

Exploratory Data Analysis (EDA) Report

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Project: SWIGGY INSTAMART Sales Dashboard



Figure 1: Swiggy Instamart Sales Dashboard

1. Executive Summary

This report presents a comprehensive Exploratory Data Analysis (EDA) of the SWIGGY INSTAMART sales dataset, summarized through an interactive dashboard. The goal is to derive meaningful insights from the data to support strategic decisions related to product categories, outlet performance, customer preferences, and operational efficiency.

2. Key Metrics Overview

- Total Sales: \$997.2K – A near-million-dollar revenue indicates significant transaction volume and user engagement.
- Average Sales per Transaction: \$141.2 – Suggests a relatively high basket value per

purchase.

- Number of Items: 7060 – Diverse inventory, enabling variety and repeat customer purchases.
- Average Rating: 3.92 – Reflects moderately positive customer feedback and satisfaction.

3. Sales by Outlet Establishment Year

Outlets established in 2012 show a steep increase in sales compared to previous years, reaching \$130.5K.

Sales remain relatively stable from 2014 to 2022 with slight fluctuations, indicating mature market stability.

4. Sales by Outlet Size

- High-size outlets lead with \$377.2K (37.8%) in sales.
 - Medium outlets contribute \$371.0K (37.2%), followed by Small outlets at \$249.0K (25%).
- This shows that both medium and high-size outlets significantly outperform smaller ones in revenue.

5. Sales by Outlet Location Type

- Tier 2 cities generate the highest revenue (\$393.15K), followed by Tier 3 (\$341.42K) and Tier 1 (\$262.59K).
- This indicates growing demand in non-metropolitan regions, a potential area for expansion.

6. Fat Content and Outlet Location Analysis

- Regular fat content items dominate with 64.64% of total sales, showing consumer preference.
- Tier 2 and Tier 3 locations dominate regular fat sales, whereas low-fat product sales are significantly lower across all tiers.

7. Item Type Analysis

Top revenue-generating categories:

- Fruits and Vegetables: \$0.15M
- Snack Foods: \$0.14M
- Household and Dairy Products: ~\$0.11M and \$0.08M respectively.

These categories account for over 50% of sales, suggesting core product offerings should be optimized in these areas.

8. Category-wise Performance

- Highest number of items: Fruits and Vegetables (1019), Dairy (566), and Baking Goods (536).
- Highest total sales: Fruits and Vegetables (\$147,188.96), Dairy (\$84,526.50), and Canned Items (\$75,053.00).
- Highest average sales per item: Breakfast (\$142.7) and Dairy (\$149.3).
- Most consistent ratings: All categories hover between 3.83 and 3.95.

9. Strategic Insights & Recommendations

1. Focus marketing and stocking efforts on Tier 2 and Tier 3 locations.
2. Expand high-earning categories like Fruits, Vegetables, and Dairy across more outlets.
3. Leverage medium and high-size outlets for better ROI.
4. Promote low-fat products to diversify health-conscious customer segments.
5. Improve customer satisfaction further to push ratings beyond 4.0 through loyalty programs or quality checks.