

Sales Analysis Report

Introduction

This report provides a comprehensive analysis of the sales data for the year, focusing on key metrics and insights that can guide future business strategies. The data used for the analysis includes monthly sales figures, product sales details, and regional sales distribution. The analysis steps involved merging, cleaning, and augmenting the raw data to ensure accurate and actionable insights.

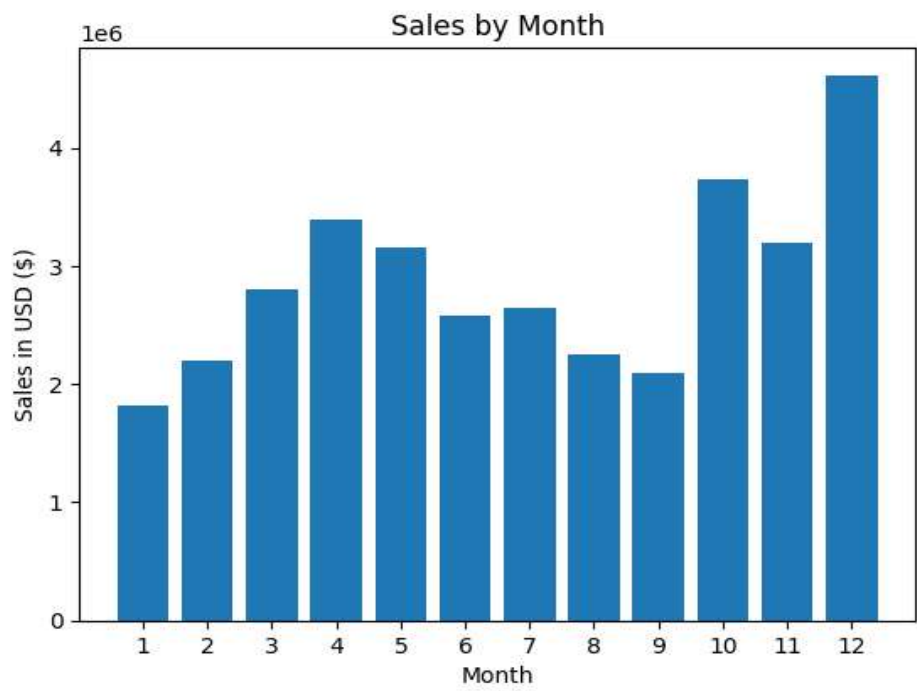
Data Preparation and Methodology

To ensure the accuracy of the analysis, I started by merging the sales data across multiple months into a single dataset. The raw data underwent a thorough cleaning process to eliminate any inconsistencies or missing values. Additionally, new columns were introduced to enhance the dataset, such as time of day for analyzing peak sales periods and product pairings for identifying popular combinations. The dataset was then prepared for analysis and visualization.

Key Questions and Answers

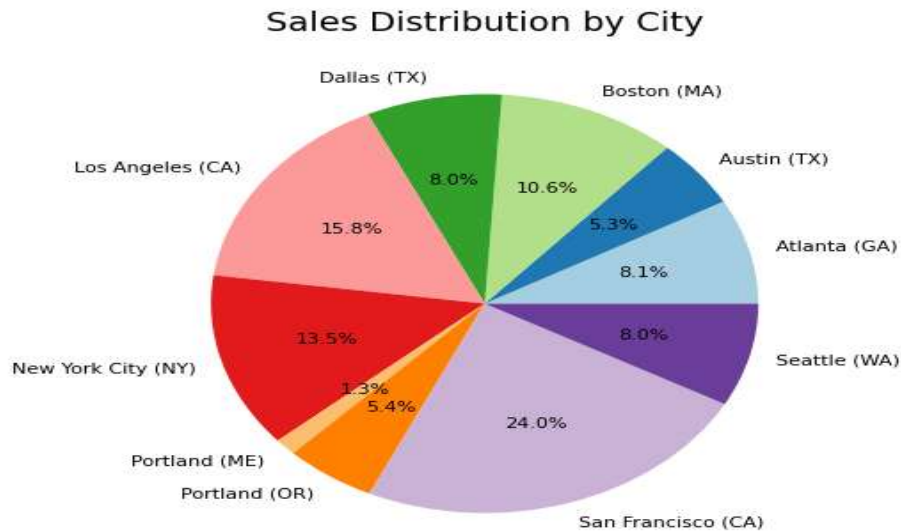
1. *What was the best month for sales? How much was earned that month?*

The best month for sales was **December**, primarily driven by events like Christmas and the holiday season, which typically see a surge in consumer spending. This month achieved the highest sales revenue, reflecting the seasonal demand for products.



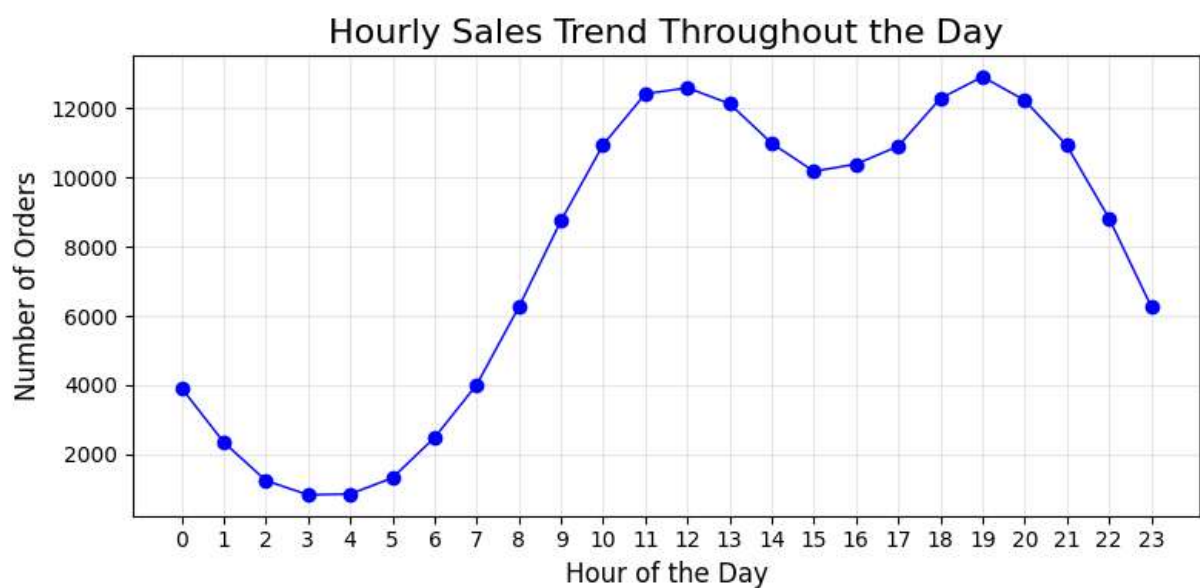
2. What was the city with the most sales?

The city with the highest sales was **San Francisco**. This is likely due to the city's popularity, vibrant lifestyle, and superior infrastructure, which contribute to higher consumer demand. The city's economic conditions and demographics may also have played a role in driving sales.



3. What is the best time to display advertisements to increase sales?

Based on the analysis of sales trends throughout the day, the most profitable time for advertising is from **10 a.m. to 8 p.m.**. During this period, sales were consistently high, suggesting that customers are most likely to engage with advertisements and make purchases during these hours.



4. What are the most sold pairs of products?

The most frequently purchased product pairs were:

- iPhone & Lightning Charging Cable: 1005 times sold
- Google Phone & USB-C Charging Cable: 987 times sold

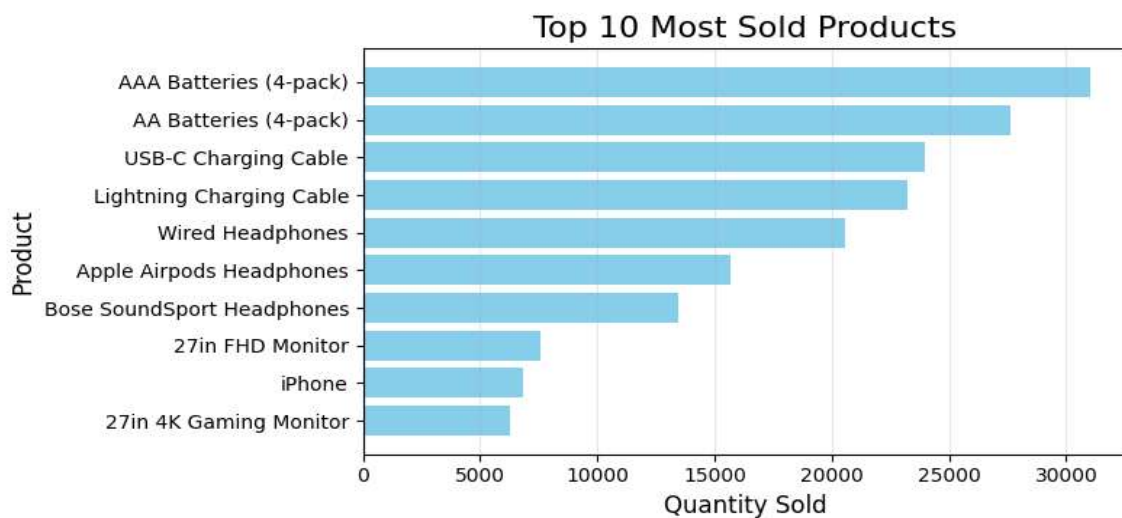
These pairs indicate a strong consumer preference for mobile phones and their accompanying accessories. This insight highlights the potential value of introducing bundled sales strategies, where offering discounts or promotions on product pairs could encourage customers to purchase both items together. Tailoring offers based on these popular product combinations could drive sales and enhance customer satisfaction.

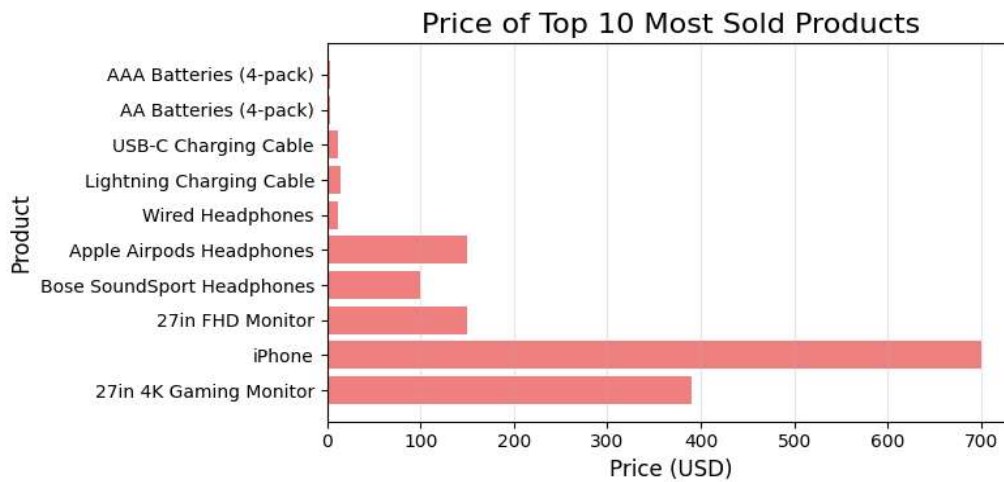
5. What products sold the most, and why?

The top-selling products were:

- **AAA Batteries (4-pack):** 31,017 units
- **AA Batteries (4-pack):** 27,635 units
- **USB-C Charging Cable:** 23,975 units
- **Lightning Charging Cable:** 23,217 units
- **Wired Headphones:** 20,557 units

The success of these products can be attributed to their affordability and accessibility. Low-priced items like batteries and charging cables appeal to a broad range of customers, in contrast to higher-priced items like iPhones or 4K gaming monitors, which may be outside the budget for some consumers.





Conclusion

The analysis reveals several important insights that can inform future business decisions. December stands out as the peak month for sales, while San Francisco leads as the city with the highest sales. The ideal window for advertising is from 10 a.m. to 8 p.m., and product bundles like mobile phones with accessories perform exceptionally well. Furthermore, affordable products, such as batteries and charging cables, dominate the sales figures, reflecting consumer behavior and purchasing patterns.

By leveraging these insights, the business can optimize its sales strategies, particularly around key sales periods and by tailoring marketing efforts to the most profitable times of day. Additionally, focusing on product bundles and understanding the demand for low-cost items will be crucial for maximizing sales.