

Dashboard Design

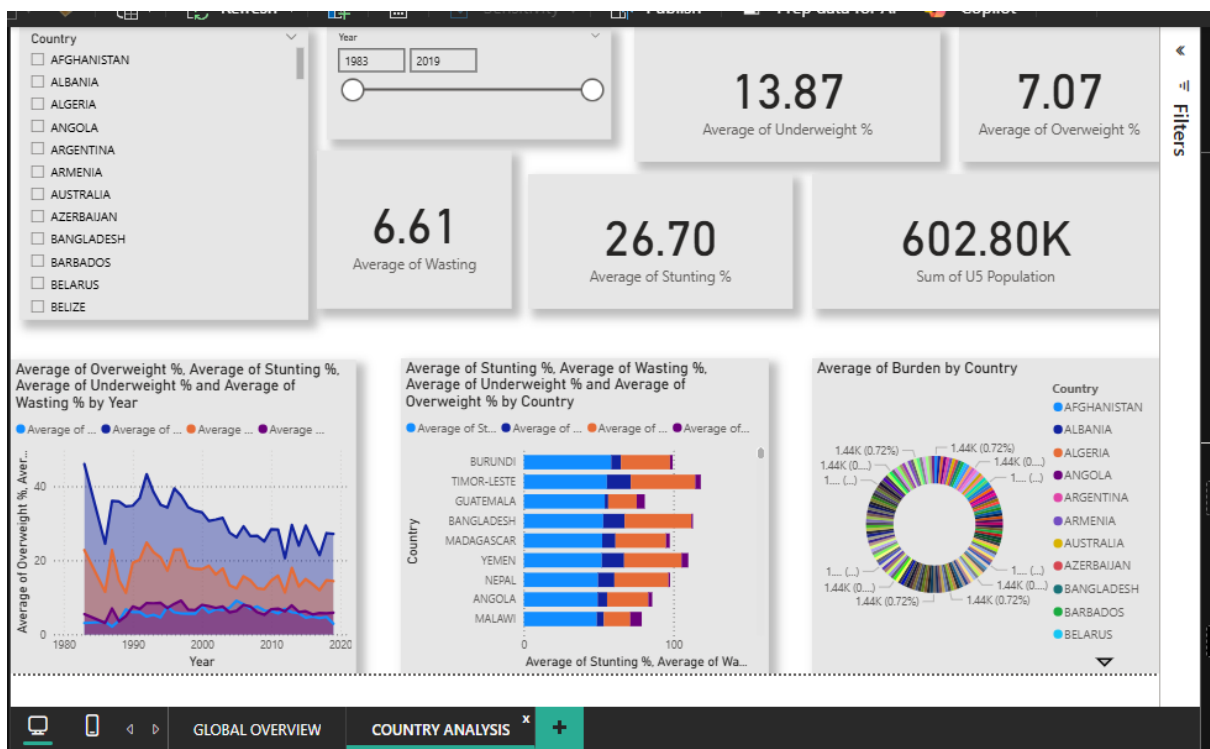
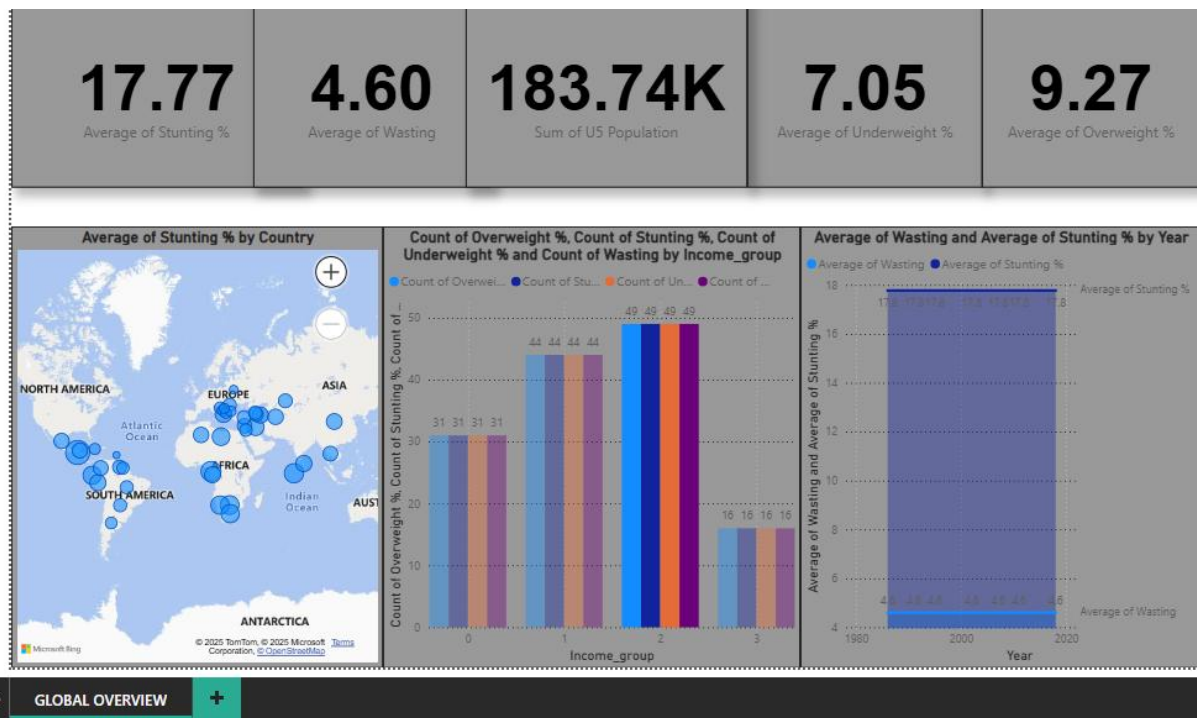
Date	02 OCT 2025
Team ID	PNT2022TMIDxxxxxx
Project Name	Malnutrition Analysis and Forecasting using Power BI
Maximum Marks	5 Marks

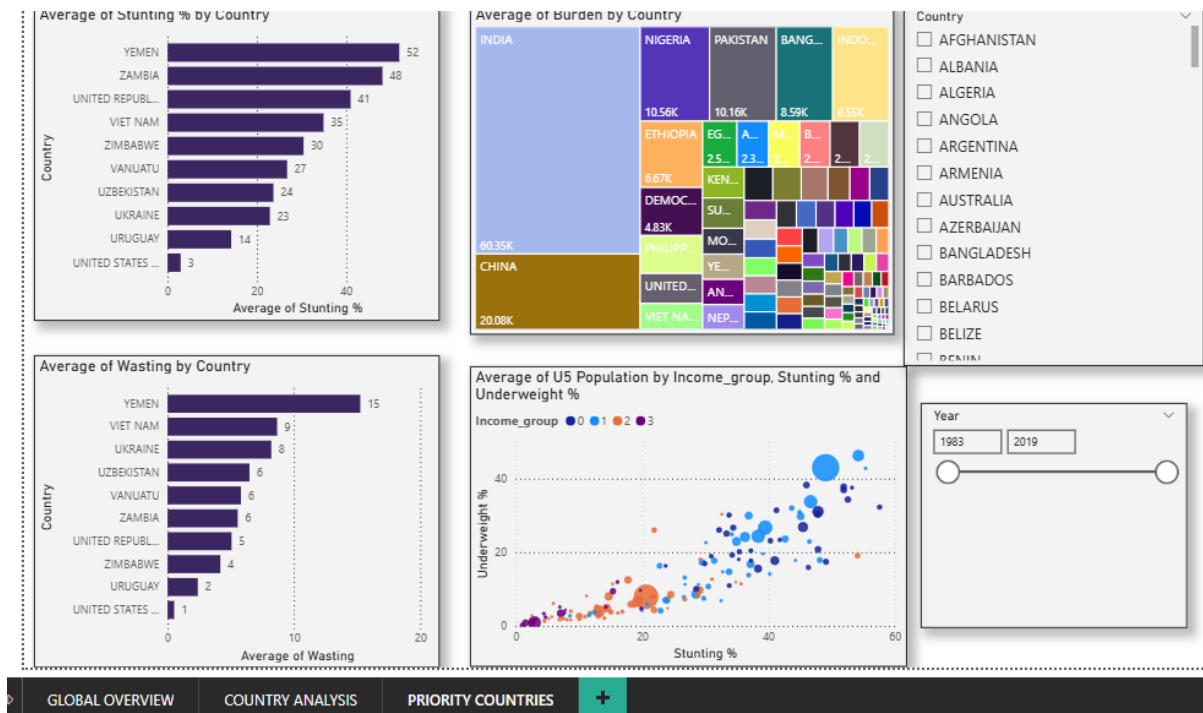
Creating an effective dashboard involves thoughtful design to ensure that the presented information is clear, relevant, and easily understandable for the intended audience. Here are some key principles and best practices for dashboard design

Activity 1: Interactive and visually appealing dashboards

Designing interactive and visually appealing dashboards requires the right balance of layout, visuals, and functionality. In this project, the following design principles were applied:

- **Clear and Intuitive Layout** → 3 structured pages (Global Overview, Country Analysis, Priority Countries).
- **Use Appropriate Visualizations** → KPIs for global indicators, map for geographic spread, bar/column charts for comparisons, line charts for trends, treemap & scatter plots for burden analysis.
- **Colour and Theming** → Consistent theme with distinct indicator colors for readability.
- **Interactive Filters and Slicers** → Country and Year slicers enable drilldown analysis.
- **Drill-Down Capabilities** → Users can move from global → country → priority countries view.
- **Custom Visuals and Icons** → Treemap and smart layouts enhance storytelling.
- **Use of Infographics** → KPI cards highlight global numbers instantly.





Major Outcomes from the Dashboard (3 Pages)

Page 1 – Global Overview

1. **Global KPIs** show stunting at ~22%, wasting ~7%, overweight ~6%, and underweight ~12%.
2. **World Map** highlights high stunting prevalence in Africa and South Asia.
3. **Clustered Column Chart** reveals that stunting is highest in low-income countries (38%) vs only 7% in high-income countries.
4. **Line Chart** indicates that stunting is declining slowly, but wasting has remained stagnant over years.

Page 2 – Country Analysis

1. **Slicers** allow users to focus on any country and year range.
2. **KPI Cards** update dynamically to show selected country's malnutrition rates.
3. **Line Chart** shows indicator trends over years for the country (e.g., India's stunting declining but overweight rising).
4. **Bar Chart** compares the country with global and income group averages.
5. **Donut Chart** displays the country's share in global burden (e.g., India & Nigeria together contribute the largest portion).

Page 3 – Priority Countries

1. **Bar Charts** identify the top 10 countries with highest stunting % and wasting %.
2. **Treemap** shows burden distribution, highlighting India, Nigeria, and Pakistan as top contributors.

3. **Scatter Plot** (Stunting % vs Underweight %) shows overlapping challenges, with bubble size representing child population and colors showing income groups.
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Final Takeaways

- Global malnutrition is concentrated in low- and middle-income countries.
- A few countries (India, Nigeria, Pakistan, Ethiopia, Bangladesh) carry the majority of the global burden.
- Overweight is emerging as a new challenge in middle-income countries → indicating a **double burden** of malnutrition.
- The dashboard empowers policymakers with country-specific, global, and comparative insights to prioritize interventions effectively.