Overview

Microsoft is a big old tech company with immense financial capabilities operating worldwide in 190 countries. It has managed to employ over 200,000 people with formal and informal qualifications.

They have positioned themselves as the best go-to company in terms of developing and marketing software as well as tech hardware such as servers and CPUs.

Their decision to get into the film industry is worth a big step as they can get a chance to market their visions and future goals through movies. The film industry also offers an opportunity for significant diversification of the company.

Business understanding

The task at hand is to extract insights from the data given to ensure Microsoft has a seamless transition into the film industry.
The objectives include:
1. To find the movie genre with ratings above 5.
2. To check the studios with good operation budgets, good operating profits, and their availability.
3. To find writers and movie directors who have experience worth giving a project.
4. To find the common age bracket (rating) of viewers.
5. To find the best optimum film durations.

Data Understanding

Five datasets were provided as well as the IMDB database with crucial information about movies. The tables movie basics and movie ratings came in handy in addressing our objective.

Most of the datasets had a common relation which was the movie title column and also the genre column.

Tables from the database had a common movie_id among them. Joining them provided a very good stepping stone for genres with good ratings analysis.

Data analysis

To answer the objectives described, some datasets had to be merged to provide an opportunity to be able to extract meaningful insights. The plots used were mainly horizontal bar graphs which provide clear non-complicated visuals.

All the objectives were described using a plot for easier analysis and visualization.

Recommendations

1. Microsoft should venture into drama, documentary, and comedy because they have the best ratings.
2. Microsoft should collaborate more with Sony, WB, and BV studios because they have the biggest production budgets as well as operating profits. A collaboration will maximize their returns. Uni, Fox, WB, Sony, and BV are the most available studios for any collaboration as they are widely spread.
3. Microsoft should make films suitable for an audience below 17 years of age.
4. Microsoft should involve Clint Eastwood who seems to be an experienced production manager having been involved in more than 2 films and also writers Mike White, Peter Morgan, and Wellesley Wild who seem to be the most experienced.
5. Microsoft should create films capped at 120 minutes.

Future recommendations

1. The data provided had missing values. The data provided should be free of null values.
2. The date formats from almost all datasets required a format change. Dates inputs should be cross-checked next time.
3. The datasets provided next time should be of the same file format for easier access.