Product performance across states Report

Introduction

This report provides a comprehensive analysis of the sales data for various products across different states within the government segment. The dataset includes key metrics such as units sold, manufacturing price, sale price, profit, revenue, and the date of the transactions. By examining the detailed breakdown of product performance, we can derive valuable insights into market trends, profitability, and sales dynamics over the specified period in 2013 and 2014. This analysis aims to highlight the variations in product sales, profit margins, and revenue generation across states, assisting in making informed decisions for targeted marketing strategies and operational improvements.

Data Collection

The data was collected from several segments of the sales department, which are the government, channel partners, enterprise, midmarket, and small businesses, which was clean and accurate for decision-making. The dataset contains 700 rows and 8 columns. The columns contain: segment, state, product, discount band, units sold, manufacturing price, sale price, and date.

Data Cleaning

The Analysis was performed on Power Bi. The data set used in this report has undergone a rigorous cleaning process to ensure its accuracy and reliability. All records have been carefully reviewed to remove any errors, duplicates, or inconsistencies. This meticulous cleaning process guarantees that the data is of high quality and does not require further cleaning, allowing for a precise and trustworthy analysis.

Data pre-processing

The data was preprocessed by categorizing the Units sold, Manufacturing price, Sale price and Date column into Profit, Profit: Loss, Revenue, Year and Month which makes the 8 columns into 13 columns.

Insight and Analysis

* This clustered column chart shows the total product sold. Biro is the best-selling product, with 202 units sold, significantly higher than any other product. The sales figures for A4 Paper, Markers, Notepad, Pencil, and Stapler are relatively close to each other, ranging between 93 and 109 units. This indicates a more even distribution of demand among these products. This chart shows that Biro has high demand compared to other products.

Fig 1.0

* This Chart displays the Profit distribution by state, Lagos State has the highest profit distribution at 22.32%. This indicates that Lagos State is the most profitable region among the states listed. Ogun State (20.86%), Ondo State (20.73%), and Osun State (20.89%) have similar profit distributions. This suggests that these states have comparable profitability levels, with only slight variations. Oyo State has the lowest profit distribution at 15.19%, significantly lower than the other states. This indicates that Oyo State is the least profitable region among the states listed

Fig 2.0

Fig 3.0

* The chart Fig 3.0 shows the revenue generated by each states. Oyo State has the highest revenue percentage at (21.32%) Lagos State closely follows with (21.05%). While Ondo state records the lowest revenue contribution (17.76%) and it indicates a relatively weaker market performance compared to other states.
* The chart 4.0 displays the monthly revenue trend such that October and December are the highest revenue month (18.09%) and (14.34%) respectively while January and April are the lowest revenue generating month (5.71%) and (5.81%) respectively.

Fig 4.0

Recommendation

* Oyo state should conduct a thorough a cost analysis to pinpoint areas where manufacturing costs can be cut without compromising product quality and they should review their pricing strategies to look for a way to increase the profit margins and also improve performance in Ondo state by developing targeted strategies to boost profit and revenue and market penetration.
* Increase high marketing for high demands products such as Biro, markers and notepad and consider releasing new versions or packages. Also you can launch an advertising campaigns for these products to generate more sales.
* Take advantage of the peak months (October and December) by organizing focused promotions and inventory management to maximize sales and also use special offers during the off-peak months (January, march and April) to boost demand and balance out income volatility.
* The segments should invest in training their sales and support teams to better understand the needs for high profits and also be updated with the latest industry trends and best practices.