

# Walmart Analysis

## A. Analyze the performance of sales and revenue at the city and branches level

The screenshot shows an Excel spreadsheet with a PivotTable summarizing sales and revenue. The PivotTable is located in the range A6:C10. The columns are labeled 'Sum of Quantity', 'Column Labels', and 'Grand Total'. The rows are labeled 'Row Labels', 'Mandalay', 'Naypyitaw', 'Yangon', and 'Grand Total'. The data is as follows:

Row Labels	Mandalay	Naypyitaw	Yangon	Grand Total
Mandalay	637	604	519	1820
Naypyitaw	648	604	579	1831
Yangon	598	631	630	1859
Grand Total	1883	1899	1728	5510

## B. What is the average price of an item sold at each branch of the city

The screenshot shows an Excel spreadsheet with a PivotTable summarizing the average unit price of items sold at each branch of the city. The PivotTable is located in the range B5:D25. The columns are labeled 'Row Labels', 'Average of Unit price', and 'Grand Total'. The rows are labeled 'Mandalay', 'Naypyitaw', 'Yangon', and 'Grand Total'. The data is as follows:

Row Labels	Average of Unit price
Mandalay	55.86
Naypyitaw	55.61
Yangon	54.78
Grand Total	55.67

## C. Analyze the performance of sales and revenue. Month over Month across the product line, Gender, and Payment Method, and identify the focus areas to get better sales for April 2019.

# 1. Sports and Travel

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Forecast: What-If Analysis, Forecast Sheet

Group, Ungroup, Subtotal, Outline

Comments, Share

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Product line	Cash	Credit card	Credit card Total	Ewallet	Ewallet Total	Grand Total
January	5206.46	4407.54	9614	3570.03	3591.86	7161.89
February	2449.13	2028.21	4477.34	1842.21	1466	3308.21
March	1799.53	2084.19	3883.72	2863.86	3633.9	6497.76
Grand Total	9455.12	8519.94	17975.06	8276.1	8691.76	16967.86

Sheet1

# 2.Home and lifestyle

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Product line	Cash	Credit card	Credit card Total	Ewallet	Ewallet Total	Grand Total
January	3618.8	3396.24	7015.04	4388.16	1131.21	5519.37
February	2424.18	2656.4	5080.58	2369.27	639.81	3209.08
March	2748.51	2859.68	5608.19	2300.39	2288.37	4588.76
Grand Total	8791.49	8912.32	17703.81	9057.82	4259.39	13317.21

Sheet1

### 3. Health and beauty

Product line	Health and beauty																			
Sum of sales	Column Labels		Cash Total		Credit card Total		Ewallet Total		Grand Total											
Row Labels	Female		Male		Female		Male													
January	878.27	3732.94	4611.21	1774.4	3712.44	5486.84	2471.17	3033.8	5504.97	15603.02										
February	4218.83	1406.58	5625.41	1792.37	2436.87	4231.24	1344.95	2705.31	4050.26	13906.91										
March	1555.04	4578.92	6133.96	1767.17	3723.77	5490.84	1874.93	3841.42	8716.35	17341.25										
Grand Total	6652.14	9718.44	16370.58	5333.94	9875.08	15209.02	5691.05	9580.53	15271.58	46851.18										

### 4. Food and beverages

Product line	Food and beverages																			
Sum of sales	Column Labels		Cash Total		Credit card Total		Ewallet Total		Grand Total											
Row Labels	Female		Male		Female		Male													
January	5197.05	1927.02	7124.07	3419.77	3797.24	7217.01	2845.51	1452.01	4297.52	18638.6										
February	3417.24	2374.27	5791.51	4499.38	3377.46	7876.84	2814.74	2564.87	5379.61	19047.96										
March	3601.07	1779.42	5380.49	2556.32	1611.44	4177.76	3230.27	2996.2	6226.47	15764.72										
Grand Total	12215.36	6080.71	18296.07	10485.47	8786.14	19271.61	8890.52	7013.08	15903.6	53471.28										

## 5. Fashion Accessories

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## 6. Electronics accessories

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### A. Performance of Sales and Revenue at the City and Branch Level

#### 1. Data Collection:

- Ensure you have data that includes sales transactions, revenue figures, branch locations, and city information.
- Important fields: Branch ID, City, Sales Amount, Date, and possibly the number of items sold.

## 2. City-Level Analysis:

- Total Sales and Revenue:
  - Calculate the total sales and revenue for each city. Sum up sales amounts and revenue from all branches in the city.
- Performance Metrics:
  - Compute total sales and total revenue for each city.
  - Determine average revenue per branch within each city by dividing the total revenue by the number of branches in that city.
- Trend Analysis:
  - Identify growth or decline trends in sales and revenue over a specified period (e.g., monthly or quarterly).

## 3. Branch-Level Analysis:

- Total Sales and Revenue:
  - Calculate the total sales and revenue for each branch.
- Performance Metrics:
  - Compute metrics such as average sales per branch and average revenue per branch.
  - Identify branches with the highest and lowest performance.
- Comparative Analysis:
  - Compare performance metrics among branches within the same city and across different cities to identify top and underperforming branches.

## B. Average Price of an Item Sold at Each Branch

### 1. Data Collection:

- Ensure you have data on total revenue and total number of items sold for each branch.

## C. Month-over-Month Performance Analysis

### 1. Data Collection:

- Collect data on sales, revenue, product lines, customer gender, and payment methods for each month.

### 2. Performance Analysis Across Product Lines:

- Monthly Trends:
  - Analyze sales and revenue trends for each product line on a month-over-month basis.
- Growth Analysis:
  - Identify which product lines are experiencing growth or decline and quantify the changes.

### 3. Performance Analysis by Gender:

- Monthly Trends:
  - Assess how sales and revenue vary by gender each month.
- Gender-Based Preferences:
  - Determine if there are any noticeable patterns in purchasing behavior based on gender.

### 4. Performance Analysis by Payment Method:

- Monthly Trends:
  - Evaluate the popularity and revenue contribution of different payment methods on a monthly basis.
- Payment Method Analysis:
  - Identify if there are shifts in payment method preferences and their impact on sales.

#### 5. Focus Areas for April 2019:

- Identify Key Metrics:
  - Look for significant deviations or trends in April 2019 compared to previous months.
- Product Line Opportunities:
  - Determine which product lines underperformed and explore reasons (e.g., seasonal demand, competition).
- Gender-Based Insights:
  - Focus on any changes in gender-based purchasing patterns and adjust marketing strategies accordingly.
- Payment Method Trends:
  - If there is a noticeable shift in preferred payment methods, consider updating payment options or promotional strategies.

#### 6. Recommendations:

- Targeted Promotions:
  - Implement targeted promotions for underperforming product lines or branches.
- Pricing Strategies:
  - Adjust pricing based on average item prices and market conditions.
- Enhanced Customer Experience:
  - Improve customer experience based on insights from gender and payment method trends.

## 2. App Exploration

### General Approach to App Exploration

#### 1. Feature Review:

- Core Features: Evaluate the primary functionalities of the app. For Jar, which is often associated with financial savings or investment, this might include features related to saving money, investment options, user account management, and financial tracking.
- Additional Features: Look at any extra functionalities that enhance the core experience, such as notifications, integrations with other services, or educational resources.

#### 2. User Experience (UX) Analysis:

- Usability: Assess how easy it is for users to navigate through the app, find information, and perform tasks.
- Design: Evaluate the visual design for clarity, aesthetics, and consistency.
- Performance: Review the app's responsiveness, load times, and overall stability.

- User Feedback: Consider user reviews and ratings to gather insights into common issues or desired features.

## Potential Areas for Improvement

### 1. Onboarding Process

#### Issue:

- Complex or Confusing Onboarding: Users might find the onboarding process overwhelming or confusing, which can lead to higher dropout rates and lower user engagement.

#### Reasoning:

- Initial Impressions Matter: The onboarding process is crucial because it shapes the user's first impression and sets the stage for their long-term engagement with the app. A complicated or lengthy onboarding process can deter new users from fully exploring the app or using it effectively.
- User Retention: Simplifying the onboarding experience helps in retaining users by making them feel comfortable and confident from the beginning. Providing clear, step-by-step instructions or interactive tutorials can enhance understanding and satisfaction.

#### Suggestion:

- Streamline Onboarding: Simplify the onboarding process by breaking it into smaller, manageable steps. Use progressive disclosure to introduce features gradually rather than all at once. Consider adding interactive tutorials or a demo mode to guide users through key functionalities.

### 2. Personalization and Customization Options

#### Issue:

- Limited Personalization: If the app doesn't offer enough options for users to personalize their experience, it might not meet individual needs or preferences effectively.

#### Reasoning:

- User Engagement: Personalization helps users feel that the app is tailored to their specific needs and preferences, which can increase engagement and satisfaction. Limited customization options can make the app feel less relevant and less engaging to a diverse user base.
- Differentiation: In a competitive market, personalization can be a key differentiator. Offering users the ability to customize their experience can set the app apart from competitors and enhance its value proposition.

Suggestion:

- Enhance Personalization: Introduce features that allow users to personalize their dashboards, notifications, and financial goals. Implement adaptive learning algorithms that tailor recommendations and insights based on user behavior and preferences. For example, providing customizable widgets or themes, and allowing users to set their own goals and track progress according to their preferences could greatly enhance user experience.

### 3. Product Optimisation

To increase participation in the 'Spin to Win' game on the Jar app from 23 out of 100 users to at least 50 out of 100, you can use several strategies to boost engagement and incentivize users. Here are actionable suggestions:

#### 1. Improve Visibility and Accessibility

Issue:

- Low Visibility: Users might not notice the 'Spin to Win' feature or understand its benefits.

Suggestions:

- Prominent Placement: Position the 'Spin to Win' feature in a highly visible area of the app's home screen or dashboard. Use eye-catching graphics or animations to draw attention.

- Persistent Banner: Add a banner or notification that highlights the game, reminding users of its availability and benefits.

#### 2. Enhance the Incentive Structure

Issue:

- Insufficient Motivation: Users may not find the rewards compelling enough to participate.

Suggestions:

- Reward Variety: Offer a range of rewards, from small instant wins to larger prizes. Ensure that the rewards are valuable and relevant to the users.

- Daily Incentives: Implement a system where users receive guaranteed rewards or bonus incentives for participating daily. This could include extra spins or exclusive offers.

- Progressive Rewards: Introduce a tiered reward system where users earn better rewards the more they participate or the longer they stay engaged with the app.



### 3. \*Optimize User Experience\*

Issue:

- Complex or Frustrating Gameplay: Users might find the game difficult or unenjoyable, leading to lower participation rates.

Suggestions:

- Simplify Gameplay: Ensure that the game mechanics are easy to understand and play. Minimize any friction in the spinning process.

- Instant Feedback: Provide immediate and positive feedback when users spin the wheel. Celebratory animations or sounds can enhance the user experience.

### 4. Promote the Game Actively

Issue:

- Lack of Awareness: Users might not be aware of the 'Spin to Win' feature or its benefits.

Suggestions:

- In-App Promotions: Use push notifications, in-app messages, or pop-ups to remind users about the game. Highlight the benefits and potential rewards.

- Email Campaigns: Send targeted emails to users, especially those who haven't yet participated, encouraging them to try the game with a clear call-to-action.

### 5. Leverage Social Proof and Gamification

Issue:

- Limited Social Influence: Users might not feel compelled to participate without seeing others doing so.

Suggestions:

- Leaderboard and Achievements: Introduce leaderboards or achievements that showcase top players and reward consistent participation. This creates a sense of competition and accomplishment.

- User Stories and Testimonials: Share stories or testimonials from users who have won significant rewards or benefited from playing the game.

## 6. Personalize the Experience

Issue:

- Generic Experience: The game might not feel relevant to all users.

Suggestions:

- Personalized Offers: Tailor rewards and incentives based on user behavior or preferences. For example, offer personalized spins or bonuses based on past interactions with the app.
- Dynamic Rewards: Adjust the rewards and incentives dynamically based on user engagement patterns to keep the game appealing.

## 7. A/B Testing and Analytics

Issue:

- Uncertain Effectiveness: Not all strategies will be equally effective.

Suggestions:

- A/B Testing: Conduct A/B tests to compare the effectiveness of different strategies for increasing participation. Test changes in game visibility, reward structures, and promotional methods.
- Monitor and Adjust: Continuously monitor user engagement metrics and adjust strategies based on performance data to optimize participation rates.