**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 KPI’s and visualization in Power BI

**KPI’s Requirement:**

* 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.

**Chart's Requirements:**

* **Total Sales by Fat Content:**

Objective: Analyzed 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.

Chart Type: Donut Chart.

* **Total Sales by Item:**

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.

Chart type: Bar Chart

* **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.

Chart Type: Stacked Column Chart.

* **Total Sales by Outlet Establishment:**

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

Chart Type: Line Chart

* **Sales by Outlet Size:**

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

Chart Type: Donut/ Pie Chart.

* **Sales by Outlet Location:**

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

Chart Type: Funnel Map.

* **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.

**ANALYSIS OF THE PROJECT**

I developed a comprehensive Power BI dashboard to address Blinkit's business requirements, focusing on sales performance, customer satisfaction, and inventory distribution.

Here's how I designed the dashboard to meet each specific requirement:

**Overall KPIs (Top Section):**

The dashboard prominently displays the key performance indicators at the top, providing an immediate overview:

* **Total Sales:** $1.20M - This is the overall revenue generated.
* **Average Sales:** 141 - The average revenue per sale.
* **No of Items:** 8523 - The total count of different items sold.
* **Average Rating:** 3.9 - The average customer rating for items sold.

**Chart-Specific Analysis as per Business Requirements:**

1. **Total Sales by Fat Content (Donut Chart - Bottom Left):**

* **Objective Met:** The donut chart clearly analyses the impact of fat content on total sales. It shows that "Low Fat" items contribute $776.32K to total sales, while "Regular" fat items contribute $425.36K. This indicates that " Low Fat " fat items significantly outsell " Regular" items in terms of total revenue.
* **Additional KPI Metrics:** While the donut chart primarily focuses on total sales, the presence of filter options (Outlet Location Type, Outlet Size, Item Type) on the left allows for further segmentation and assessment of how other KPIs (Average Sales, Number of Items, Average Rating) would vary when these filters are applied in conjunction with fat content. This fulfils the "Assess how other KPIs vary with fat content" requirement by enabling interactive exploration.

1. **Total Sales by Item Type (Bar Chart - Middle Right):**

* **Objective Met:** The bar chart effectively identifies the performance of different item types in terms of total sales. "Fruits" (+$0.18M) and "Snack" (+$0.18M) are the top-performing item types, indicating strong sales in these categories. Other categories like "Seafood" (+$0.01M) and "Starchy Foods" (+$0.02M) have lower sales.
* **Additional KPI Metrics:** Similar to the fat content analysis, the interactive filters would allow for assessing how Average Sales, Number of Items, and Average Rating vary for specific item types.

1. **Fat Content by Outlet for Total Sales (Stacked Column Chart - Bottom Middle):**

* **Objective Met:** This chart compares total sales across different outlets segmented by fat content. It shows "Tier 3" with $0.31M in "Low Fat" sales and $0.17M in "Regular" fat sales. "Tier 2" has $0.25M (Low Fat) and $0.14M (Regular), while "Tier 1" has $0.22M (Low Fat) and $0.12M (Regular).
* **Additional KPI Metrics:** This chart provides a good comparison of fat content sales across outlets. To fully assess how other KPIs (Average Sales, Number of Items, Average Rating) vary, users would likely need to interact with the dashboard, perhaps by filtering for a specific outlet tier and then observing the top-level KPI cards or other relevant charts.

1. **Total Sales by Outlet Establishment (Line Chart - Top Right):**

* **Objective Met:** The line chart effectively evaluates how the age or type of outlet establishment influences total sales. The sales trend shows an initial increase from 2012 to 2018 (peaking around $205K) and then a decline towards 2022. This suggests that newer or older establishments might have different sales patterns, or there could be external factors influencing sales over time.

1. **Sales by Outlet Size (Donut/Pie Chart - Middle Left):**

* **Objective Met:** This donut chart analyses the correlation between outlet size and total sales. It clearly shows "Medium" outlets generating $507.90K in sales, "Small" outlets generating $248.99K, and the largest portion, presumably "Large" or a different category, contributing $444.79K. This visualizes which outlet sizes contribute most to total sales.

1. **Sales by Outlet Location (Funnel Map - Middle Right - represented by stacked bar for percentages):**

* **Objective Met:** While the chart is a stacked bar chart showing percentages rather than a traditional "Funnel Map," it still assesses the geographic distribution of sales across different locations. "Tier 3" accounts for 47.13% ($472.13K), "Tier 2" for 39.31% ($393.15K), and "Tier 1" for 33.60% ($336.40K) of sales. This provides insight into which location tiers are most lucrative.

1. **All Metrics by Outlet Type (Matrix Card - Bottom Right):**

* **Objective Met:** This matrix card provides a comprehensive view of all key metrics (Total Sales, No of Items, Avg Sales, Avg Rating, Item Visibility) broken down by different outlet types (Grocery Store, Supermarket Type1, Type2, Type3). This is an excellent way to compare performance across different outlet categories at a glance. For example, "Supermarket Type1" has the highest Total Sales ($787.55K) and Number of Items (5577), suggesting it's a high-volume outlet type. It also allows for quick comparison of average rating and item visibility across outlet types.
* **Key Insights:**
* "Low Fat” items significantly outsell "Regular" items.
* "Fruits" and "Snacks" are top-performing item types.
* Sales peaked around 2018 and have declined since then.
* "Medium" outlets contribute the most to total sales based on the provided chart.
* "Tier 3" locations generate the highest percentage of sales.
* "Supermarket Type1" is the highest-performing outlet type across multiple metrics.
* **Opportunities for Optimization:**
* Investigate the decline in sales post-2018.
* Explore strategies to boost sales of "Low Fat" items.
* Analyze the reasons behind the success of "Fruits" and "Snacks" to replicate in other categories.
* Understand the dynamics of sales performance across different outlet sizes and locations to optimize resource allocation and marketing efforts.
* Leverage insights from "Supermarket Type1" to improve performance in other outlet types.

In conclusion, the dashboard effectively addresses the business requirements, providing a comprehensive and interactive platform for analyzing Blinkit's sales performance. The selection of KPIs and chart types is appropriate for the stated objectives, enabling data-driven decision-making.