# Blinkit Sales Performance Analysis

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Project Type: Business Intelligence Sales Analysis  
Tool Used: Power BI  
Objective: To analyze Blinkit's sales data across outlet types, store segmentation, item categories, and fat content to uncover actionable insights.

## Step 1: Problem Definition and Business Objective

Blinkit wanted to understand what drives its sales performance across various dimensions: outlet types, item categories, fat content, and store segmentation (location, size, tier). The objective was to create a visual, dynamic solution using Power BI to analyze these metrics and help stakeholders make informed decisions.

## Step 2: Data Understanding and Cleaning

Data was provided in tabular format (Excel/CSV). Initial tasks included:  
• Checking for nulls and duplicates  
• Normalizing formats (date, currency, category names)  
• Creating calculated fields such as 'Sales Amount' if not directly provided  
• Converting data types (text, number, date) to ensure compatibility in Power BI  
• Verifying outlet attributes like size, location, and tier

## Step 3: Data Modeling in Power BI

Once cleaned, the dataset was imported into Power BI Desktop. Data modeling included:  
• Setting relationships between tables (if multiple sources)  
• Creating a star schema (fact and dimension tables)  
• Optimizing the data model for performance (removing unnecessary columns)  
• Adding hierarchy fields for easy drill-down (e.g., Year > Quarter > Month)

## Step 4: KPI and Metric Development

DAX (Data Analysis Expressions) was used to create the following KPIs:  
• Total Sales = SUM(SalesAmount)  
• Average Sales = AVERAGE(SalesAmount)  
• Number of Items = DISTINCTCOUNT(ItemID)  
• Average Ratings = AVERAGE(Rating)  
These KPIs were placed at the top row for quick executive-level access.

## Step 5: Time-Series Trend Analysis

An Area Chart was used to show outlet establishment and sales over time (2011–2022). This helped identify key growth phases, such as a noticeable spike in 2018 indicating performance boost or expansion.

## Step 6: Store Segmentation Analysis

This section included:  
• Donut chart for Outlet Size: Medium-sized stores showed highest sales.  
• Tier-based segmentation bar chart: Tier 3 cities outperformed Tier 1 and 2 in sales volume.  
• Table for Outlet Type Comparison: Included KPIs such as Sales, Ratings, Item Count, and Item Visibility.  
These insights help Blinkit plan future outlet strategies and resource allocation.

## Step 7: Item-Level Performance Analysis

Tabbed visual views were created to explore:  
• Total Sales by Item Type  
• Average Sales per Item  
• Number of Items by Category  
• Average Ratings by Category  
  
Insights like Fruits, Snacks, and Dairy performing strongly helped identify category leaders.

## Step 8: Fat Content Breakdown

Donut and bar charts were used to analyze regular vs low-fat items:  
• Regular fat products generated more sales overall.  
• Regional breakdown revealed low-fat preferences in higher-tier cities.  
This helps product teams adjust inventory and marketing for regional health trends.

## Step 9: Slicers and Dynamic Filters

Filters were added to allow users to interact with the data:  
• Location (Tier)  
• Outlet Size  
• Item Type  
Slicers enabled dynamic updates across the dashboard, providing tailored views for different users.

## Step 10: Business Impact and Conclusion

This Power BI project enabled Blinkit to:  
• Identify high-performing store types and categories  
• Understand regional differences in sales behavior  
• Track long-term sales growth and outlet establishment trends  
• Optimize product and outlet strategy for improved customer satisfaction and profitability.  
  
The interactive, data-driven approach empowers faster and more confident decision-making.