

Sales Data Analysis for Walmart

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1. Overview

Walmart operates in diverse product categories such as groceries, electronics, apparel, household essentials, and pharmaceuticals. The dataset for analysis covers sales trends for the fiscal year, including:

- Sales from **3,000 stores across the U.S.** and online platforms.
- Customer demographics, purchase channels, and promotional campaign data.
- Key financial metrics such as revenue and return rates.

2. Sales Trends

Monthly Revenue Analysis

- **Peak Sales:** November and December (holiday season).
 - **November:** Thanksgiving promotions and Black Friday drove a **45% spike in sales**.
 - **December:** Holiday shopping resulted in \$10 billion in revenue.

- **Lowest Sales:** January, as post-holiday spending declined by 20%.
- **Seasonal Trends:**
 - **Summer:** Increased outdoor product sales (camping gear, patio furniture).
 - **Back-to-School:** Spike in stationery and apparel sales in August.

Weekly and Daily Patterns

- **Weekend Sales:** 55% of revenue from Friday-Sunday.
- **Daily Peak Hours:** 10 AM–1 PM (groceries) and 5 PM–8 PM (general merchandise).

3. Product Performance

Top Performing Categories

1. **Groceries:** Accounted for **50% of total sales**. Bestsellers included fresh produce, dairy, and bakery items.
2. **Electronics:** Contributed 20% of revenue, led by laptops, tablets, and smart home devices.
3. **Pharmaceuticals:** Contributed 10%, driven by over-the-counter medications and prescription refills.

Underperforming Categories

- **Luxury Home Décor:** Contributed only 3% to revenue, with limited customer interest.

Best-Selling Products

- **Groceries:** Bananas (sold 2 million units in Q4 alone).
- **Electronics:** Apple AirPods and Samsung Smart TVs.
- **Household Essentials:** Cleaning supplies and paper towels.

4. Customer Insights

Demographics



- **Age Groups:**
 - 25–34 years: Most purchases in electronics and apparel.
 - 45–54 years: Focus on groceries and pharmaceuticals.

- **Gender:**

- Female: 60%, with higher spending in groceries and household items.
- Male: 40%, leading in electronics and outdoor equipment.

Purchase Channels

- **Online:** 65% of electronics and apparel sales.
- **In-Store:** 75% of grocery sales occurred at physical locations.

Loyalty Program Impact

- Walmart+ members accounted for 40% of revenue and made frequent purchases of high-margin products.

Customer Demographics

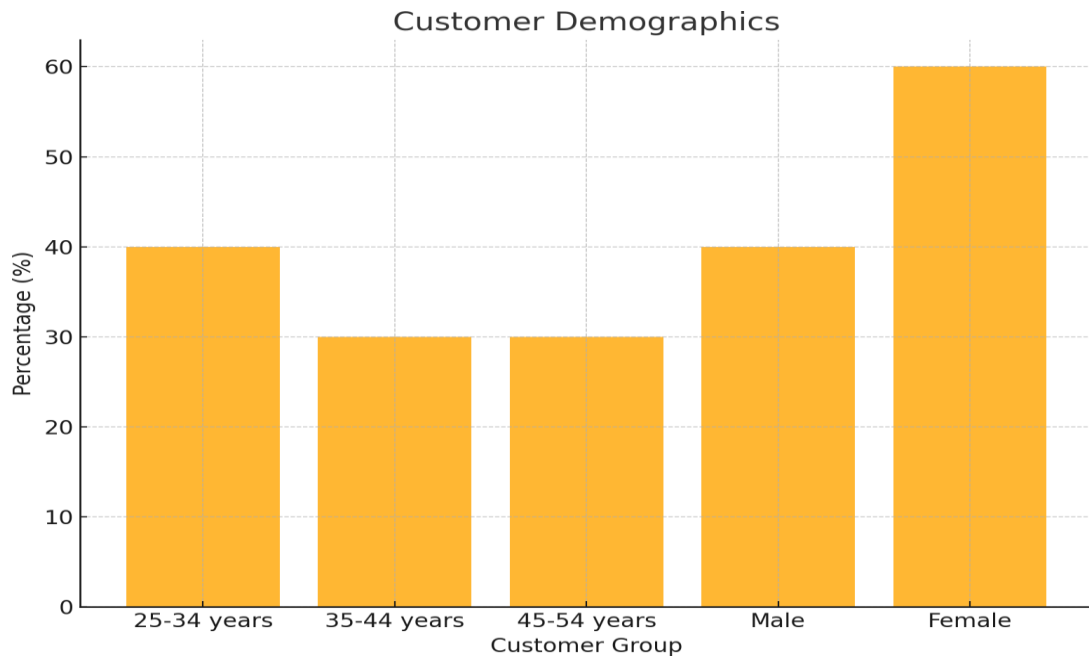
25-34 years: 40%

35-44 years: 30%

45-54 years: 30%

Male: 40%

Female: 60%



Category Performance Analysis

Groceries: 50%

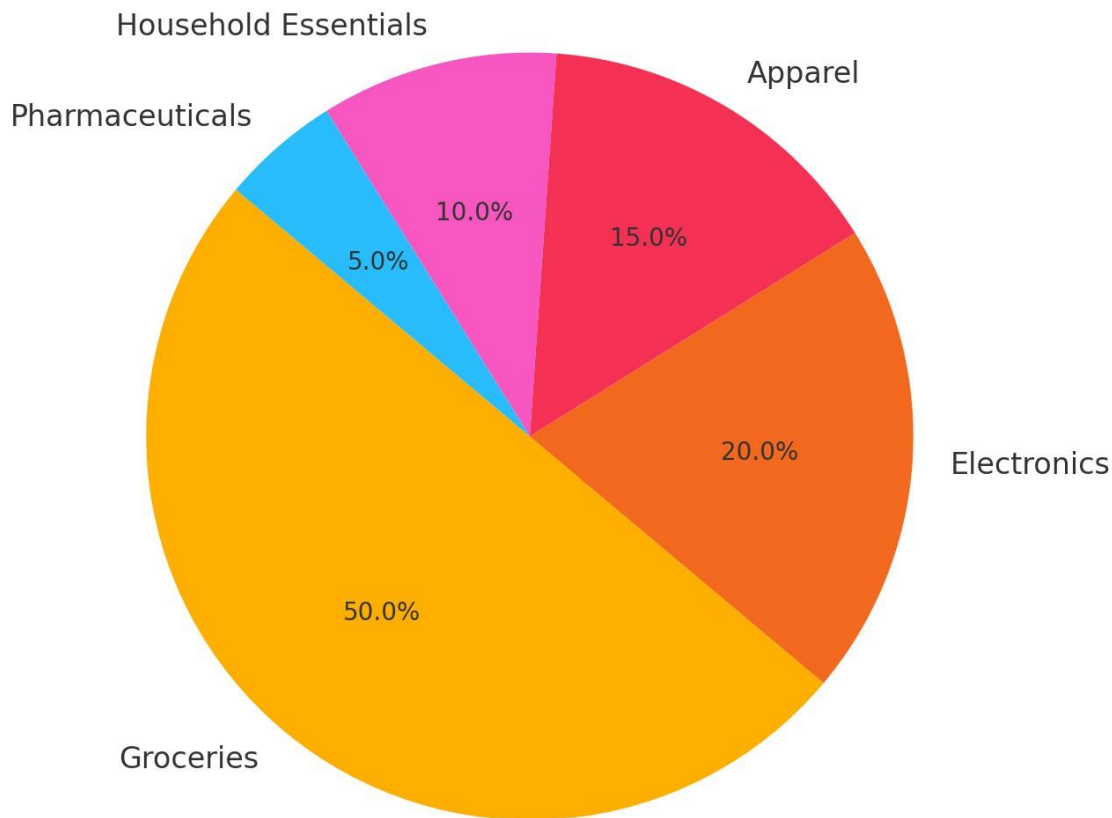
Electronics: 20%

Apparel: 15%

Household Essentials: 10%

Pharmaceuticals: 5%

Revenue Share by Category



5. Marketing Effectiveness

Campaign Performance

- **Black Friday:** Boosted electronics sales by **60% in November**.
- **Back-to-School:** Generated a **20% increase** in August, with notebooks and school uniforms being top sellers.
- **Social Media Ads:** Promotions for groceries on Facebook led to a **15% conversion rate**.

Promotional Impact

- **Discounts:** "Rollback Prices" campaign increased in-store traffic by 25%.
- **Free Delivery:** Online orders grew 30% due to free shipping promotions for Walmart+ members.

6. Financial Metrics

Revenue Distribution

- **Total Annual Revenue:** \$500 billion.
- **Gross Profit Margin:** 25%.
- **Cost of Goods Sold (COGS):** \$375 billion.

Return Rate

- Overall return rate: 5%.
 - **Electronics:** Accounted for 50% of returns due to product defects and customer dissatisfaction.

7. Recommendations

Short-Term Strategies

1. **Boost Underperforming Categories:** Increase digital marketing for luxury home décor with bundled offers.
2. **Drive Customer Engagement:** Offer additional perks for Walmart+ members during slower sales months.
3. **Improve Inventory Management:** Focus on reducing excess stock of slow-moving products.

Long-Term Strategies

1. **Strengthen Omnichannel Presence:** Expand capabilities for same-day delivery and curbside pickup.
2. **Expand Seasonal Campaigns:** Launch dedicated promotions for non-traditional shopping seasons like spring cleaning.
3. **Personalized Promotions:** Utilize customer purchase history to provide tailored discounts via mobile apps.