**Problem Statement: The Social Media Paradox – Predicting App Usage and Its Impact on Well-being**

In the digital age, social media has become an inseparable part of our daily lives. From teenagers scrolling endlessly on Instagram and Snapchat to professionals networking on LinkedIn, different age groups engage with different platforms. However, with this constant connectivity comes a question: **How does social media usage affect our mental and physical well-being?**

Imagine you are a **data scientist working for the Global Digital Well-being Research Institute (GDWRI)**. Your team has been assigned a critical task: **to analyze social media usage patterns across different age groups and predict their potential effects on mental and physical health.**

Governments and health organizations are concerned about the rising impact of excessive screen time on anxiety, depression, and even sleep disorders. Your insights will help policymakers design digital well-being initiatives and educate users on responsible social media consumption.

**Your Challenge:**

* Analyze user behavior across multiple social media platforms (YouTube, Instagram, Facebook, WhatsApp, etc.) based on various entity like age groups.
* Develop a **predictive model** that forecasts which social media platform a person is likely to use based on their age and engagement patterns.
* Identify and predict **potential mental and physical health effects** associated with different usage patterns.
* Create an **interactive data visualization dashboard** to present insights in an intuitive and engaging way.

**Key Objectives:**

1. **Prediction Model:** Train a machine learning model to predict which social media app a user is most likely to use based on age and behaviour and predict the physical and mental health of the user.
2. **Impact Analysis:** Identify correlations between excessive usage and mental/physical health outcomes.
3. **Data Visualization:** Develop an interactive dashboard showcasing platform popularity by age and its associated risks.
4. **Summary:** Write your thoughts based on this dataset and explain in brief.

**Bonus Challenges:**

* Predict **future trends** in social media usage

**Social Media Usage**



**Sleep Dataset**

