

8 Power BI projects for a successful portfolio

1. Product Sales Analysis (Beginner Level)

Explanation: This project involves analyzing sales data to identify patterns, trends, and insights that can help improve business performance. You can explore total sales, compare product categories, and identify top-performing products or regions. Visualizing revenue over time helps stakeholders make informed decisions regarding inventory and marketing strategies.

Dataset Source: Kaggle's Sales Analysis Dataset or mock Excel/CSV data from Power BI sample files.

Link- <https://www.kaggle.com/datasets>

Tools: Columns for product category, sales amount, region, and date for visualizations like bar charts, line charts, and KPIs.

2. Marketing Campaign Analysis (Beginner Level)

Explanation: This project focuses on analyzing marketing campaigns to measure their effectiveness. By tracking metrics such as impressions, click-through rates, and conversions, you can determine which campaigns perform best and identify areas for improvement. This type of analysis is useful for refining marketing strategies and allocating budgets effectively.

Dataset Source: Google Merchandise Store Analytics Dataset or Kaggle's Marketing Data.

Tools: Columns for campaign name, impressions, clicks, and conversion rates to create pie charts, line graphs, and KPIs.

3. Financial Performance Analysis (Beginner Level)

Explanation: This project involves evaluating a company's financial health by tracking metrics such as revenue, profit, and expenses. You can create visualizations to monitor key performance indicators (KPIs) and identify trends over time, helping stakeholders make data-driven financial decisions. This analysis is fundamental for budgeting and forecasting.

Dataset Source: Sample data from Power BI templates or Kaggle's Financial Dataset.

Tools: Use datasets with columns for revenue, cost, profit, and time to create line graphs, KPIs, and dashboards.

4. Healthcare Sales Analysis (Beginner Level)

Explanation: This project is centered on analyzing healthcare product sales to understand product demand and regional performance. You can explore how sales vary across different regions or product types and identify trends in revenue growth. This analysis can support decision-making for product distribution and marketing strategies.

Dataset Source: Kaggle's Healthcare Sales Dataset or mock datasets.

Tools: Include columns for product type, region, sales amount, and time. Use heatmaps, slicers, and bar charts to provide detailed insights.

5. Loan Application Analysis (Intermediate Level)

Explanation: This project aims to analyze loan application data to identify approval/rejection trends, customer demographics, and repayment performance. You can discover patterns in loan amounts, customer profiles, and payment defaults, helping financial institutions improve risk assessment and lending policies.

Dataset Source: Kaggle's Loan Prediction Dataset or public datasets from financial institutions like the World Bank.

Tools: Use demographic details, loan amounts, and repayment status columns to create charts, tables, and KPIs for data visualization.

6. Movie Sales Visualization (Intermediate Level)

Explanation: This project focuses on analyzing movie sales data to uncover trends in box office performance. You can compare earnings across different genres, regions, and time periods. Such insights are valuable for understanding audience preferences and planning future productions.

Dataset Source: Kaggle's Movie Data or IMDB datasets via APIs.

Tools: Columns for movie title, genre, region, and box office earnings. Use visuals like scatter plots, tree maps, and line graphs for detailed analysis.

7. Global Energy Trade Analysis (Advanced Level)

Explanation: This project involves analyzing global energy data, including production, consumption, exports, and imports. It provides insights into energy trends, trade relationships, and the shift towards renewable energy sources. Such analysis is critical for governments and organizations to plan energy policies and investments.

Dataset Source: IEA Energy Dataset or Kaggle's Energy Dataset.

Tools: Include columns for country, energy type, production, and trade flows. Use Power BI's mapping tools and DAX functions to create interactive visualizations.

8. Airport Authority Analysis (Advanced Level)

Explanation: This project involves analyzing data related to airport operations, such as passenger traffic, flight schedules, and revenue streams. The analysis can help identify the busiest airports, optimize flight schedules, and improve passenger experiences. Advanced features like real-time data integration can enhance insights.

Dataset Source: OpenFlights Dataset or Kaggle's Flight Data.

Tools: Use data on passenger traffic, airport codes, and flight schedules. Integrate Power BI's geographic mapping and predictive analytics features for deeper insights.
