Power BI Project: Global Health Expenditure Analysis

Overview: In this Power BI project, we will analyse global health expenditure data to gain insights into different aspects of health spending across countries and regions. The dataset used in this project will contain information on health expenditure, GDP, population, and other relevant metrics.

Objective: The objective of this Power BI project is to analyse global health expenditure data to gain valuable insights into various aspects of health spending across countries and regions. The primary goal is to provide a comprehensive and data-driven view of health expenditure trends, its relationships, and identify key patterns. The analysis aims to answer critical questions and support decision-making in the field of global healthcare

Data Source: We will use a dataset that includes the following key columns:

- ***CountryID:*** It contains unique identifiers to different countries
- ***Country:*** Name of the country or region.
- ***YearID:*** It contains unique identifiers to different years
- ***Year:*** Year of the data record.
- ***Health Expenditure:*** Total health expenditure in US dollars.
- ***GDP:*** Gross Domestic Product in US dollars.
- ***Population:*** Total population of the country or region.

Project Steps:
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Data Loading and Data Modelling:

- Import the dataset into Power BI.
- Perform data cleaning and transformation as needed.
- Create a data model with appropriate relationships between tables (if multiple tables are used).
- Ensure all relevant columns have appropriate data types.

Data Analysis using DAX Functions:

- Create a new table that consolidates information from multiple tables using DAX
- Find the countries/regions with the highest and lowest health expenditure for all years.
- Determine the percentage of health expenditure as a share of GDP for each country.

- Calculate the average health expenditure per capita for each country/region.

Visualisations:

- Calculate the year-to-year percentage change in health expenditure.
- Calculate the average annual growth rate of health expenditure over a selected period.
- Create a line chart to visualise the trend of health expenditure over the years for selected countries/regions.
- Create a bar chart to compare health expenditure across different countries/regions for a 2020 year.
- Use a scatter plot to explore the relationship between health expenditure and GDP.
- Utilise a map visualisation to show health expenditure distribution geographically.

Insights and Conclusions:

- Summarise the key findings from the analysis.
- Draw meaningful conclusions about global health expenditure trends.

Report and Dashboard:

- Create a well-structured report with relevant visualisations and explanations.
- Design an interactive dashboard for end-users to explore the data on their own.

Remember to document each step thoroughly and use best practices in data visualisation and storytelling. Make the report and dashboard user-friendly and accessible for the audience. Additionally, use slicers or filters to allow users to change parameters and view different aspects of the data easily.