Detailed Analysis of Products and Sales

This report provides a comprehensive analysis of sales data from a retail chain, examining performance across branches, cities, product categories, and time periods. Key findings include:

- Weslaco is the top-performing city with \$46,352 in total sales
- Fashion accessories and home/lifestyle categories generate the highest revenue (\$489k each)
- Credit cards are the most popular payment method (488,821 transactions)
- December is the peak sales month, while June has the lowest order volume
- Evenings (6pm-midnight) account for 37.7% of total sales

Sales Performance Analysis

Top Performing Cities

| Rank | City | Total Sales |
|------|-------------|-------------|
| 1 | Weslaco | \$46,352 |
| 2 | Waxahachie | \$40,703 |
| 3 | Plano | \$25,688 |
| 4 | San Antonio | \$24,951 |
| 5 | Port Arthur | \$24,524 |

Key Insight: Weslaco outperforms other cities by 14% in total sales. The top 5 cities account for 35% of total revenue.

Branch Performance

| Branch | Total Sales | Transactions | Profit Margin |
|---------|-------------|--------------|---------------|
| WALM009 | \$25,688.34 | 235 | 0.48 |
| WALM074 | \$25,555.42 | 210 | 0.48 |
| WALM003 | \$24,950.56 | 115 | 0.48 |

| WALM058 | \$24,524.37 | 239 | 0.48 |
|---------|-------------|-----|------|
| WALM030 | \$24,460.60 | 229 | 0.48 |

Observation: WALM058 has the highest transaction volume (239) but ranks 4th in total sales, suggesting lower average order value compared to top performers.

Product Category Analysis

Revenue by Category

| Category | Revenue | Profit Margin | Quantity Sold |
|------------------------|------------|---------------|---------------|
| Fashion accessories | \$4,89,481 | 0.39 | 9,653 |
| Home and lifestyle | \$4,89,250 | 0.39 | 9,610 |
| Electronic accessories | \$78,175 | 0.39 | 1,494 |
| Food and beverages | \$53,471 | 0.40 | 952 |
| Sports and travel | \$52,498 | 0.38 | 920 |
| Health and beauty | \$46,851 | 0.40 | 854 |

Key Findings:

- Fashion and home categories dominate with identical revenue performance
- Health and beauty has the highest profit margin (0.40) among major categories
- Electronic accessories have surprisingly low quantity sold despite being a high-demand category

Price Range Analysis

| Price Range | Total Sales |
|-------------|---------------|
| \$70-80 | \$2,40,195.44 |
| \$60-70 | \$2,14,650.81 |
| \$50-60 | \$1,71,496.67 |
| \$80-90 | \$1,54,939.37 |

| \$40-50 | \$1,36,983.45 |
|---------|---------------|
| | |

Insight: Premium products (\$70-80 range) contribute most to revenue, suggesting customers prefer higher-value items.

Temporal Trends

Monthly Sales Performance

| Month | Total Sales | Orders |
|----------|-------------|--------------|
| December | \$2,52,617 | High |
| November | \$2,44,885 | High |
| January | \$1,37,481 | 630 |
| March | \$1,31,692 | 622 |
| February | \$1,22,668 | 583 |
| June | \$25,645 | 258 (lowest) |

Seasonal Pattern: Year-end holiday season (Nov-Dec) accounts for 32% of annual sales. Summer months (June-Aug) show significant drop.

Daily Trends

| Time Frame | Sales Percentage |
|--------------------|------------------|
| Evening (6pm-12am) | 37.7% |
| Morning (6am-12pm) | 25.1% |
| Other times | 37.2% |

Peak Hours: 3pm (142,017 sales), 4pm (134,918), 7pm (128,581)

Customer Behaviour

Payment Methods

| Credit card | \$4,88,821.02 | 5.42 |
|-------------|---------------|------|
| Ewallet | \$4,57,316.07 | 6.48 |
| Cash | \$2,63,589.29 | 5.42 |

Finding: Despite lower customer ratings (5.42), credit cards dominate payment methods. Ewallets have significantly higher satisfaction (6.48).

Weekend Shopping Patterns

Top categories on weekends:

- 1. Home and lifestyle (1,459 units on Sunday)
- 2. Fashion accessories (1,448 units on Saturday)
- 3. Electronic accessories (230 units on Saturday)

Profitability Analysis

Profit by Category

| Category | Total Profit |
|------------------------|--------------|
| Home and lifestyle | \$1,783.50 |
| Fashion accessories | \$1,783.05 |
| Electronic accessories | \$164.73 |
| Food and beverages | \$69.66 |

Observation: Despite similar revenues, home/lifestyle edges out fashion accessories in profitability by \$0.45.

Recommendations

- 1. **Inventory Optimization:** Increase stock of \$70-80 priced items and home/lifestyle products, especially in Weslaco and Waxahachie locations.
- 2. **Staffing Adjustments:** Align workforce with peak hours (2pm-8pm) and holiday seasons to handle increased customer traffic.
- 3. **Promotional Strategy:** Target summer months (June-August) with special campaigns to address the seasonal sales dip.
- 4. **Payment Incentives:** Develop rewards for Ewallet usage to capitalize on higher customer satisfaction ratings.
- 5. **Weekend Focus:** Enhance displays and promotions for home/lifestyle and fashion accessories on weekends when demand peaks.
- 6. **Premium Category Expansion:** Explore adding more products in the \$70-90 price range which shows strong sales performance