# Blinkit Sales Analysis Using SQL Server Management Studio

## **1. Project Overview**

### Objective:

To analyze Blinkit's sales data using SQL Server Management Studio in order to identify sales trends, customer preferences, and outlet performance. The goal is to derive insights that help optimize business decisions related to product sales, outlet operations, and customer satisfaction.

### Tools Used:

* SQL Server Management Studio
* blinkitdb database with table: blinkit\_data

## **2. Data Cleaning**

Cleaning the Item\_Fat\_Content field ensures consistent and accurate analysis. Different variations like LF, low fat, and reg are standardized.

UPDATE blinkit\_data

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;

Check cleaned values:

SELECT DISTINCT Item\_Fat\_Content FROM blinkit\_data;

✅ **Cleaned values:** Low Fat, Regular 

## **3. KPI Metrics**

### 1. Total Sales (in millions):

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

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### 2. Average Sales:

SELECT CAST(AVG(Total\_Sales) AS INT) AS Avg\_Sales FROM blinkit\_data;

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### 3. Number of Items:

SELECT COUNT(\*) AS No\_of\_Orders FROM blinkit\_data;

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### 4. Average Rating:

SELECT CAST(AVG(Rating) AS DECIMAL(10,1)) AS Avg\_Rating FROM blinkit\_data;

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## **4. Granular Sales Analysis**

### A. Total Sales by Fat Content

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

GROUP BY Item\_Fat\_Content;

**Insight:** Low Fat products generate higher revenue.

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### B. Total Sales by Item Type

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

GROUP BY Item\_Type

ORDER BY Total\_Sales DESC;

**Insight:** Some item types consistently perform better, indicating customer preference.

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### C. Fat Content by Outlet for Total Sale

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 blinkit\_data

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;

**Insight:** Urban and Tier 1 outlets see more Low Fat sales.

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### D. Total Sales by Outlet Establishment Year

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

GROUP BY Outlet\_Establishment\_Year ORDER BY Outlet\_Establishment\_Year;

**Insight:** Older outlets generate higher cumulative sales.

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## **5. Outlet and Location Insights**

### A. 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 blinkit\_data

GROUP BY Outlet\_Size

ORDER BY Total\_Sales DESC;

**Insight:** Medium-sized outlets contribute most to total sales.

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### B. Sales by Outlet Location

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

FROM blinkit\_data

GROUP BY Outlet\_Location\_Type

ORDER BY Total\_Sales DESC;

**Insight:** Urban and Tier 1 locations dominate sales performance.

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### C. 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 blinkit\_data

GROUP BY Outlet\_Type

ORDER BY Total\_Sales DESC;

**Insight:** Supermarkets lead in sales, average rating, and visibility.

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## **6. Conclusions**

* **Low Fat products** are more popular and generate higher sales.
* **Urban and Tier 1** areas show stronger performance across all metrics.
* **Medium-sized outlets** convert inventory to revenue most effectively.
* **Supermarkets** are the top-performing outlet type.
* **Older outlets** consistently achieve higher cumulative sales.

## **7. Recommendations**

* Boost inventory and promotions for **Low Fat** products.
* Focus expansion efforts in **Urban and Tier 1** markets.
* Prioritize **medium-sized** outlets for operational investment.
* Explore opportunities to **revitalize or support newer outlets**.