Sales Performance Project

Summary

Analysed sales performance data of a superstore using Power BI and Python. The project focused on identifying sales trends, evaluating profitability, and deriving actionable insights across categories, regions, and customer segments. Key metrics include total sales of **$1.6M**, a profit of **$175K**, and a total quantity of **22K items sold**.

Goal

To provide data-driven insights to improve business decision-making by analysing sales performance, understanding customer preferences, and optimizing operations.

Objective

- Investigate sales, profit, and quantity across categories, regions, and customer segments.

- Identify top-performing sub-categories and regions to focus marketing efforts.

- Evaluate shipping modes and payment preferences for operational improvements.

- Recommend strategies to enhance sales and profitability.

Key Insights

1.Category Performance:

Office Supplies: **$0.64M** sales with the highest profit margin.

Technology: **$0.47M** sales, contributing significantly to overall profit.

Furniture: **$0.45M** sales but lowest profit margin.

2.Regional Trends:

West: **$0.52M** sales (highest).

South: **$0.25M** sales (potential for growth).

1.Sub-Category Highlights:

Phones ($0.20M), **Chairs ($0.18M)**, and **Binders ($0.17M)** lead in sales.

2.Shipping Modes:

Standard Class accounts for **$0.33M** sales, highlighting its popularity.

Same Day shipping shows potential for upselling.

3.Customer Segments:

Consumers account for **48%** of total sales.

Findings

- **Technology** and **Phones** drive significant profits, making them priority areas for focus.

- Seasonal peaks in sales are observed during **November and December**, aligned with holiday promotions.

- **Standard Class** shipping is the most utilized, while **First Class** and **Same Day** shipping show untapped potential.

- **California** is the top-performing state, contributing **$0.34M** in sales.

Visualizations and Bars

- **Category and Sub-Category Sales**: Visualized using bar charts to highlight top-performing segments.

- **Regional Sales Distribution**: Bar charts showcasing performance across the four regions.

- **Monthly Sales and Profit Trends**: Line charts indicating seasonality and growth patterns.

- **Shipping Modes**: Comparative bar charts displaying shipping preferences.

Recommendations

1. Enhance Marketing Efforts:

Focus campaigns on **Office Supplies** and high-demand sub-categories like **Phones** and **Chairs**.

2.Expand Regional Growth:

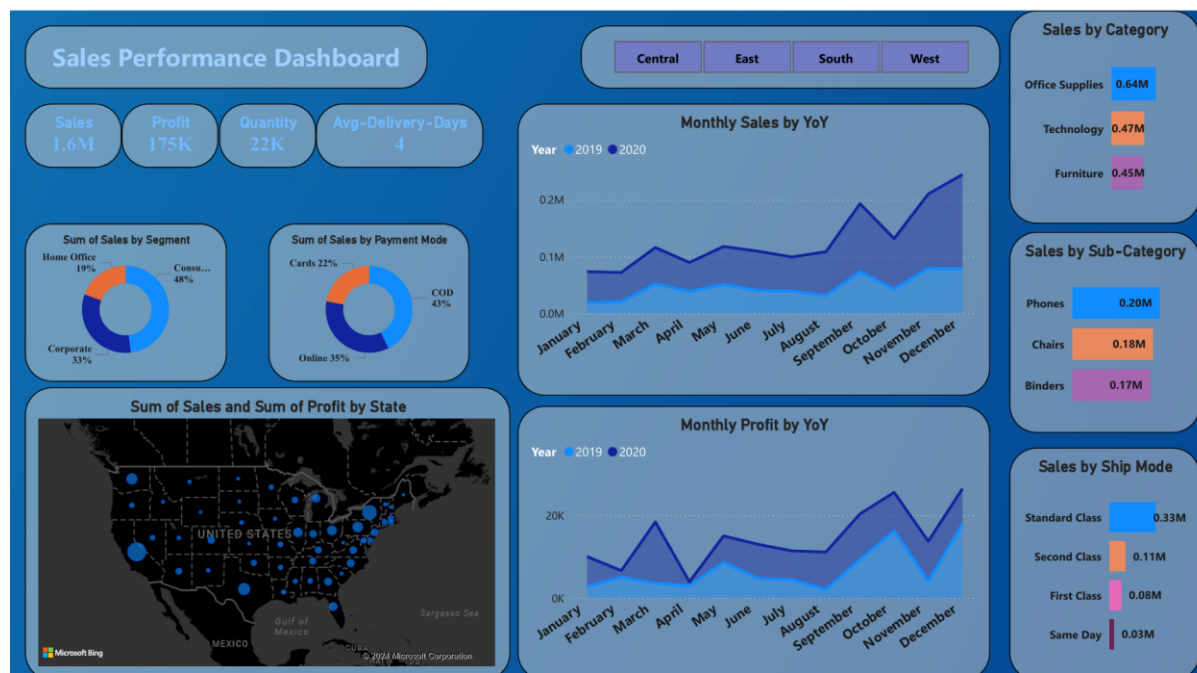Develop promotional strategies for the **South** region to increase market share.

3.Improve Shipping and Payment Options:

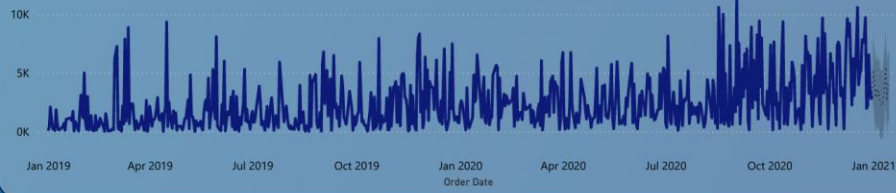Encourage customers to use **First Class** and **Same Day** shipping through targeted promotions.

Enhance online payment options to capitalize on its **43%** sales share.

4.Leverage Seasonal Trends:

Stock inventory and provide discounts during **November and December** to maximize sales.

Sales Performance Forecast - 16 days

Sales by State

State	Value
California	0.34M
New York	0.19M
Texas	0.12M
Washington	0.09M
Pennsylvania	0.08M
Ohio	0.07M
Illinois	0.06M
Florida	0.05M
Michigan	0.05M
North Carolina	0.04M

Order Date — Jan 2019, Apr 2019, Jul 2019, Oct 2019, Jan 2020, Apr 2020, Jul 2020, Oct 2020, Jan 2021

Order Date — Dec 2020, Jan 2021