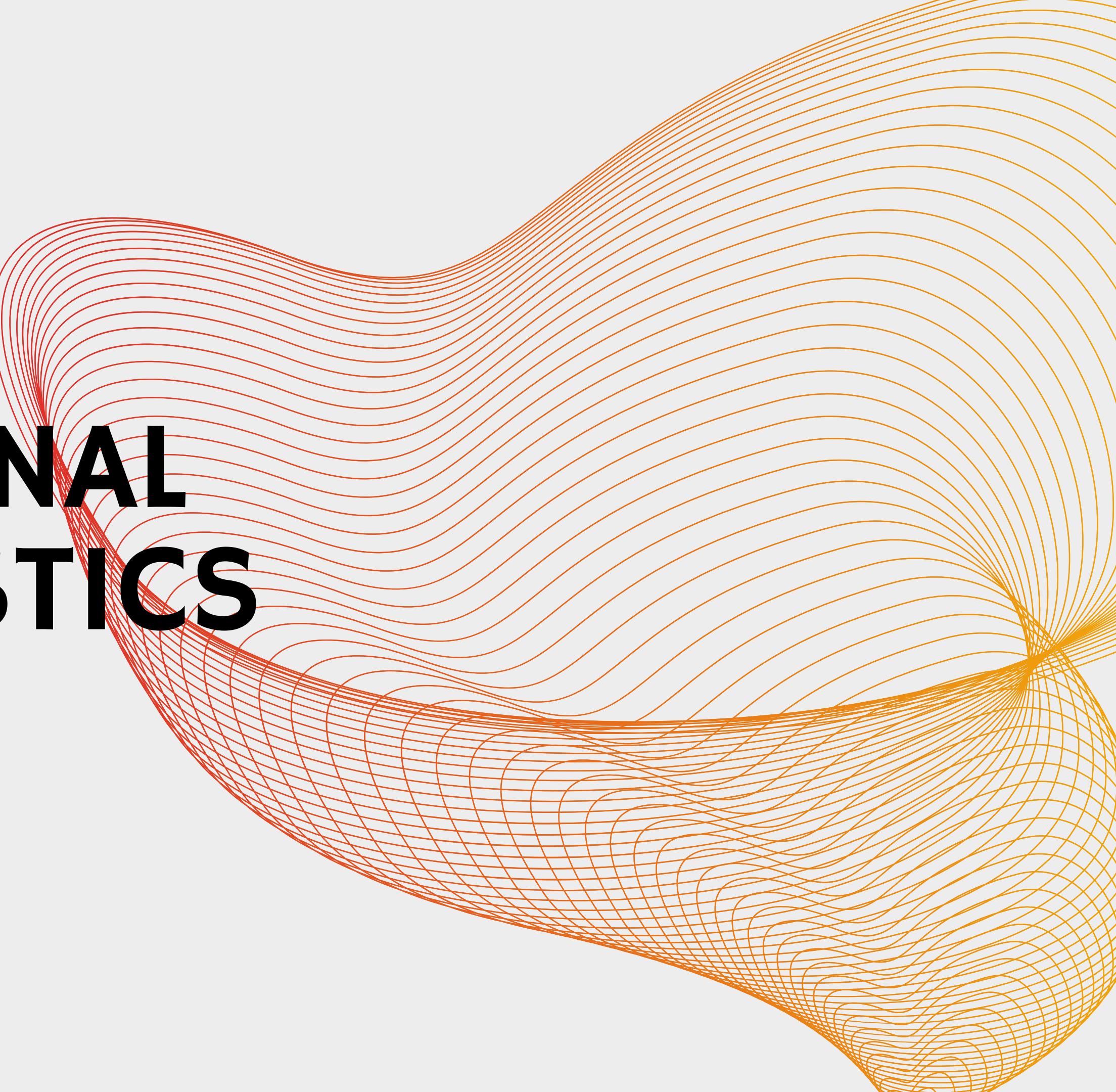




# **ANALYZE INTERNATIONAL DEBT STATISTICS**



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# PROJECT OBJECTIVE

This project determines the international debt of various countries and analyse the data concluding which country has the maximum amount of debt and compare the various parameters from distinct countries to total international debt.

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# RESOURCES AND TOOLS UTILIZE TO BUILD THE PROJECT





# PROBLEM STATEMENT

Developing countries in particular have to pay huge costs to service their debts, and those costs are borne by people living in extreme poverty. They had to deal with repayments made in hard currency.

Developing countries have been hit hardest by the global recession. High fuel costs, high interest rates and declining exports made it increasingly difficult for them to service their debts.



# OBJECTIVE

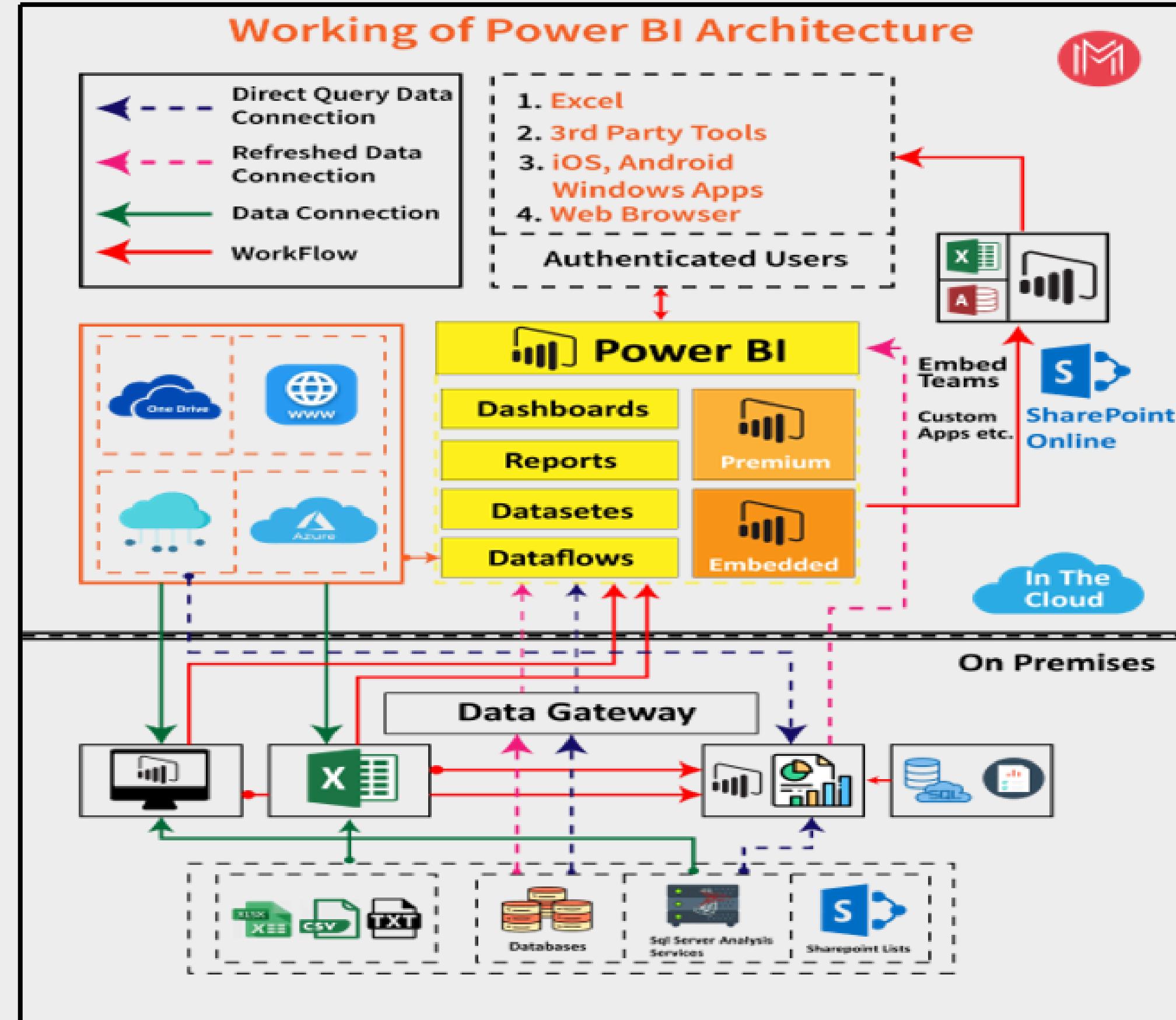
The aim is to minimize the interest cost of servicing debt to taxpayers and use it countercyclically as a stabilizing weapon to complement monetary and fiscal policy. This dataset contains information on the amount of debt (in US dollars) owed by developing countries across multiple categories. Objective is to analyze international debt data collected by the World Bank and determine the following objectives :

- What is the total amount of debt that is owed by the countries listed in the dataset?
- Which country owns the maximum amount of debt and what does that amount look like?
- What is the average amount of debt owed by countries across different debt indicators?

# BENEFITS

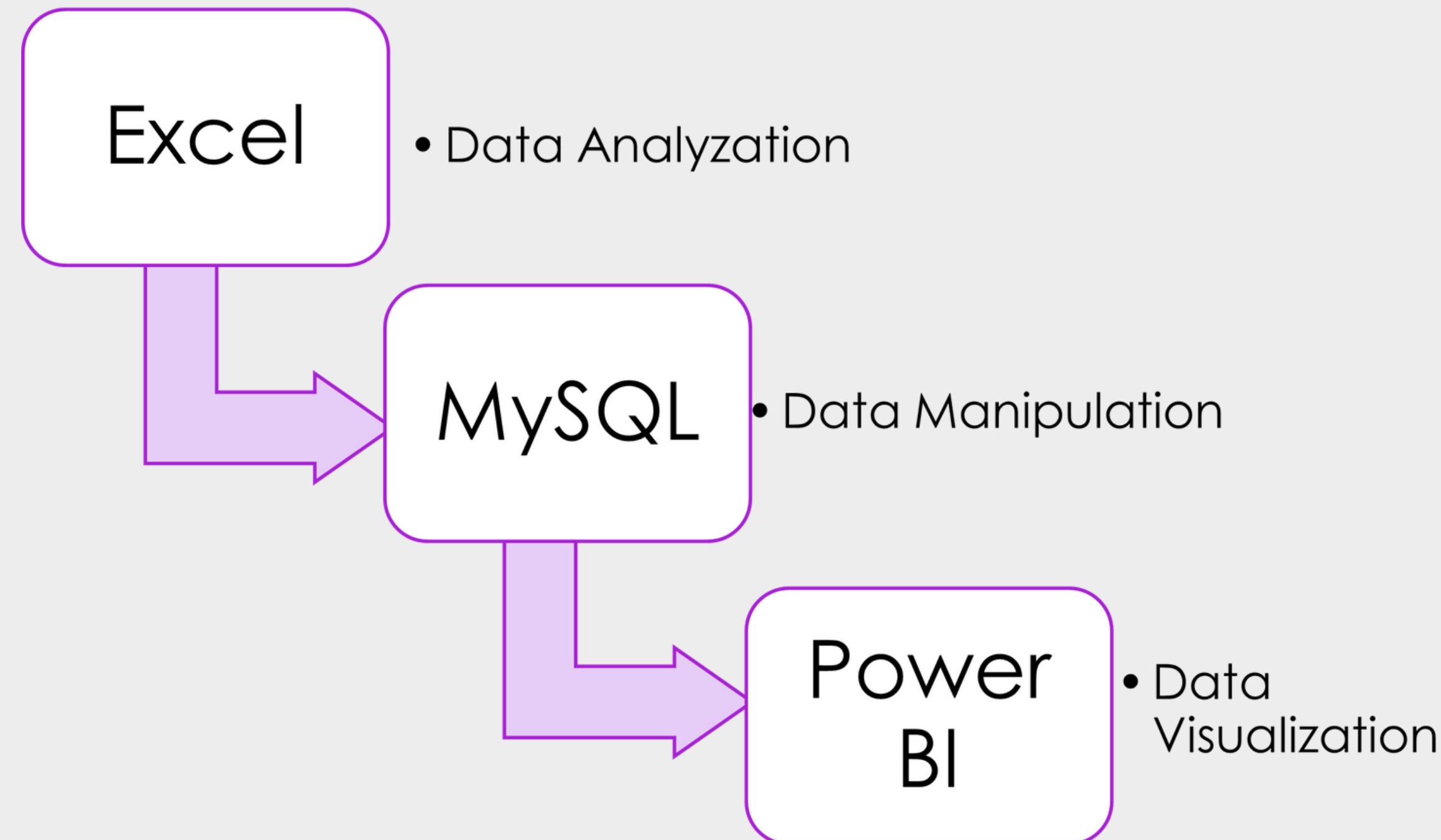
- Overall International Debt Data
- Total Debt Owed by Various Countries And Overall Countries
- Average Amount By Different Countries Across Different Indicators
- Highest Debt By Various Countries
- Average Debt Across Indicators
- Principal Repayments Across The Highest Average Debt
- The Most Common Indicator

# ARCHITECTURE





# METHODOLOGY



# PROCESS FOR VISUALIZATION



## I. Business Understanding:

When analyzing industry data, you should have a clear picture and understanding of what the industry does, what decisions it makes, and for what purpose the data is being analyzed. This entire data analysis process starts with the question

## 2. Acquiring The Raw Data:

This is the step of defining questions and then collecting data from various sources such as data warehouses, logs, and datasets to answer these questions. Raw data is queried to answer the question, but this is not the raw data set instead. It should be called raw data because it is not in the exact format you want to analyze.

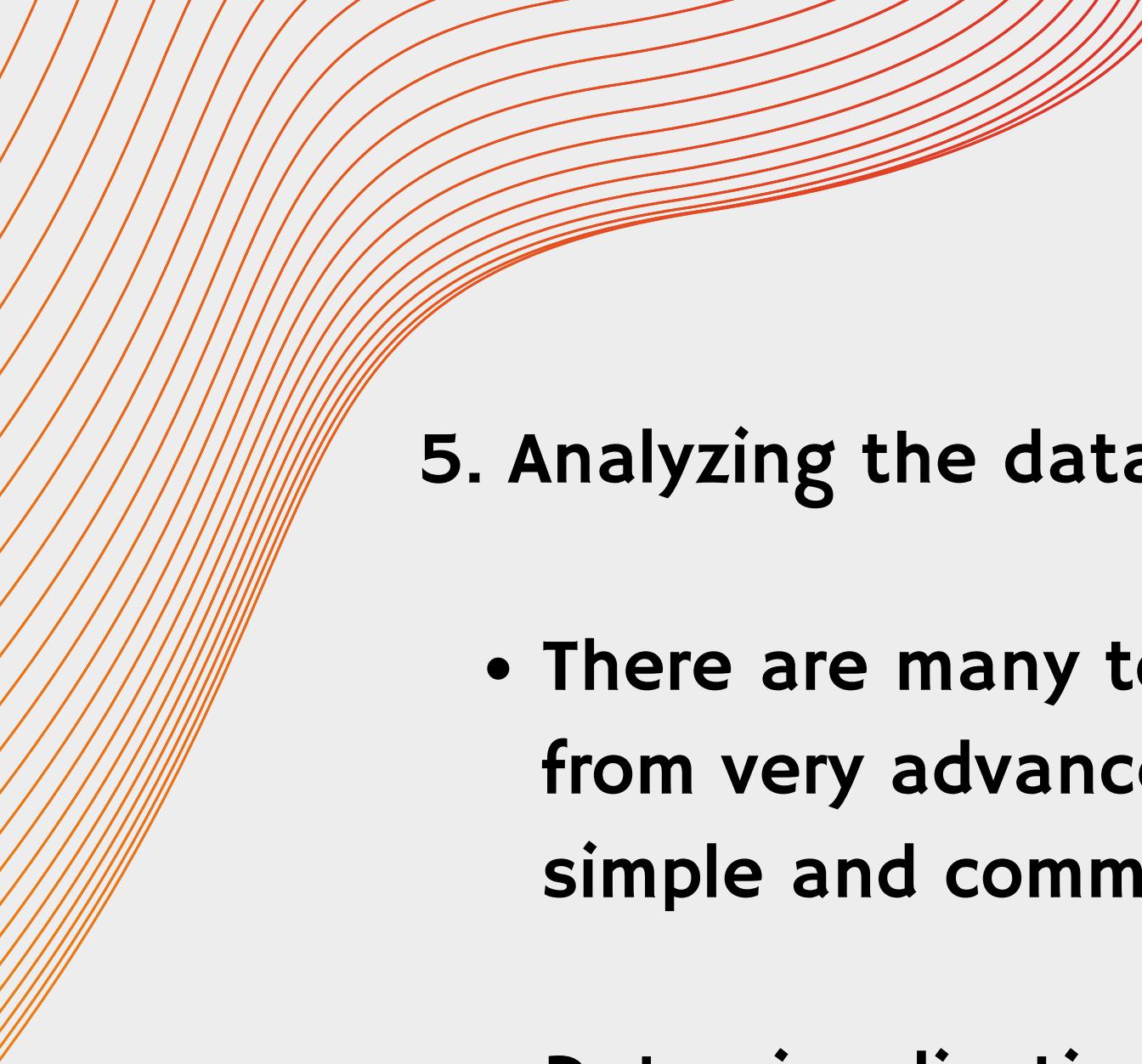


### 3. Extracting The Data :

This step extracts the data to create the final dataset. This can guide further analytical processes. This is a clean record. MySQL is used to extract data from the database. Over 1 million databases queried to extract multi-row data. A database query language like MySQL makes it easy for analysts to analyze and transform data. SQL must be learned first as it allows us to work with datasets.

### 4. Transforming The Data:

Data transformation is the process of transforming data or data sets from one state or structure to another state structure. This is the basic form of data integration where data collected from various sources are integrated with specific structured data such that this process used in the target of the analytical process is known as ETL (Extract Transform Load). State.



## 5. Analyzing the data:

- There are many tools and languages available for doing data analysis, from very advanced like SAS, SPSS, Tableau, Python, R to very basic, simple and common like MS Excel.
- Data visualization can use graphs, charts, tables, or images to convey information in an effective way. Data visualization techniques allow you to simplify and present even the most complex data in an easy-to-understand5. way.

# FINAL DASHBOARD



## Analyze International Debt Statistics

**Number of Countries**

**123**

**Countries**

**Total Debt**

**\$1,890T**

**Countries with Highest Debt**

Country	Debt (\$T)
China	\$200T
South Asia	\$150T
Brazil	\$120T
Russian Feder...	\$100T
India	\$100T

**Countries With Lowest Debt**

Country	Debt (\$T)
Azerbaijan	\$3T
Nepal	\$2T
Botswana	\$1.5T
Djibouti	\$0.5T
Timor-Leste	\$0.2T

**Average of Debt by Indicator Code**

Indicator Code	Average Debt (\$T)
NY.GNP.MKTP.CD	\$2.5T
DT.DOD.DECT....	\$1.5T
BM.GSR.TOTL....	\$1.2T
BX.GSR.TOTLCD	\$1.2T
DT.DOD.DLXF....	\$1.0T
FI.RES.TOTLCD	\$0.8T
DT.DOD.DPPG....	\$0.6T
DT.DOD.DEPS....	\$0.6T
DT.DOD.PUBS....	\$0.6T
DT.DOD.VTOT....	\$0.5T
DT.DOD.DEGG....	\$0.4T
DT.DOD.OFFT....	\$0.3T
DT.DOD.OFFT....	\$0.3T
DT.DOD.PRVS....	\$0.2T
DT.DOD.OFFT....	\$0.2T

**Most Common Debt Indicators**

Indicator_Code	Count of Indicator_Code	Indicator_Name
DT.DOD.DSDR.CD	123	Use of IMF credit, SDR allocations (DOD, current US\$)
DT.DOD.DIME.CD	123	Use of IMF credit (DOD, current US\$)
DT.UND.DPPG.CD	123	Undisbursed external debt, total (UND, current US\$)
DT.UND.PRVT.CD	123	Undisbursed external debt, private creditors (UND, current US\$)
DT.UND.OFFT.CD	123	Undisbursed external debt, official creditors (UND, current US\$)

**The highest amount of principal repayments by countries**

Country_Name	Indicator_Name
Brazil	Principal repayments on external debt, long-term (AMT, current US\$)
China	Principal repayments on external debt, long-term (AMT, current US\$)
Mexico	Principal repayments on external debt, long-term (AMT, current US\$)
Russian Federation	Principal repayments on external debt, long-term (AMT, current US\$)
Turkey	Principal repayments on external debt, long-term (AMT, current US\$)
Total	



# Thank You

