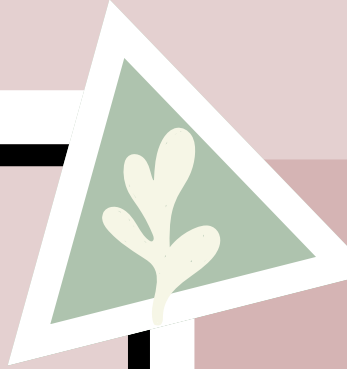






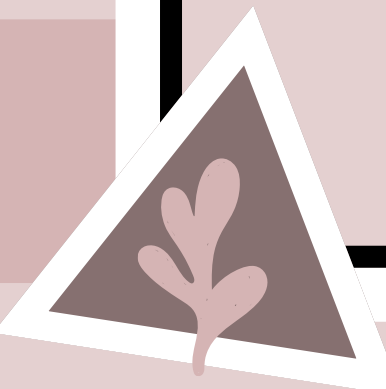
LISA MWIKALI

PHASE 1
PROJECT



PROJECT OVERVIEW

For this project I used exploratory data analysis to generate insights for Microsoft (the business stakeholder).







BUSINESS PROBLEM

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

I 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.



OBJECTIVE





The primary objective is to identify the most successful film genres at the box office and translate these findings into strategic recommendations for Microsoft's new movie studio.



DATA UNDERSTANDING

The sample includes a diverse set of movies, spanning various genres, gross, release dates and ratings. It represents a cross-section of the industry to provide insights into broader trends and patterns. The primary target variables are "domestic_gross" and "averagerating" which will serve as the measure of a movie's success.





EXPLORATORY DATA ANALYSIS

Top 10 Genres based on Weighted Average
Rating



Top Genres based on Weighted Average Rating:

	genres	averagerating	domestic_gross	numvotes
60	Adventure	9.200000	3600000.0	47
114	Biography,Documentary,Sport	8.593394	1776000.0	55511
58	Action,Sport	8.400000	4200000.0	8
167	Crime,Documentary	8.300000	4300000.0	65304
207	Drama,Music	8.235441	61900000.0	774367
228	Fantasy	8.200000	146000.0	12
168	Crime,Documentary,History	8.200000	708000.0	15
143	Comedy,Drama,Thriller	8.100000	3100000.0	151123
115	Biography,Documentary,Thriller	8.100000	2800000.0	47994
102	Animation,Drama,Fantasy	8.090101	8700000.0	204500



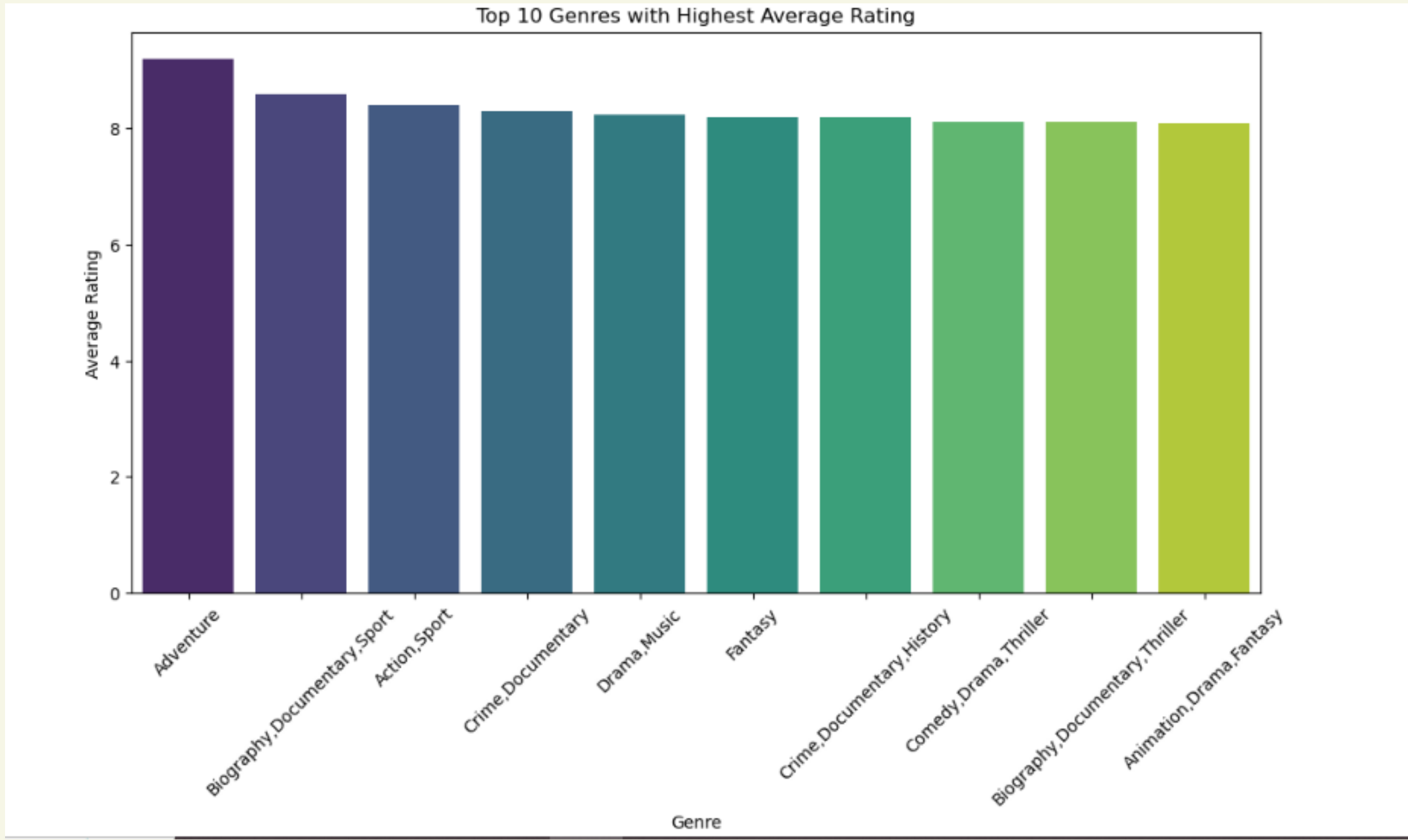
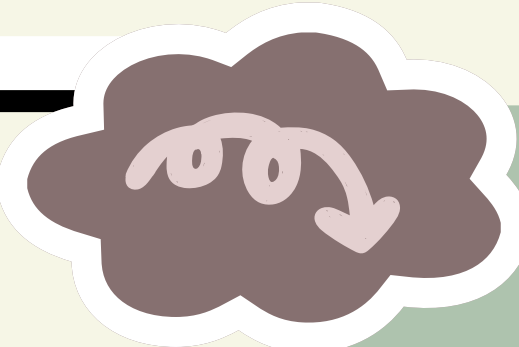
EXPLORATORY DATA ANALYSIS

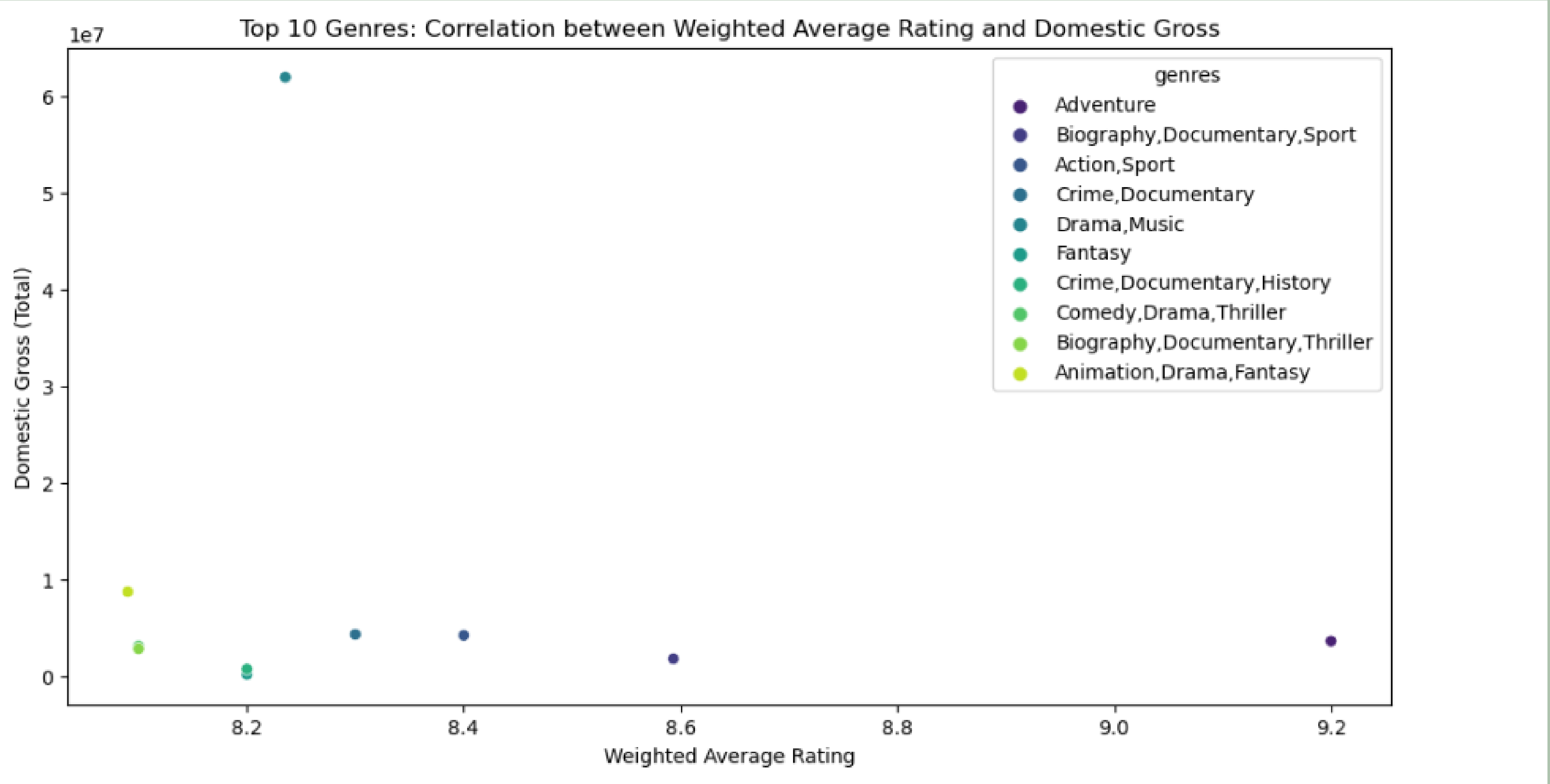
Top 10 Genres based on Domestic Gross



Top Genres based on Domestic Gross:

	genres	average rating	domestic_gross	numvotes
61	Adventure, Animation, Comedy	6.406943	3.105838e+09	2035366
189	Drama	7.349237	2.241894e+09	2720080
124	Comedy	5.970694	2.159740e+09	3426092
10	Action, Adventure, Sci-Fi	6.554069	1.653900e+09	4451412
133	Comedy, Drama	6.826813	1.640057e+09	2545366
160	Comedy, Romance	6.086460	1.487929e+09	2700097
141	Comedy, Drama, Romance	6.968311	1.445831e+09	4418196
19	Action, Comedy, Crime	6.545402	1.429857e+09	2889974
180	Documentary	7.204841	1.346385e+09	91862
237	Horror, Mystery, Thriller	6.173324	1.307266e+09	2256877







CONCLUSION

In conclusion, Microsoft should explore the following genres displayed on the side and keep checking on audience preferences to ensure that they are creating movies that will get good reception from the target market

genres	
●	Adventure
●	Biography, Documentary, Sport
●	Action, Sport
●	Crime, Documentary
●	Drama, Music
●	Fantasy
●	Crime, Documentary, History
●	Comedy, Drama, Thriller
●	Biography, Documentary, Thriller
●	Animation, Drama, Fantasy

