the peak sales month with the highest revenue of 53K.
- 2. Revenue Distribution by Product Category: Electronics, Clothing, and Beauty categories contributed 34%, 34%, and 31% to the total revenue, respectively.
- 3. Customer Demographics: Female customers generated higher revenue (165K) compared to male customers (157K), with the adult age group being the most significant contributor.
- 4. Monthly Revenue Trends: Revenue fluctuated throughout the year, with notable peaks in February, May, and October, and a significant dip in March and September.

The **Recommendations** from the above results:

- 1. Target Marketing Campaigns: Allocate more marketing resources during peak months (e.g., May, October) to maximize sales. Tailor promotions and discounts for high-performing product categories like Electronics and Clothing.
- 2. Customer Segmentation: Develop targeted marketing strategies based on customer demographics, focusing on high-revenue segments such as female customers and adults. Loyalty Programs: Implement loyalty programs to retain high-value customers and increase their purchase frequency.
- 3. Inventory Management: Adjust inventory levels based on the sales trends of different product categories and peak sales periods to avoid stockouts or overstocking. Continuously evaluate and adjust the product assortment to align with customer preferences and market demand.
- 4. Data-Driven Strategy: Regularly update and monitor the dashboard to stay informed of sales performance and emerging trends.

Conclusion

The Retail Store Sales Analysis Dashboard has transformed raw sales data into meaningful insights, empowering the retail store to make informed, data-driven decisions. By addressing the identified challenges and implementing the recommendations, the store can enhance its sales performance, improve customer satisfaction, and achieve sustained growth.

Links for Data & Dashboard:

1. Raw Data: Click Here

2. Cleaned and Modelled Data: Click Here

Dashboard (PDF): <u>Click Here</u>
 Dashboard (Pbxi): <u>Click Here</u>