Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	25th June 2025
Team ID	LTVIP2025TMID49638
Project Name	Measuring the pulse of Prosperity: An index of economic freedom analysis
Maximum Marks	

Technical Architecture:

The technical architecture of the project "Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis" begins with collecting data from reliable sources like the Index of Economic Freedom, World Bank, and IMF in formats such as CSV or through APIs. ABLY is used to sync or fetch real-time or scheduled data updates into the system. The ingested data is stored temporarily and then cleaned, transformed, and prepared using tools like Excel or Python (Pandas). Once the data is ready, it is connected to Tableau for visualization where various charts and dashboards are created to analyze indicators such as GDP, HDI, and economic freedom scores..

Guidelines: These dashboards are published to Tableau Public and then embedded into a web application built using HTML for the frontend and Flask (Python) as the backend. The final application allows users to view interactive dashboards, offering insights into prosperity and economic freedom trends. The architecture supports scalability, is secured through appropriate access controls, and ensures availability by integrating all components into a smooth and responsive web experience
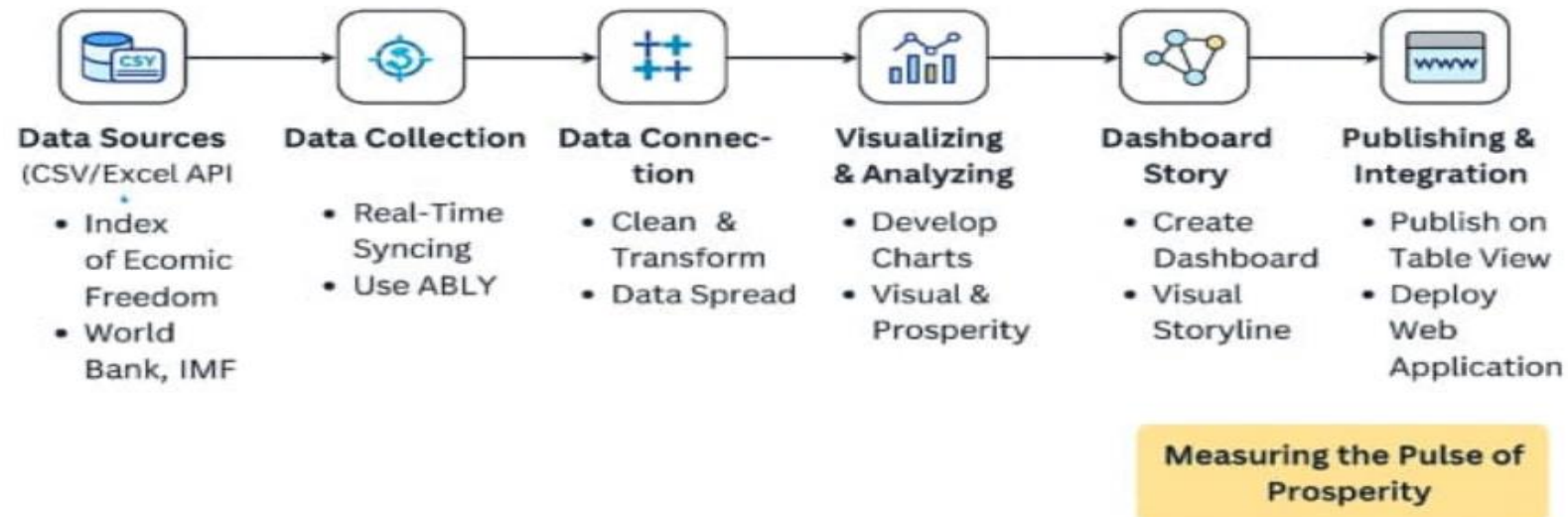
Solution architecture

Data Sources
(CSV/Excel API

- Index
of Ecomic
Freedom
- World
Bank, IMF

Data Collection

- Real-Time
Syncing
- Use ABLY

**Data Connec-
tion**

- Clean &
Transform
- Data Spread

**Visualizing
& Analyzing**

- Develop
Charts
- Visual &
Prosperity

**Dashboard
Story**

- Create
Dashboard
- Visual
Storyline

**Publishing &
Integration**

- Publish on
Table View
- Deploy
Web
Application

**Measuring the Pulse of
Prosperity**

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data Source	Source of raw data for analysis	Heritage , world rank
2.	Data ingestion	Fetching data into the system	Python
3.	Data storage	Temporary storage for raw and cleaned data	Csv files, Excel
4.	Data preprocessing	Cleaning and formatting	Excel
5.	Data vizualization	Building charts and graphs	Tableau public
6.	Backend framework	Logic for routing dashboard embedding and user interactions	Flask
7.	Frontend interface	User facing pages like home,about,dashboard view	Html,Css