

Using Python and Power BI, I conducted comprehensive data analysis to identify trends, top-selling products, and revenue metrics crucial for strategic decision-making.

🔗 **Data Analysis Tools:** Utilizing Python, Power BI, and employing techniques such as data pre-processing, data modeling, DAX calculations, and data visualization proved instrumental in deriving these insights. Here are some notable findings:

💡 **Annual Sales:** The company has achieved impressive annual sales of \$34.48 million.

💡 **Seasonal Sales Trends:** December stands out as the best month for sales. Notably, the last half of the year shows a significant increase in sales. This pattern suggests a potential opportunity to optimize advertising strategies for the first three months of the year.

💡 **Top-Performing City:** San Francisco leads among the 9 cities, contributing 24% to the total annual sales. Understanding the factors driving success in San Francisco could provide valuable insights for other regions.

💡 **Peak Shopping Hours:** There's a noticeable influx of shoppers between 12 pm and 7 pm. This information can be leveraged for targeted marketing and promotional activities during these hours.

💡 **Best-Selling Products:** AA and AAA batteries emerge as the best-selling products, boasting an attractive profit margin. The low acquisition cost of these products likely contributes to their profitability.

💡 **Underperforming Products:** LG products appear to be the least purchased, with the company earning minimal profits from them. Reevaluating advertising strategies for LG products may be necessary to improve their performance.

🧠 **In conclusion,** these data-driven findings provide a foundation for informed decision-making. As we move forward, it's essential to consider refining advertising techniques, particularly for the less successful products, and to capitalize on the observed sales trends.