Sales Analysis

A deep dive into sales data, aimed at extracting valuable insights to enhance strategic decision-making.

OUTLINE

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- ➔ Documentation of cleaning and manipulations
- ➔ Summary of data analysis
- ➔ Key visualizations and findings
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PURPOSE:

Analyze sales data to identify trends, top-selling products, and revenue metrics for business decision-making.

DESCRIPTION:

In this project, you will dive into a large sales dataset to extract valuable insights. You will explore sales trends over time, identify the best-selling products, calculate revenue metrics such as total sales and profit margins, and create visualizations to present your findings effectively. This project showcases your ability to manipulate and derive insights from large datasets, enabling you to make data-driven recommendations for optimizing sales strategies.

Data Source

Dataset was gotten from meriskill Internship program.

Data contained 185951 rows and 11 columns of sales data from different stores across 9 states in the United States of America.

Timeline: December 2019 - January 2020

This dataset is deemed credible.

Documentation of cleaning and manipulations

- Data was downloaded and stored using the appropriate file naming convention.
- Tools employed for analysis were Excel and PowerBI.
- The dataset was opened with Excel while I checked for consistency and cleaned the empty columns.
- I uploaded the dataset on PowerBI using the 'Get Data' option, and then proceeded to transform the data.
- I detected data type.
- Split the date-time column into date and time stamp while I proceeded to creating visuals.
- I started with sales trend over time using the line chart, best selling products using tree map, top 5 best-selling product using stacked bar chart amongst others visuals

Summary of data analysis/ Key visualizations and findings

Total revenue is $34.49m

Total quantity ordered 209,080units

Profit margin 0.58

Weekly distribution of sales almost evenly spread ranging from $4.8m to $5.1m with Tuesday being the highest and Thursday being the lowest.

The top 5 products based on count of sales (USB-C charging cable, Lightning charging cable, AAA batteries {4-packs}, AA batteries {4-packs} and Wired headphones) just contributed a mere 3.13% of the total sales while just an item (Macbook pro laptop); although not demanded in high frequency contributed 23.3% of the total sales.

Top 5 products based on revenue generation are Macbook Pro Laptop, iPhone, Thinkpad Laptop, Google phone and 27in 4K Gaming Monitor.

The top 5 revenue generating cities jointly contributing 72% of the total sales are San Francisco, Los Angeles, New York City, Boston and Atlanta.

The rush hour of the day is around 12 noon and from 6pm to 9pm which attracted the highest order volumes and sales.

Based on monthly performance, December is the highest performer while January is the lowest performer.

SALES DASHBOARD

$34.49M
Sum of Sales

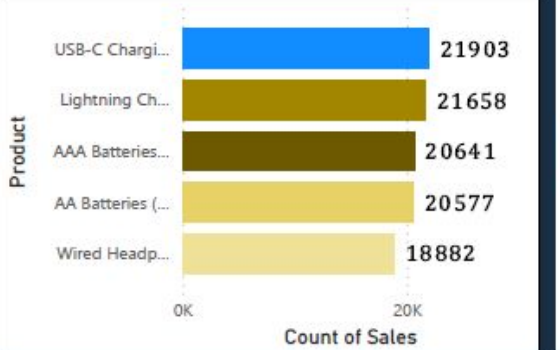
PROFIT MARGIN
0.59

Total Quantity Ordered
209.08K

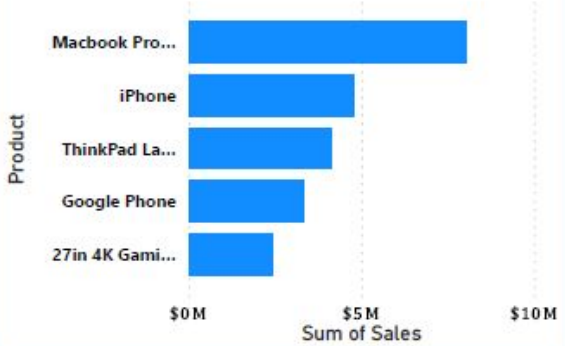
Month
All

Sum of Sales by Month

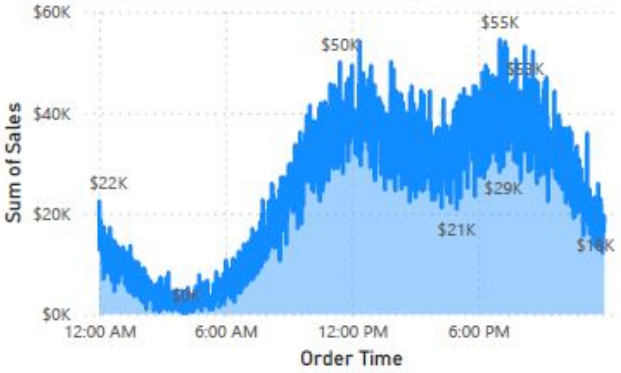
Count of Sales by Product(TOP 5)



Sum of Sales by Product

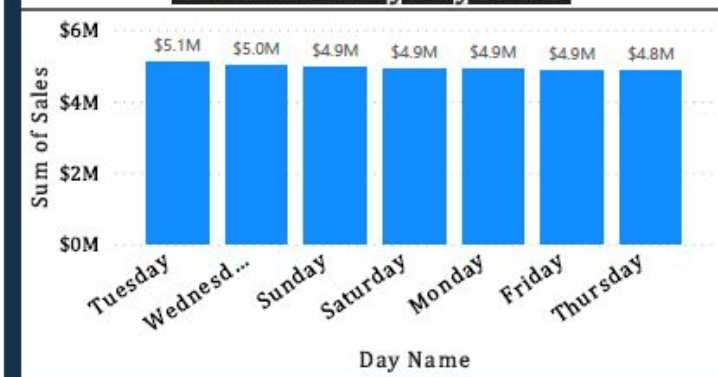


Sum of Sales and Latest Order Time by Order Time



City	Sum of Sales
Atlanta	$2,795,498.58
Austin	$1,819,581.75
Boston	$3,661,642.01
Dallas	$2,767,975.4
Los Angeles	$5,452,570.8
New York City	$4,664,317.43
Portland	$2,320,490.61
San Francisco	$8,262,203.91
Seattle	$2,747,755.48
Total	**$34,492,035.97**

Sum of Sales by Day Name



Recommendations

Personally, these insights can be used for future planning and strategic decisions such as getting stocked up for months with high performance and rendering extra hands during rush hours of the day. More attention to high performing locations and more sales incentives for low performing locations