

Project Design Phase-II
Data Flow Diagram & User Stories

Date	24 July 2025
Team ID	PNT2025TMID10173
Project Name	Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis
Maximum Marks	4 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

The Data Flow Diagram (DFD) for this project outlines how the Index of Economic Freedom data flows through the system, is processed in Tableau, and results in interactive visual insights for end users such as students, researchers, and policymakers.

Entities:

- **Data Source:** 2022 Index of Economic Freedom CSV file (from The Heritage Foundation)
- **Data Preprocessing** (*optional in Excel/Tableau Prep*): Clean nulls, ensure numeric formats, standardize column names □ **Processing Tool:** Tableau Desktop / Tableau Public
- **Output:** Interactive Dashboards & Stories (with maps, bar charts, and filters) □ **Users:** Economics Students, Policy Analysts, Researchers

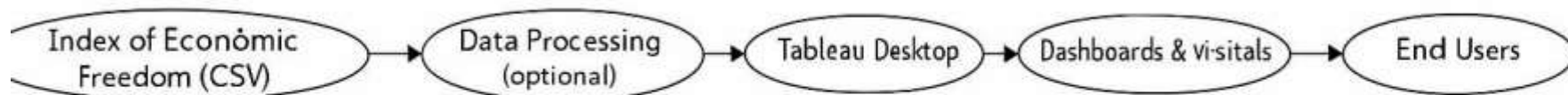
Flow Summary:

- Raw dataset is imported into Tableau for analysis.
- Key indicators like property rights, tax burden, GDP, and freedom scores are prepared and grouped by their four main pillars.

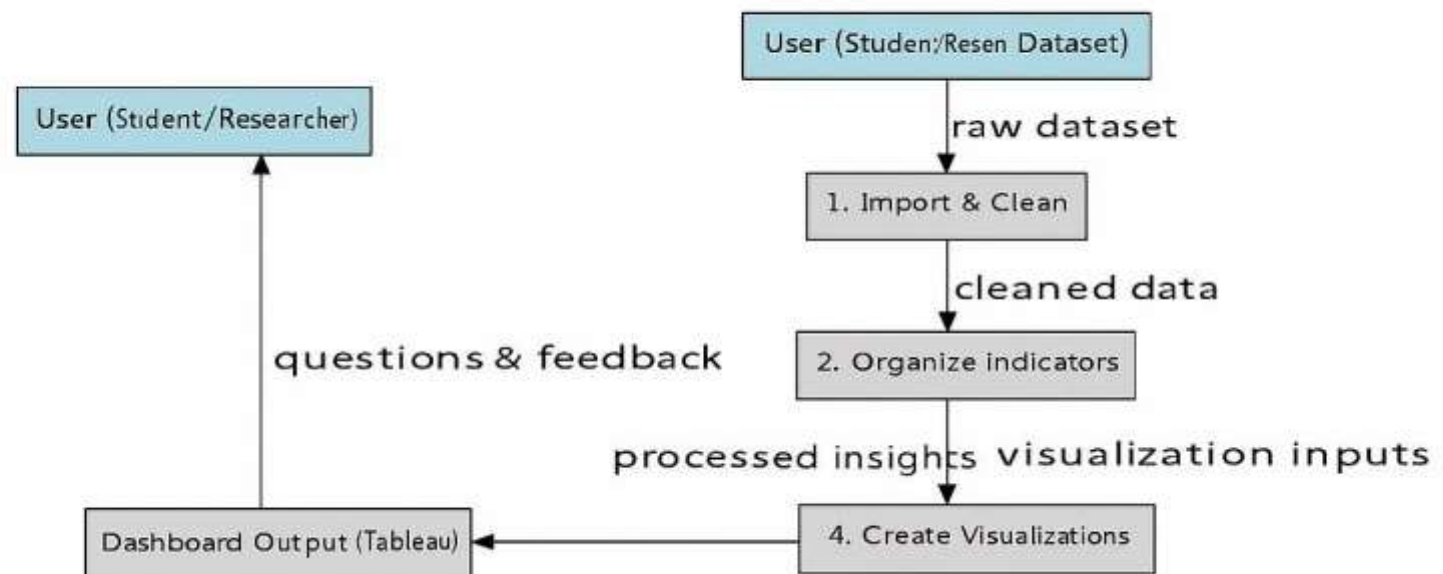
- Visualizations such as world maps, bar charts, and scatter plots are created to show country-wise, region-wise, and indicator-wise insights.
- A dashboard and story are compiled and published to Tableau Public for access and sharing.
- Users interact with the dashboards to explore trends, compare nations, and draw data-driven conclusions.

Flow And Data Flow Diagram:

Example: Flow



Example: DFD Level 0 (Industry Standard)



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Analyst (Dashboard User)	View Global Scores Overview	USN-1	As an analyst, I want to see the overall economic freedom scores by country to compare global trends.	I can view a choropleth map displaying each country's score with interactive tooltips.	High	Sprint1
Analyst (Dashboard User)	Analyze Pillarwise Scores	USN-2	As an analyst, I want to break down scores by pillars (Rule of Law, Govt Size, etc.) for comparison.	I can view a grouped bar chart showing country-wise scores by pillar.	High	Sprint1
Research Student	Study Freedom vs GDP Relation	USN-3	As a student, I want to explore the relationship between freedom scores and GDP per capita.	I can use a scatter plot with trendlines and country labels.	Medium	Sprint2
Policy Analyst	Filter by Region and Score Range	USN-4	As a policymaker, I want to filter the dashboard by region or score band.	I can apply filters to dynamically update the dashboard visuals.	High	Sprint1
Admin (Dashboard Publisher)	Publish Dashboard	USN-5	As an admin, I want to publish the dashboard to Tableau Public for wider access.	The workbook is uploaded and a shareable Tableau Public link is available.	High	Sprint1
Executive (Stakeholder)	Export Visual Reports	USN-6	As an executive, I want to download visuals to share with decision-makers.	I can export the dashboard visuals in PDF or image format.	Medium	Sprint2

Research Student	View Indicator Trends over Time	USN-7	As a student, I want to track how freedom indicators change across years for select countries.	A line graph shows trends over time for selected indicators and countries.	Medium	Sprint2
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