

# Walmart Business Problems

## 1. Analyze Payment Methods and Sales

- **Question:** What are the different payment methods, and how many transactions and items were sold with each method?
- **Purpose:** This helps understand customer preferences for payment methods, aiding in payment optimization strategies.

## 2. Analyze Customer Loyalty by Payment Method

- **Question:** how many transactions per customer are recorded for each payment method?
- **Purpose:** Understand which payment methods correlate with higher customer loyalty?

## 3. Identify the Highest-Rated Category in Each Branch

- **Question:** Which category received the highest average rating in each branch?
- **Purpose:** This allows Walmart to recognize and promote popular categories in specific branches, enhancing customer satisfaction and branch-specific marketing.

## 4. Identify Underperforming Categories Across Branches

- **Question:** Which categories have the lowest total sales and profit margins?
- **Purpose:** Identify product categories that may need new marketing strategies or promotions.

## 5. Determine the Busiest Day for Each Branch

- **Question:** What is the busiest day of the week for each branch based on transaction volume?
- **Purpose:** This insight helps in optimizing staffing and inventory management to accommodate peak days.

## 6. Evaluate Sales Contribution by Time of Year

- **Question:** What are the total sales during holidays, weekends, and weekdays?
- **Purpose:** Determine periods with high and low sales activity for targeted promotions.

## 7. Calculate Total Quantity Sold by Payment Method

- **Question:** How many items were sold through each payment method?
- **Purpose:** This helps Walmart track sales volume by payment type, providing insights into customer purchasing habits.

## 8. Analyze Profitability by Payment Method

- **Question:** Which payment method yields the highest average profit per transaction?
- **Purpose:** Understand which payment methods are most profitable

## 9. Analyze Category Ratings by City

- **Question:** What are the average, minimum, and maximum ratings for each category in each city?
- **Purpose:** This data can guide city-level promotions, allowing Walmart to address regional preferences and improve customer experiences.

## 10. Assess Customer Satisfaction by Shift

- **Question:** What is the average rating for transactions during morning, afternoon, and evening shifts?
- **Purpose:** Helps evaluate if staff performance or peak-hour issues affect customer satisfaction.

## 11. Calculate Total Profit by Category

- **Question:** What is the total profit for each category, ranked from highest to lowest?
- **Purpose:** Identifying high-profit categories helps focus efforts on expanding these products or managing pricing strategies effectively.

## 12. Track Repeat Purchases by Category

- **Question:** Which product categories have the highest rate of repeat purchases?
- **Purpose:** Helps Walmart identify customer favorites and drive loyalty programs

## 13. Determine the Most Common Payment Method per Branch

- **Question:** What is the most frequently used payment method in each branch?

- **Purpose:** This information aids in understanding branch-specific payment preferences, potentially allowing branches to streamline their payment processing systems.

#### **14. Compare Sales-to-Profit Ratios Across Branches**

- **Question:** What is the sales-to-profit ratio for each branch?
- **Purpose:** Highlights branches that generate high sales but low profitability, indicating possible cost issues.

#### **15. Analyze Sales Shifts Throughout the Day**

- **Question:** How many transactions occur in each shift (Morning, Afternoon, Evening) across branches?
- **Purpose:** This insight helps in managing staff shifts and stock replenishment schedules, especially during high-sales periods.

#### **16. Evaluate Sales Impact from Promotions**

- **Question:** How do sales change during promotional periods compared to non-promotional periods?
- **Purpose:** Measures the effectiveness of sales campaigns

#### **17. Analyze Customer Preferences by City**

- **Question:** What are the top-selling categories in each city?
- **Purpose:** Helps Walmart tailor city-specific inventory and marketing strategies.

#### **18. Identify Branches with Highest Revenue Decline Year-Over-Year**

- **Question:** Which branches experienced the largest decrease in revenue compared to the previous year?
- **Purpose:** Detecting branches with declining revenue is crucial for understanding possible local issues and creating strategies to boost sales or mitigate losses.