Logistics Performance Report

Ву

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1. Introduction

This report provides an in-depth analysis of logistics performance based on key business metrics such as order volume, profitability, customer segmentation, and delivery efficiency. The goal of this analysis is to identify trends, assess operational performance, and provide actionable insights to optimize logistics operations.

2. Workflow Overview

The following workflow was followed in the analysis process:

1. Data Collection:

o The dataset was given to us by the co-ordinator for the cohort

2. Data Processing:

- Data was cleaned and processed using Microsoft Excel
- Removed duplicates and handled missing value
- o Then i noticed the table didn't have a unique identifier for the customers

3. Analysis and Visualization:

- Key metrics such as total orders, total profit, and customer segmentation were visualized.
- o Various charts and filters were applied to facilitate interactive data exploration.

4. Insights Generation:

o Findings were documented based on visual trends and patterns.

3. Analysis Steps

Order Volume Over Time

- Order volume trends were analyzed from 2015 to 2022.
- A consistent increase in order volume was observed, peaking at 118,187 total orders.

Regional Performance Analysis

- The dashboard provides insights into order distribution across four regions: Central, East, South, and West.
- Filters were applied to compare order performance across different regions.

Customer Segmentation

- Customer types were segmented into: Consumer, Corporate, Home, and Home Office.
- Consumer and Corporate segments contributed the most to total orders.

Best and Low-Performing States

- Best-Performing States: California, New York, Texas, Pennsylvania, and Washington.
- **Low-Performing States:** South Dakota, North Dakota, West Virginia, Vermont, and Wyoming.

Product Performance Analysis

- Top Revenue-Generating Products: Staples, Easy-Start Paper, Storex Dura Products.
- Most Purchased Products: Staples Staple Envelope, Easy-Start Paper, KI Adjustable Products.

Delivery Performance by Shipping Modes

- The shipping methods analyzed include:
 - o Standard Class
 - o Second Class
 - o First Class
 - Same Day
- Delivery performance was categorized as:
 - o **On-Time Delivery:** 19.27%
 - Late Delivery: 52.11%
 - o Advance Shipping: 24.21%
 - Shipping Cancellations: 4.41%

Product Category Performance

• Office Supplies emerged as the top-performing category at **60.17**%, and it was purchased majorly by followed by Furniture at **21.6**%, and Technology at **18.23**%.

4. Tools Used

The following tools and platforms were used to carry out the analysis:

- Excel: Initial data exploration and cleaning.
- Power BI: Data visualization and report creation.

5. Key Findings

- Order Growth: Steady increase in order volume, with notable peaks in 2021 and 2022.
- Regional Insights: The West region contributed the highest number of orders.
- **Profitability:** The most profitable product categories were office supplies.

• **Delivery Challenges:** A significant portion (52.11%) of orders experienced late delivery, indicating potential inefficiencies in logistics.

6. Conclusion and Recommendations

The logistics performance analysis highlights key areas of success and improvement opportunities in order volume, profitability, and delivery efficiency. The business has seen growth, but operational challenges like late deliveries and regional disparities need attention.

Recommendations:

- 1. Optimize Delivery Processes: Address inefficiencies to reduce late deliveries.
- 2. **Regional Focus:** Increase marketing efforts in underperforming states.
- 3. **Product Strategy:** Focus on high-performing categories like Office Supplies for sustained profitability.
- 4. **Customer Segmentation Strategies:** Tailor strategies for different customer types to maximize sales.