

GROCERY ANALYSIS

Using Power BI

problem statement:-

To conduct a comprehensive analysis of grocery sales performance, customer satisfaction, and inventory distribution to identify key insights and opportunities for optimization using various KPI's and visualization in POWER BI

GROCERY ANALYSIS

Using Power BI

KPI's Requirements :

Total Sales: The overall revenue generated from all items sold.

Average Sales: The average revenue per sale.

Number of Items: The total count of different items sold.

Average Rating: The average customer rating for items sold.

GROCERY ANALYSIS

Using Power BI

Steps in Project:

- Requirements Gatherings
- Data Walkthrough
- Data Connection
- Data Cleaning / Quality Check
- Data Modeling
- Data Preprocessing
- DAX Calculations
- Dashboard Lay outing
- Charts Development and Formatting
- Dashboard / Report Development
- Insight Generation

GROCERY ANALYSIS

Using Power BI

Business requirements

1) Total Sales by Fat Content:

objective: Analyze the impact of fat content on total sales.

Additional KPI Metrics: Assess how other KPI's(Average Sales, Number of Items, Average rating) vary with fat content.

Chart Type: Donut Chart

2) Total Sales by Item Type:

Objective: Identify the performance different items type in total sales.

Additional KPI Metrics: Assess how other KPI's(Average Sales, Number of Items, Average Rating) vary with fat content

Chart Type: Bar Chart

3) Fat Content by Outlet for Total Sales:

Objective: Compare total sales across different outlets segmented by fat content

Additional KPI Metrics: Assess how other KPI's(Average Sales, Number of Items, Average Rating) vary with fat content

Chart Type: Column Chart

GROCERY ANALYSIS

Using Power BI

Business requirements

4) Total Sales by Outlet Establishment:

Objective: Evaluate how the age or type of outlet establishment influence 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 the geographic distribution of sales across different location

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)

Chart Type: Matrix Card

Project Outlet:

Grocery Box

Food Happiness Starts Here



FILTER PANNEL

OUTLET LOCATI...

All

OUTLET SIZE

All

ITEM TYPE

All



\$1.20M

TOTAL SALES



\$141

AVG SALES



8523

NO OF ITEMS



3.9

AVG RATING



Total Sales

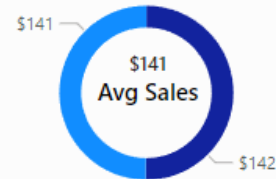
Avg Sales

No of Items

Avg Rating

FAT CONTENT

Regular Low Fat

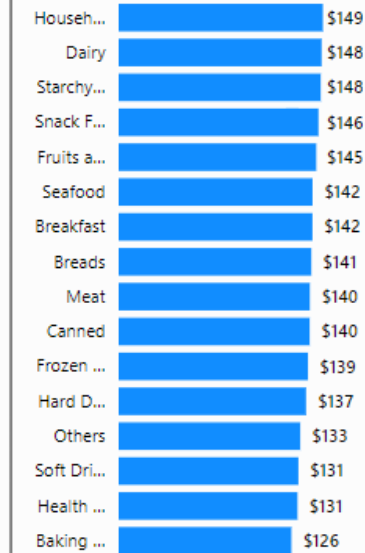


FAT BY OUTLET

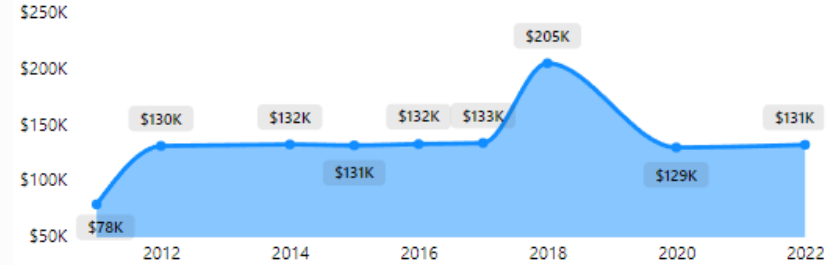
Low Fat Regular



ITEM TYPE

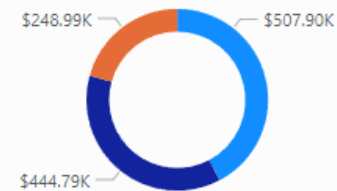


OUTLET ESTABLISHMENT

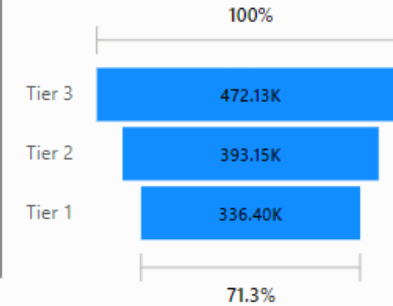


OUTLET SIZE

Medium Small High



OUTLET LOCATION



OUTLET TYPE

Outlet Type	Total Sales	No of Items	Avg Sales	Avg Rating	Item Visibility
Supermarket Type2	\$1,31,477.78	928	\$142	3.93	56.62
Supermarket Type1	\$7,87,549.89	5577	\$141	3.92	338.65
Grocery Store	\$1,51,939.15	1083	\$140	3.93	113.57
Supermarket Type3	\$1,30,714.67	935	\$140	3.91	54.80

GROCERY ANALYSIS

Using Power BI

Conclusion:

The data analysis project on grocery sales performance, customer satisfaction, and inventory distribution provided valuable insights that could support strategic decision-making and operational improvements. Key findings include identifying high-performing products, understanding customer satisfaction drivers, and pinpointing inventory management inefficiencies. By leveraging Power BI to visualize these trends, the project revealed actionable insights, such as optimizing stock levels for popular items, addressing customer concerns to improve satisfaction, and reallocating resources to align with demand patterns. These insights equip the business to make informed decisions that enhance sales, streamline inventory management, and improve overall customer satisfaction.