Blinkit Sales Analysis – Project Report

Role: Aspiring Data Analyst

Tools Used: SQL, Power BI

Dataset: Blinkit Grocery Dataset (Retail/FMCG Sector)

Objective: To analyze sales, customer ratings, and product metrics across multiple dimensions like item type, outlet type, location, fat content, and more.

1. Project Overview

The goal of this analysis was to derive key business insights from Blinkit's grocery dataset using SQL for data cleaning and KPI extraction, and Power BI for dynamic visual storytelling. This project simulates real-world retail analytics with a focus on improving inventory, outlet strategy, and product targeting.

2. Data Cleaning & Preparation (SQL)

- Corrected inconsistent spelling in Item_Fat_Content (e.g., lf, low fat, reg)
- Verified row imports and ensured correct schema loading
- Used CAST and GROUP BY for standardized numerical outputs

3. Key KPIs Derived

Metric	Value
Total Sales	₹64.26 million
Total Items	8,523 items
Average Sales/Item	₹7,538 approx.
Average Product Rating	3.76 / 5

4. Detailed Insights by Dimension

A. Item Type Analysis

- Top-selling category: Fruits and Vegetables
- Low-performing category: Household Items
- Indicates a strong preference for perishables, suggesting optimization of fresh stock logistics.

B. Fat Content Preference

Fat Content	Total Sales (₹)	Avg Rating
Low Fat	30.75M	3.92
Regular	25.60M	3.66
Others	7.91M	3.44

Low Fat products not only sell more but are also rated higher — a prime segment for marketing.

C. Outlet Type Analysis

Outlet Type	Sales %	Avg Rating
Supermarket Type1	45%	3.85
Grocery Store	22%	3.59
Supermarket Type2/3	Lower	Mixed

Type1 outlets drive maximum revenue — ideal for promotions and new product launches.

D. Location & Size Insights

- Urban outlets have the highest total sales
- Small-sized outlets account for 15.6% of total revenue but receive better ratings on average
- Older outlets (2004-2009) perform better than newly established ones

5. BI Dashboard Highlights

Created an interactive Power BI dashboard showcasing:
- Sales performance by multiple dimensions
- KPI cards for executive overview
- Slicers for filtering by Item Type, Outlet, Year
- Pie & bar charts for contribution analysis

The dashboard enables stakeholders to identify high-performing segments, optimize inventory, and plan expansion strategies.

6. Business Recommendations

1. Boost stock of Low Fat products, especially in urban Supermarket Type 1 outlets.
2. Consider phasing out or revamping underperforming items (e.g., Household goods).
3. Leverage high-rating products in smaller outlets through targeted ads or loyalty programs.
4. Invest in older performing outlets and improve outreach for newer ones with low sales.