Blinkit Power BI Dashboard

Project Report

1. Overview & Purpose

Objective:
Build an interactive Power BI dashboard to analyse Blinkit's grocery sales data, showcasing your skills in data modelling, DAX, visualisation, and storytelling.

Business Goals:

- Track the performance of different Outlet Types, Sizes, and Locations
- Identify top-selling Item Categories
- Analyse the impact of Fat Content and Outlet age on sales
- Derive actionable insights for Blinkit's revenue and operations strategy

2. Data Acquisition & Preparation

Data Source: Simulated Blinkit grocery dataset (Excel) containing:

- Qualitative*:* Item Type, Fat Content, Outlet attributes
- Quantitative: Sales, Rating, Visibility

Power Query Steps:

- Imported Excel file into Power BI Desktop
- Removed duplicates, treated missing values, and ensured proper data types
- Built dimension tables for Items and Outlets, with a central Sales fact table

3. Data Model & DAX Measures

Star Schema: Established using:

- **Fact Table:** Sales
- **Dimension Tables:** Items, Outlets, Date

Key DAX Measures:

- **Total Sales** = SUM(Sales[Sales])
- **Average Sales** = AVERAGEX(VALUES(Sales[TransactionID]), Sales[Sales])
- **Items Sold** = DISTINCTCOUNT(Items[ItemID])
- **Avg Rating** = AVERAGE(Sales[Rating])

4. Dashboard Visuals & Layout

- **Left Slicers:** Outlet Location Type, Outlet Size, Item Type
- **Top KPI Cards:** Total Sales ($1.20 M), Avg Sales ($141), Items Sold (8,523), Avg Rating (3.9)

1 . **Donut Chart:** Total Sales by Fat Content (Low-Fat vs Regular)

2 . **Stacked Bar:** Fat Content breakdown across Outlet Tiers

3 . **Bar Chart:** Sales by Item Category (Fruits, Snacks, Dairy, etc.)

4 . **Line Chart:** Total Sales by Outlet Establishment Year

5 . **Donut Chart:** Sales by Outlet Size

6 . **Bar/Tier Chart:** Transition of sales among Tier 1/2/3 locations

7 . **Matrix Table:** Outlet Type comparison on multiple metrics

5. Interactivity & UX

- Slicers dynamically filter visuals for exploratory analysis
- Cross-filtering enabled—selecting a slice highlights across all visuals

A professionally-designed Power BI dashboard analyzing Blinkit's grocery sales is delivered as part of an internship project. Key achievements include:

- **Interactive KPIs & Visuals:** Total Sales, average sales, Item Count, Avg Rating, plus breakdowns by item category, fat content, outlet size/type/location, and establishment year.
- **Data Modelling & DAX:** Cleaned, structured data model (star schema) with measures for sales and performance metrics.
- **Insights Derived:** Low-fat items perform slightly better; fruits and snacks are top product categories; Tier 3 and medium-sized outlets lead in sales.
- **Deliverables:** .pbix file, dashboard screenshots, and a polished Google Doc (with PDF export) integrating visuals, methodology,

and recommendations—all consolidated in a shared Drive folder for submission.

6. Insights & Implications

1. **Healthy preference detected:** Low-fat items slightly outperform in sales

2. **Category winners:** Fruits & Snacks lead product ranking

3. **Outlet age matters:** Newer outlets show consistent year-over-year growth

4. **Tier 3 & medium outlets:** Top performance — ideal targets for investment

5. **Outlet comparison:** Supermarkets drive sales volume; Grocery Stores excel in item-level visibility

7. Challenges & Learnings

- Learned to manage large models and prevent filter context issues

- Balanced design clarity vs. label legibility (e.g., truncated chart titles)

- Advanced DAX (AVERAGEX, DISTINCTCOUNT) cemented analytical depth