

# Walmart Analysis Insights

## Sales Insights

### 1. Key Categories by Sales & Quantity

- Top-selling categories can be inferred from Q6, which shows **category-wise profit**. Categories with higher total profit also likely have high sales volumes.
- Use Q1 to compare total quantity sold across different **payment methods**.

### 2. Branches with Highest Sales Activity

- Q3 helps identify the **busiest day for each branch**, indicating high traffic and sales.
- Q9 compares **year-over-year revenue** by branch, highlighting the top 5 branches with the highest revenue decline, useful for trend analysis.

### 3. Preferred Payment Methods

- Q1 and Q4 reveal that certain **payment methods are more frequently used** and drive larger quantities sold.
- Q7 shows the **most common payment method per branch**, indicating local preferences.

## Profitability

### 1. Most Profitable Product Categories

- Q6: Shows that some categories significantly outperform others in terms of **total profit**, helping to identify which categories to prioritize or expand.

### 2. Most Profitable Locations

- By pairing Q6 with branch/city filters or joining with Q5, you could identify **cities or branches where profitable categories dominate**.

## Customer Behavior

### 1. Ratings and Category Perception

- Q2: Displays **highest-rated categories per branch** based on average customer rating—shows what products customers value most.
- Q5: Gives insights into **rating distributions per category per city**, showing regional customer satisfaction trends.

## 2. Payment Preferences

- Q1 and Q7: Show the **distribution and dominance of different payment methods**, providing insight into customer trust or convenience factors.

## 3. Shopping Time Patterns

- Q8: Categorizes sales into **Morning, Afternoon, and Evening**, identifying **peak shopping times** across branches.

## Summary of Insights:

- **Top Profitable Categories:** Easily visible from total profit calculations (Q6).
- **Branch Trends:** Busiest days, preferred payments, and sales timing (Q3, Q7, Q8).
- **Customer Ratings:** Top-rated categories by branch and city (Q2, Q5).
- **Strategic Alerts:** Revenue drop alerts in specific branches (Q9).