## Final project in Module 1

Guofa Shou Self-paced

#### Outline

- The aim of the project:
  - To provide suggestions regarding what type of films should be created in terms of box office in the newly found Microsoft studio
- Three questions are addressed sequentially by data analyses to fulfill the aim:
  - 1) What's the general performance of movie industry in terms of box office for recent years?
  - 2) What types of films have large number of box office?
  - 3) What types of films have good ratings?
- Conclusion

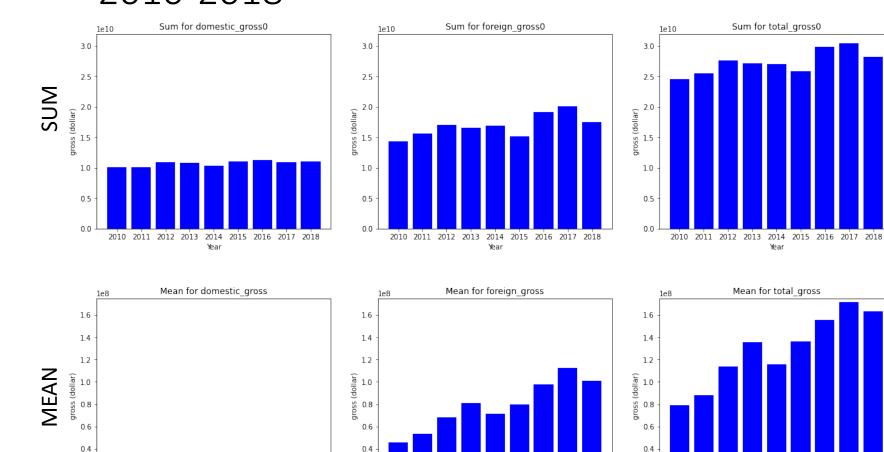
# Q1: What's the general performance of movie industry in terms of box office for recent years?

- Data sources: bom.movie\_gross.csv and tn.movie\_budgets.csv
- Two summarized figures:
  - 1) Gross values: sum and mean values of the domestic, foreign, and total gross for all types of films in the years between 2010 and 2018
  - 2) Profits: Sum and mean values of the worldwide and domestic profit

# 1) Gross values: sum and mean of selected films between 2010-2018

0.2

2010 2011 2012 2013 2014 2015 2016 2017 2018



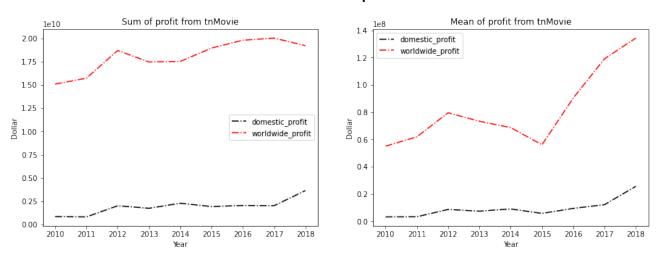
2010 2011 2012 2013 2014 2015 2016 2017 2018

 From sum: domestic gross is stable, but foreign gross has an increased trend. Therefore, the worldwide gross has an increased trend

From mean: similar patterns as for sum values: domestic market is stable, but foreign gross has an increased trend, which contributes the increased trend in worldwide

## 2) Profit values: sum and mean profit values of selected films between 2010-2018

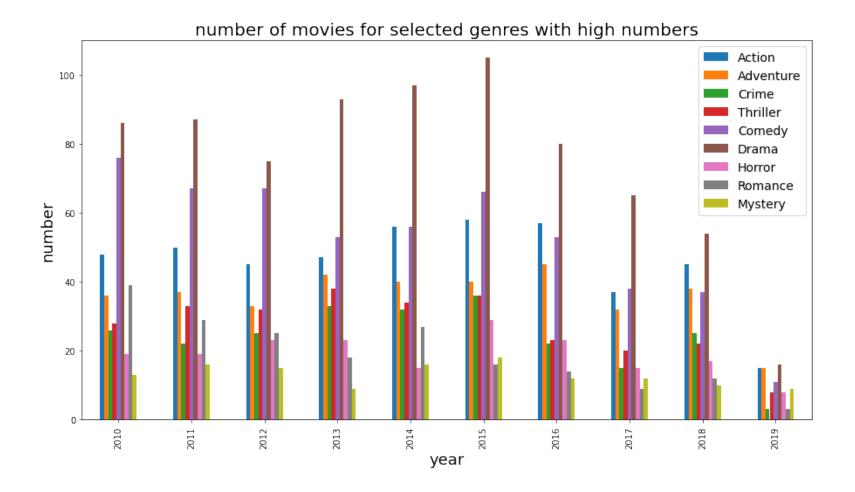
#### Sum and mean profit values



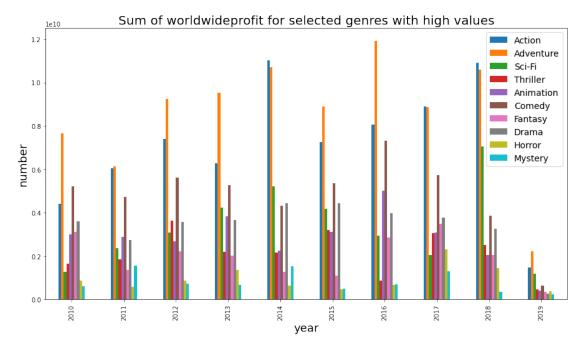
- Both sum and mean profit values indicate an increased trend for both domestic and worldwide profits
- There is a trough in 2015
- Answer to Q1: The film industry is still developing very well, and lots of profits could be achieved, especially from foreign market

# Q2: What types of films have large number of box office?

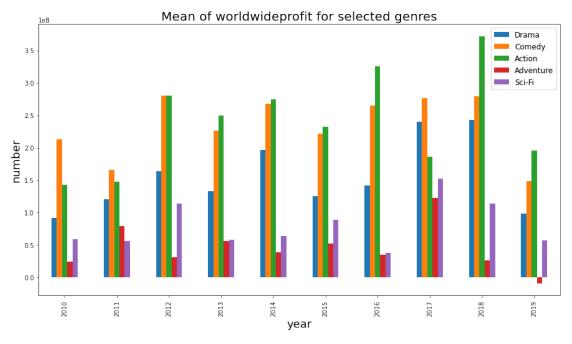
- Data sources: imdbTitleBasics and tnMovie\_Budgets
- Two summarized figures:
  - 1) Number of movies for different types
  - 2) Sum of worldwide profit for selected genres with high values
  - 3) Mean of worldwide profit for selected genres



Drama, Comedy, Action, Adventure are the top four categories in terms of number of movies



Adventure, Action, Comedy, and Sci-Fi, are the top 4 categories in terms of sum of worldwide profit

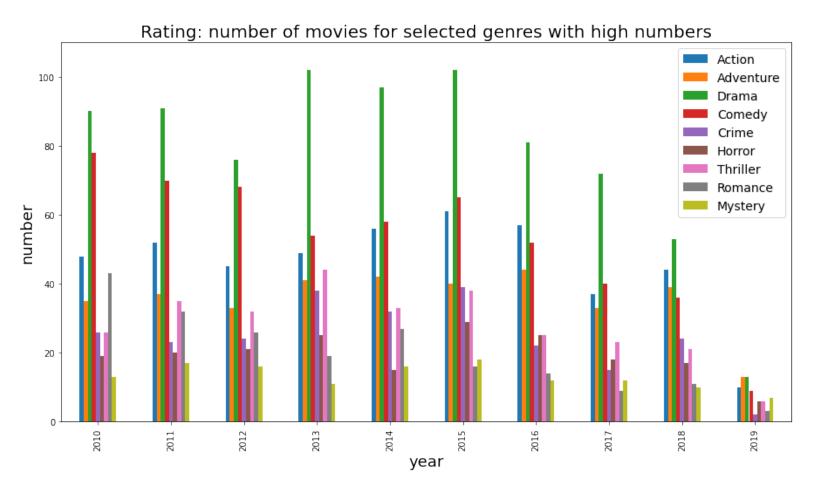


Action, comedy and Drama have higher mean values of worldwide profit

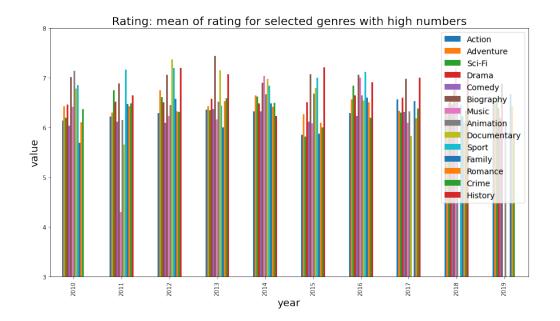
 Answer to Q2: Action and comedy are two types of films that have high box office in recent years

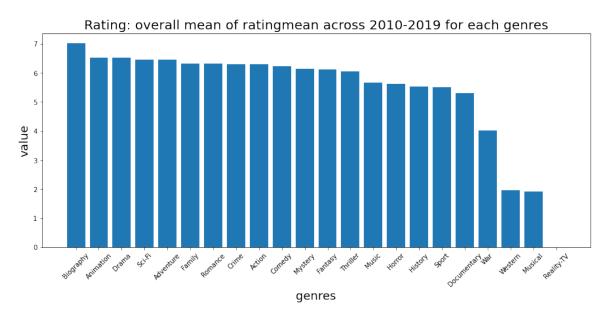
### Q3: What types of films have good ratings?

- Data sources: imdbTitleRatings and the one prepared in Q2
- Two summarized figures:
  - 1) Number of movies in the selected genres with high ratings
  - 2) Mean of rating for selected genres with high ratings
  - 3) Overall mean of mean rating across 2010 to 2019



Drama, Comedy, Action, Adventure are the top four categories in terms of number of movies





Answer to Q3: Biography, Animation, Drama, Sci-Fi, and Adventure are top five for the rating

#### Conclusion

 Based on rating and box office data, adventure and action should be invested in the newly found Microsoft studio