

## Project Design Phase Solution Architecture

Date	2 July 2025
Team ID	LTVIP2025TMID51597
Project Name	Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis
Maximum Marks	4 Marks

### Solution Architecture:







Solution architecture in this project helps bridge the gap between global economic challenges and data-driven insights. It provides the foundation for collecting, processing, and visualizing Economic Freedom Index data to empower decision-makers and researchers.

### Objectives:

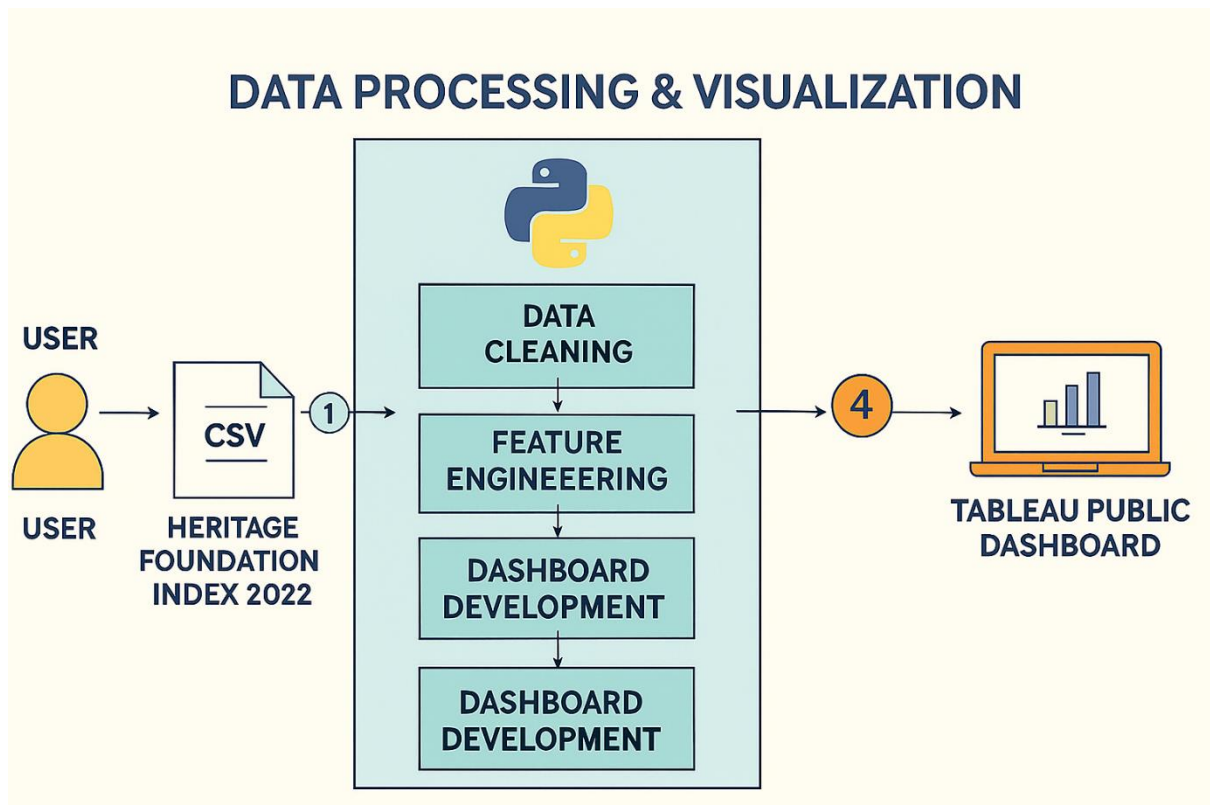
- Identify the optimal tech stack to analyze and visualize global economic freedom indicators.
- Define the end-to-end data flow from raw data ingestion to dashboard deployment.
- List the tools and platforms used (e.g., Python, Excel, Tableau Public).
- Offer a clear visual overview to stakeholders on how insights are derived and shared.

### Description of Solution Architecture:

This solution is centered around transforming static economic data into interactive visualizations through Tableau. The architecture includes the following stages:

1.  **Data Collection:** Economic Freedom Index data for 2022 is collected in CSV format from The Heritage Foundation.
2.  **Data Preparation (Optional):** Data cleaning, formatting, and categorization are done using Excel or Python (Pandas), including grouping indicators under four main pillars.
3.  **Tableau Processing:** The cleaned dataset is imported into Tableau. Various visualizations like choropleth maps, bar charts, and scatter plots are created.
4.  **Dashboard Compilation:** Visualizations are organized into an interactive dashboard and a narrative story to aid exploration and comparison.
5.  **Publication:** Dashboards are published on Tableau Public for global access via shareable URLs.
6.  **Stakeholder Access:** Students, policymakers, and economic researchers use these dashboards to explore trends and make informed, data-backed decisions.

## Example - Solution Architecture Diagram:



## Economic Freedom Index Analysis – Solution Architecture

