

Financial Analysis Report using Power BI

Dataset Description

The dataset used for this project is the "Financial Sample," comprising financial sales data spanning two years (2013-2014). The data includes details such as Gross Sales, Sales (Net Sales), Cost of Goods Sold (COGS), Profit, Profit Margin, Product Category, Country, Segment, and Date information.

Objective

The project's primary aim was to analyze and visualize financial performance using Power BI. The tasks included revenue analysis, profitability insights, sales forecasting, year-over-year (YoY) comparisons, customer segmentation analysis, and detailed cost vs. revenue analysis. The goal was to identify profitable segments, seasonal trends, and products requiring optimization. DAX (Data Analysis Expressions) was extensively used to create calculated measures such as Total Sales, Sales Last Year (Sales LY), Profit, and Profit Margin to enable deeper financial analyses and accurate performance tracking.

Report and Results

Page 1: "Sales and Profit Overview"

This page provides an insightful overview of sales and profitability. It visualizes total sales by country, highlighting the United States, Canada, and France as top contributors, each generating approximately \$25 million in sales. Sales trends reveal clear peaks in July and October 2014, where monthly revenues approached \$10 million. "Paseo" emerged as the top-performing product with total sales reaching approximately \$33 million and an individual product profit margin of 14.2%. Although the profit margin percentages are identical across all products, "Paseo" significantly contributed to overall profit due to its higher sales volume.

Page 2: "Segment & Growth Analysis"

This page explores customer segments and YoY growth. "Government" was the dominant segment, generating around 470,000 units sold, accounting for approximately 44% of Gross Sales (\$56.4 million). YoY analysis showed overall growth of 349.46%, with significant monthly variations such as a 123.51% increase in December 2014 and a 25.91% decrease in November 2014, indicating volatility driven by seasonal factors or specific market conditions.

Dynamic Dashboard

A highly interactive dashboard was created to facilitate exploration of sales data across countries, products, and periods. This tool is valuable for stakeholders to dynamically analyze performance, revealing that "Paseo" remains consistently the top revenue-generating product across major markets.

Cost vs Revenue Analysis

This analysis distinctly compares product costs and profits using a stacked column chart, with Cost represented in light blue and Profit in dark blue. "Paseo" recorded the highest cost (\$28.2 million) but also achieved the highest profit (\$4.8 million), reflecting substantial returns relative to investment. Conversely, products like "Carretera" showed comparatively lower profitability with only \$1.8 million profit against a cost of \$12 million, marking it for potential cost optimization.

Forecasting

Sales forecasting provided predictions for the subsequent six months based on historical data, forecasting uncertainty in early 2015, signaling careful inventory and resource management. YoY growth visualizations highlighted a sharp increase in sales towards the end of 2014, with November 2014 showing considerable improvement despite preceding volatility.

Insights and Recommendations

- Strategically prioritize "Paseo" for further market expansion given its high profitability and significant sales volume.
- Investigate and optimize costs for lower-profit products such as "Carretera" and "Montana," to improve overall margins.
- Utilize segment analysis to deepen engagement within the highly lucrative "Government" sector.
- Continuously monitor market trends via the dynamic dashboard to ensure responsive and effective decision-making.

This comprehensive analysis demonstrates Power BI's capability, aided by strategic DAX calculations, to translate raw financial data into actionable insights, facilitating informed and strategic business decisions.