#### 1. Introduction

The Global Firepower Dashboard in PowerBI provides a comprehensive visualization of the military capabilities of top countries worldwide. By integrating multiple datasets and interactive elements, the dashboard offers a detailed and engaging overview of global military power.

#### 2. Datasets Utilized

The project leverages a variety of data sources to ensure a robust and multifaceted analysis:

- **Excel**: Military data of the top 140 countries.
- Python Scripts: Data on nuclear power countries.
- **SQL**: Table for top 10 jets.
- Web URLs: Links to images and videos.
- **Text Data**: PowerIndex ranking by Global Firepower.
- **HTML**: Data on the top 10 countries with the highest total number of military personnel.

### 3. Dashboard Pages

The dashboard comprises six pages, each dedicated to a specific aspect of global military power:

- 1. **Legends**: Visualizes top countries in various military domains, including aircraft, rocket projectiles, population, tanks, aircraft carriers, nuclear weapons, and submarines. Features charts such as stacked bar, pie, line and stacked column, funnel, and an interactive slicer.
- 2. **Nuclear Power**: Focuses on top nuclear power countries with funnel charts, stacked column charts, a Python-scripted pie chart, and interactive images linked to further information.
- 3. **Army**: Displays data on active personnel, army vehicles, reserve personnel, and artillery using stacked column charts and matrix charts. Includes interactive elements linking to 2024 military rankings.
- 4. **Airforce**: Represents air force capabilities with pie charts, donut charts, and a slicer-enhanced line and clustered column chart.
- 5. **Navy**: Highlights naval strength with clustered bar and column charts showing aircraft carriers, navy ships, destroyers, and coastline data.
- 6. **NATO**: Features a map highlighting NATO member countries.

#### 4. Visualizations

The project employs a wide range of visualizations to effectively communicate the data:

- **Charts**: Stacked bar, pie, funnel, matrix, donut, line and stacked column, and clustered bar and column charts.
- Maps: Highlighting NATO countries.
- **Interactive Elements**: Slicers and clickable images linking to additional resources.

### 5. Interactivity

Interactive elements enhance user engagement and data exploration:

- **Slicers**: Allow users to filter and explore data dynamically.
- **Clickable Images**: Link to additional information and resources, such as nuclear weapon details and military ranking webpages.

#### 6. Content Focus

The dashboard provides a detailed analysis of the military strength of top countries across various domains:

- Aircraft and Rocket Projectiles
- Population and Tanks
- Aircraft Carriers and Nuclear Weapons
- Submarines
- Active and Reserve Personnel
- Army Vehicles and Artillery
- Air Force and Navy Capabilities
- NATO Membership

#### 7. Enhancements

The project is enriched with multimedia content, including URL links to engaging videos and images about jets, nuclear weapons, and ships, providing a more immersive and informative experience.

### **Conclusion**

The Global Firepower Dashboard in PowerBI is a powerful tool for visualizing and understanding the military capabilities of countries worldwide. By integrating diverse datasets and interactive features, it offers a comprehensive and engaging analysis suitable for various stakeholders interested in global military power.

# **Project Output:**











