

**Title:** Grocery Sales Analysis Report  
**Subtitle:** A Comprehensive Analysis of Sales Trends  
and Key Metrics

**Subject :** Information visualisation

**Team :** (Batch 1)

- 1) Sathyajit Suresh - RA2211027010008
- 2) Mufeeda O - RA2211027010035
- 3) Akash Kumar - RA2211027010042
- 4) Ansh Semwal - RA2211027010071

# Key Sales Metrics Overview

- **Total Sales:** \$1.20M
  - This represents the overall revenue generated from all grocery sales.
- **Number of Items Sold:** 8523
  - The total quantity of individual items sold across all outlets.
- **Average Sales per Item:** \$141
  - The mean value of sales per item type, indicating the average revenue each item contributes.
- **Average Rating:** 3.9
  - A measure of customer satisfaction, showing the overall average rating given to products by customers.
- **Visuals:**
- Include a snapshot of the dashboard displaying these key statistics.
- **Key Insight:**
- The average sale per item and high total sales value indicate strong performance, while a decent customer rating of 3.9 reflects a generally positive customer experience.

# Grocery Sales

\$1.20M

\$141

8523

3.9

Metrics

Total Sales

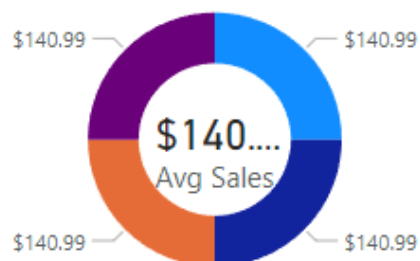
Avg Sales

No of Items

Avg Rating

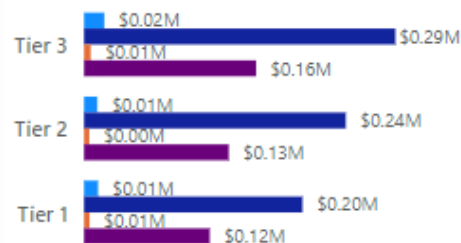
## FAT CONTENT

LF Low Fat reg Regular

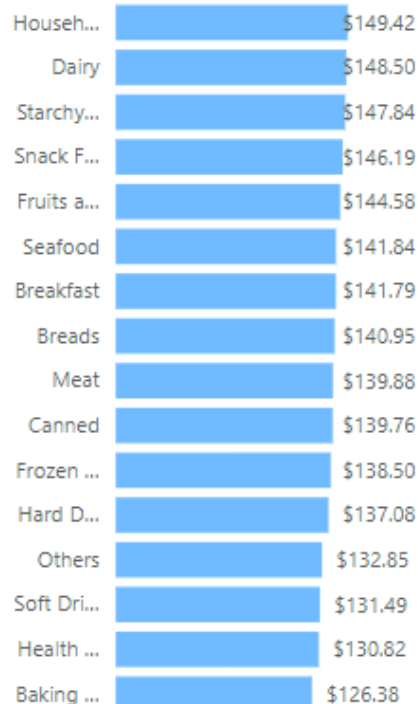


FAT BY OUTLET

Item Fa... LF Low Fat reg Regular



## ITEM TYPE



## OUTLET ESTABLISHMENT

\$250K

\$200K

\$150K

\$100K

\$50K

2012

2014

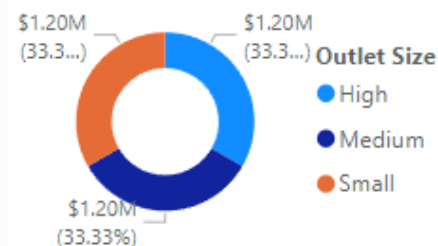
2016

2018

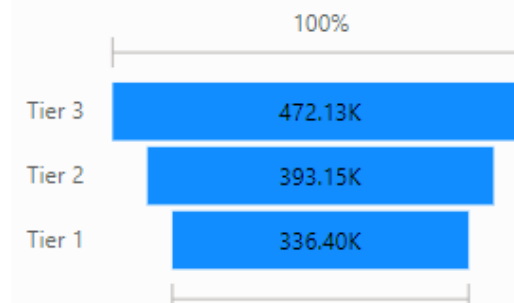
2020

2022

## OUTLET SIZE



## OUTLET LOCATION



| Outlet Type       | Total Sales    | Items | Avg Sales | Avg Rating | Item Visibility |
|-------------------|----------------|-------|-----------|------------|-----------------|
| Grocery Store     | \$12,01,681.49 | 8523  | \$140.99  | 3.93       | 563.64          |
| Supermarket Type1 | \$12,01,681.49 | 8523  | \$140.99  | 3.92       | 563.64          |
| Supermarket Type2 | \$12,01,681.49 | 8523  | \$140.99  | 3.93       | 563.64          |
| Supermarket Type3 | \$12,01,681.49 | 8523  | \$140.99  | 3.91       | 563.64          |

# Sales Trends by Outlet Establishment (2012–2022)

- **Sales Growth Overview:**
  - Over the last decade, grocery sales have shown steady growth, peaking in 2018 at \$205K.
- **Sales Performance Over the Years:**
  - Starting at \$78K in 2012, the sales have fluctuated but maintained a strong upward trend, especially between 2016 and 2020, with sales consistently over \$130K.
- **2022 Sales:**
  - The latest data for 2022 indicates sales stabilized at \$131K, showing consistent performance after the 2018 peak.
- **Visuals:**
  - Line chart from the dashboard showing sales progression from 2012 to 2022.
- **Key Insight:**
  - The significant spike in 2018 reflects a potential market expansion or increased consumer demand during that period, with steady performance since then. This can be attributed to strategic growth or changes in consumer behavior that boosted overall sales.

# Sales Distribution by Outlet Size

- **High Outlet Size Sales Contribution:**
  - Outlets classified as "High" in size contributed **33.3%** of total sales, amounting to **\$1.20M**. These larger outlets are critical to overall sales performance.
- **Medium and Small Outlet Contribution:**
  - Medium-sized outlets also contributed **33.3%** of sales, with **small outlets** matching this at **33.3%**.
- **Overall Sales Balance:**
  - Interestingly, all three outlet sizes contribute equally to total sales, signifying balanced performance across different store sizes.
- **Visuals:**
  - Pie chart showing sales distribution by outlet size (High, Medium, Small) from the dashboard.
- **Key Insight:**
  - Despite the equal percentage contribution, larger outlets may have a higher volume of sales per outlet, indicating they play a vital role in driving revenue. Medium and small outlets balance the market coverage, providing access to different customer segments.

# Sales by Outlet Location

- **Tier 3 Outlets:**
  - Tier 3 outlets generated the highest sales at **472.13K**, accounting for **39.2%** of total sales. These outlets are likely in densely populated areas or serve a larger customer base.
- **Tier 2 Outlets:**
  - Tier 2 outlets contributed **393.15K** in sales, making up **32.7%** of the total. These are mid-level outlets, balancing between Tier 1 and Tier 3 in sales performance.
- **Tier 1 Outlets:**
  - Tier 1 outlets, while having the smallest contribution, still accounted for **336.40K** or **27.9%** of sales, likely serving smaller communities or niche markets.
- **Visuals:**
  - Bar chart showing sales by outlet location (Tier 1, Tier 2, and Tier 3) from the dashboard.
- **Key Insight:**
  - **Tier 3** outlets are the primary sales drivers, suggesting they are located in more profitable or high-demand regions. **Tier 2** and **Tier 1** outlets, though smaller in sales, still significantly contribute and may play a key role in more specialized or regional markets.

# Sales Breakdown by Item Type

- **Top Selling Categories:**
  - **Fruits and Vegetables:** Leading the sales with **\$178,124**, accounting for **14.82%** of total sales. These are staple items driving the highest revenue.
  - **Snack Foods:** Contributing **\$175,433**, representing **14.61%** of total sales. This reflects strong demand for quick, consumable products.
  - **Household Products:** Sales of **\$135,976** (11.32%) indicate that household essentials are a key contributor to revenue.
- **Other Significant Categories:**
  - **Dairy Products:** Generated **\$101,276** (8.43%), showing consistent demand for perishable, everyday goods.
  - **Canned and Frozen Foods:** These categories combined contributed **7.55%** and **9.87%** respectively, reflecting a growing preference for preserved goods.
- **Visuals:**
  - Pie chart showing the distribution of sales by item type from the dashboard.
- **Key Insight:**
  - **Fruits and Vegetables** and **Snack Foods** dominate the sales, followed closely by **Household** and **Dairy** items. This suggests that essential and frequently consumed items generate the most revenue across grocery outlets.

# Average Sales Value by Item Type

- **Highest Average Sales:**
  - **Household Items:** Lead the chart with an average sale value of **\$149.42** per item, reflecting the high price or bulk purchase nature of these products.
  - **Dairy Products:** Averaging **\$148.50** per sale, indicating strong demand and consistent customer purchases of dairy products.
  - **Starchy Foods:** With an average sale of **\$147.84**, these essential goods demonstrate their importance in customer baskets.
- **Other Categories with Strong Averages:**
  - **Snack Foods:** Average sales per item are **\$146.19**, reflecting the frequent purchase of these items.
  - **Frozen Foods:** Averaging **\$141.84**, frozen goods remain a popular choice for customers, offering convenience and longer shelf life.
- **Visuals:**
  - Bar chart showing the average sales per item type from the dashboard.
- **Key Insight:**
  - **Household** and **Dairy** products top the average sales per item, suggesting that while these items may not be bought as frequently as snack foods, they yield higher revenue per purchase.



Item Type

Baking Goods

Breads

Breakfast

Canned

Dairy

Frozen Foods

Fruits and Vegetables

Hard Drinks

Health and Hygiene

Household

Meat

Others

Seafood

Snack Foods

Soft Drinks

Starchy Foods

# Baking Goods

First Item Type

# 16

Count of Item Type

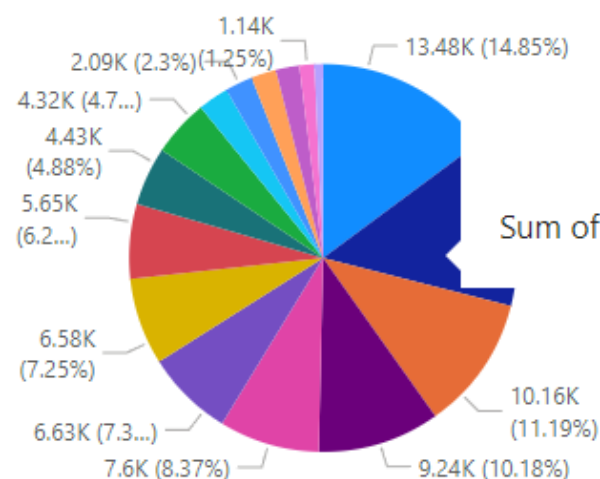
# Starchy Foods

Last Item Type

# 8523

Count of Item Type

Sum of Item Weight by Item Type



Item Type

Fruits and Vegeta...

Snack Foods

Item Type Snack Foods

Sum of Item Weight 12,832.03 (14.14%)

Baking Goods

Health and Hygiene

Soft Drinks

Meat

# Sales Distribution by Fat Content

- Low Fat Products:**

- \$0.29M** in sales, representing a growing consumer trend towards healthier options.

- Regular Fat Products:**

- Contributed **\$0.91M**, showing that traditional products still dominate the market but with room for growth in healthier alternatives.

- Balance of Sales:**

Though regular fat products make up the majority, the rise in low-fat product sales suggests a shifting preference towards health-conscious eating.

- Visuals:**

- Pie chart comparing sales from low-fat and regular-fat items from the dashboard.

- Key Insight:**

- Low-fat products, though smaller in share, are rising in popularity, providing opportunities for promoting health-oriented items.

# FDU12

First Item Identifier

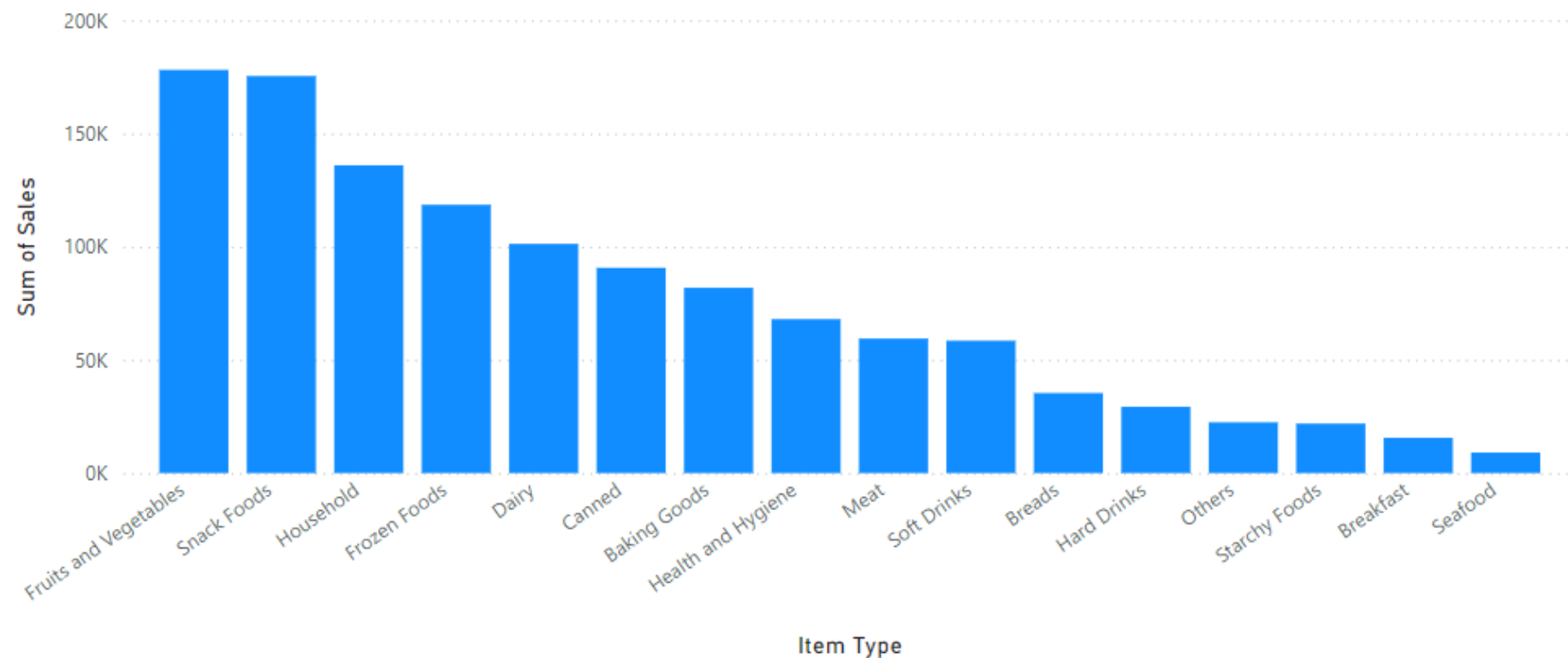
# DRA24

First Item Identifier

# DRF48

First Item Identifier

Sum of Sales by Item Type



# Sales by Item Weight and Outlet Location

- **Item Weight Impact on Sales:**
  - Heavier items like **Fruits and Vegetables** and **Household Products** had the highest sales by weight, reflecting bulk purchases of essential products.
- **Sales by Outlet Location Type:**
  - **Tier 3 outlets** dominate sales by weight, particularly for items like fruits and snack foods, due to larger foot traffic and higher capacity for inventory.
- **Visuals:**
  - Pie charts showing the distribution of item sales by weight and sales by outlet location type.
- **Key Insight:**
  - Heavier products, especially staples like fruits and household goods, generate the most revenue, indicating that these products are critical for outlet success, especially in Tier 3 locations.

| Item Type             | Sum of Sales        |
|-----------------------|---------------------|
| Baking Goods          | 81,894.74           |
| Breads                | 35,379.12           |
| Breakfast             | 15,596.70           |
| Canned                | 90,706.73           |
| Dairy                 | 1,01,276.46         |
| Frozen Foods          | 1,18,558.88         |
| Fruits and Vegetables | 1,78,124.08         |
| Hard Drinks           | 29,334.68           |
| Health and Hygiene    | 68,025.84           |
| Household             | 1,35,976.53         |
| Meat                  | 59,449.86           |
| Others                | 22,451.89           |
| Seafood               | 9,077.87            |
| Snack Foods           | 1,75,433.92         |
| Soft Drinks           | 58,514.17           |
| Starchy Foods         | 21,880.03           |
| <b>Total</b>          | <b>12,01,681.49</b> |

### Fruits and Vegetables

1,78,124.08  
Sum of Sales

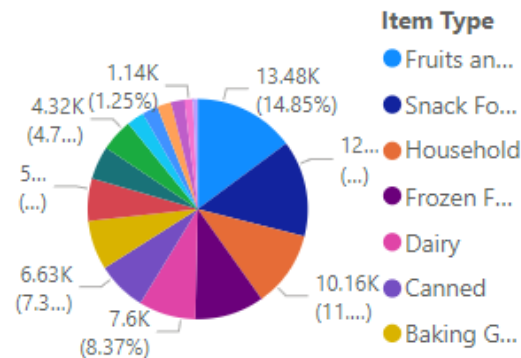
### Household

1,35,976.53  
Sum of Sales

### Snack Foods

1,75,433.92  
Sum of Sales

Sum of Item Weight by Item Type



### Fruits and Vegetables

13,476.04  
Sum of Item Weight

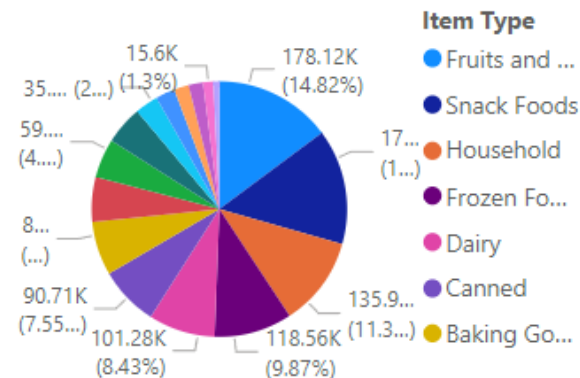
### Household

10,159.02  
Sum of Item Weight

### Snack Foods

12,832.03  
Sum of Item Weight

Sum of Sales by Item Type



### Tier 1

23,979.35  
Sum of Item Weight

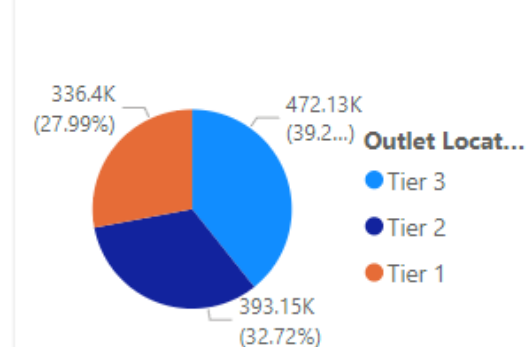
### Tier 2

35,560.63  
Sum of Item Weight

### Tier 3

31,235.00  
Sum of Item Weight

Sum of Sales by Outlet Location Type



# Key Recommendations and Conclusion

- **Focus on High-Demand Items:**
  - Leverage top-selling categories like **Fruits and Vegetables**, **Snack Foods**, and **Household Products** by optimizing stock and promoting them across outlets.
- **Expand in Tier 3 Locations:**
  - Tier 3 outlets contribute the highest sales volume. Consider expanding or improving these outlets to drive further growth.
- **Tap into Health Trends:**
  - Promote **Low-Fat** products through targeted campaigns, as this category shows growing consumer interest and potential for increased sales.
- **Enhance Customer Experience:**
  - With an average rating of **3.9**, customer satisfaction can be improved through better service, promotions, and product variety to push the rating higher and drive loyalty.
- **Visuals:**
  - Final summary chart or image showcasing overall performance.
- **Key Takeaway:**
  - A balanced focus on high-performing items, expanding Tier 3 outlets, and catering to health-conscious consumers will help maximize future growth and maintain the upward sales trend.