



Steam Game Analysis

Group 21

Yue Qiao

Shiqi Liu

Matheus Gorski

Yifan Cao



Motivation

- In 2017, Steam generated over 4.5 Billion USD in revenue.
- To better understand the changes in the computer game industry, we take a closer look at three key factors:
 - Characteristics of different video games
 - Types of hardware video games are designed for
 - The developers and publishers of video games



Dataset

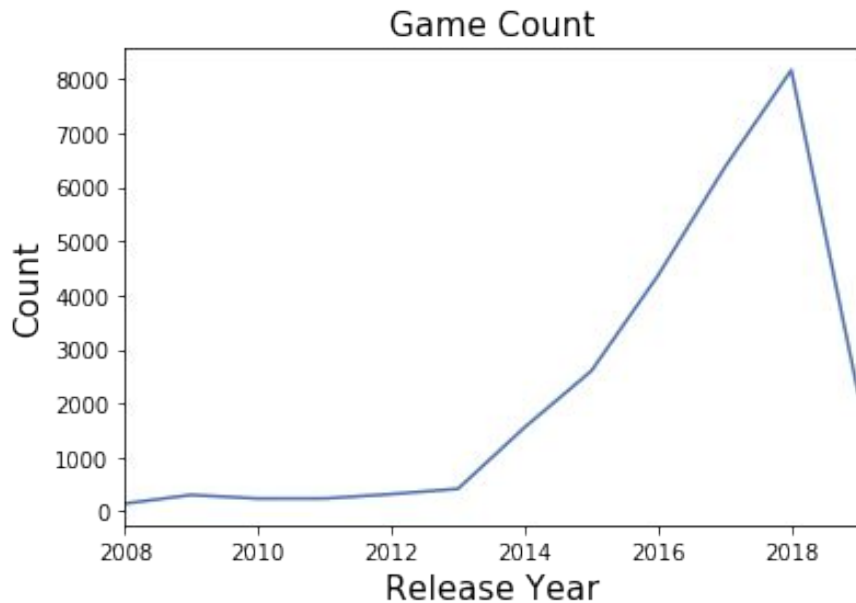
Steam Spy Data

- Data of steam games from user-side
 - Estimated # owners
 - Average play time
 - Price
 - # of positive/negative reviews
 - ... and more

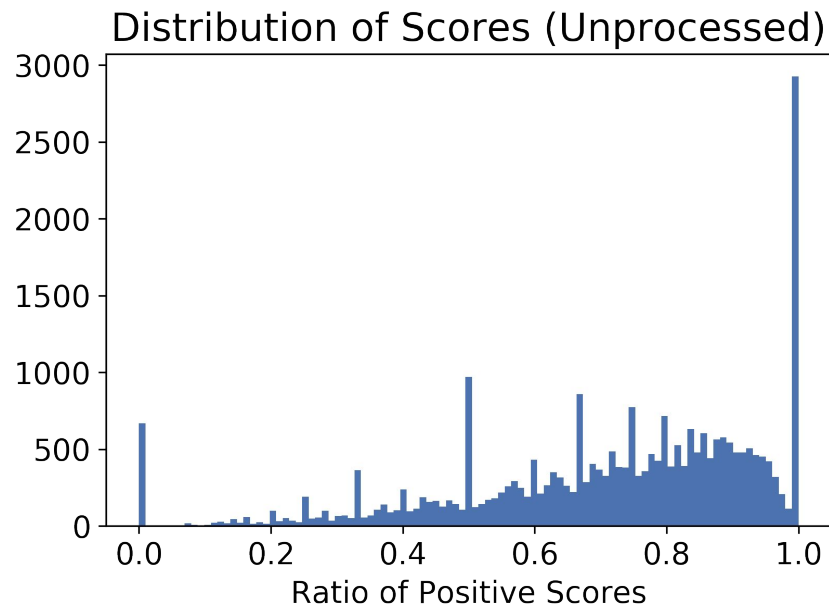
Steam Store Games Data

- Data of all games released on Steam platform before May 2019
 - Release date
 - Developer
 - Publisher
 - System requirements
 - Genre
 - ... and more

Data Processing

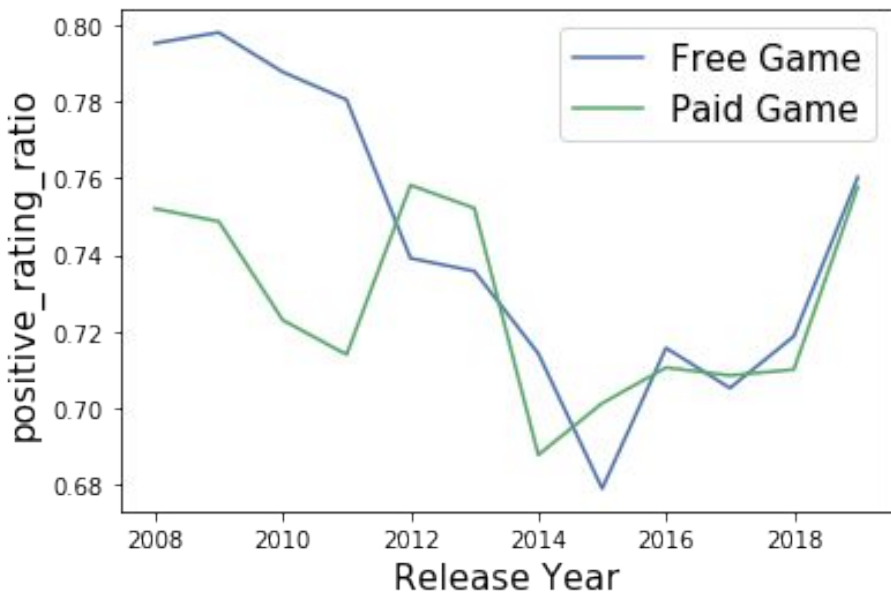


'PC Gaming' enters the mainstream ~2013

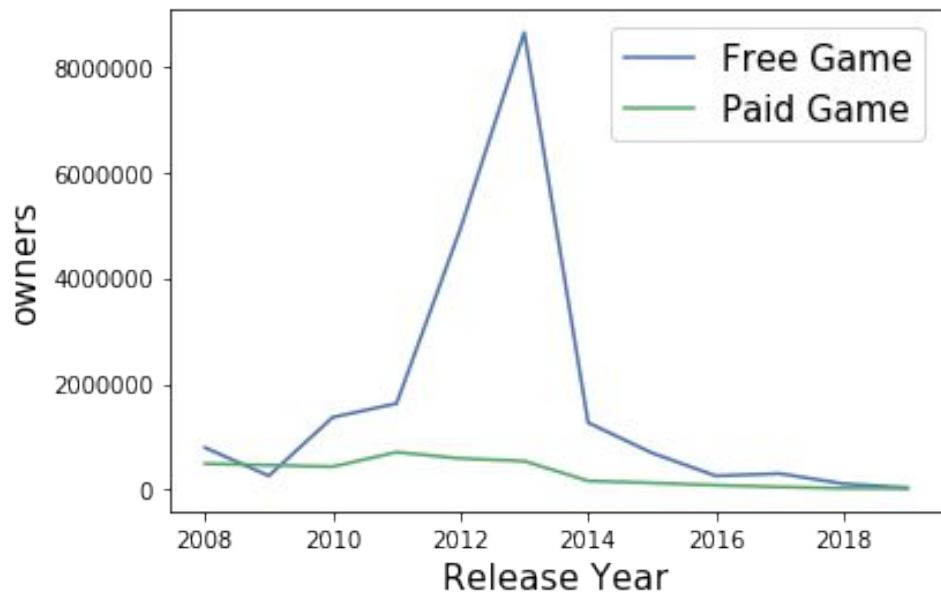


Score distribution heavily skewed due to huge amount of small games released

Paid Game vs Free Game

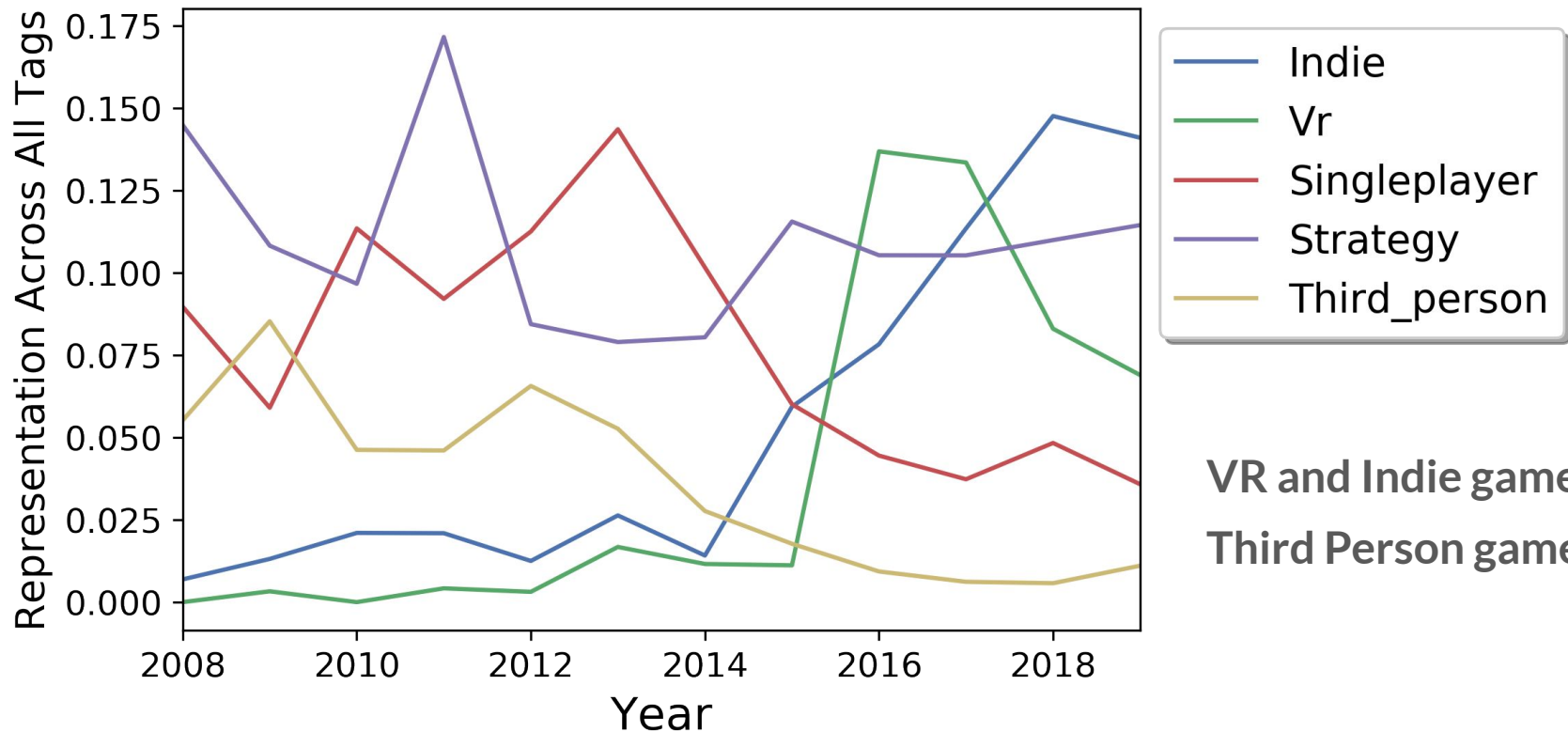


Before 2012, free games have higher average positive rating ratio. After 2012 similar.



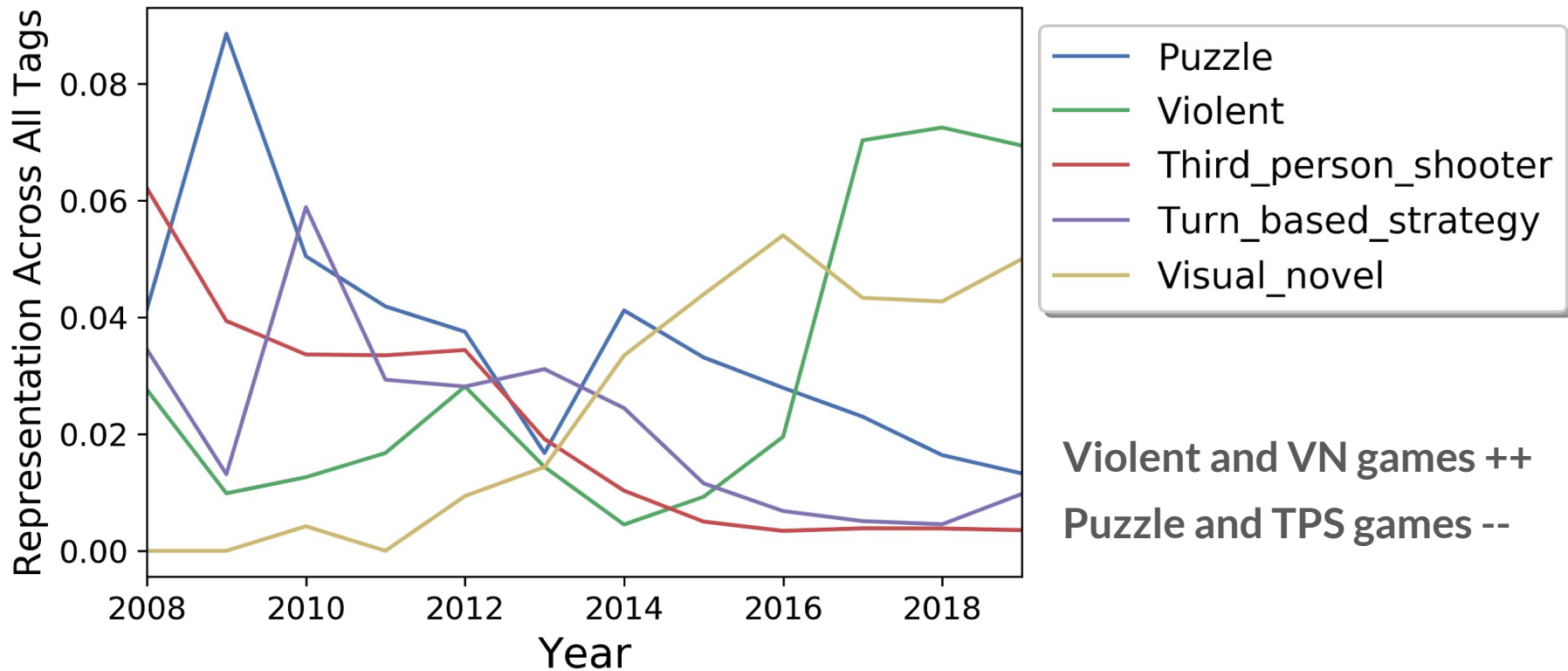
In 2012 and 2013, two free games are released: CS:GO and Dota2. We can see a big gap at that time.

Genre Changes Over Time



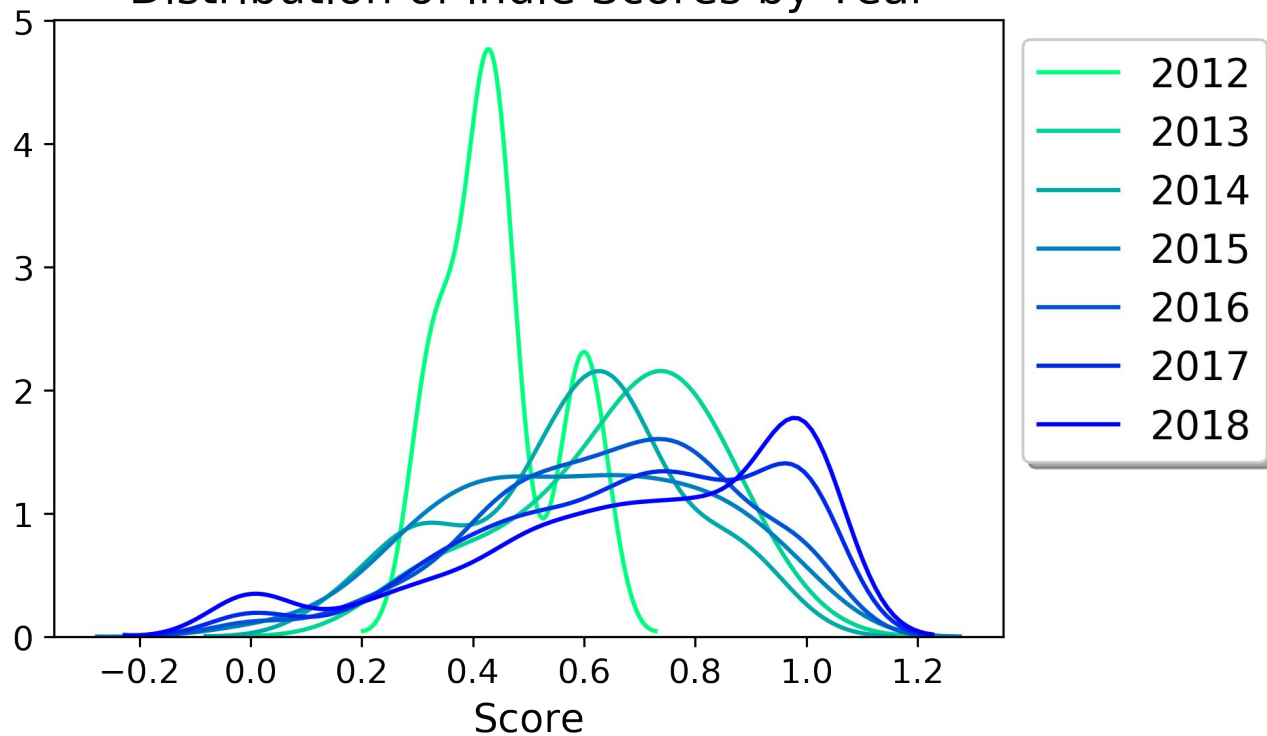
VR and Indie games ++
Third Person games --

Genre Changes Over Time



Scores of Indie Games

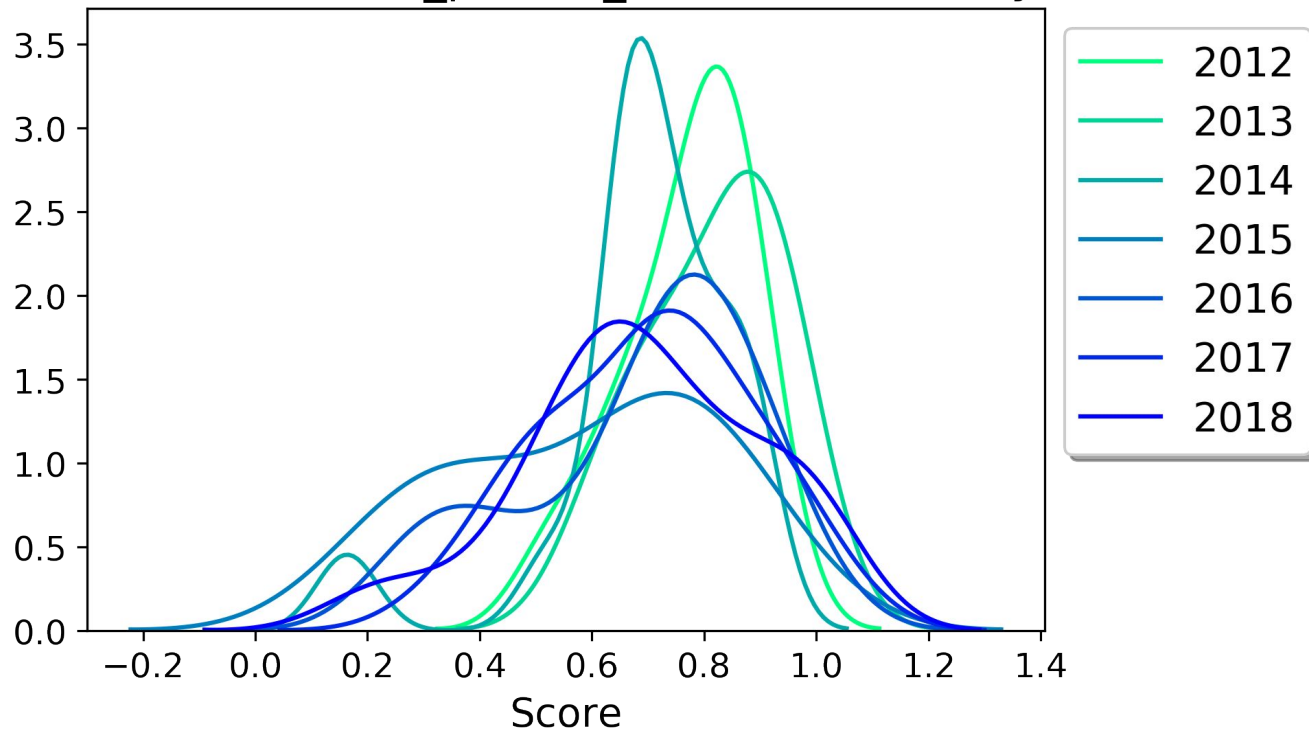
Distribution of indie Scores by Year



Better scores
accompany rise
in popularity

Scores of TPS Games

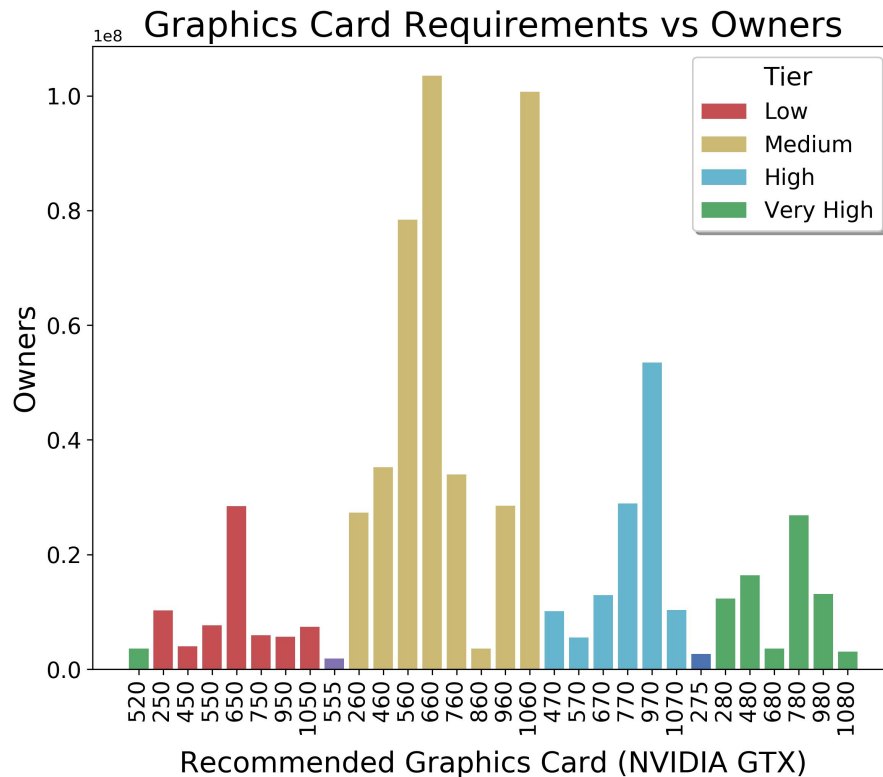
Distribution of third_person_shooter Scores by Year



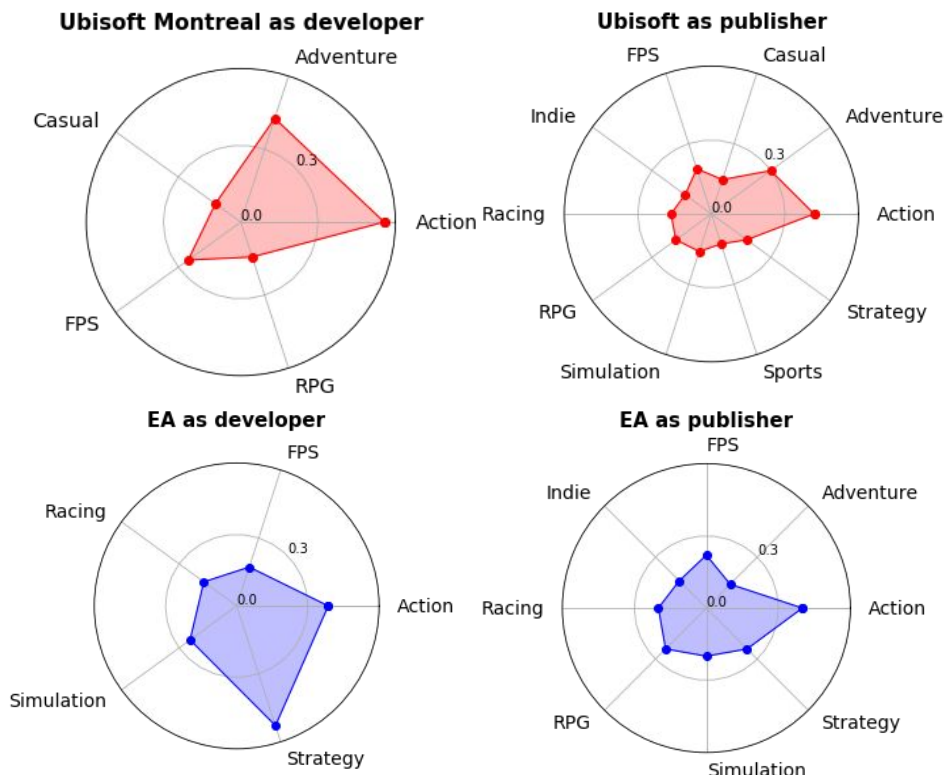
**Worse scores
accompany fall in
popularity**

System Requirements

- Games with mid-range system requirements have significantly more owners
- Are most games designed for the average gaming computer?
- Are games designed for the average gaming computer usually better?

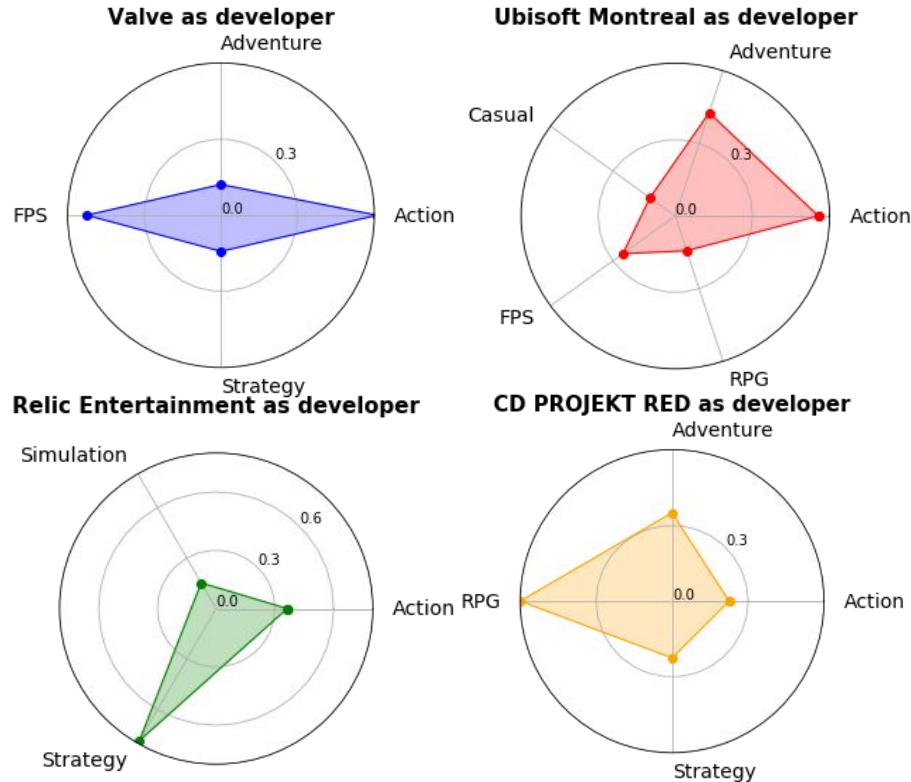


Developers vs Publishers



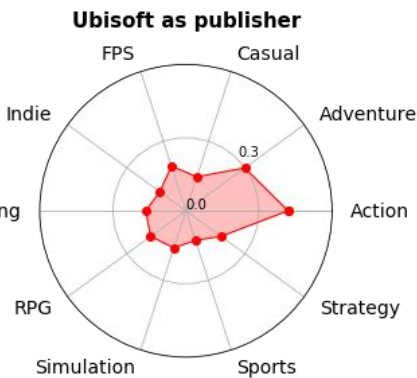
- Developers
 - Design and production
 - Specialize in 1-2 genres
- Publishers
 - Distribution, advertising, and oversight
 - Release a variety of game genres

Which genres do top developers focus on?



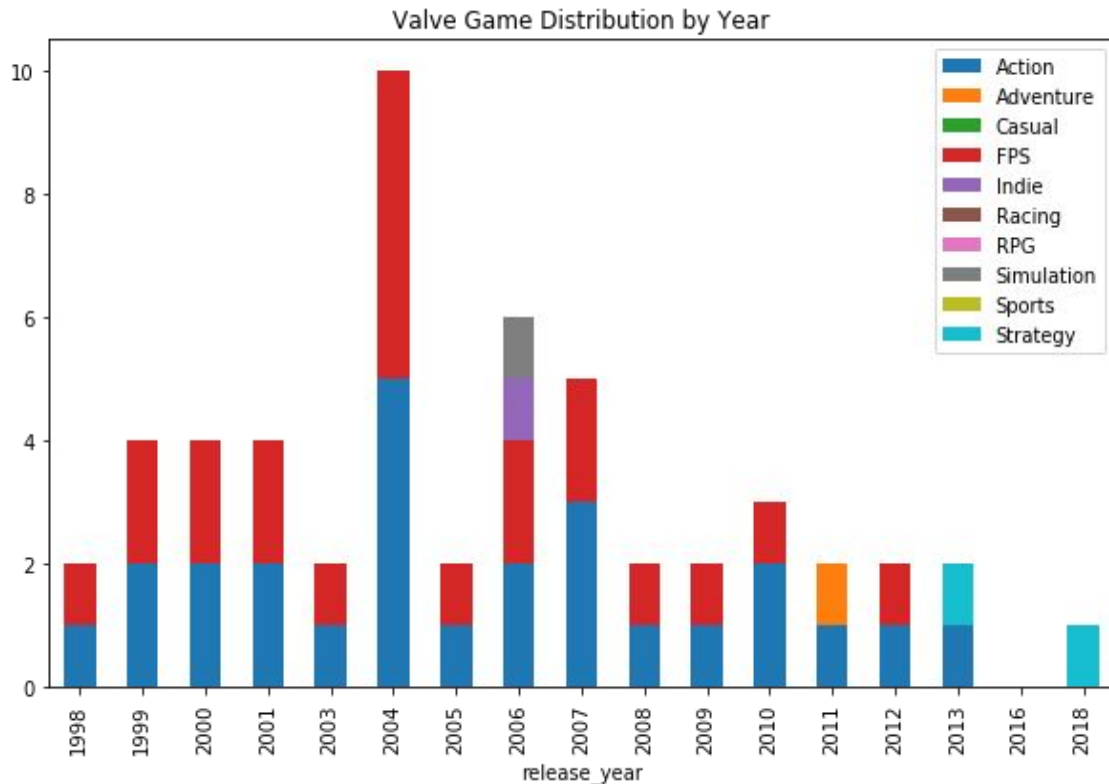
- Large variance of top genres across different developers
- Action, FPS, Adventure, Strategy, and RPG all popular

Which genres do top publishers release?



- Less variance of top genres across publishers
- Emphasis on Action and Strategy games

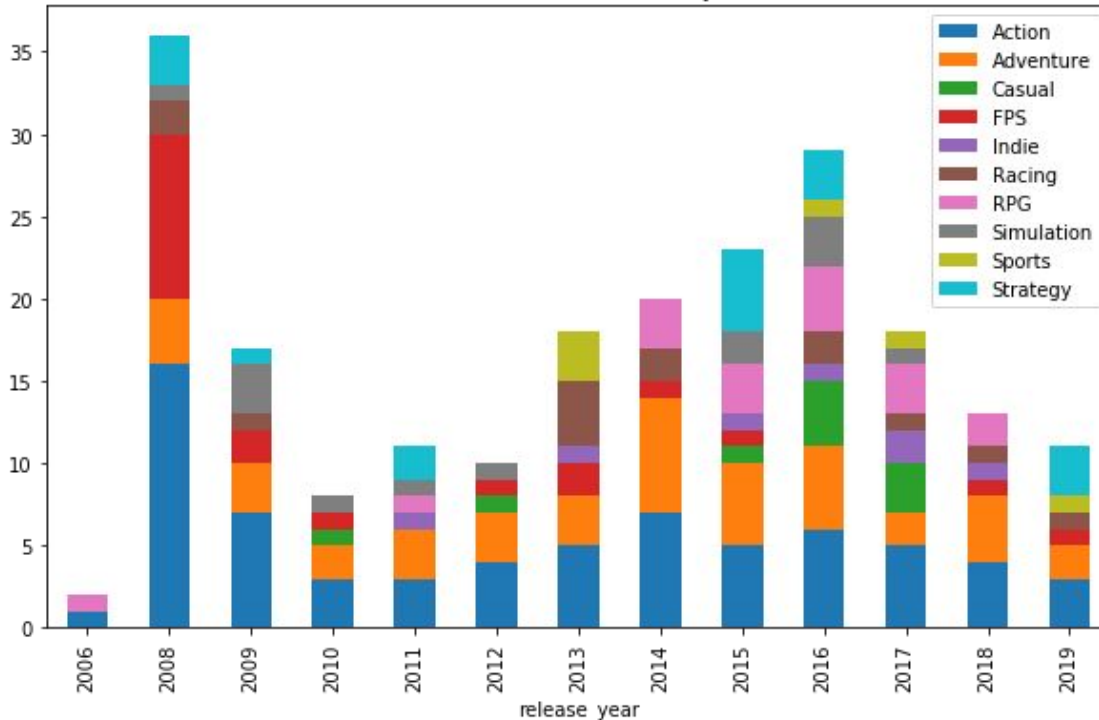
Valve's Publishing History



- Steam released in 2003
- Explosive increase in Steam user base in the following years
- Low genre variety very uncommon amongst other top publishers

Ubisoft's Publishing History

Ubisoft Game Distribution by Year



- Almost exclusive focus on Action and FPS titles in 2008
- Increasing diversity of genres in following years
- New focus on Adventure and RPG titles, among others



Thank You!