

Walmart Business Questions

1. **Payment Method Analysis**
 - **Question:** What are the different payment methods, and how many transactions are associated with each?
 - **Purpose:** To identify and quantify the distribution of customer payment methods.
2. **Unique Branches**
 - **Question:** How many unique branches are there in the dataset?
 - **Purpose:** To calculate the total number of Walmart branches in the dataset.
3. **Maximum Quantity Sold**
 - **Question:** What is the maximum quantity of items sold in a single transaction?
 - **Purpose:** To highlight the largest order size in terms of quantity, which is useful for understanding sales extremes.
4. **Average Quantity Per Transaction**
 - **Question:** What is the average number of items sold per transaction?
 - **Purpose:** To compute the average transaction size, which provides insight into typical customer behavior.
5. **Payment Method Sales Summary**
 - **Question:** How many transactions and items were sold for each payment method?
 - **Purpose:** To combine transaction counts and quantities to analyze payment method performance.
6. **Highest-Rated Category by Branch**
 - **Question:** Which category has the highest average rating in each branch?
 - **Purpose:** To highlight customer preferences by identifying the most favored product category per branch.
7. **Busiest Day per Branch**
 - **Question:** What is each branch's busiest day of the week based on the number of transactions?
 - **Purpose:** To determine peak business days for operational planning and staffing.
8. **Category Ratings by City**
 - **Question:** What are the average, minimum, and maximum ratings for each category in each city?
 - **Purpose:** To examine product performance in different cities to identify local preferences or issues.
9. **Profit by Category**
 - **Question:** What is the total profit for each category, ordered from highest to lowest?
 - **Purpose:** To analyze profitability across categories, helping focus on the most lucrative ones.

10. Preferred Payment Method per Branch

- **Question:** What is the most frequently used payment method in each branch?
- **Purpose:** To identify payment trends to optimize customer convenience and branch policies.

11. Transactions by Sales Shift

- **Question:** How many transactions occur during each sales shift (Morning, Afternoon, Evening), and for each branch?
- **Purpose:** Tracks transaction volume by shift to optimize staff scheduling and inventory.

12. Branches with Revenue Decline

- **Question:** Which branches experienced the largest revenue decline year-over-year?
- **Purpose:** To identify branches with declining revenue to investigate underlying issues.

13. Top 3 Busiest Days per Branch

- **Question:** What are each branch's three busiest days based on transaction count?
- **Purpose:** Highlights key business days for better resource allocation and strategy planning.

14. Revenue Contribution by Category

- **Question:** What percentage of a branch's revenue is contributed by each product category?
- **Purpose:** Assesses the revenue impact of each category within a branch for targeted marketing or expansion.

15. Top Revenue Categories per Branch

- **Question:** What are the top three categories contributing to the total revenue in each branch?
- **Purpose:** Identifies the most significant revenue drivers per branch to prioritize product focus.

16. Cumulative Revenue per Branch

- **Question:** What is the cumulative revenue for each branch, ordered by transaction date?
- **Purpose:** Tracks revenue trends over time to understand growth patterns within branches.

17. Sales Summary by Category

- **Question:** What are the total sales for each product category displayed in columns for comparison?
- **Purpose:** Simulates a pivot table for cross-category comparisons, providing insights into relative performance.