**GADGET STORE SALES ANALYSIS**

**DATA UNDERSTANDING**

The dataset originates from a gadget store and encompasses customer transactions spanning from the fiscal year 2019 to 2020. Each dataset column represents attributes such as Order ID, Products, Quantity Ordered, Unit Price, Order Date, Purchase Address, Month, Sales, City, and Hours. The dataset comprises 185,951 rows, including headers.

**PROJECT GOAL**

The objective is to conduct a comprehensive descriptive analysis of sales data from the gadget store for the fiscal years 2019 to 2020. This aims to unveil customer purchasing patterns, identify trends, and refine sales strategies. The analysis entails examining sales trends, identifying top-selling products, and gauging revenue metrics crucial for business decision-making.

**DATA SOURCES**

The primary dataset utilized for this analysis is from Meriskill "Sales\_Data.csv," capturing sales transactions from the gadget store.

**TOOLS USED**

EXCEL: For data cleaning and analysis.

POWER BI: For report creation.

**KEY AREA FOCUS**

* **Sales Performance Analysis:** Evaluate overall sales performance, encompassing total revenue, average order value, and discernible sales trends over the period.
* **Product Analysis:** Assess the popularity of products based on quantity ordered and revenue generated. Pinpoint top-selling products and evaluate their contribution to overall sales.
* **Customer Segmentation:** Segment customers based on their buying behavior, purchase frequency, and average order value. Identify high-value customers and tailor marketing strategies accordingly.
* **Geographical Analysis:** Analyze sales by city to pinpoint regions with the highest sales volume and potential growth prospects. Evaluate the impact of location on sales performance.
* **Time Analysis:** Scrutinize sales trends by month and hour to identify peak selling periods and streamline inventory management and staffing.
* **Correlation Analysis:** Investigate correlations between different variables like product categories, purchase timing, and sales performance to unveil insights and areas for improvement.

**EXPLORATORY DATA ANALYSIS**

After the dataset review, the following questions were guided for the analysis:

1. **Sales Performance Analysis:**

What is the total revenue?

What is the average order value?

Are there discernible sales trends?

1. **Product Analysis:**

Which products are the top sellers?

1. **Geographical Analysis:**

Which cities drive the most sales?

1. **Time Analysis:**

When are the peak selling periods?

**RESULTS**

1. Total revenue amounts to approximately $34.49 million.
2. The average order value is $185.49.
3. The total quantity ordered is 209,000 units.
4. There are 19 product categories, with USB-C Charging Cable and Lightning Charging Cable emerging as the top-selling products.
5. The total number of customers is 185,950.
6. Sales were recorded in nine cities, with San Francisco leading in sales volume.
7. December 2019 witnessed the highest sales, totaling $4.6 million, making it the peak sales period.

**RECOMMENDATIONS**

Based on the results of the analysis, here are recommendations for the gadget store:

1. **Revenue Optimization:**

Capitalize on High-Value Products: Given the substantial total revenue, focus on promoting and ensuring the availability of high-margin products like USB-C Charging Cable and Lightning Charging Cable to maintain and potentially increase revenue levels.

Diversify Product Range: While the top-selling products are crucial, consider diversifying the product range to appeal to a broader customer base and potentially unlock new revenue streams.

1. **Average Order Value Enhancement:**

Implement Cross-Selling Strategies: Encourage customers to add complementary products to their orders during checkout to increase the average order value. This could involve offering discounts on bundled purchases or suggesting related products based on their current selections.

1. **Inventory Management:**

Optimize Stock Levels: With a total quantity ordered of 209,000 units, ensure optimal inventory management practices to avoid stockouts of popular products while minimizing excess inventory of slow-moving items. Utilize sales trends to forecast demand accurately and adjust procurement accordingly.

1. **Customer Engagement:**

Enhance Customer Experience: With nearly 186,000 customers, prioritize delivering exceptional customer service to foster loyalty and encourage repeat purchases. Implement customer feedback mechanisms and loyalty programs to incentivize engagement and drive retention.

1. **Geographical Expansion:**

Explore New Markets: While sales are recorded in nine cities, consider expanding into additional markets to tap into new customer segments and diversify revenue streams. Conduct market research to identify regions with high sales potential and tailor marketing efforts accordingly.

1. **City-Level Strategies:**

Target San Francisco Market: Given that San Francisco leads in sales volume, allocate resources to further penetrate and capitalize on this market. Implement localized marketing campaigns and promotions to strengthen the brand presence and capture a larger share of the market.

1. **Seasonal Planning:**

Prepare for Peak Periods: With December 2019 identified as the peak sales period, proactively prepare for upcoming peak seasons by optimizing inventory levels, staffing, and marketing efforts. Plan special promotions or events to capitalize on increased consumer spending during these periods.

**SUMMARY**

By implementing these recommendations, the gadget store can optimize its sales strategies, enhance customer satisfaction, and drive sustainable growth in revenue and market share.