

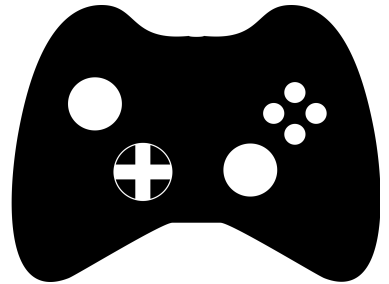
Video Game Trends

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Video Game Facts

- The Video Game Industry contributed \$11.7 billion in value to the US GDP in 2016
- Employed 65,678 Americans
- \$30.4 billion in consumer spending in 2016
- 67% of US Households own a device to play video games
- 1.7 Gamers in each game-playing household
- The average gamer age is 35 years old



Who are the clients?

- Development Studios
- Publishers
- Hardware and Software companies

Microsoft
game studios

Nintendo®



VALVE®

ACTIVISION
BLIZZARD

CAPCOM®

STEAM™

RIOT
GAMES



UBISOFT® telltalegames



BUNGE™



The Problem:

- Competitive Release Dates that will generate the most sales based on genre and platform.
- What metacritic score development studios should aim for when creating favorable in-game features that will get higher reviews.

The Solution

- Optimal Video Game Release Dates
- Realistic Metacritic Scores
- Genre and Platform Trends
- Global and Regional Sale Trends



Data Wrangling

Dataset 1 from IGN

- Name
- Platform
- Score/Score Phrase
- Editor's Choice
- Release Date
- URL



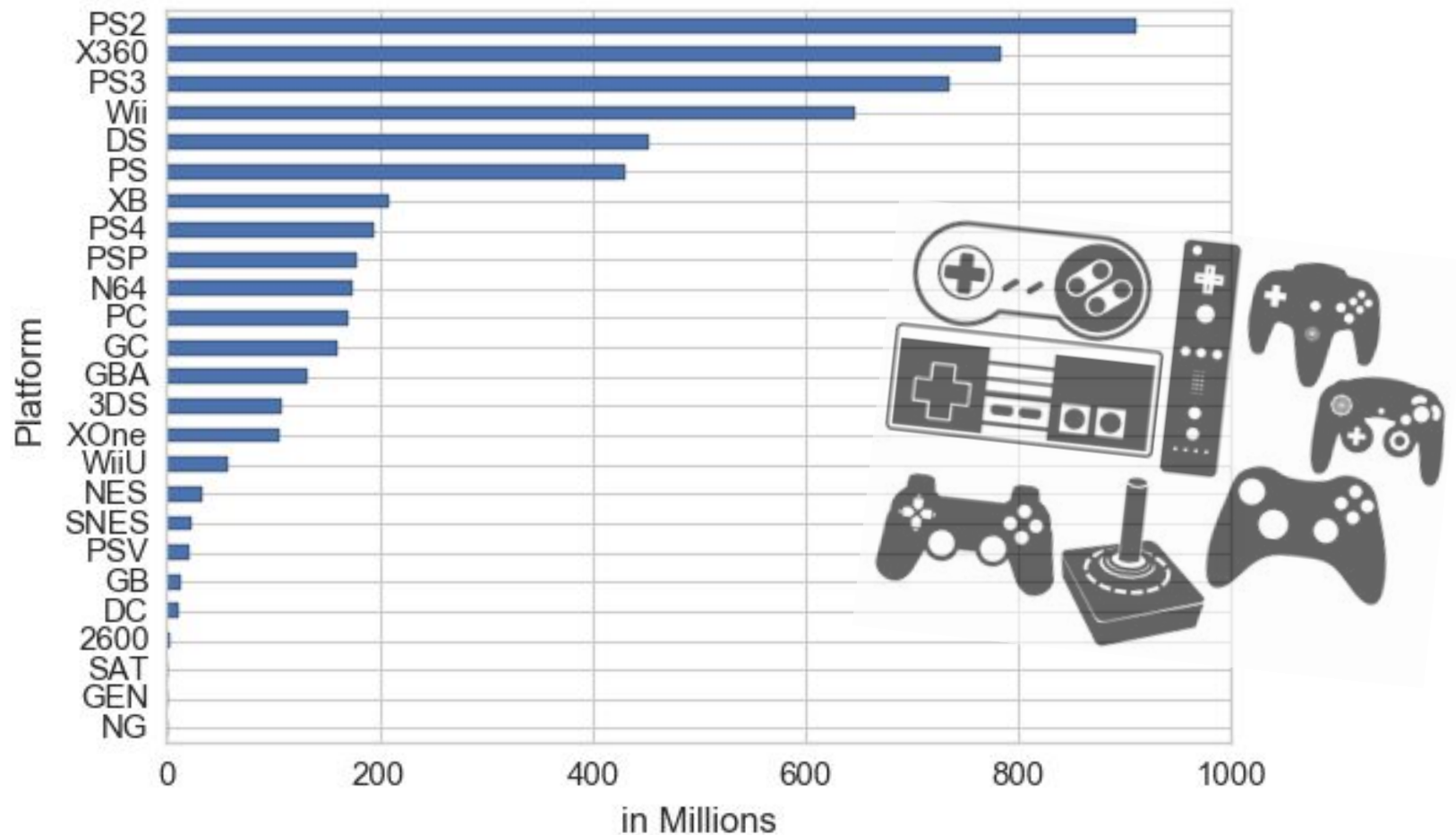
Merged the two datasets on Name and Platform column to create a dataset with all the information



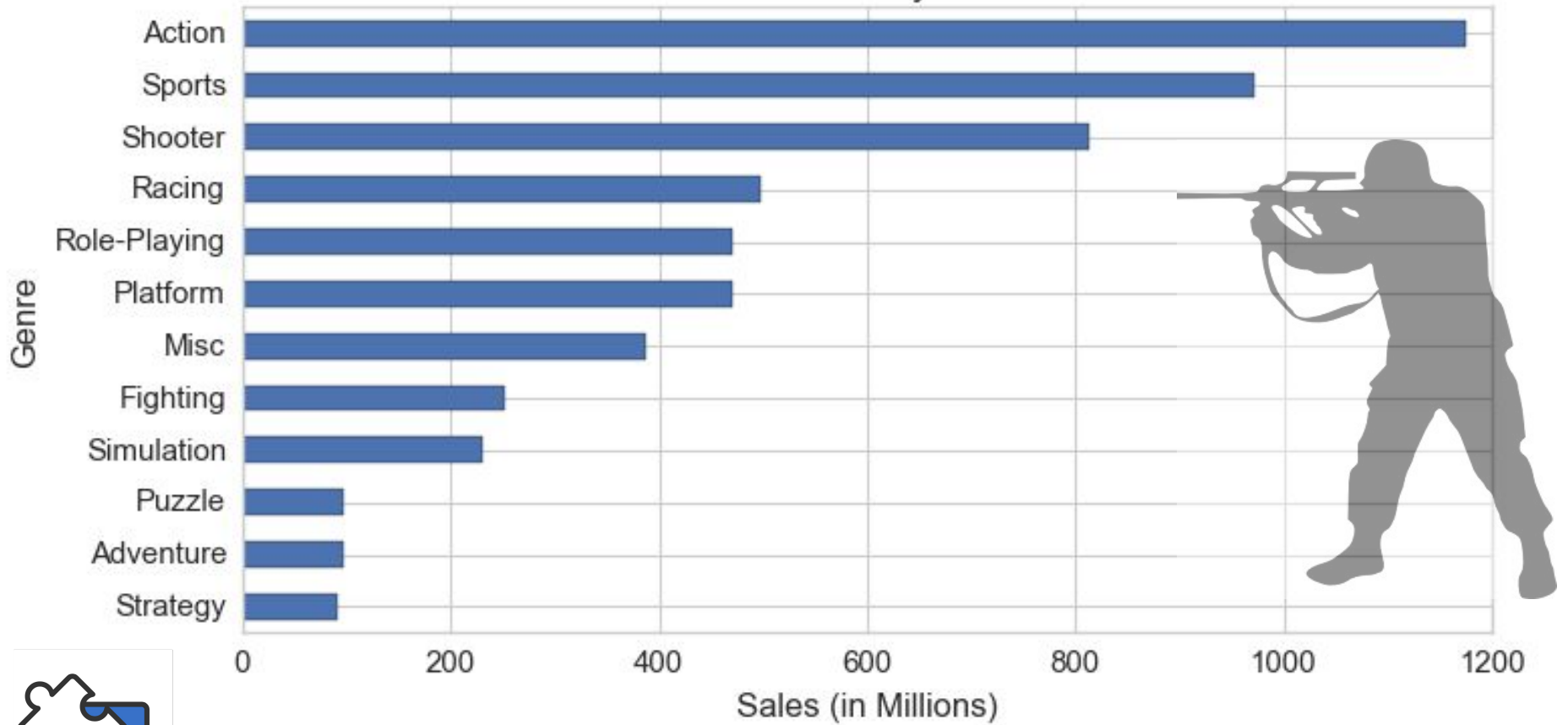
Dataset 2 from VG

- Name
- Platform
- Release Year
- Genre
- Publisher
- Sales Information
- Critic Score
- Critic Count
- User Score
- User Count
- Rating

Global Platform Sales

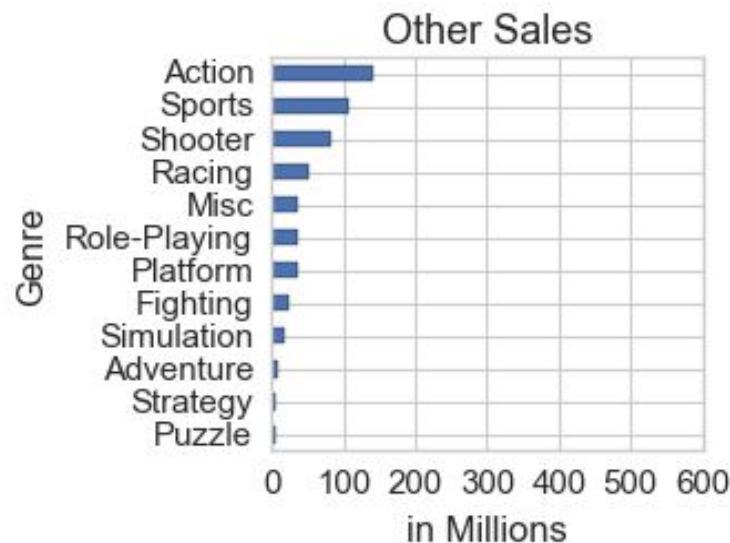
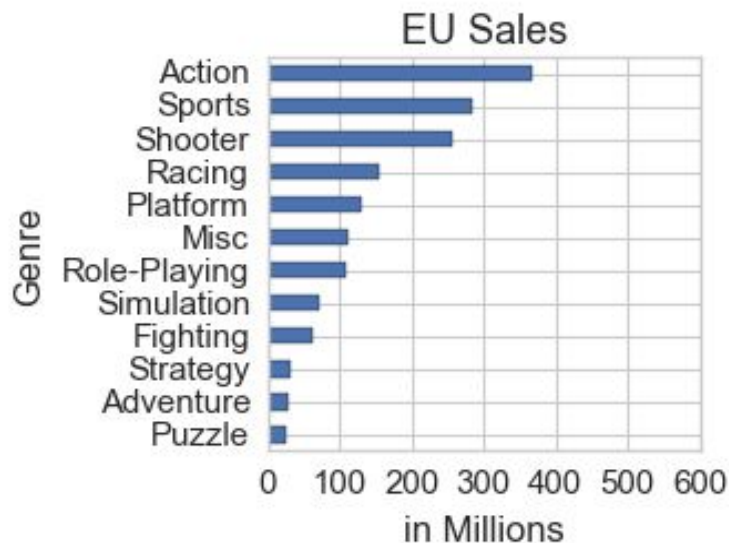


Global Sales by Genres

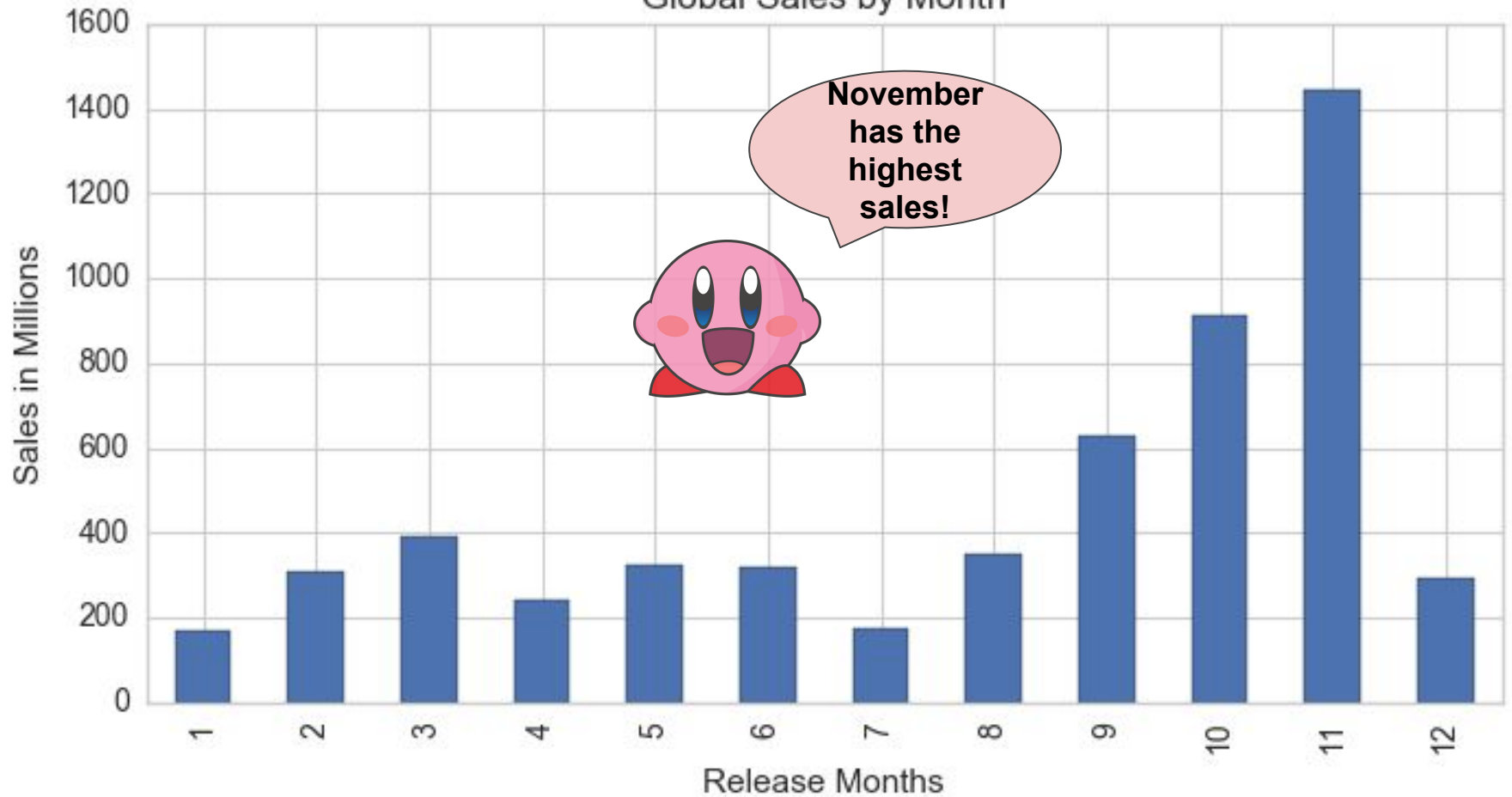


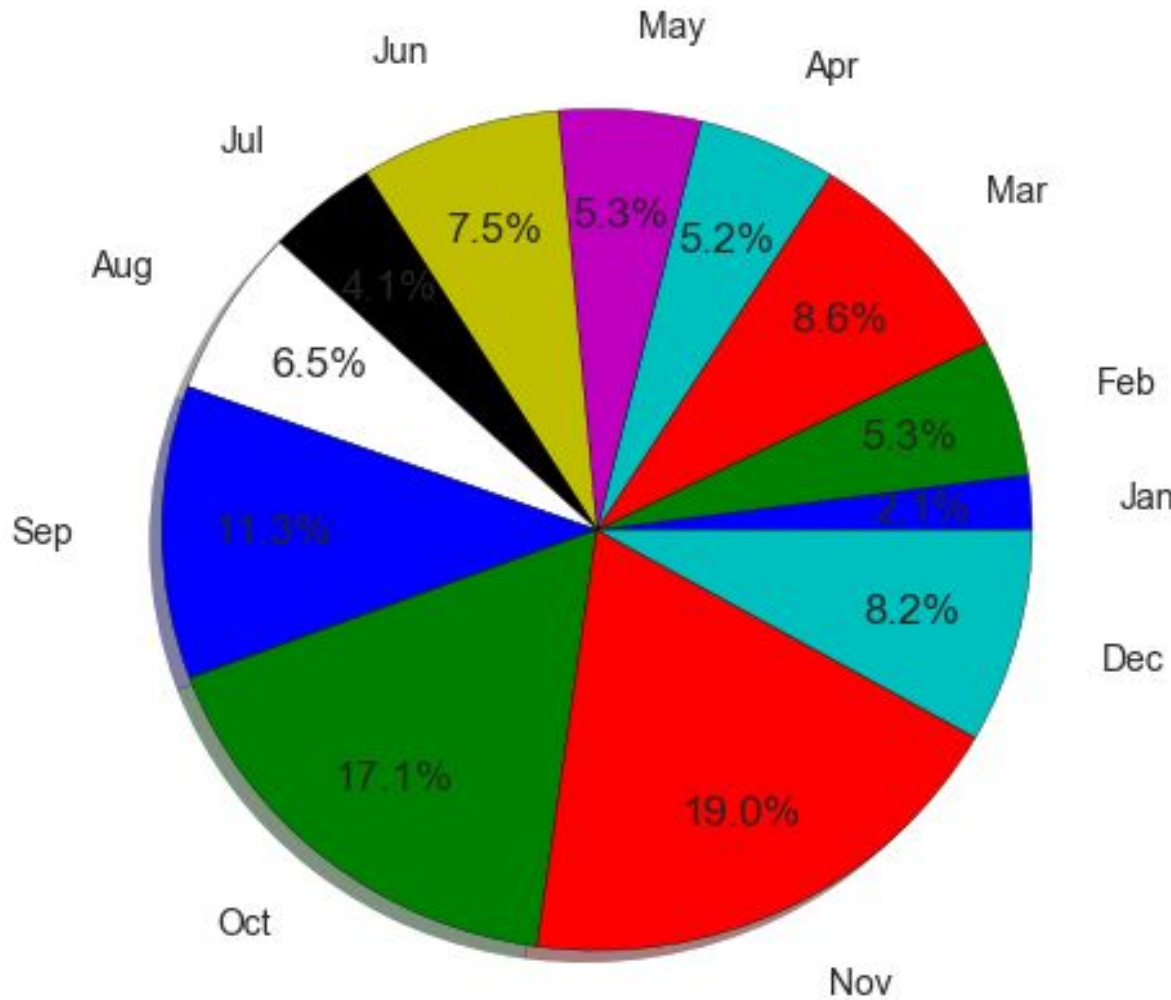


Role-Playing
more popular
in Japan



Global Sales by Month

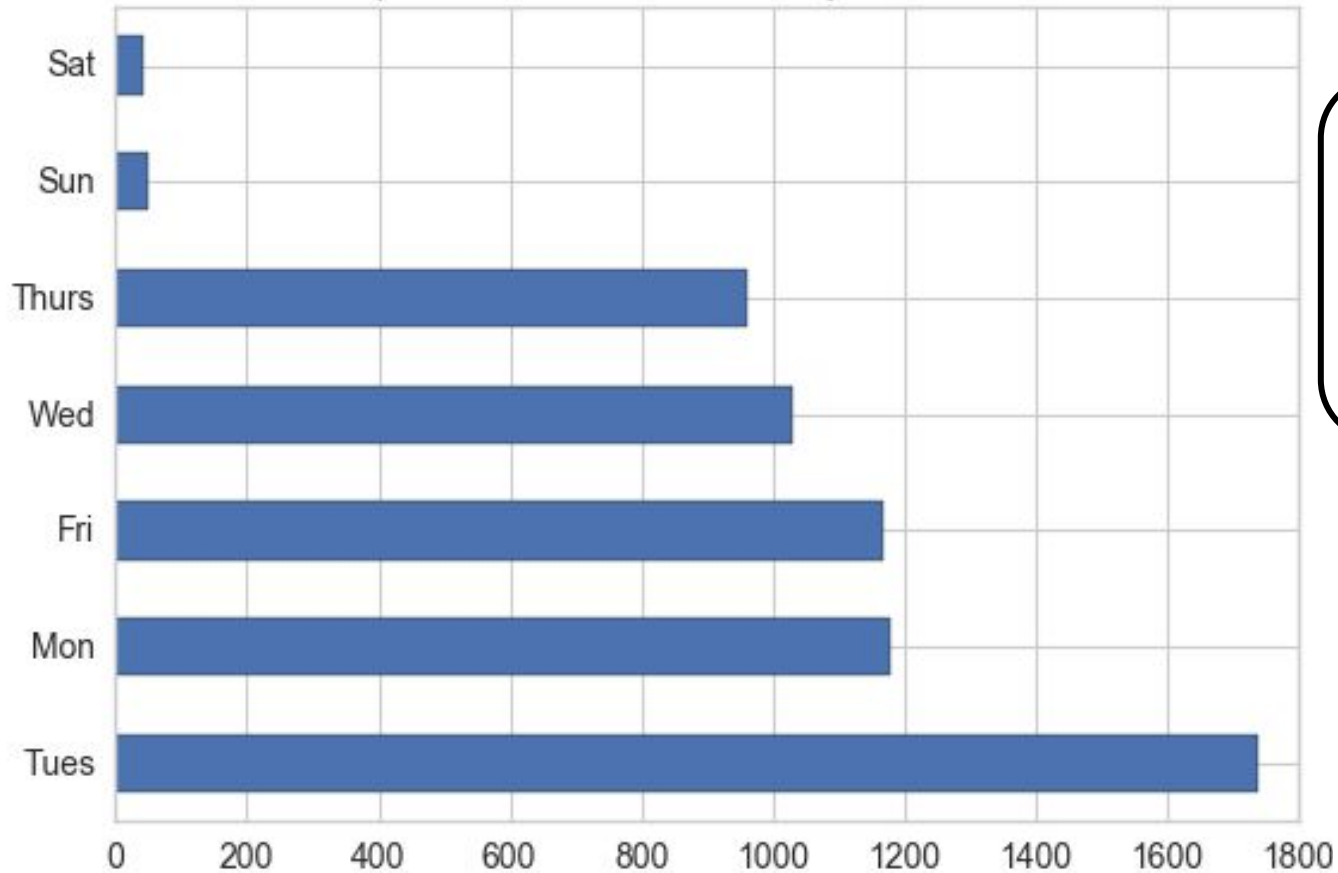




**And the
highest
release
proportion!**



Popular Releases for the Days of the Week



**Did you know that it's
an industry standard to
release games on a
Tuesday because of
me?!**

Sonic "2sDay"!



Recommendation

- Action, Shooter, and Sports are the most popular genres. Try to make a game within these categories!
- November is the best month to release a game
- Tuesday is the best day of the week and avoid weekends at all cost



Harsh Metacritic Scores?

Distribution of Scores

The distribution of IGN and Metacritic scores were investigated and both are left-skewed.

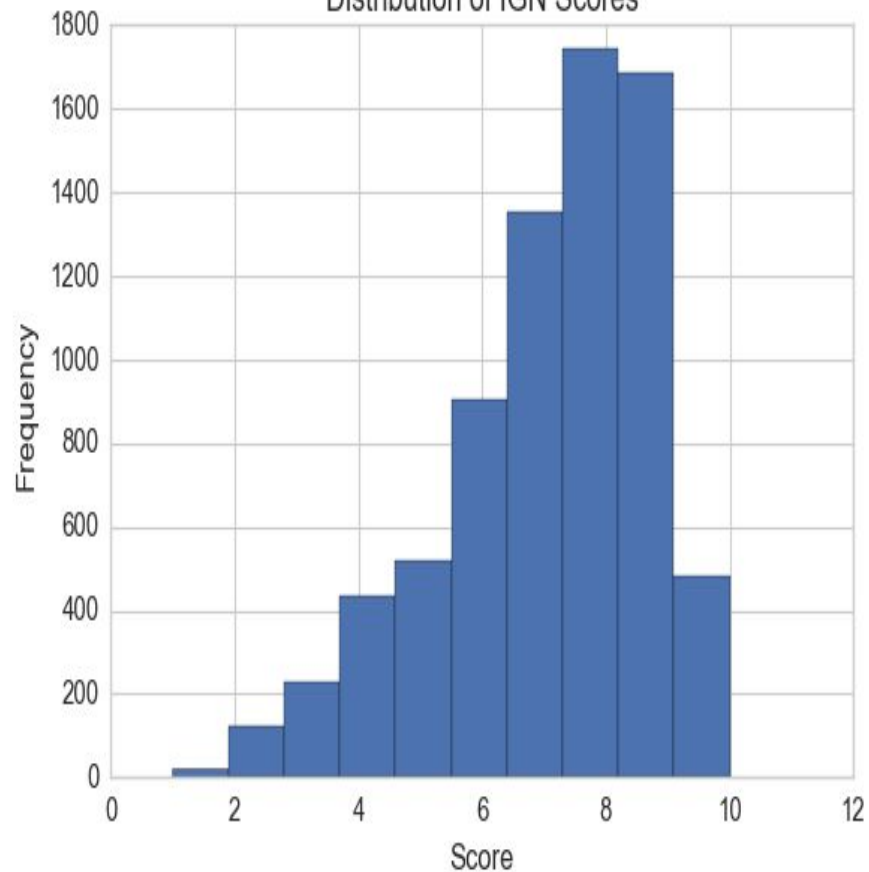
Finding Realistic Score

Using the One-Sample t-test to evaluate if a metacritic score of 90 is what developers should be aiming for

Correlation between Sales and Scores

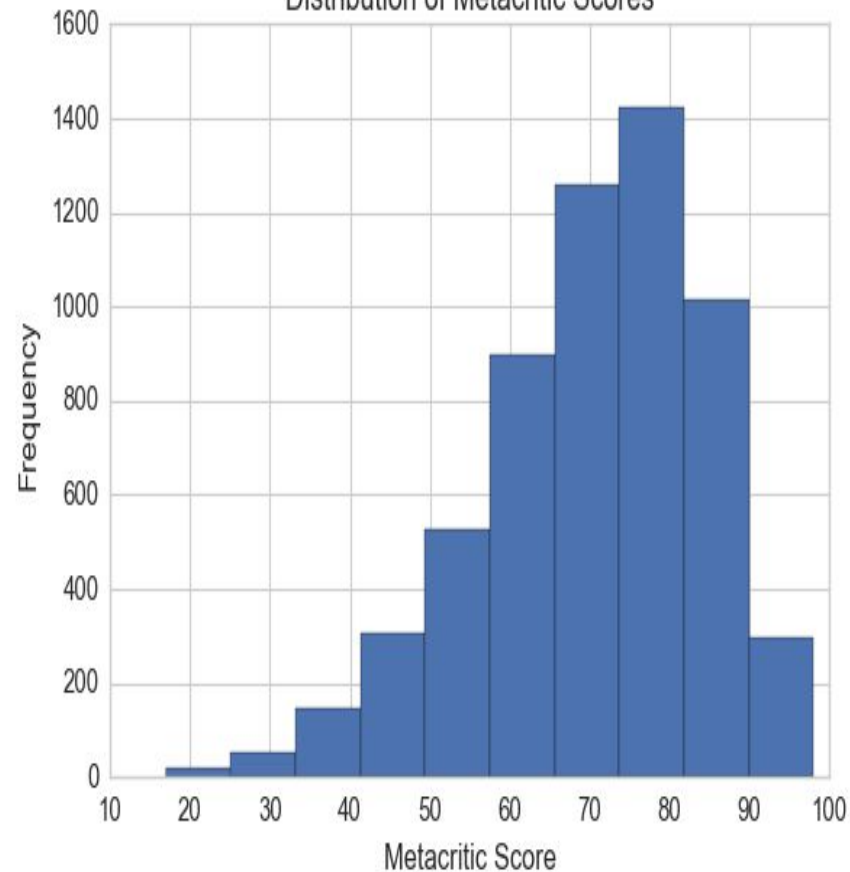
By using Linear Regression to analyze the relationship between the two variables.

Distribution of IGN Scores



Average IGN score given is 7.011 ± 717

Distribution of Metacritic Scores

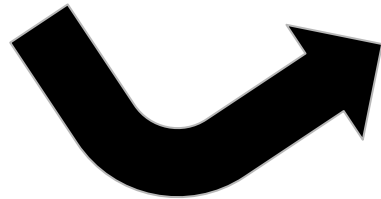


Average Metacritic score given 70.17 ± 13.90

Realistic Score

- Metacritic on average, gives a score 70.17 ± 13.90
- 56.27 or lower is an unfavorable score
- 84.07 or higher is considered favorable.

Very different than their scale



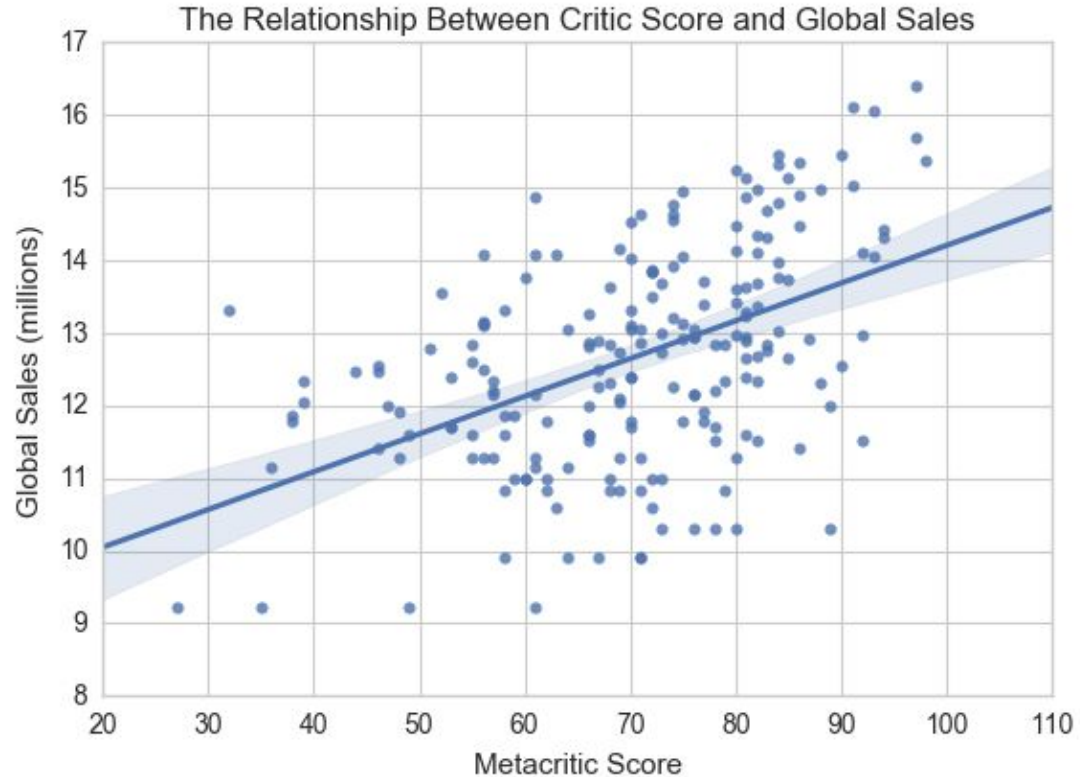
Metacritic's Actual Scale

| General Meaning of Score | Movies, TV & Music | Games |
|-------------------------------|--------------------|----------|
| Universal Acclaim | 81 - 100 | 90 - 100 |
| Generally Favorable Reviews | 61 - 80 | 75 - 89 |
| Mixed or Average Reviews | 40 - 60 | 50 - 74 |
| Generally Unfavorable Reviews | 20 - 39 | 20 - 49 |
| Overwhelming Dislike | 0 - 19 | 0 - 19 |

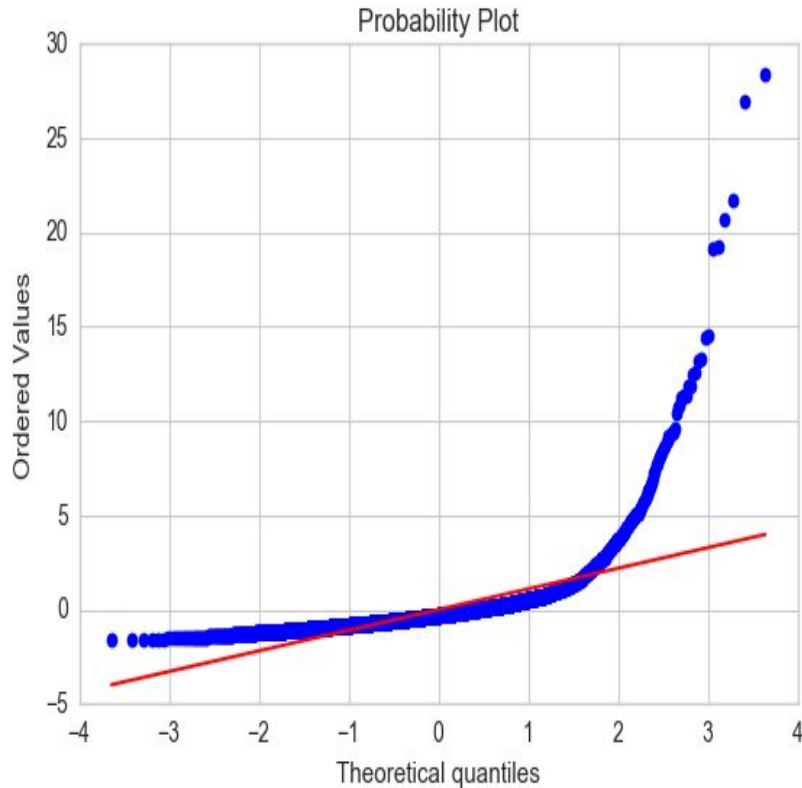
Relationship Between Metacritic Scores & Global Sales

$$\ln(\text{Global Sales}) = 0.0408 * \text{Metacritic Score} + 9.7340$$

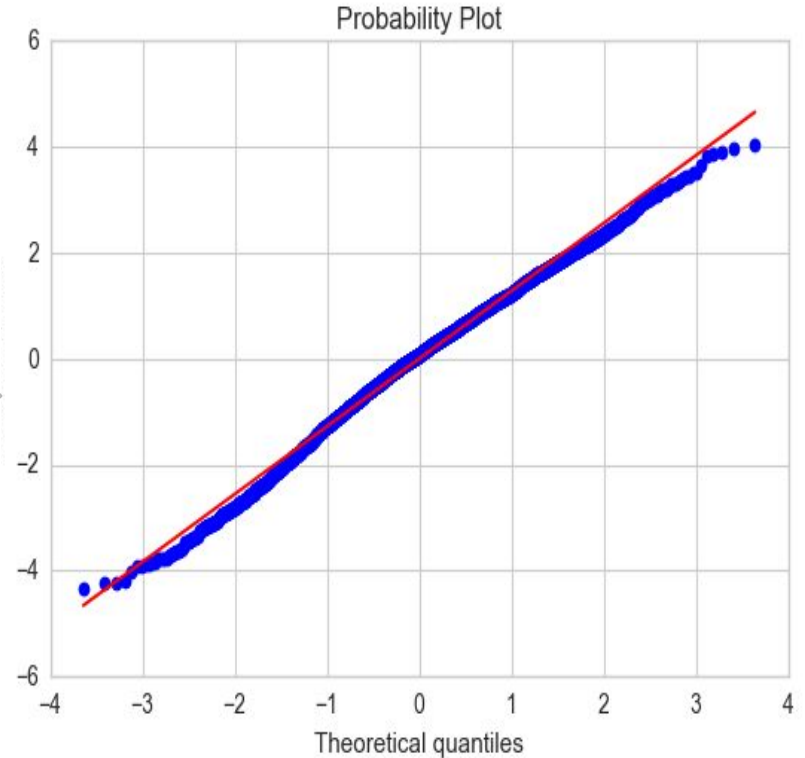
- 16.4% of the global sales of a particular video game can be explained by the critic score
- 4.15% increase in global sales for every one unit increase of the Metacritic score



Relationship Between Metacritic Scores & Global Sales

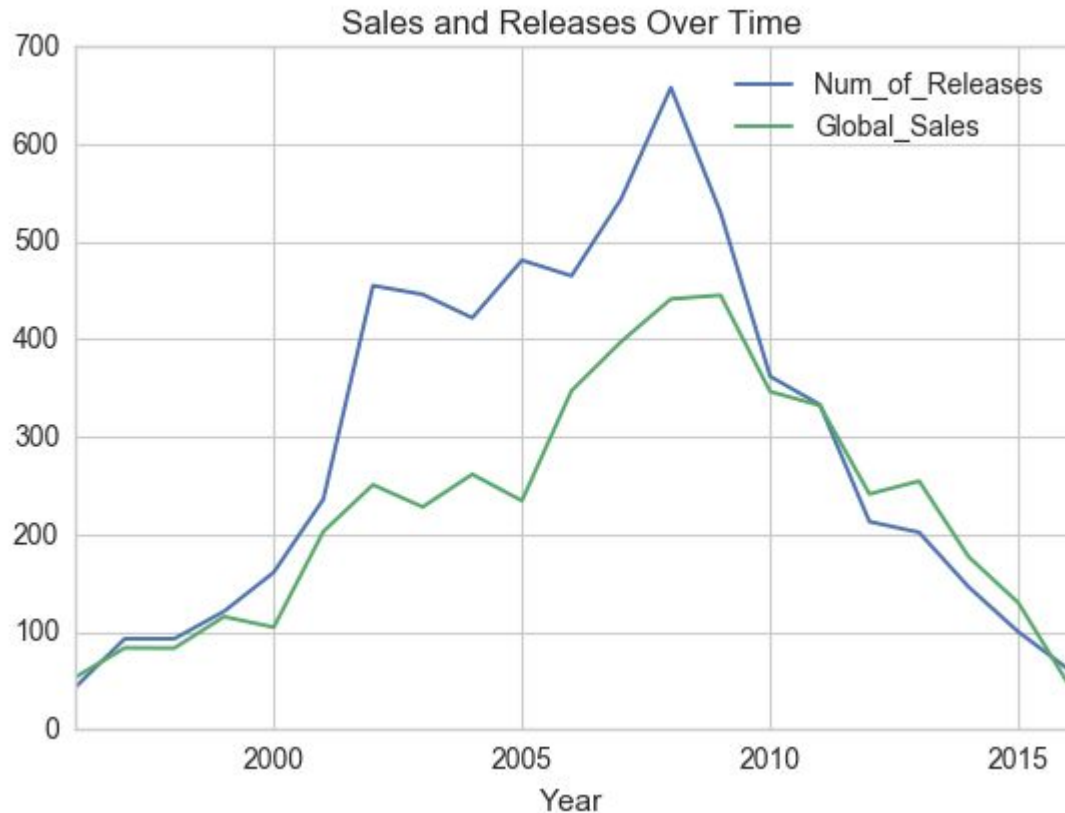


Removed
outliers &
influential
points



More Releases, More Sales?

- 72.6% of the global sales can be explained by the number of releases of that year
- If the number of games released per year increased then the global sales will also increase by 0.31% million dollars for that respected year.



Conclusion

- Try to release a game in November and on a Tuesday
 - If not, September - November is also good
 - Monday is good too
 - Avoid Weekends
- Release Game on Playstation, Xbox, and PC for the most sales
- Make a Action, Shooter, or Sports game
- Try to get a critic score of 84.07 or higher to be considered favorable
 - For every increased unit of a critic score, there is a 4.15% increase in potential global sales
- Publishers should try to release more games, where for every 100 releases, there's an 0.31% increase in global sales.

