Spotify intends to analyze the impact of its recommendation algorithm updates on user satisfaction and discoverability of new music.

## The objective:

is to evaluate whether the algorithm changes have led to an increase in user engagement with recommended tracks.

### Understanding the Data:

#### 1. Data Collection:

 Collect data on user interactions with recommended tracks, including play counts, likes, and playlist additions, before and after the recommendation algorithm updates.

#### 2. Data Cleaning:

- o Ensure the accuracy of recommendation interaction data.
- o Address any missing or irregular data points.

#### 3. Data Exploration:

- Explore the data to identify patterns in user engagement metrics with recommended tracks.
- Analyze changes in play counts, likes, and playlist additions associated with the updated recommendation algorithm.

## Structuring the Narrative:

### 4. Choose the Right Visualization:

- Utilize a radar chart to visually represent the distribution of user interactions with recommended tracks across different metrics (play counts, likes, additions to playlists) before and after the algorithm updates.
- Use bar charts to show the top genres or artists that gained popularity post-update.

#### 5. Craft a Compelling Narrative:

- Develop a narrative that outlines the goals of the recommendation algorithm updates and the expected impact on user satisfaction.
- Emphasize specific adjustments made to the algorithm to improve the accuracy of track recommendations

## Incorporate Context and Real-World Examples:

### 6. Incorporate Context:

- Provide context on the evolving landscape of music consumption and emerging trends in user preferences.
- Explain any technological advancements or partnerships that influenced the recommendation algorithm updates.

#### 7. Real-World Examples:

- Share stories of users discovering new favorite songs through the updated recommendations.
- Highlight instances where user feedback directly contributed to refining the recommendation algorithm.

# Communicate Key Insights Effectively:

#### 8. communication:

- Present findings through visuals, highlighting the positive impact of the algorithm updates on user engagement.
- Showcase the percentage increase in likes or playlist additions as key indicators of the algorithm's success.
- Connect the data to Spotify's commitment to providing a personalized and enjoyable music streaming experience.