Data Analysis of Blinkit

Date

April 24, 2025

Objective

To explore and analyze sales data from Blinkit using Python for deriving key performance insights.

1. Dataset Overview

- Size: 8,523 rows × 12 columns
- The dataset contains sales and product information, including item type, fat content, outlet details, visibility, and ratings.

2. Data Cleaning

- Standardized column names to lowercase and replaced spaces with underscores.
- Cleaned 'item_fat_content' by unifying variants such as 'LF', 'low fat', and 'reg' into 'Low Fat' and 'Regular'.

3. Key Performance Indicators (KPIs)

- Total Sales: INR 1,201,681.48
- Average Sales per Item: INR 141
- Total Items Sold: 8,523
- Average Customer Rating: 4.0

4. Visual Analysis Highlights

a. Sales by Fat Content

- Low Fat: 63%
- Regular: 37%

b. Total Sales by Item Type

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- Highest sales from: Fruits and Vegetables, Snack Foods, and Household items.

c. Fat Content Sales by Outlet Location

- Tier 3 locations contribute significantly to both Low Fat and Regular sales.

d. Sales by Outlet Establishment Year

- Newer outlets (post-2010) tend to generate higher sales volumes.

e. Sales by Outlet Size

- Medium-sized outlets dominate with the highest percentage of total sales.

f. Sales by Outlet Location

- Tier 3 areas outperform Tier 1 and Tier 2 in overall sales.

5. Conclusion

The analysis reveals strong performance in newer and medium-sized outlets, with higher sales concentrated in Tier 3 locations. Low Fat products are more popular, and Fruits & Vegetables remain top-selling items. These insights can guide marketing and operational strategies for inventory, promotions, and expansion.