Blinkit Analysis

BUSINESS REQUIREMENT

To conduct a comprehensive analysis of Blinkit's sales performance, customer satisfaction, and inventory distribution to identify key insights and opportunities for optimization using various KPIs and visualizations in Power BI.

KPI’s Requirements

1. Total Sales: The overall revenue generated from all items sold.
2. Average Sales: The average revenue per sale.
3. Number of Items: The total count of different items sold.
4. Average Rating: The average customer rating for items sold.

Granular Requirements

1. Total Sales by Fat Content:

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

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

2. Total Sales by Item Type:

Objective: Identify the performance of different item types in terms of total sales.

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

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 KPIs (Average Sales, Number of Items, Average Rating) vary with fat content.

4. Total Sales by Outlet Establishment:

Objective: Evaluate how the age or type of outlet establishment influences total sales.

Chart’s Requirements

5. Percentage of Sales by Outlet Size:

Objective: Analyze the correlation between outlet size and total sales.

6. Sales by Outlet Location:

Objective: Assess the geographic distribution of sales across different locations.

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.

Data Processing

* See all the data imported:

SELECT \* FROM blinkitdata

* DATA CLEANING:

Cleaning the Item\_Fat\_Content field ensures data consistency and accuracy in analysis. The presence of multiple variations of the same category (e.g., LF, low fat vs. Low Fat) can cause issues in reporting, aggregations, and filtering. By standardizing these values, we improve data quality, making it easier to generate insights and maintain uniformity in our datasets.

UPDATE blinkitdata

SET Item\_Fat\_Content =

CASE

WHEN Item\_Fat\_Content IN ('LF', 'low fat') THEN 'Low Fat'

WHEN Item\_Fat\_Content = 'reg' THEN 'Regular'

ELSE Item\_Fat\_Content

END;

After executing this query check the data has been cleaned or not using below query

SELECT DISTINCT Item\_Fat\_Content FROM blinkitdata;



Exploratory Data analysis

A. KPI’s

1. TOTAL SALES:

SELECT CAST(SUM(Total\_Sales) / 1000000.0 AS DECIMAL(10,2)) AS Total\_Sales\_Million

FROM blinkitdata;



2. AVERAGE SALES

SELECT CAST(AVG(Total\_Sales) AS INT) AS Avg\_Sales

FROM blinkitdata;



3. NO OF ITEMS

SELECT COUNT(\*) AS No\_of\_Orders

FROM blinkitdata;



4. AVG RATING

SELECT CAST(AVG(Rating) AS DECIMAL(10,1)) AS Avg\_Rating

FROM blinkitdata;



B. Total Sales by Fat Content:

SELECT Item\_Fat\_Content, CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales

FROM blinkitdata

GROUP BY Item\_Fat\_Content



C. Total Sales by Item Type

SELECT Item\_Type, CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales

FROM blinkitdata

GROUP BY Item\_Type

ORDER BY Total\_Sales DESC



D. Fat Content by Outlet for Total Sales

SELECT Outlet\_Location\_Type,

ISNULL([Low Fat], 0) AS Low\_Fat,

ISNULL([Regular], 0) AS Regular

FROM

(

SELECT Outlet\_Location\_Type, Item\_Fat\_Content,

CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales

FROM blinkitdata

GROUP BY Outlet\_Location\_Type, Item\_Fat\_Content

) AS SourceTable

PIVOT

(

SUM(Total\_Sales)

FOR Item\_Fat\_Content IN ([Low Fat], [Regular])

) AS PivotTable

ORDER BY Outlet\_Location\_Type;



E. Total Sales by Outlet Establishment

SELECT Outlet\_Establishment\_Year, CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales

FROM blinkitdata

GROUP BY Outlet\_Establishment\_Year

ORDER BY Outlet\_Establishment\_Year



F. Percentage of Sales by Outlet Size

SELECT

Outlet\_Size,

CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales,

CAST((SUM(Total\_Sales) \* 100.0 / SUM(SUM(Total\_Sales)) OVER()) AS DECIMAL(10,2)) AS Sales\_Percentage

FROM blinkitdata

GROUP BY Outlet\_Size

ORDER BY Total\_Sales DESC;



G. Sales by Outlet Location

SELECT Outlet\_Location\_Type, CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales

FROM blinkitdata

GROUP BY Outlet\_Location\_Type

ORDER BY Total\_Sales DESC



H. All Metrics by Outlet Type:

SELECT Outlet\_Type,

CAST(SUM(Total\_Sales) AS DECIMAL(10,2)) AS Total\_Sales,

CAST(AVG(Total\_Sales) AS DECIMAL(10,0)) AS Avg\_Sales,

COUNT(\*) AS No\_Of\_Items,

CAST(AVG(Rating) AS DECIMAL(10,2)) AS Avg\_Rating,

CAST(AVG(Item\_Visibility) AS DECIMAL(10,2)) AS Item\_Visibility

FROM blinkitdata

GROUP BY Outlet\_Type

ORDER BY Total\_Sales DESC

