

Power BI Analysis Report

Name: Vaibhav Pratap Singh

Tool Used: Microsoft Power BI

Objective

To design an interactive Power BI dashboard based on the provided dataset, highlighting essential KPIs, dynamic CAGR, sales trends, profitability mapping, return analysis, and category-level insights. The dashboard enables business stakeholders to make informed decisions through multi-level drilldowns and interactive filters.

Dashboard Features Aligned to Task

- ✓ KPIs for 2017: Total Sales (733K), Profit (93K), and Product Count (1525)
- ✓ Dynamic CAGR Measure: Value updates based on user-selected Start and End years
- ✓ Sales Trend and Year-over-Year Growth visualization by year
- ✓ Geographic segmentation by Country, Region, State, and City with Profit Zones (High, Medium, Low)
- ✓ Treemap chart displaying Category and Sub-category distribution
- ✓ Best Month for Sales identified as November using bar chart
- ✓ Return Rate analysis by Product Category and Sub-Category (with donut chart)
- ✓ Currency conversion slicer (Dollar, Euro, Pound, Rupee) applied across measures

Key Insights from Dashboard

- ✓ Sales Trends rising from approx 484K in 2014 to over approx 730K in 2017.
- ✓ Sales peaked in November, making it the highest-performing month
- ✓ In Technology & Furniture Category, Phones & Chairs sub-Category contributed most to sales
- ✓ Central region dominated in profit margin with higher sales concentration
- ✓ Strong positive YoY growth in 2016 (approx 30%)
- ✓ Return rate is highest in Technology and Furniture categories
- ✓ CAGR was positive over most user-selected periods (example: 29.5% from 2015–2016)

Tools & Techniques

- ✓ Power BI visuals: Card, Bar chart, Line chart, Treemap, Filled Map, Donut chart, Slicers
- ✓ DAX formulas created for: Total KPIs, CAGR, YoY Growth, Return Rate, Currency Switcher
- ✓ User-friendly filters: Region, Year, Currency Type

Conclusion

This Power BI dashboard delivers a comprehensive analytical view of business performance using dynamic KPIs, interactive visuals, and drilldown capabilities. By combining sales trends, profitability zones, return analysis, and category-level insights, the report enables data-driven decision-making for stakeholders. The dashboard not only meets the outlined objectives of the case study but also offers scalable flexibility through currency conversion and time-range filtering.

Overall, the solution demonstrates strong alignment with real-world analytics needs and showcases the power of visualization for actionable insights.

Dashboard Overview

733K

Total Sales 2017

93K

Total Profit 2017

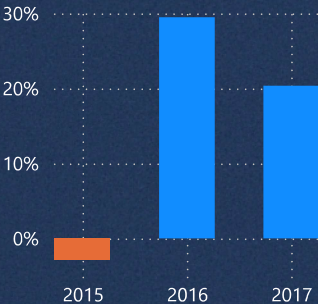
1525

Total Products 2017

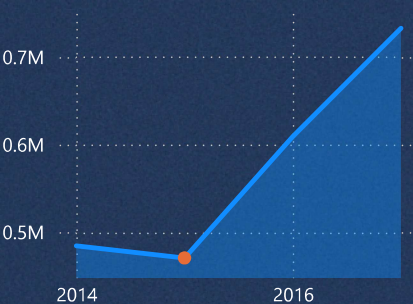
29.5%

CAGR

YoY Growth by Year



Sales Trends by Year



StartYe...

2015

EndYear

2016

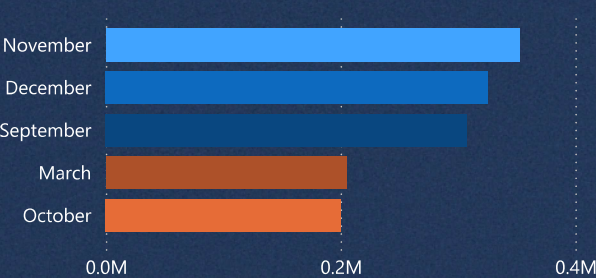
Region

- Select all
- Central
- East
- South

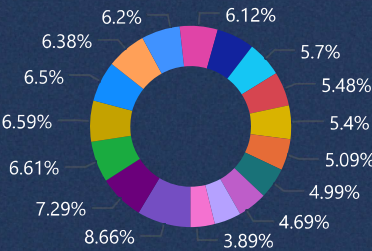
Currency

- Dollar
- Euro
- Pound
- Rupee

Sales by Month

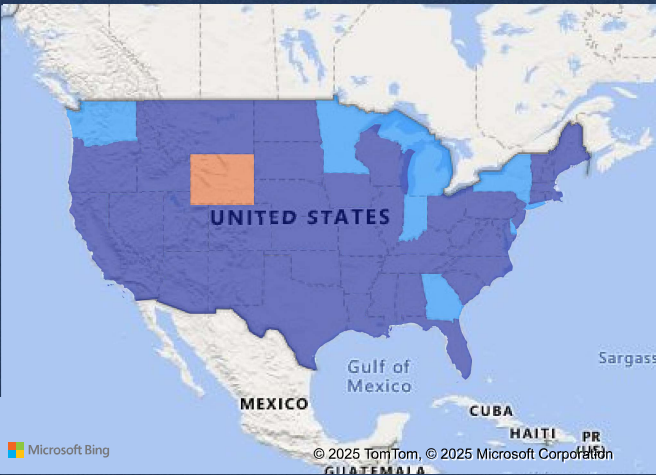


Return Rate by Product Category and Product Sub-Category



Country, State and Profit Zone

Profit Zone ● High ● Low ● Medium



Sales and Profit by Product Category and Product Sub-Category

