## **BUSINESS PROBLEM STATEMENT:**

As a data analyst, the task is to conduct a comprehensive analysis and visualization of historical stock prices for Apple, Google, and Meta from September 7, 2017, to September 7, 2022. The primary goal is to explore relationships and correlations among the stock prices of these three companies.

## **DASHBOARD REQUIREMENTS:**

- Open and Close Stock Prices (Year by Year Analysis):
  - Display the open and close stock prices for Google, Meta, and Apple.
  - Provide a year-by-year breakdown for enhanced analysis.
- Max High and Min Low Stock Prices (Year by Year Analysis):
  - Showcase the maximum high stock price for Google, Meta, and Apple.
  - Highlight the minimum low stock price for Google, Meta, and Apple.
  - Present the data in a year-wise format for a detailed understanding.
- Adjusted Close Stock Prices (Year by Year Analysis):
  - Visualize the adjusted close stock prices for Google, Meta, and Apple.
  - Break down the information by year to identify trends and patterns.
- Volume of Stock Trades (Year by Year Analysis):
  - Illustrate the trading volume for Google, Meta, and Apple.
  - Explore the volume trends over the specified period, delineated by years.
- Key Performance Indicators (KPIs):
  - Develop KPI measures for Average Open, Close, High, Low, Adjusted Close, and Volume.
  - Consolidate measures for Google, Meta, and Apple into single KPIs.
  - Include a slicer for date flexibility, allowing users to focus on specific time frames.

## **MEASURES:**

- Average Open Stock Price:
   Calculated by averaging the open stock prices of Google, Meta, and Apple.
- Average Close Stock Price:
   A measure derived from the average close stock prices of Google, Meta, and Apple.
- Average High Stock Price:
   Obtained by averaging the high stock prices of Google, Meta, and Apple.
- Average Low Stock Price:
   Calculated through the average low stock prices of Google, Meta, and Apple.
- Average Adjusted Close Stock Price:
   A measure reflecting the average adjusted close stock prices of Google, Meta, and Apple.
- Average Volume:
   Derived from the average trading volumes of Google, Meta, and Apple.