Blinkit Grocery Data Analysis

Project Overview / Headline

Blinkit Grocery Data Analysis: Sales & Outlet Performance Dashboard
An interactive Power BI dashboard built to analyze Blinkit's grocery sales performance across 8,523 transactions. The project focuses on understanding outlet size, location tier, establishment type, and product attributes to derive actionable business insights.

Short Description / Purpose

The Blinkit Grocery Dashboard is a visually engaging Power BI report designed to explore grocery sales and outlet trends. It enables stakeholders to identify which outlets, item types, and fat content categories drive the most revenue, supporting strategic decisions on outlet expansion, optimization, and product distribution.

Tech Stack

The dashboard was created using the following tools and technologies:

• Power BI Desktop – For data visualization and dashboard creation.

• Power Query – Used for data cleaning and transformation.

• DAX (Data Analysis Expressions) – To create calculated measures and KPIs.

Data Source

Source: BlinkIT Grocery Dataset (Excel – 8,523 records)

Includes:
• Item characteristics – Type, Fat Content, Visibility, Weight
• Outlet attributes – Size, Location Tier, Establishment Year, Type
• Performance metrics – Item Sales and Ratings

The dataset was structured and cleaned for analysis. As it contains a single table, data modeling was not required. Transformations and calculated measures were created directly within Power BI.

Features / Highlights

- Business Problem

Blinkit operates grocery outlets across multiple regions but lacked a consolidated, data-driven view of how outlet characteristics (size, tier, and establishment) and product attributes (fat content, item type) affect overall sales performance.

Key Questions:
- Which outlet types and sizes generate the highest sales?
- How do location tiers impact sales performance?
- Which product categories should be prioritized for restocking or marketing?

Goal of the Dashboard

To build a dynamic, interactive Power BI dashboard that:
- Provides a comprehensive view of sales performance by outlet and item type.
- Highlights trends across outlet size, establishment year, and product attributes.
- Enables data-driven decisions for outlet expansion, product strategy, and operational efficiency.

Walkthrough of Key Visuals

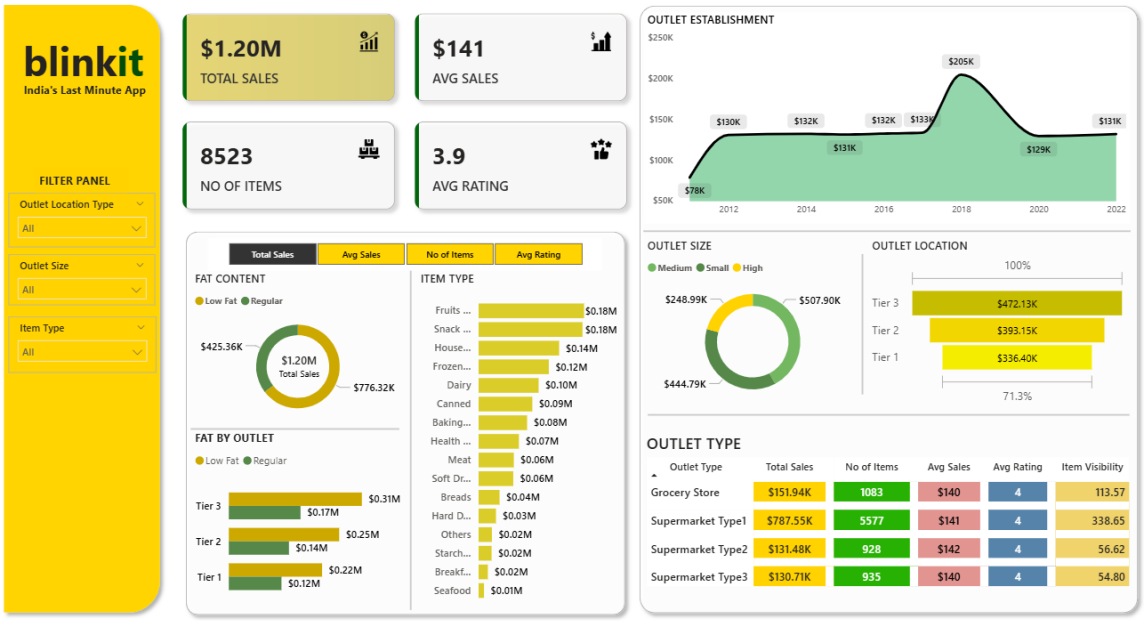
- KPI Cards: Display Total Sales, Average Sales, Number of Items, and Average Rating.
- Sales by Item Type: Highlights top-performing product categories.
- Sales by Fat Content: Compares performance between regular and low-fat products.
- Sales by Outlet Size: Shows revenue share by outlet size — medium-sized outlets lead (~$508K).
- Sales by Location Tier: Highlights Tier 3 outlets as top revenue contributors (~$472K).
- Sales by Establishment Year: Evaluates sales performance based on outlet age.
- Interactive Filters: Slicers for outlet type, item category, and location tier enable dynamic exploration.

Business Impact & Insights

- Medium-sized outlets generated the highest revenue (~$507.9K).
- Tier 3 locations performed best, showing strong suburban demand potential.
- Regular-fat products consistently outperformed low-fat variants.
- Supermarket Type 1 outlets achieved the best overall sales and product diversity.

Impact:
- Improved visibility into outlet performance and customer behavior.
- Guided strategic decisions for outlet expansion and optimization.
- Enhanced inventory planning and marketing focus using data-driven insights.

Screenshot / Demo



Key Takeaways

This project demonstrates expertise in:

- Data cleaning and transformation using Power Query.
- DAX-based KPI creation and measure implementation in Power BI.
- Dashboard design and business storytelling for actionable insights.