

Project Title

Measuring the Pulse of Prosperity: An Index of Economic Freedom Analysis

Team ID: LTVIP2025TMID50259

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1. INTRODUCTION

1.1 Project Overview

Economic freedom is the fundamental right of every individual to control their own labor and property. In an economically free society, individuals are free to work, produce, consume, and invest as they please, with minimal government interference beyond ensuring liberty and justice. This project analyzes the Index of Economic Freedom to understand its relationship with prosperity across nations, using interactive visualizations and dashboards.

1.2 Purpose

The purpose of this project is to explore global economic freedom trends through data visualization techniques. By analyzing key economic indicators and integrating them into an interactive web application, this project aims to provide insights into how economic freedom contributes to national prosperity.

2. IDEATION PHASE

2.1 Problem Statement

Although economic freedom is recognized as a driver of prosperity, many countries experience varying levels of economic freedom due to differing policies and governance. This project investigates the impact of economic freedom on global prosperity.

2.2 Empathy Map Canvas

Users: Policymakers, Economists, Researchers, Students

Think & Feel: Seek growth, stability, fairness

Hear: News on economic policies, rankings, global comparisons **See:** Economic disparities, reforms, development indicators **Say & Do:** Advocate for reforms, research, engage in discussions

Pain: Poverty, unemployment, limited opportunity **Gain:** Economic opportunity, growth, prosperity

2.3 Brainstorming

- Analyze Index of Economic Freedom data
- Visualize correlations with GDP, unemployment, inflation

- Compare regions and identify best-performing countries
- Develop an interactive dashboard for easy data exploration

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

Discovery: Users learn about the Index of Economic Freedom **Exploration:** Access interactive dashboards and visualizations

Insights: Analyze country rankings and economic trends

Action: Use insights for research, policy-making, or awareness

3.2 Solution Requirement

Functional Requirements:

- Data collection and preprocessing
- Tableau dashboard development
- Web application integration
- Interactive visualizations based on economic indicators

Non-Functional Requirements:

- User-friendly interface
- Real-time accessibility via Tableau Public
- Responsive design for mobile and desktop

3.3 Data Flow Diagram

Data Sources → Data Cleaning → Tableau Visualizations → Web Integration → End Users

3.4 Technology Stack

- Data Processing: Python, Pandas
- Visualization: Tableau, Tableau Public
- Web Application: HTML, CSS, Bootstrap

4. PROJECT DESIGN

4.1 Problem Solution Fit

The project provides a visual, data-driven approach to understanding how economic freedom contributes to prosperity, enabling users to analyze global trends effectively.

4.2 Proposed Solution

An interactive platform that presents country rankings, economic indicators, and their relationships through dynamic dashboards and storyboards.

4.3 Solution Architecture

- Data collection from reliable global sources
- Data cleaning and preparation
- Development of Tableau dashboards
- Integration with a responsive web application

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

Phase	Timeline
Requirement Gathering	Week 1
Data Collection & Preprocessing	Week 2
Data Analysis & Visualization	Week 3-4
Dashboard & Story Development	Week 5
Web Integration & Testing	Week 6
Final Report & Presentation	Week 7

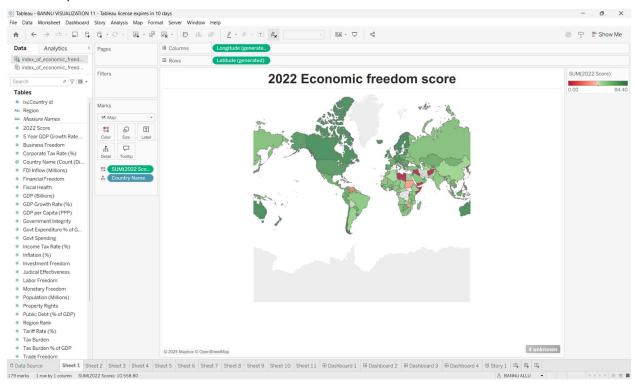
6. FUNCTIONAL AND PERFORMANCE TESTING

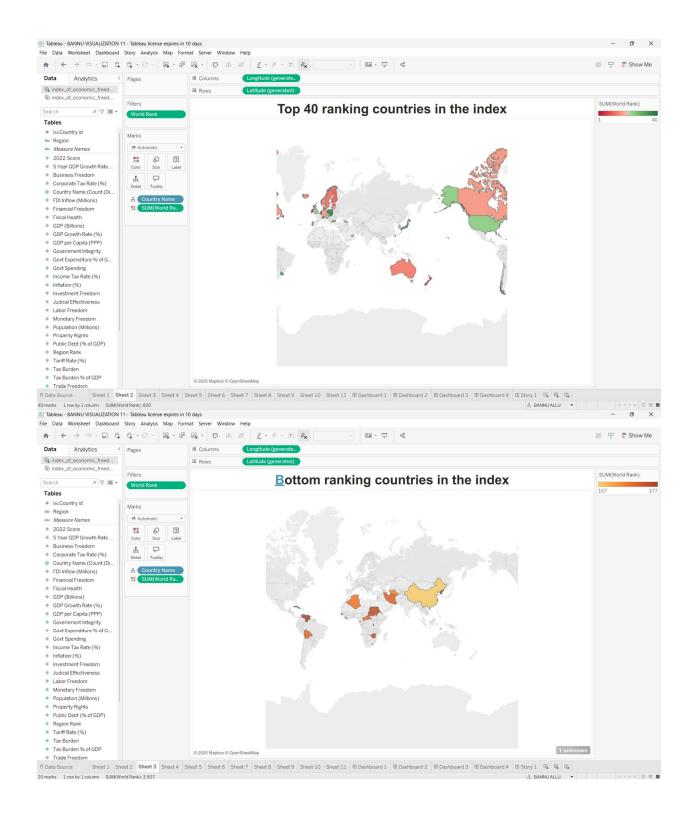
6.1 Performance Testing

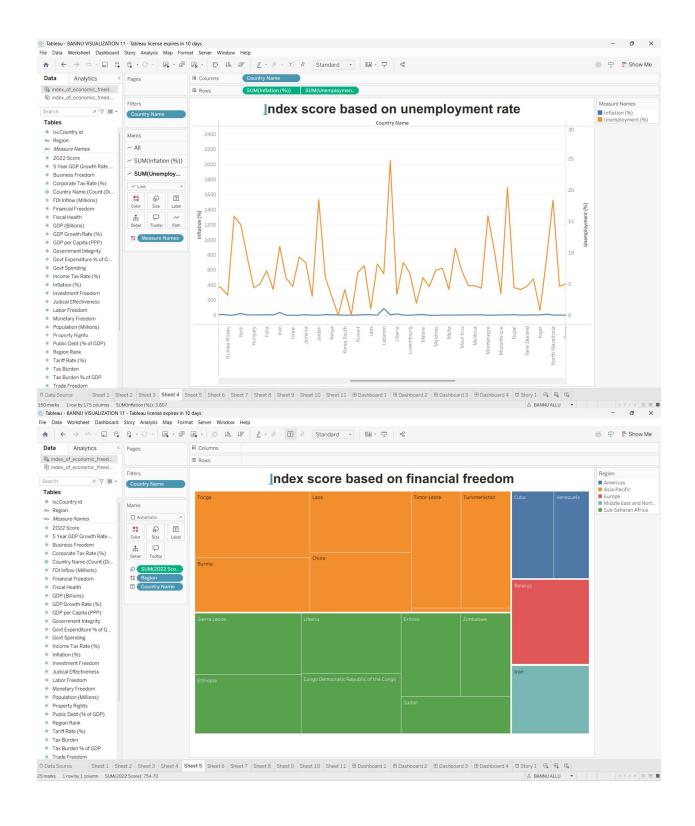
- Tested dashboard load times and responsiveness
- Verified accurate data rendering across devices
- Ensured stable integration between Tableau Public and the web application

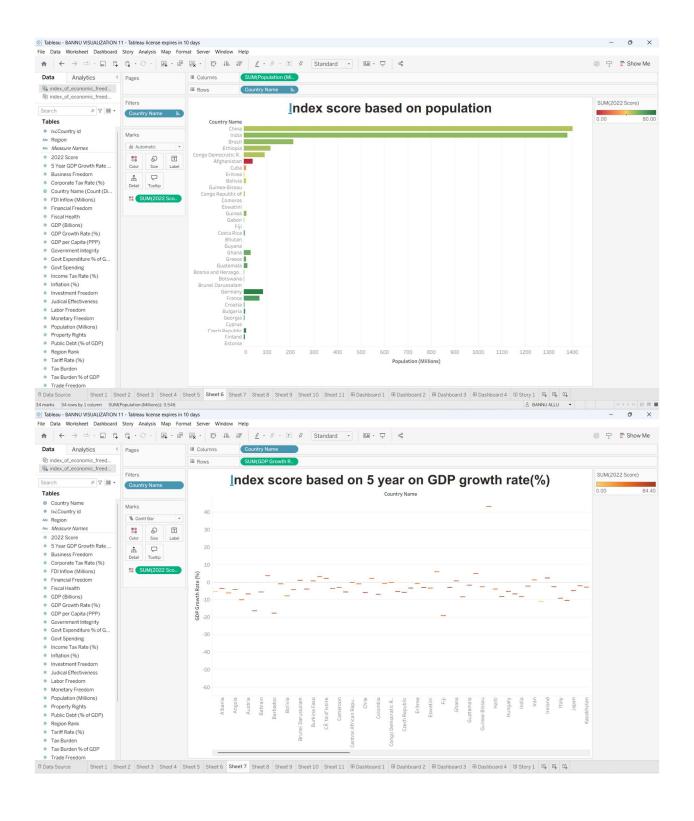
7. RESULTS

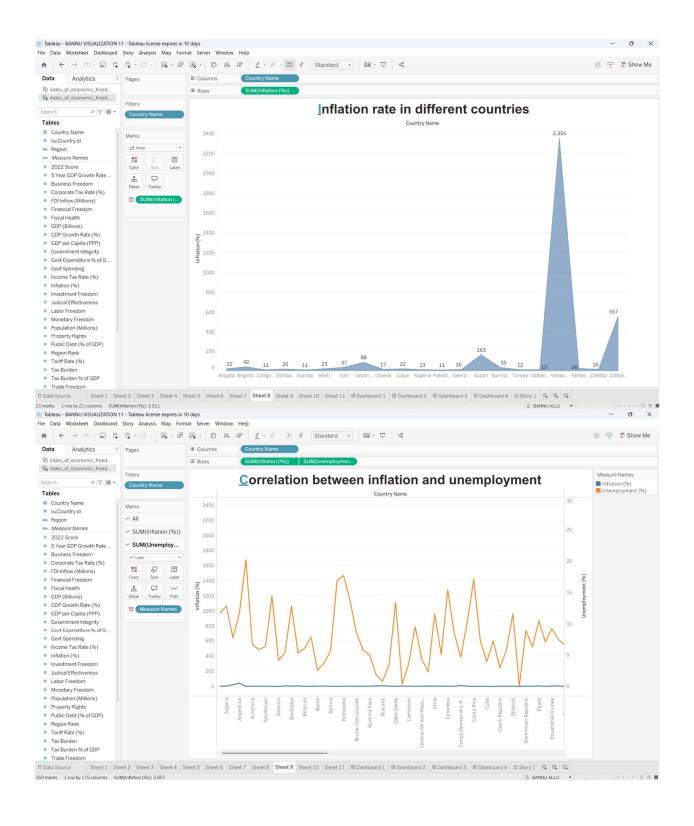
7.1 Output Screenshots

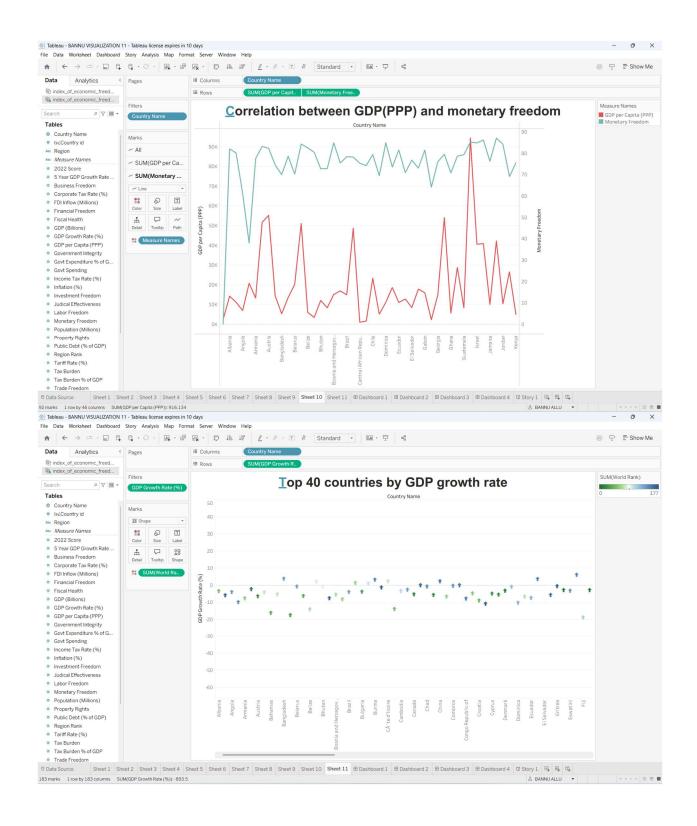


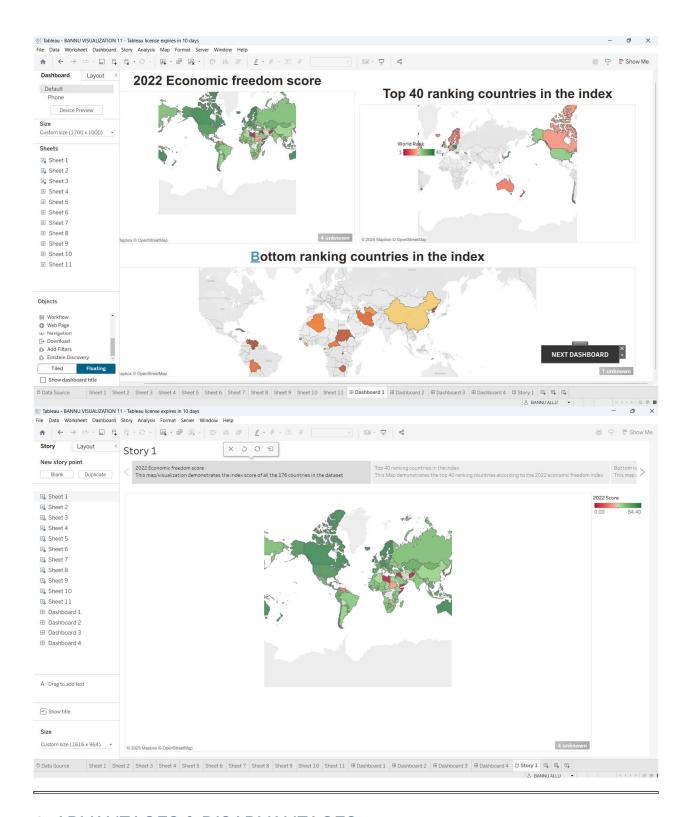












8. ADVANTAGES & DISADVANTAGES

Advantages:

- Interactive and user-friendly data exploration

- Visual insights into global economic trends
- Supports policymakers, researchers, and students

Disadvantages:

- Dependence on third-party data sources
- Some indicators may have subjective interpretations

9. CONCLUSION

The project effectively demonstrates how economic freedom correlates with prosperity. By providing visual insights and comparative analysis, it contributes to a better understanding of global economic patterns.

10. FUTURE SCOPE

- Inclusion of time-series data for trend analysis
- Expansion of economic indicators such as HDI
- Integration of predictive models for forecasting

11. APPENDIX

Dataset Link:

https://drive.google.com/file/d/1EBIa1LtM3Ni2Uh3nekLB6wt3263Q3NeX/view

Dashboard public link:

https://public.tableau.com/views/BANNUALLU/Dashboard1?:language=en-US&publish=yes&:sid=&:display count=n&:origin=viz share link

Story board public link:

https://public.tableau.com/views/BANNUSTORY/Story1?:language=en-US&publish=yes&:sid=&:display_count=n&:origin=viz_share_link