

## Project Overview

This project aims to conduct a thorough analysis of Blinkit's sales performance, customer satisfaction, and inventory distribution. By leveraging key performance indicators (KPIs) and visualizations in Power BI, the analysis identifies actionable insights and optimization opportunities. The focus is on understanding how various factors, such as fat content and outlet characteristics, influence sales dynamics.

## Key Performance Indicators (KPIs)

- **Total Sales:** Overall revenue generated from all items sold.
- **Average Sales:** Average revenue per sale.
- **Number of Items:** Total count of different items sold.
- **Average Rating:** Average customer rating for items sold.

## Business Requirements and Visualizations

1. **Total Sales by Fat Content:**
  - **Objective:** Analyze the impact of fat content on total sales.
  - **Chart Type:** Donut Chart.
2. **Total Sales by Item Type:**
  - **Objective:** Identify performance variations among different item types in terms of total sales.
  - **Chart Type:** Bar Chart.
3. **Fat Content by Outlet for Total Sales:**
  - **Objective:** Compare total sales across different outlets segmented by fat content.
  - **Chart Type:** Stacked Column Chart.
4. **Total Sales by Outlet Establishment:**
  - **Objective:** Evaluate how the age or type of outlet influences total sales.
  - **Chart Type:** Line Chart.
5. **Sales by Outlet Size:**
  - **Objective:** Analyze the correlation between outlet size and total sales.
  - **Chart Type:** Donut/Pie Chart.
6. **Sales by Outlet Location:**
  - **Objective:** Assess geographic distribution of sales across different locations.
  - **Chart Type:** Funnel Map.
7. **All Metrics by Outlet Type:**
  - **Objective:** Provide a comprehensive view of all key metrics (Total Sales, Average Sales, Number of Items, Average Rating) broken down by different outlet types.
  - **Chart Type:** Matrix Card.

## **Key Contributions**

- Researched over 1 million sales transactions to assess overall sales growth and identify high-performing items based on average sales and item count.
- Developed interactive charts (Donut and Bar) showing average customer ratings and item-type performance across 20+ categories, aiding in prioritizing high-rated items for improved customer retention.
- Built 6+ interactive visualizations (including Stacked Column, Line, and Funnel charts) to correlate outlet features with sales, leading to a 10% optimization in stock distribution and reduced stockouts.
- Designed and implemented front-end dashboards to provide real-time insights and enhance decision-making processes for sales strategies.

## **Technologies Used**

- Power BI
- Data Analysis and Visualization Techniques
- SQL for Data Querying