# Deloitte.



Studio Pod Analytics Computing Vision: Film Type Discovery



# Our Experienced Team

We have several excited practitioners here to share their analysis with you!



Joseph Wargo
Data Cleaning SME
Deloitte Consulting LLP



Madelyn Helson
Data Scientist
Deloitte Consulting LLP



Josue Galindo De La Serna
Data Scientist
Deloitte Consulting LLP



Sheri Elsaker
Strategic Data Analyst
Deloitte Consulting LLP

# Agenda

Overview of what we will be reviewing in this presentation

Recommendation **DS Process: CRISP-Recommendation 1 Summary Acknowledgments Data Recommendation 2 Thank You Analysis Generation Recommendation 3** 

#### DS Process: CRISP - DM

Sharing our journey



#### Data Understanding

- Initial examination of data
- Verification that the data can assist with our plans and goals

# Data Preparation

- Cleaning, constructing, and formatting the data frames to be easily manipulated
- This includes standardizing the genres, inputting Booleans to aid with qualitative comparisons, etc

# Deployment

- Gathered final information such as the top 3 recommendations and why.
- Ensure this meets the business needs and requirements





# **Business Understanding**

- What is the current situation?
- What insights will have the greatest impact?
- Can we retrieve these insights and how?

#### Data **Movie Basics Movie ID Primary Title Persons Original Title** Start Year **Person ID Runtime Minutes Primary Name** Genres Birth Year Death Year **Principals Primary Profession Person ID Movie Ratings Movie ID** 0 **Movie ID** Ordering **Average Rating** Category Number of Votes Job Characters **Known For** 0 **Person ID Directors** Movie ID **Directors Movie ID Person ID** Ordering Movie ID Title Writers Region Language **Person ID** Types Movie ID Attributes Is Original Title

# **Analysis Generation**

Three questions that drove our analysis on box office films:

# **Data Description**

Five data sets from reputable movie review websites with over 300,000 rows of data.

#### Genres

**Question:** Are any of the genres undervalued?

Value: Identifying genres with high likability and low quantity of material exposes an opening in the film industry for Computing Vision to successfully create in while facing minimal competition.

#### **Actors**

Question: Which actors and actresses are the most popular? What is the most optimal cast size?

Value: Choosing the right number of actors and actresses that are performing at the top of their industry can draw an immense amount of attention and praise from reviewers.

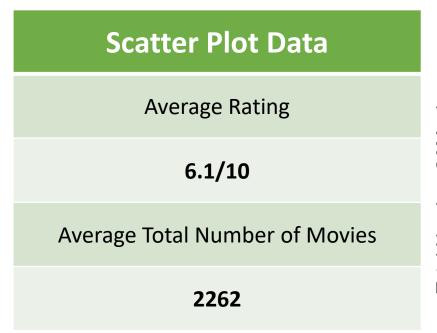
#### Directors

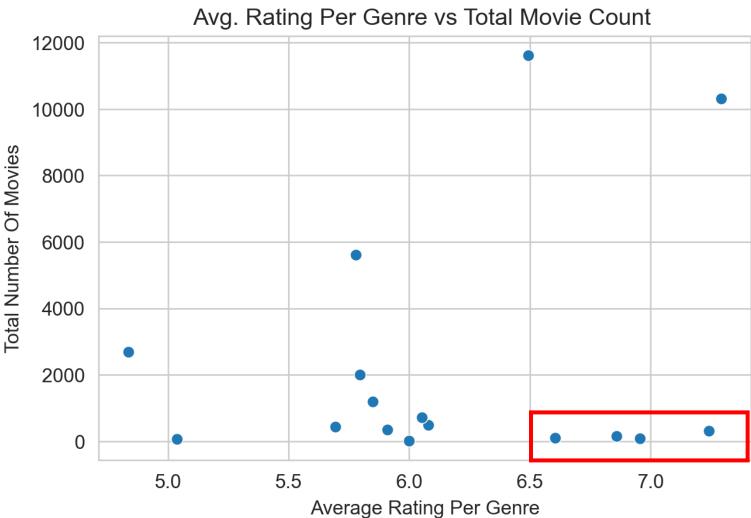
**Question:** Which directors receive the highest praise from critics?

Value: A director with a portfolio of high-quality productions can aid in establishing Computing Vision as a highly regarded movie studio.

#### Recommendation 1 - Genre

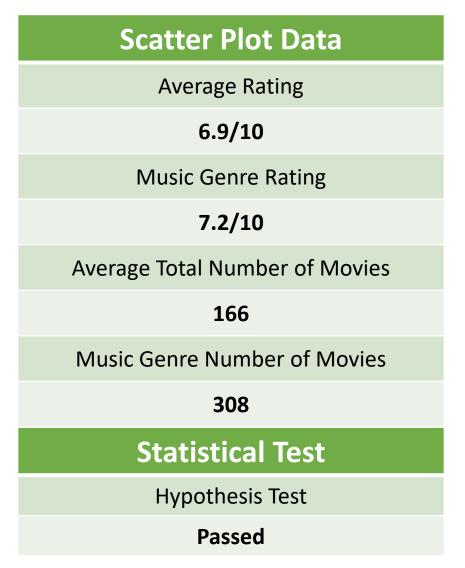
Breakdown of movie genres across the industry according to the average rating and quantities of movies in each genre

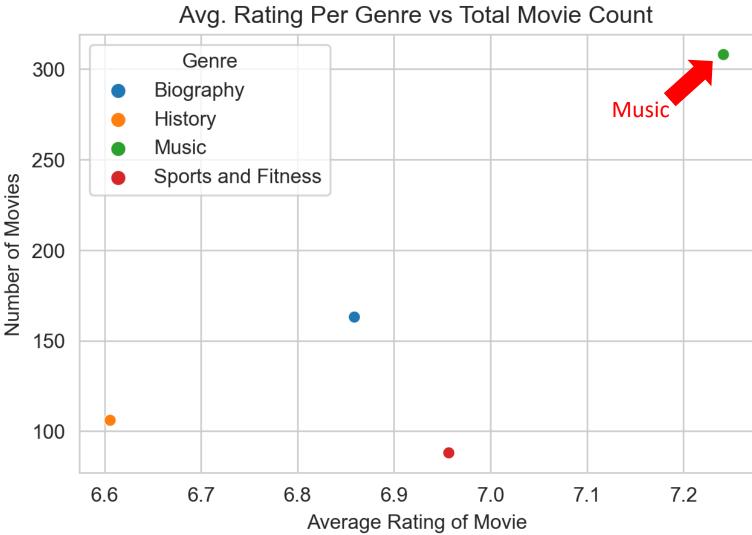




#### Recommendation 1 - Genre

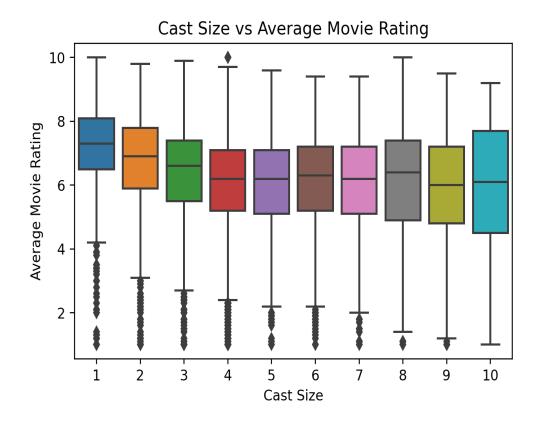
The music genre is the most lucrative genre due to its above average ratings and market size.

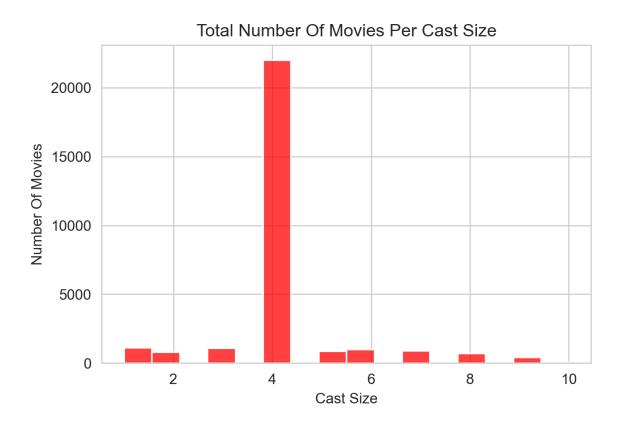




# Recommendation 2 - Cast

Correlation between movie cast size and average moving rating



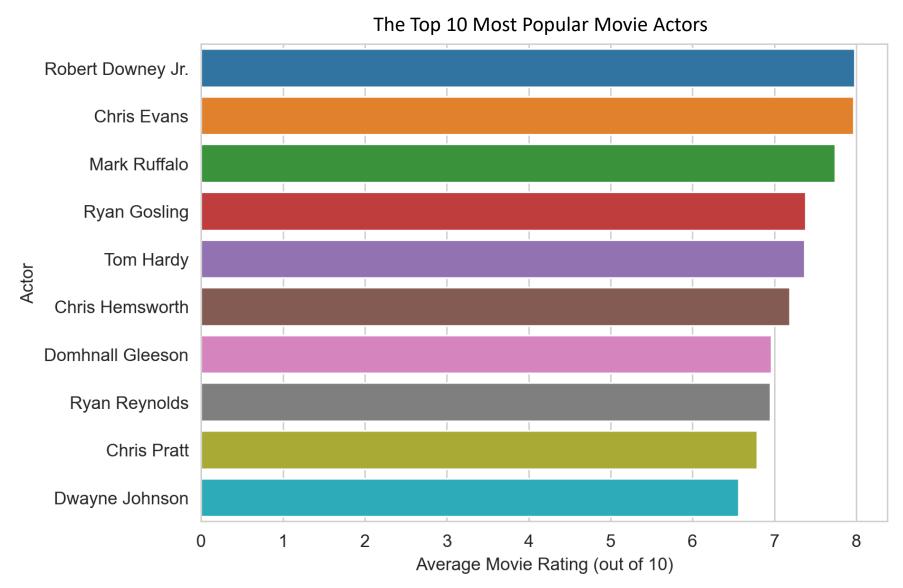


Cast size does not affect movie overall rating

The most popular cast features four main characters

# Recommendation 2 - Cast

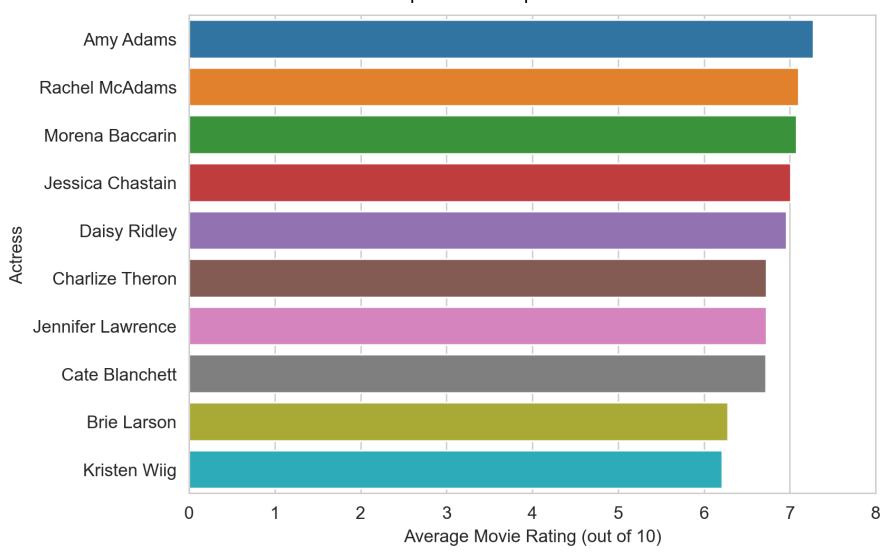
Top 10 most popular actors with most reviews ordered by rating in descending order from 2015 onwards



# Recommendation 2 - Cast

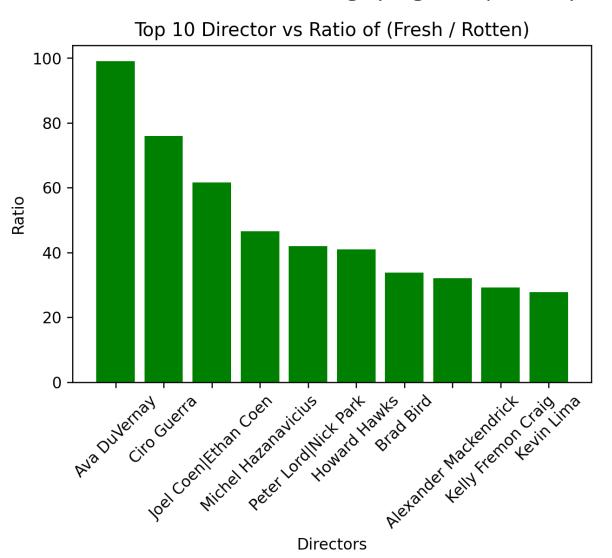
Top 10 most popular actresses with most reviews ordered by rating in descending order from 2015 onwards

The Top 10 Most Popular Movie Actresses



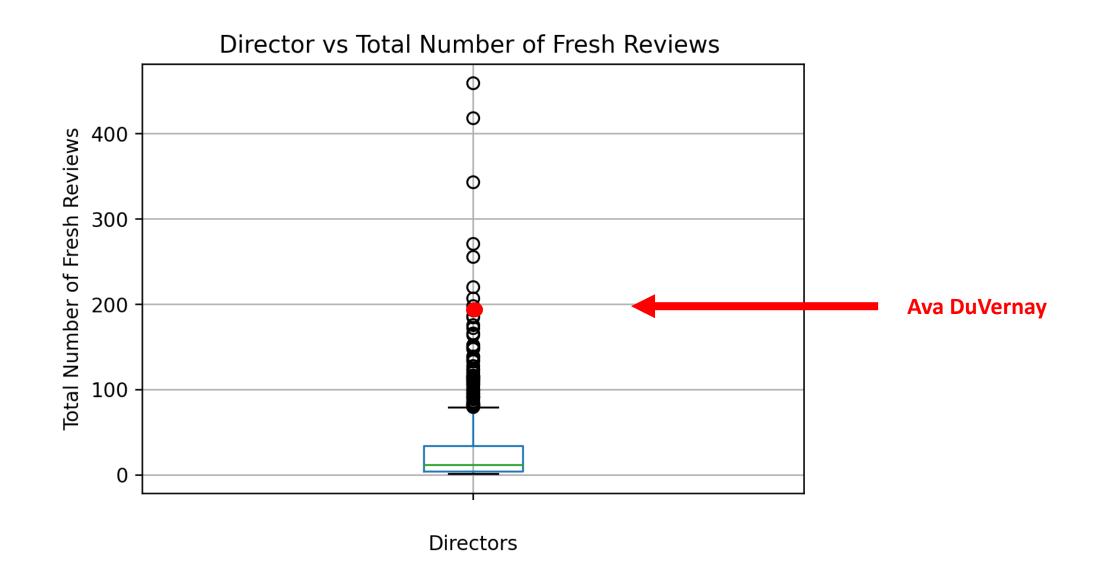
# Recommendation 3 - Directors

The bar plot below shows the directors verses their ratio of rotten reviews to rotten reviews Ava has the highest ratio with means she is most balanced and highly regarded positively



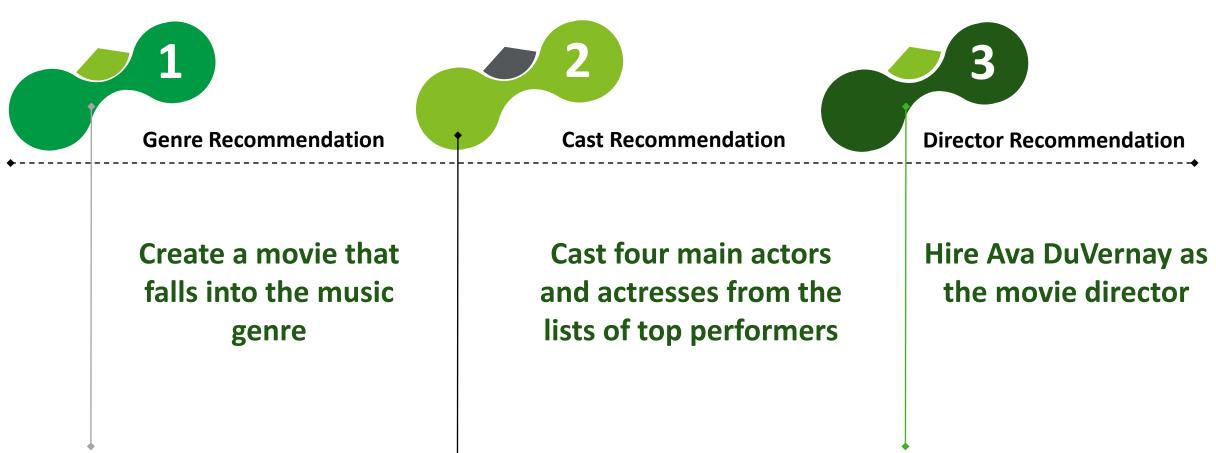
# Recommendation 3 - Directors

Ava Duvernay is the director we recommend due to her favorable reviews and ratings



# **Recommendation Summary**

3 recommendations based on statistical analysis



# Acknowledgments

Special Thank You!

Deloitte Flatiron Instructor **Flatiron Instructor Program Coordinator** William Wang Nesli Bisgin Tina Lhotak Deloitte Deloitte Mentor Program **Program Coordinator** Lionel Medal Coordinator Laura Tolliver Amy Huttenhoff Flatiron Program Coordinator Al Cohort 4 **Guest Speakers** Jordan Schraeder

# THANK YOU! QUESTIONS