

Project Report: Blinkit Sales Performance Analysis

Prepared by: Sourav Dan

Project Overview

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

Steps Involved in the Project

1. Requirement Gathering/Business Requirements

- Collected detailed business requirements, including the need to analyze Blinkit's sales data and customer satisfaction metrics.
- Identified key performance indicators (KPIs) such as Total Sales, Average Sales, Number of Items sold, and Average Customer Rating.

2. Data Walkthrough

- Conducted an initial review of the available data, focusing on sales, customer feedback, and inventory management.

3. Data Connection

- Connected the data sources to Power BI, ensuring that all necessary data tables and fields were accessible for analysis.

4. Data Cleaning/Quality Check

- Cleaned the data to remove any inconsistencies or errors. This included handling missing values, duplicates, and ensuring data integrity across all fields.

5. Data Modeling

- Established relationships between different data tables, ensuring that the data was structured appropriately for analysis.

6. Data Processing

- Processed the data to prepare it for analysis, including aggregating sales data, calculating averages, and categorizing items based on fat content and outlet type.

7. DAX Calculations

- Developed DAX calculations to create custom metrics, such as Average Sales per Item, Total Sales by Outlet, and Average Rating by Item.

8. Dashboard Layout Design

- Designed a dashboard layout that provides a clear and concise view of Blinkit's sales performance and customer feedback. The layout was optimized for easy navigation and insights discovery.

9. Charts Development and Formatting

- Created a variety of charts and visualizations to represent the KPIs, including bar charts, pie charts, and funnel maps. The visualizations were formatted for readability and effective communication of insights.

10. Dashboard/Report Development

- Developed the final Power BI dashboard, combining all charts, KPIs, and insights into a single, cohesive report.

Business Requirements and Key Metrics

The project required the analysis of several KPIs to evaluate Blinkit's sales performance and customer satisfaction. The following metrics were calculated and visualized:

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.

Visualizations and Insights

1. Total Sales by Fat Content

- **Objective:** Analyze the impact of fat content on total sales.
- **Visualization:** A bar chart showing total sales by fat content category, along with 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.
- **Chart Type:** Bar chart displaying the sales performance of various item types.

3. Fat Content by Outlet for Total Sales

- **Objective:** Compare total sales across different outlets, segmented by fat content.
- **Insight:** Identified the outlets with the highest sales for different fat content levels, helping understand customer preferences at various locations.

4. Total Sales by Outlet Establishment

- **Objective:** Evaluate how the age or type of outlet establishment influences total sales.
- **Insight:** This analysis helped identify trends where older or newer outlets performed differently based on various factors, leading to optimization opportunities.

5. Sales by Outlet Size

- **Objective:** Analyze the correlation between outlet size and total sales.
- **Chart Type:** Donut chart or pie chart visualizing the relationship between outlet size and sales.

6. Sales by Outlet Location

- **Objective:** Assess the geographic distribution of sales across different locations.
- **Chart Type:** Funnel map providing a geographical overview of sales performance by location.

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.
- **Insight:** Helped understand how outlet type impacts key metrics and customer satisfaction.

Key Insights and Recommendations

1. Impact of Fat Content on Sales:

- Products with lower fat content tended to perform better in specific regions, highlighting a growing customer preference for healthier options.

2. Outlet Performance by Establishment Type:

- Older outlets showed higher customer loyalty but slightly lower average sales, indicating a potential for rejuvenation strategies to increase sales without losing loyal customers.

3. Geographic Sales Distribution:

- Outlets in urban areas had higher total sales, but rural outlets showed better customer ratings, suggesting potential for increased focus on rural markets.

4. Outlet Size and Sales Correlation:

- Larger outlets generally had higher sales but required higher operational costs, suggesting a need for optimization of outlet size depending on location demand.

Conclusion

This Power BI analysis of Blinkit's sales performance and customer satisfaction provided valuable insights into how different factors such as fat content, item type, and outlet location affect key business metrics. The findings offer actionable recommendations for Blinkit to optimize its sales strategies, improve customer satisfaction, and enhance inventory distribution across its outlets.