



# Ravenclaw Gaming Investment Group

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# Agenda

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02

Data Wrangling  
& Data Cleaning

03

Exploratory  
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Conclusion



# Dataset: Gaming Industry Trends

## Key Features:

- Game Sales & Revenue Data (across various platforms)
- Popular Gaming Platforms & Trends (PC, Console, Mobile)
- Genre-Wise Game Popularity (Action, RPG, FPS, etc.)
- Yearly Market Trends & Growth Insights
- Player Engagement & Gaming Patterns



# Hypothesis



Higher the Metacritic, higher the game sales / revenue



Platform with growing trends over a few years is a good investment



Certain genre systematically outperform others



Platform with more players generate higher revenue



# Structure & Process Followed



Project Setup & Planning



Data Collection & Retrieval



Data Wrangling & Cleaning



Analysis & Hypothesis testing



Coding Best Practices &  
Finalization



Documentation &  
Presentation

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# Challenges Faced



Missing Data



Mixed Data Types



Inconsistent Formatting



Duplicate Records



Incorrect Numeric Values



Outliers and Influential Values



Category Overlaps & Ambiguous Labels

# Exploratory Data Analysis (EDA)



## Threshold Analysis

We tested whether certain threshold in higher review rate correlates with revenue.



## Benchmarking & Ranking

We compared the financial efficiency of the core console platforms on a per-game basis.



## Segmentation & Ranking

We segmented the revenue data by 3 categorical variables; Platform, Genre, & Total Revenue to find the most attractive platform to invest.

# Teamwork & Project Management

The image shows a digital project management board titled "Ravenclaw". The board is organized into columns representing days of the week: Monday, Tuesday, Wednesday, and Thursday. Each day has two time slots: 9:00-13:00 and 14:00-18:00. The tasks are listed in cards, many of which have checkmarks indicating completion.

**Monday, 9:00-13:00:**

- Week4 1st Project Task Link
- Look for interesting topic
- Create Kanban Board
- Find Datasets for Console Games (Switch, PS, Xbox) 2 is min.

**Monday, 14:00-18:00:**

- TEAM MTG : fix Hypothesis, Research Questions (Due Dec 8)
- Examine the data, understand what the fields mean before proceeding with data cleaning and manipulation.
- Import CSV/Excel
- Apply >5 data cleaning tech
- Cleaning the dataset
- creating function and adding to py file
- commit our files
- TEAM MTG : structure, identify potential "issues or problems" PLAN cleaning and transforming the data.

**Tuesday, 9:00-13:00:**

- TEAM MTG : Pull & Git conflict Resolution
- Structure the data (create new fields, grouping data, or creating pivot tables)
- Finalize all cleaning, transformation, and analysis tasks

**Tuesday, 14:00-18:00:**

- Git conflict Resolution
- Use aggregation and filtering techniques to further refine the dataset and to start drawing conclusions about your hypotheses.
- If needed, work with SQL Workbench
- Work on charts, graphs
- Perform Exploratory Data Analysis
- Finish refining your code according to best practices

**Wednesday, 9:00-13:00:**

- Git conflict Resolution
- Add contents to Google Slides
- Analysis
- Work on Conclusion & Hypothesis

**Wednesday, 14:00-18:00:**

- Git conflict Resolution
- + Add a card

**Thursday, 9:00-13:00:**

- git conflict resolution
- Finalise Google slides : min texts, compelling narrative, significance of analysis

**Thursday, 14:00-18:00:**

- + Add a card

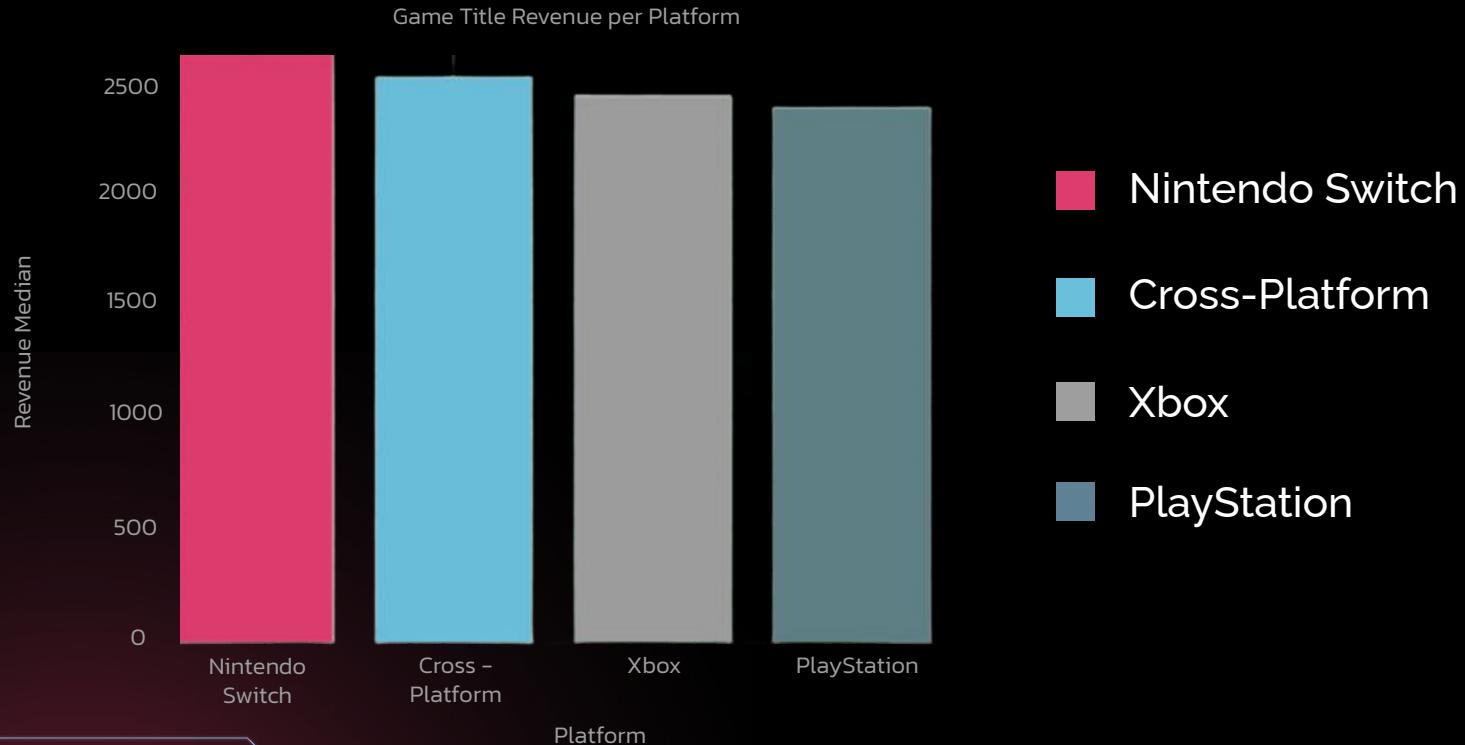
# Wizarding Journey Timeline



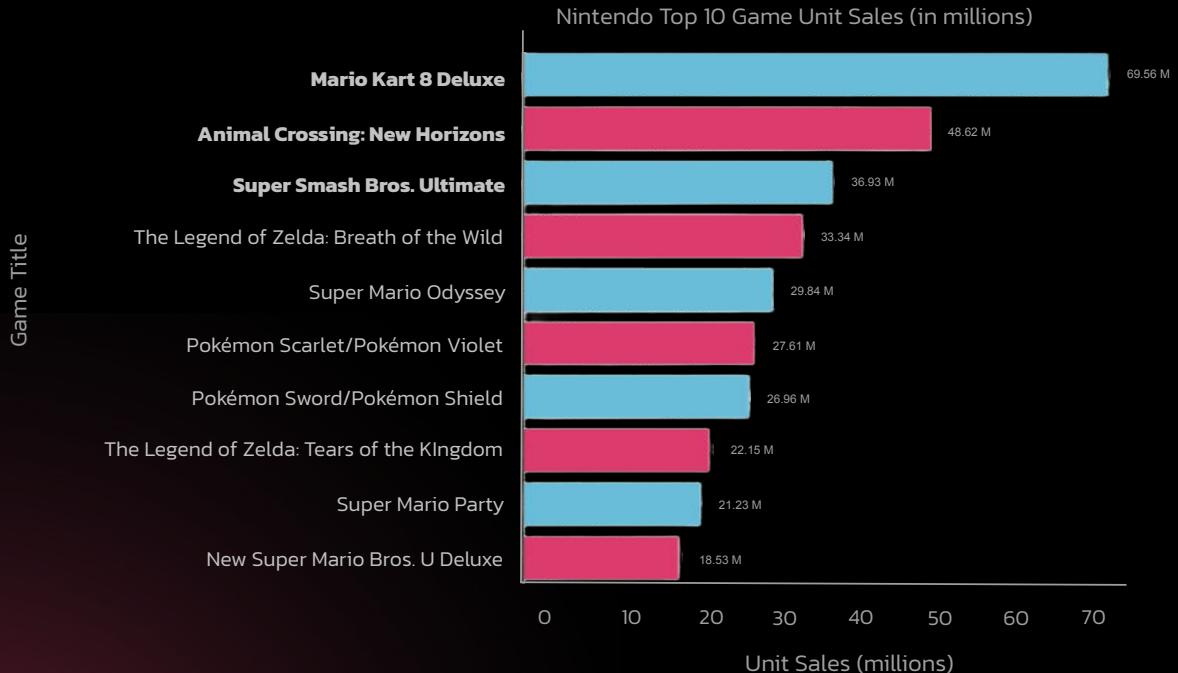
Gather Hogwarts data      Wingardium Leviosa the project      Daily Standups  
Slytherin disturbed us..      Analysis  
Ravenclaw way!

Harry Potter Typing Test      Monitoring  
'The one we cannot say  
the name'...Volde-who?      Perfecting Coding Spells      Sorting Hat closure  
with Conclusions

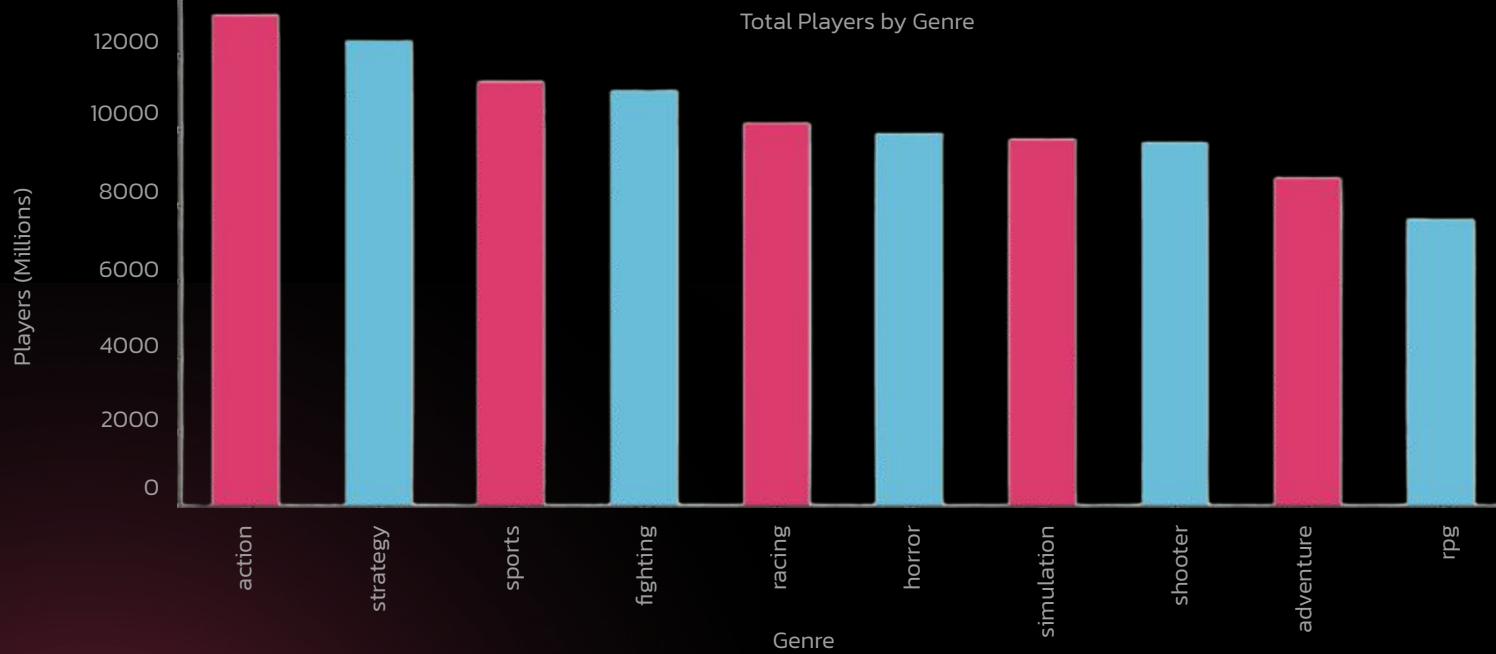
# Who generate highest \$ per game?



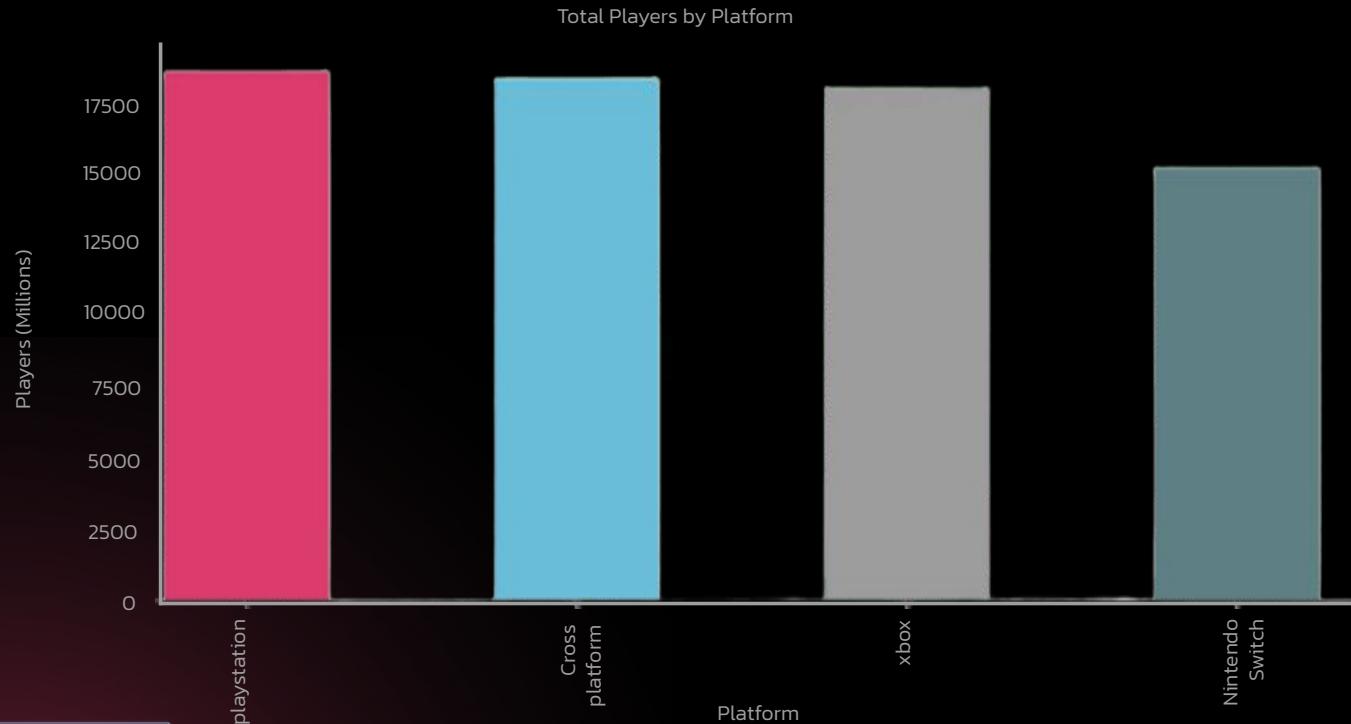
# Nintendo Switch - By Game Title



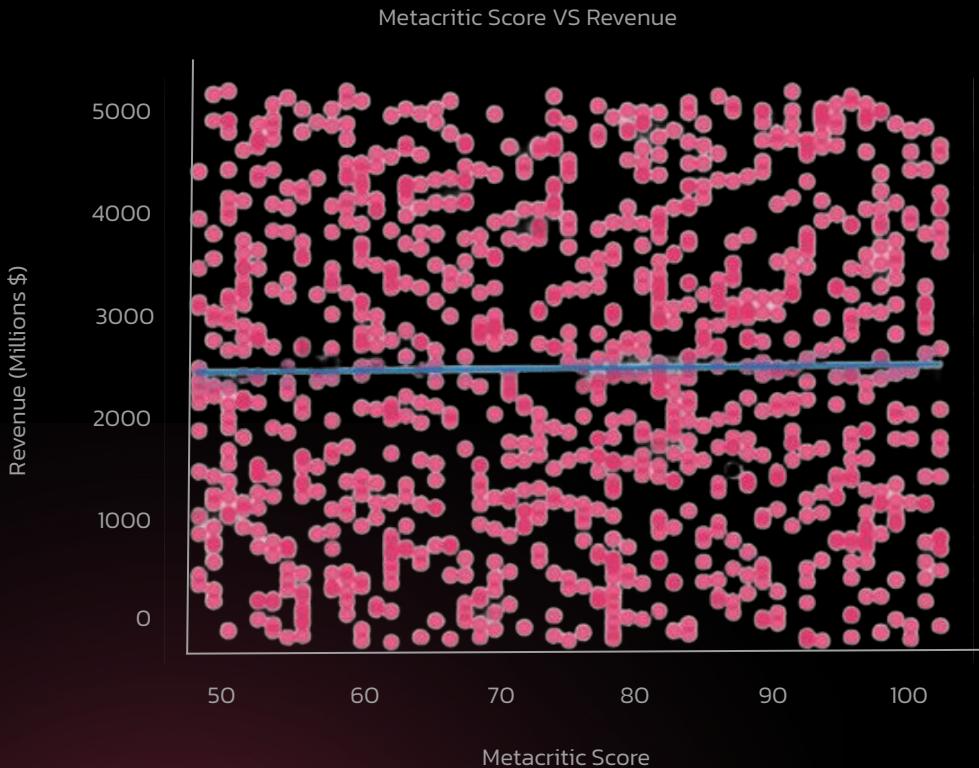
# Total Players by Genre



# Total players by Platform



Is there a correlation between Metacritic\* score & revenue ?



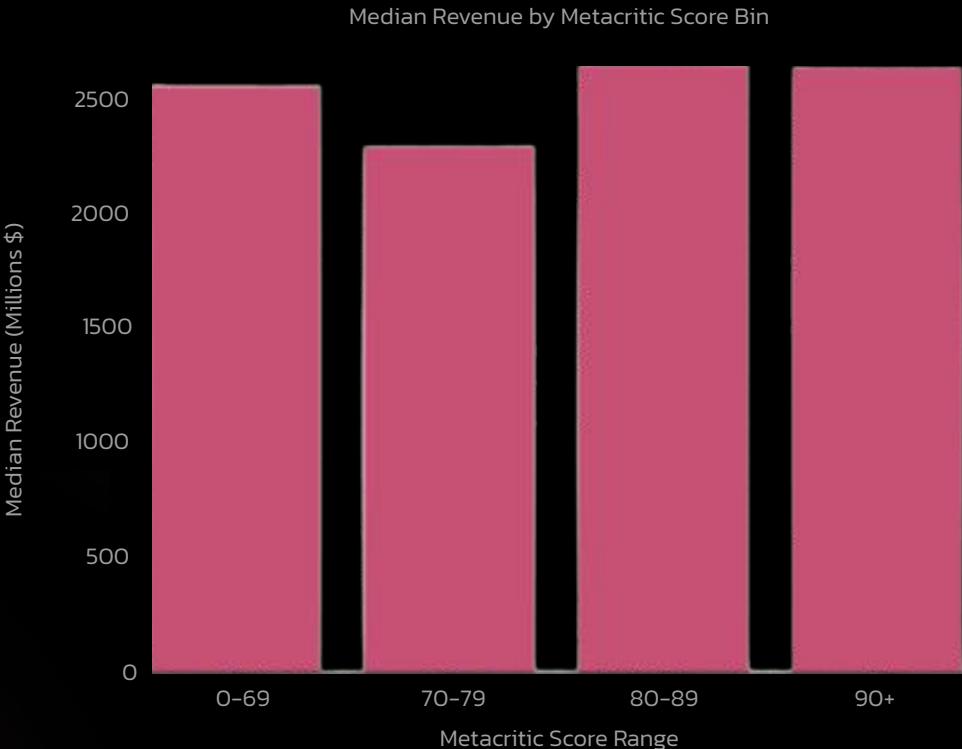
- The graph shows that there is no correlation between scores and revenues

● Metacritic score

\*Metacritic is a platform that combines the average scores from all gaming outlets that give games a review score.

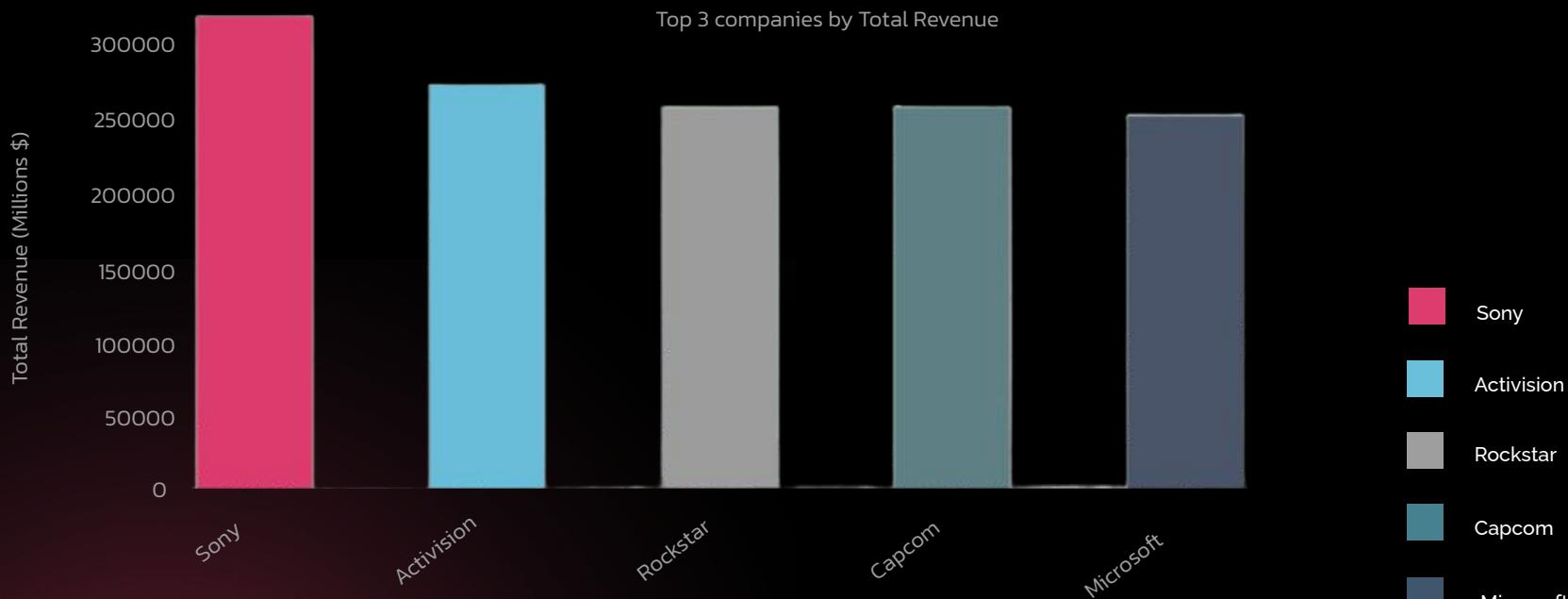
Is there a  
“threshold”  
score after  
which median  
revenue  
increases  
sharply?

<sup>\*</sup>Metacritic is a platform that combines the average scores from all gaming outlets that give games a review score.

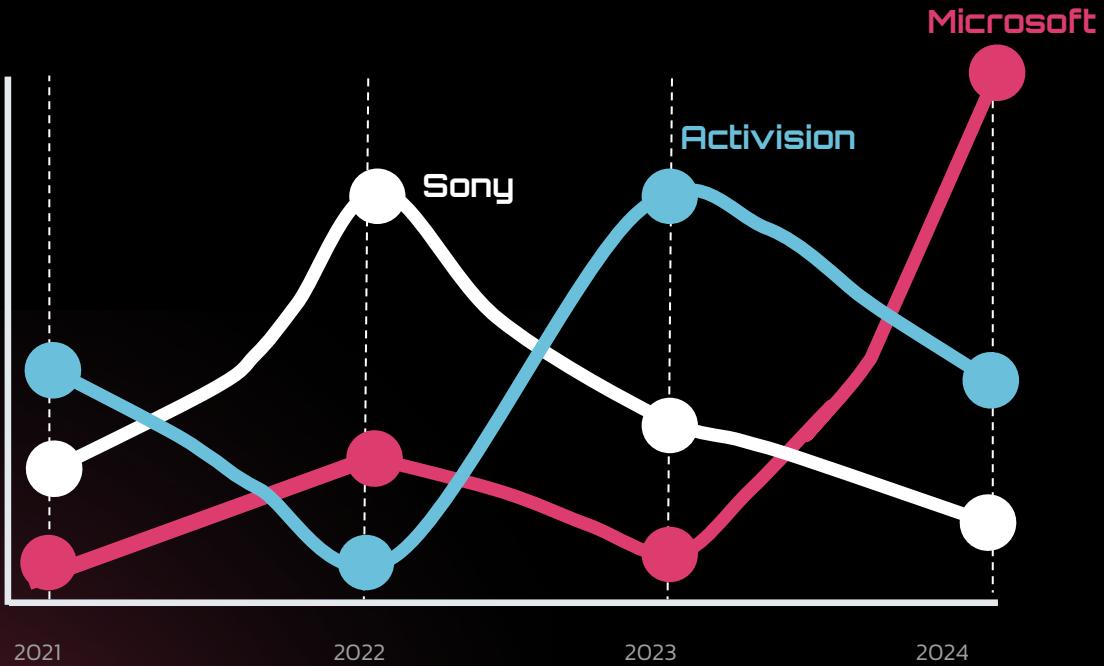


- After 80, median revenue increases sharply
  - Cross-platform strategy game is on top 3 genre

# Top Developers by Revenue (in millions)



# Dev Rev Growth Over 3 years



# Which companies achieved a Metacritic score above 80 ?



# Major Obstacle



## GitHub Coordination



pushing  
pulling  
env change

but...  
No Conflict!

## Compiling the Code



Column names  
DataFrames

should've...  
cleaned df=>  
coding !!

# Conclusions

## Project objective:

The objective of the project is to understand which gaming console, genre most people play and better reviewed.



### Key takeaway 1

Nintendo Switch had the highest revenue per game, followed by cross-platform.

### Key takeaway 2

Games that scored the best in Metacritic added the best total revenues.

### Key takeaway 3

Action, strategy, and sports attract the highest total number of players across the gaming industry.

# Insights



## Cross-platform

Invest in multiplatforms,  
with a  
tendency to  
Nintendo consoles



## Players

PlayStation lead in total  
players, followed by  
multiplatforms



## 80% in Metacritic

Sony released 47 games  
above 80% in Metacritic

# Hypothesis Results



**Confirmed**



Higher the Metacritic, higher the game sales / revenue

**Confirmed**



Platform with growing trends over a few years is a good investment

**Refuted**



Certain genre systematically outperform others

**Refuted**



Platform with more players generate higher revenue



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Thank you!!

