Beth Mithamo Presentation

Business Background

▶ Microsoft sees all the big companies creating original video content and they want to get in on the fun.

▶ They have decided to create a new movie studio, but they don't know anything about creating movies.

▶ You are charged with exploring what types of films are currently doing the best at the box office.

▶ You must then translate those findings into actionable insights that the head of Microsoft's new movie studio can use to help decide what type of films to create.

Problem Statement

- We will evaluate the movie genres and make general recommendations of the genres that should pay most attention to, based on:

  - most and least popular genres in terms of ratings and votes

  - Highest and lowest domestic grossing genres

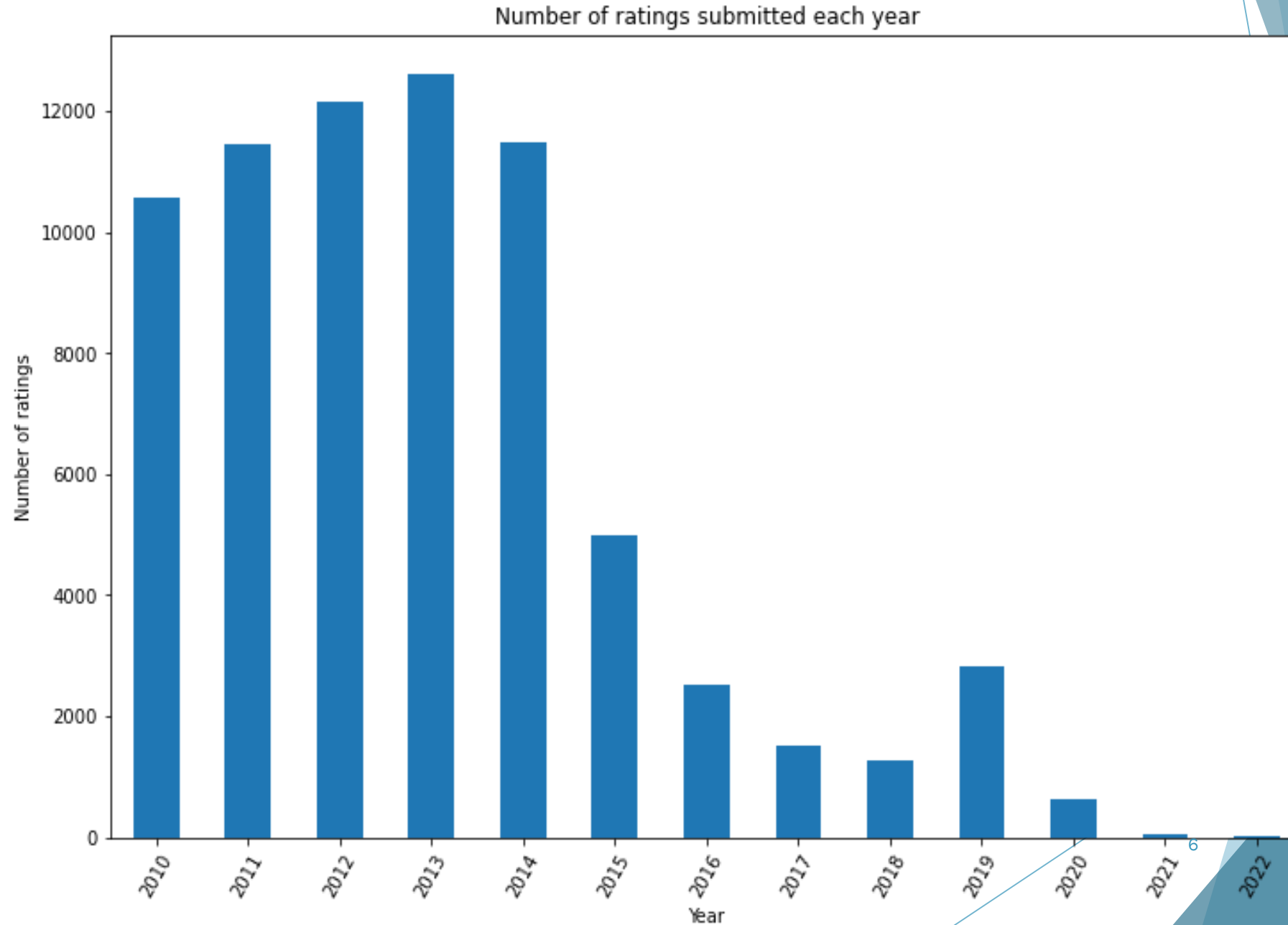 - Genre popularity over time

  - Other movie genre features

Solution

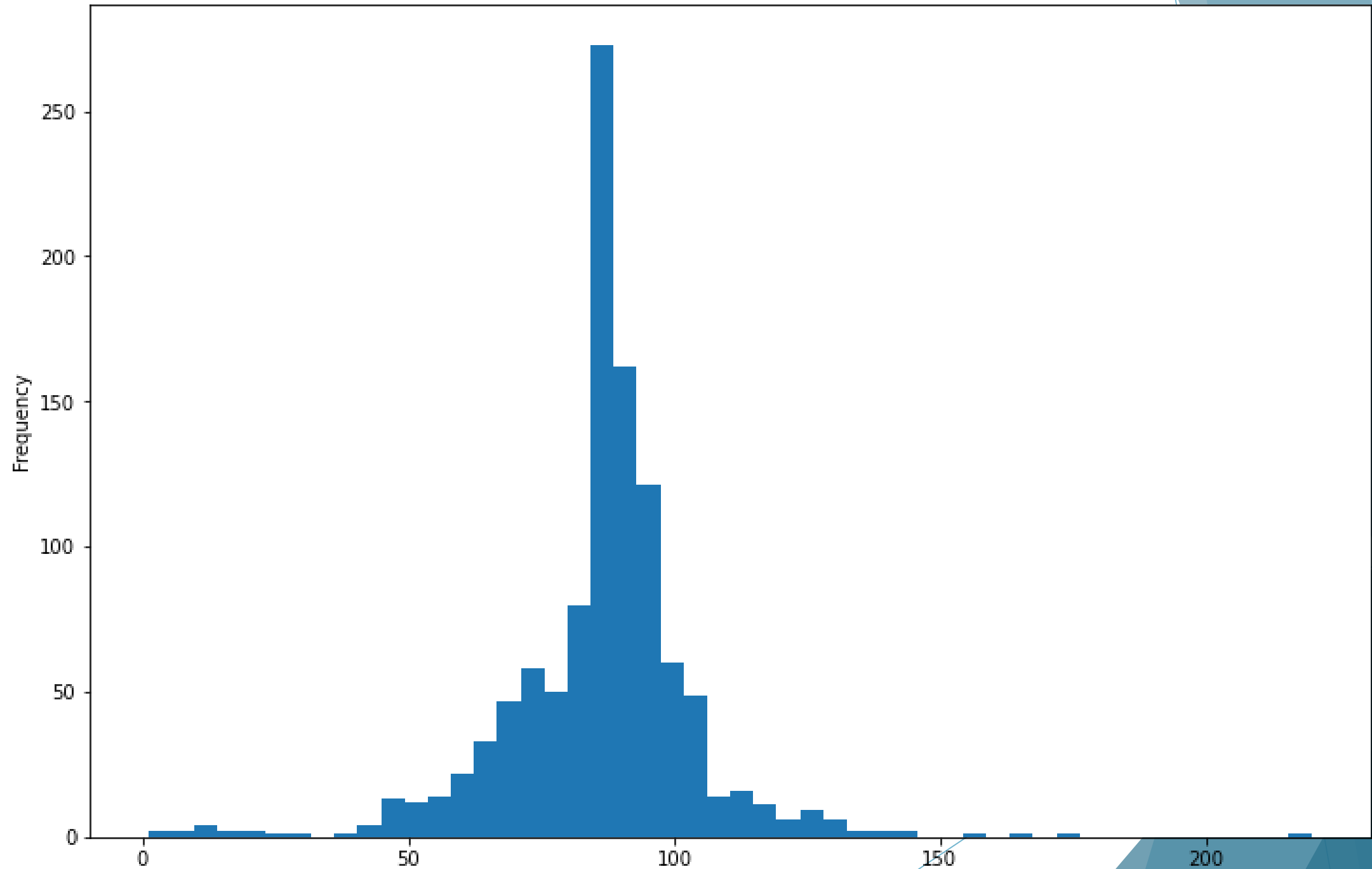- Exploratory data analysis to find insights, that will help advice Microsoft appropriately.

Development Process
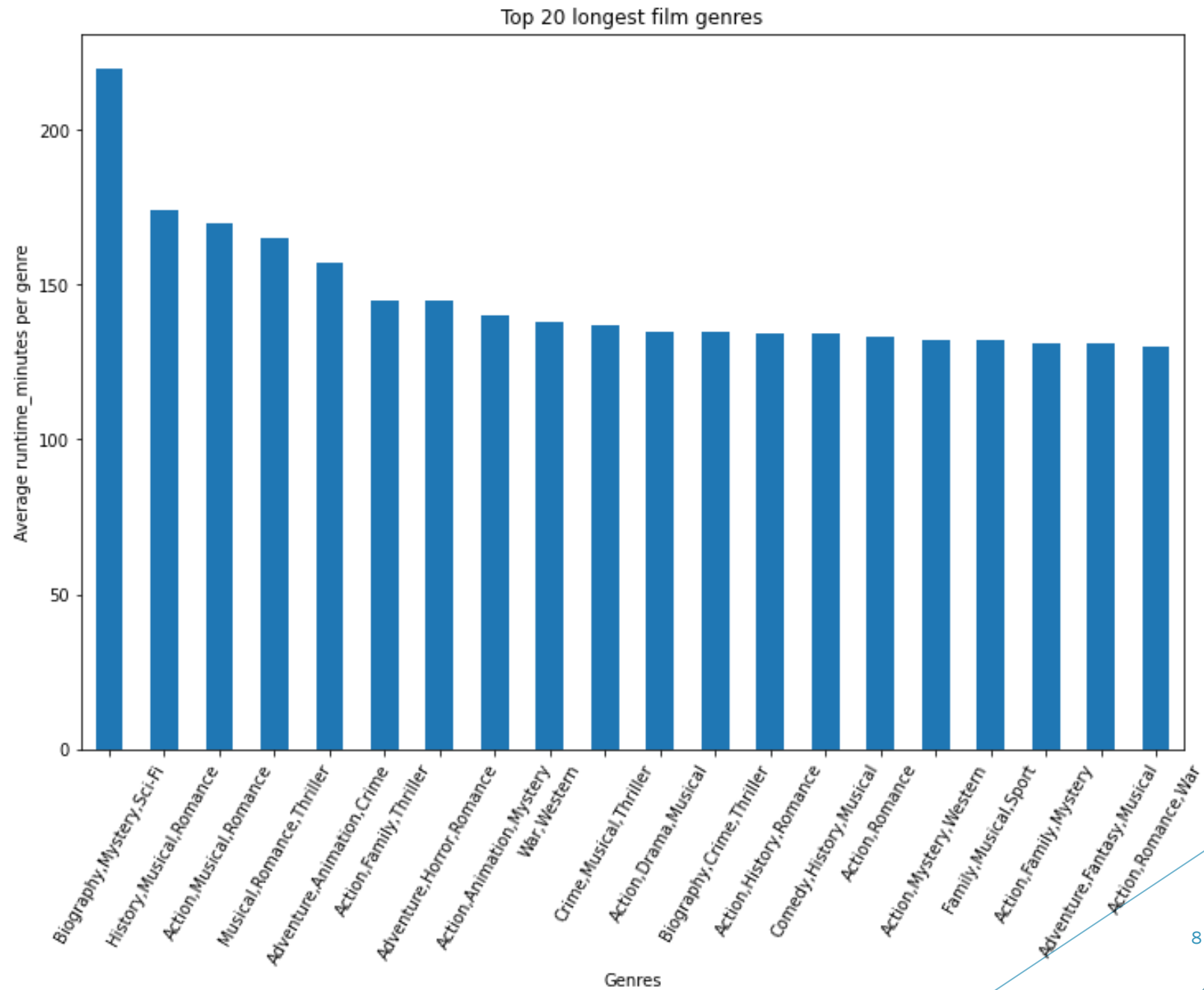
- Import libraries

- Open relevant files

- Exploratory data analysis and Data cleaning

- Data analysis

- Join files for further analysis

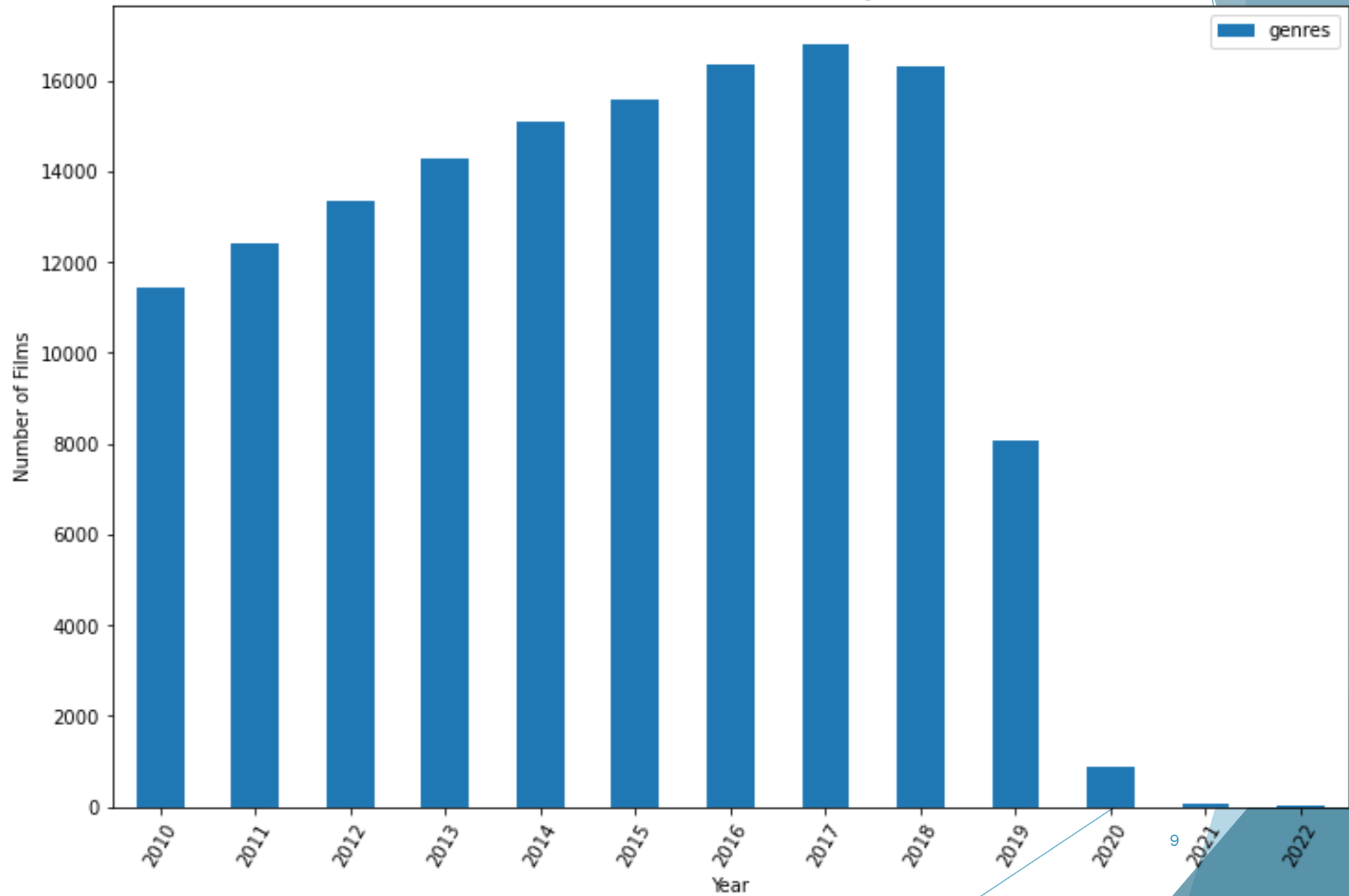- Data analysis and visualization

Data Visualizations and insights

Number of ratings submitted each year

Median length of films

Top 20 longest film genres

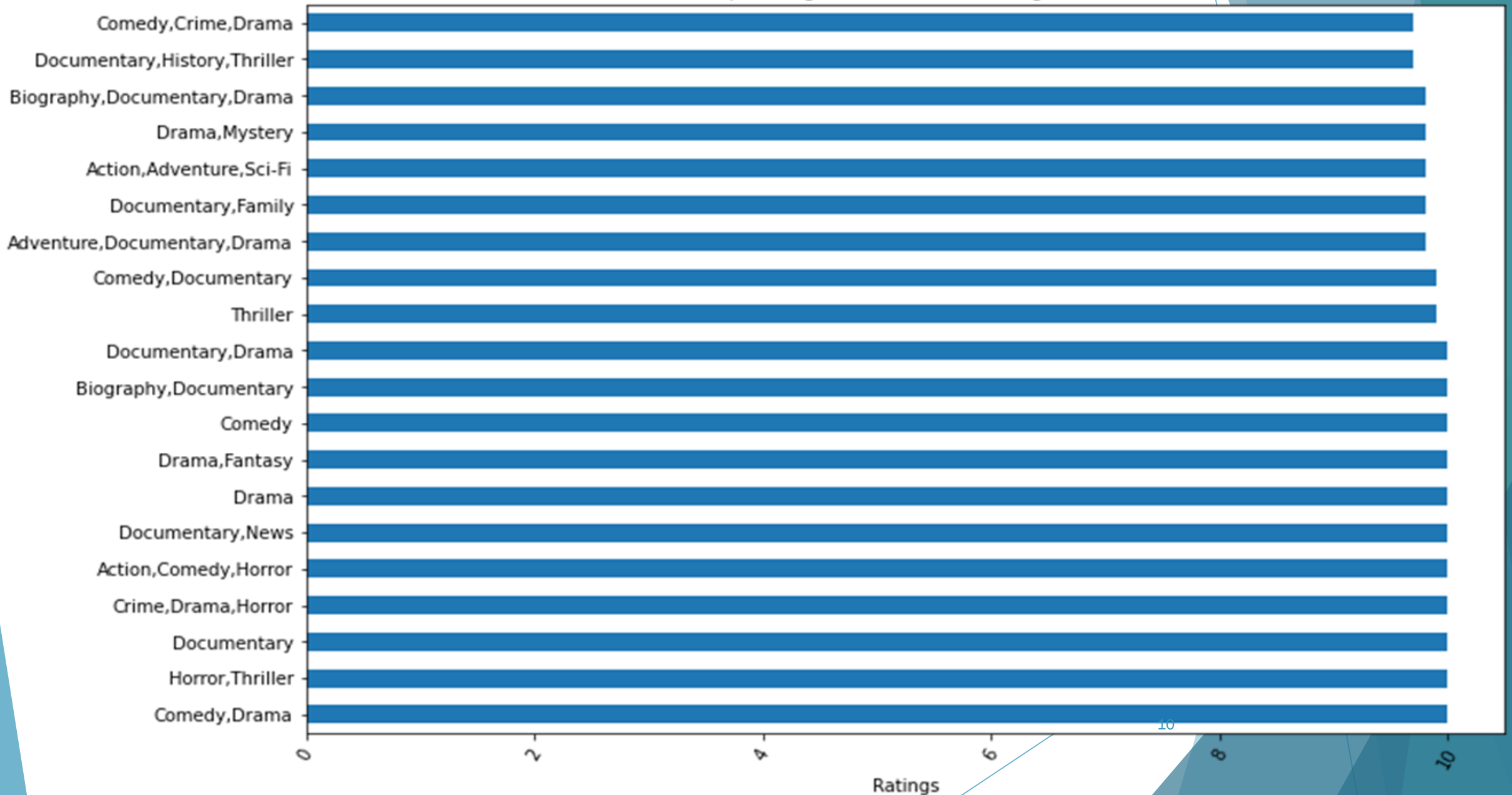Number of films made each year

Top 20 highsest rated movies genres

Technologies used

▶ The tech stack I used was Python and its libraries to perform exploratory data analysis, descriptive analysis and visualizations of the insights gathered.

▶ Python libraries used included:

  ▶ Pandas

  ▶ Matplotlib

  ▶ Numpy

Conclusion and Recommendation

▶ Based on the above findings, Microsoft should invest in:

▶   1.Documentary, Drama and Comedy as they are the highest grossing films based on the domestic gross data. There was plenty of missing data for the foreign gross, hence we did not use it. Movies with a genre focus seem to gross better than movies with a combination of genres. The least performing genres had a combination of genres. They included (Adventure,Animation,Biography), (Comedy,Family,Fantasy), (Documentary,Mystery)

▶   2.Movies with the highest ratings were (Comedy,Drama),(Horror,Thriller),(Documentary). Once again we see the Documentary making a strong comeback here. This should be one of genres that Microsoft should be keen on investing in. The Comedy and Drama genres, although a combination are also highly rated. This proves our first point even further.

▶   3.The number of films being started since 2020 have significantly reduced. The variety of genres has reduced as well. The most common genres since 2020 are (Action, Drama & Animation). This is a point of interest that Microsoft should look into. Why have the many varieties of movie genres reduced significantly since 2020?

▶   4.The most common length of films is between 85-88 minutes. The length of films has significantly reduced over the years.