

E-Commerce Sales Insights Analysis By POWERBI

Power BI, developed by Microsoft, is a business analytics tool that enables users to visualize and analyse data, share insights, and make informed decisions. It is part of the Microsoft Power Platform, which also includes Power Apps and Power Automate. Power BI is widely used for its user-friendly interface, robust data connectivity, and powerful analytical capabilities.

- 1. Data Transformation and Modelling:** Power BI Desktop provides powerful tools for transforming and shaping data, and it supports data modelling through relationships between tables. Users can create calculated columns, and measures, and use DAX (Data Analysis Expressions) formulas to perform complex calculations.
- 2. Visualization:** Power BI offers a rich set of visualization options, including charts, tables, maps, and custom visuals created by the Power BI community. Users can customize the appearance of visuals and create interactive dashboards.
- 3. Q&A (Natural Language Query):** Users can ask questions about their data in natural language, and Power BI will generate visualizations based on the data. This feature makes it easy for non-technical users to explore and analyse data.
- 4. Security and Collaboration:** Power BI provides robust security features, allowing organizations to control access to data and reports. It also supports collaboration by enabling users to share and collaborate on reports and dashboards.
- 5. Integration with Other Microsoft Products:** Power BI seamlessly integrates with other Microsoft products like Excel, Azure, and SQL Server, providing a comprehensive ecosystem for data analysis and reporting.

Managing healthcare chains can be challenging, particularly when clinics are situated at diverse locations. The current system design often results in issues such as ineffective data sharing, inconsistency in data, and increased program maintenance. To address these challenges, we've developed a centralised database for the Healthcare Management System. This solution aims to enhance efficiency by facilitating healthcare providers in the collection, storage, retrieval, and exchange of patient healthcare information. Ultimately, it aims to improve patient care and optimise revenue generation across all clinics within the chain.

Overview:

This project offers an in-depth analysis of an e-commerce enterprise leveraging Power BI tools. Key business metrics and trends are visualized through a comprehensive dashboard. The insights derived facilitate data-driven decision-making, aiding business growth. The project incorporates forecasting techniques for predictive analysis.

Aim:

The primary goal is to provide actionable insights into the e-commerce landscape, pinpointing areas for enhancement and growth through comprehensive analysis.

Dashboard Insights:

- Key Performance Indicators (KPIs): Total Profit, Total Sales, Total Quantity, Profit Margin%
- Monthly Trends: Sales and Profit
- Category-wise Analysis: Profits, Sales, and Sales%
- Sales by Geography: States and Regions
- Top & Bottom 5 Products Analysis
- Regional Sales Analysis

Business Performance Analysis:

The project aims to highlight crucial business metrics and trends via a Power BI dashboard, identifying areas for optimization and informed decision-making.

Project Learnings

- Creation of interactive dashboards for online sales data analysis
- Utilization of complex parameters for drill-down analysis and filter customization
- Data manipulation techniques: connections, table joins, calculations, and user-driven parameters for visualization
- Various visualization types used: bar chart, pie chart, donut chart, clustered bar chart, scatter chart, line chart, area chart, map, slicers, etc.

Conclusion:

This project harnesses Power BI's capabilities to empower stakeholders with a dynamic platform for sales data analysis. The derived insights lead to informed decisions and refined sales strategies.



