Business Context and Problem Statement

MovieLens is a company in the internet and entertainment domain providing an online database of information related to films, television series, and online streaming content including cast, production crew, trivia, ratings, fan, and critical reviews. Every year in collaboration with a guest curator, MovieLens publish their annual insights based on a theme providing a comprehensive view of a topic. The company is planning to bring out the "Movie Talkies: Classic" edition this year. The idea is to connect with viewers who have strong movie preferences as well as promote classic movies to attract newer customers and expand their viewer base.

Problem Statement

In order to create the "Movie Talkies: Classic" edition, the challenge lies in effectively analyzing and presenting a wealth of information about movies from a bygone era. The core issue is understanding the characteristics of these classic movies, user interests, and the relationship between user demographics and movie ratings. Without clear visuals, it's difficult to identify patterns, draw meaningful conclusions, and engage the audience on a deeper level. You have been hired as a Data Analyst by the company, to create a report that provides a detailed analysis of the classic movies that were released till 2000. The dashboard should provide insights on the following questions:

1. How many movies were released until 2000? How many distinct genres have come up till the year 2020?

2. How many users are part of the MovieLens community, and what is the gender diversity in this community?

3. What are the genre preferences of different genders, highlighting user engagement?

4. What's the average user rating for classic movies, reflecting overall reception? How does the distribution of movies vary across different genres?

5. How does the demographic distribution of the users look like across gender? Where do these users live?

6. How do users across different age groups and professions engage with classic movies, revealing generational interests?

7. Which classic movies and genres are top-rated? How do these ratings differ based on user age and occupation?

8. Is there a link between user age and the ratings they provide for classic movies, providing insights into age-related viewing habits? How do the average ratings vary over the years based on the genre considered?