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# Ravenclaw Gaming Investment Group

*Ako Kitamura, Charul Mathur, Rui Parreira, Davy Goupil*

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# Agenda

01

Project  
Overview

02

Data Wrangling  
& Data Cleaning

03

Exploratory  
Data Analysis

04

Teamwork &  
Project  
Management

05

Major Obstacle

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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

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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

Ravenclaw  

CM A G        Share 11

Mon, 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.

Dec 8 1

+ Add a card

Mon, 14:00-18:00

- TEAM MTG : fix Hypothesis, Research Questions
- Dec 8 1
- 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, quality of a dataset, identify potential "issues or problems" PLAN cleaning and transforming the data.

+ Add a card

Tues, 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

+ Add a card

Tues, 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

+ Add a card

Weds, 9:00-13:00

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

+ Add a card

Weds, 14:00-18:00

- Git conflict Resolution

+ Add a card

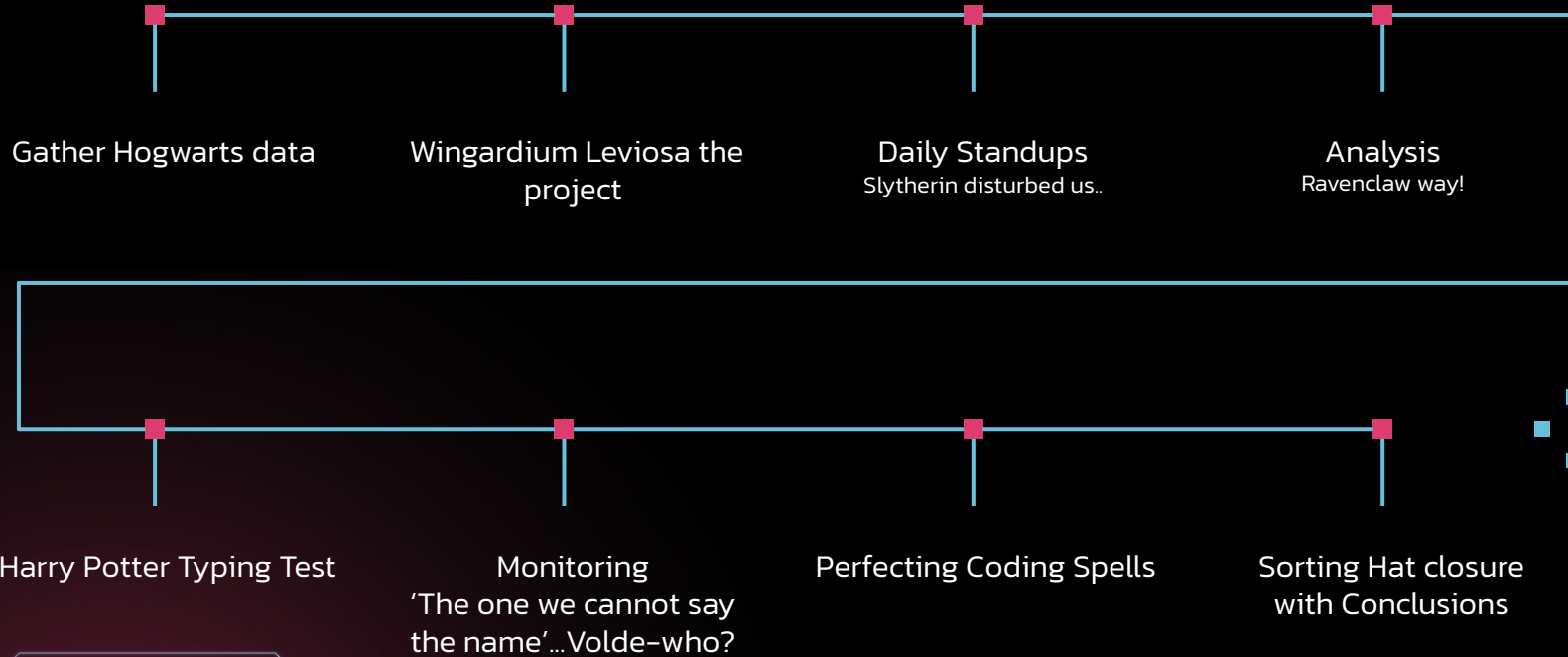
Thurs, 9:00-13:00

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

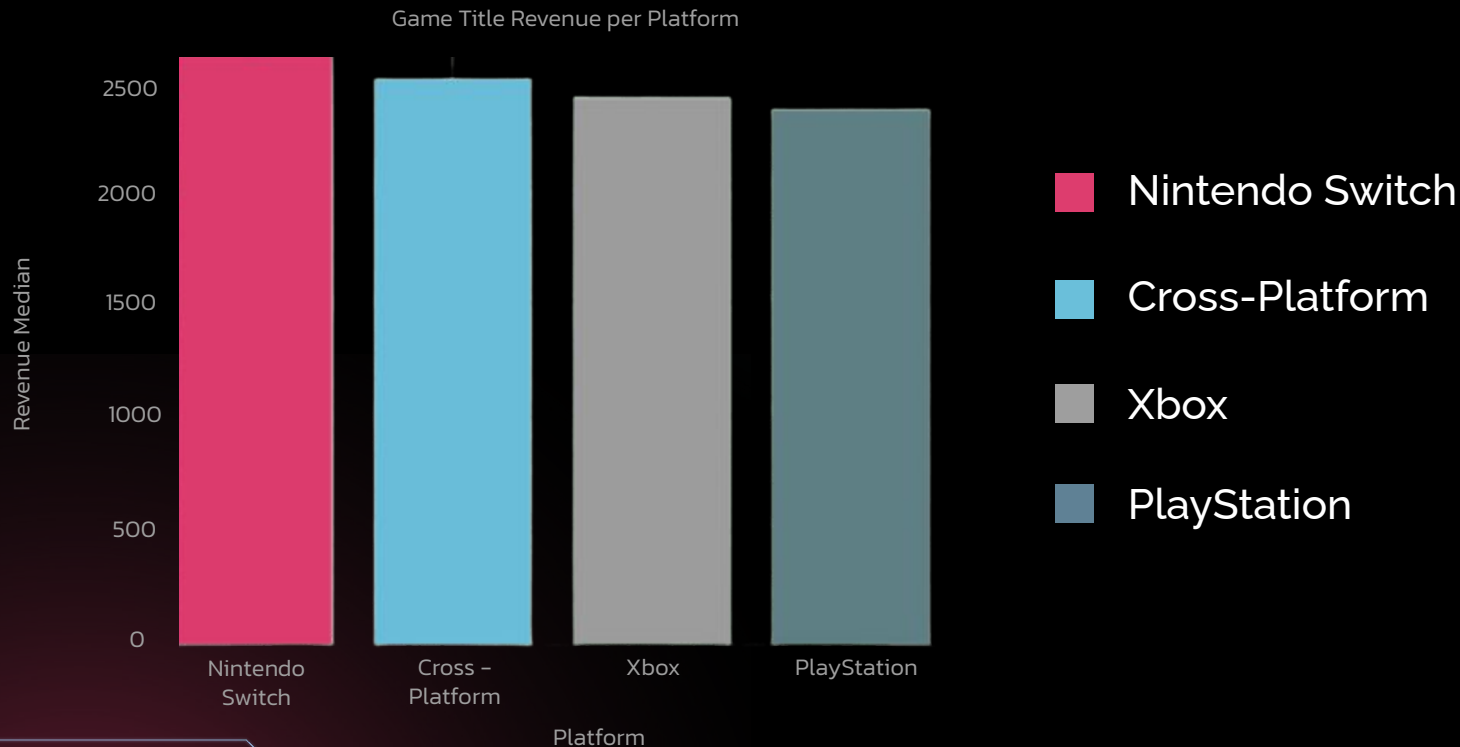
+ Add a card



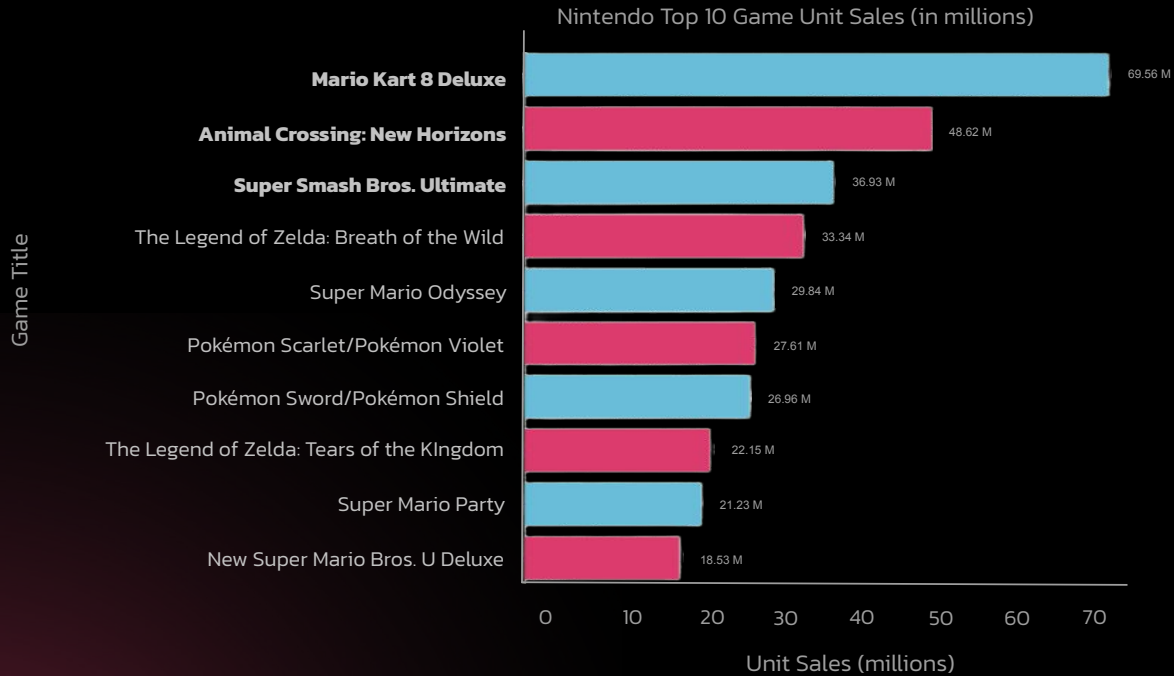
# Wizarding Journey Timeline



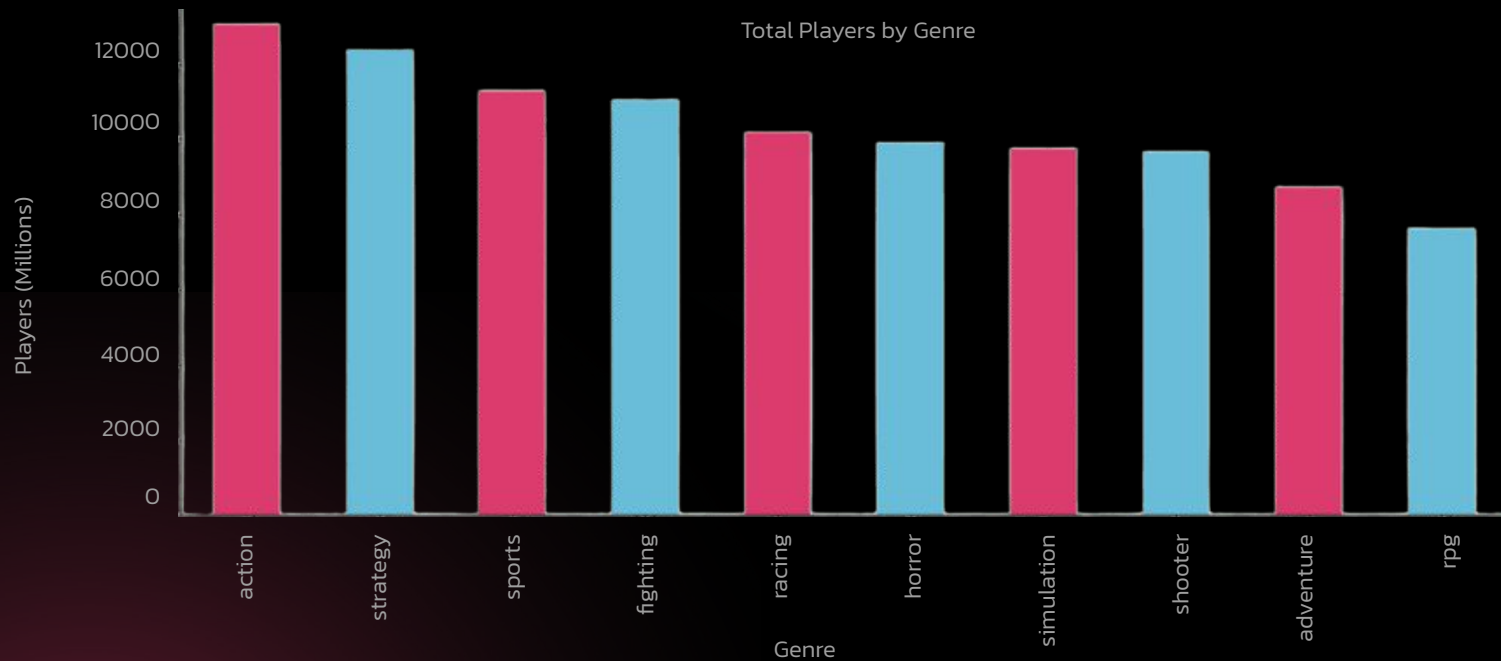
# Who generate highest \$ per game?



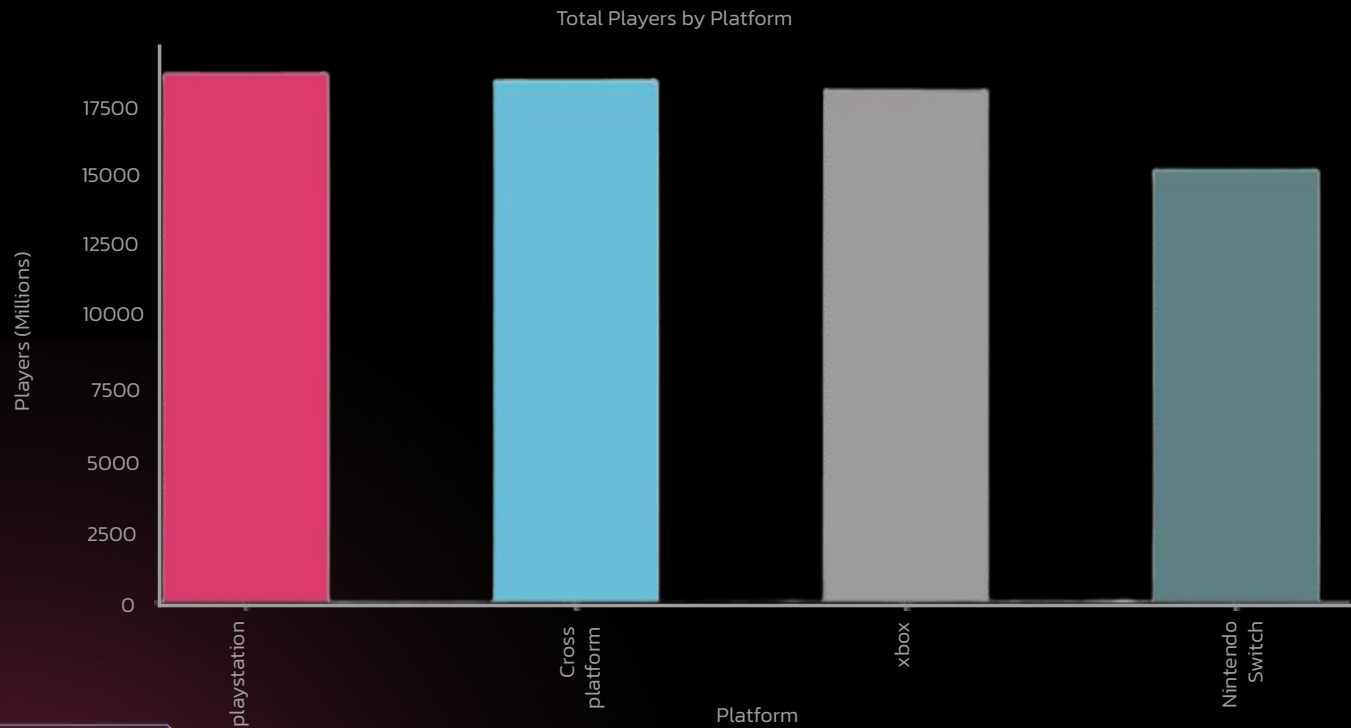
# Nintendo Switch - By Game Title

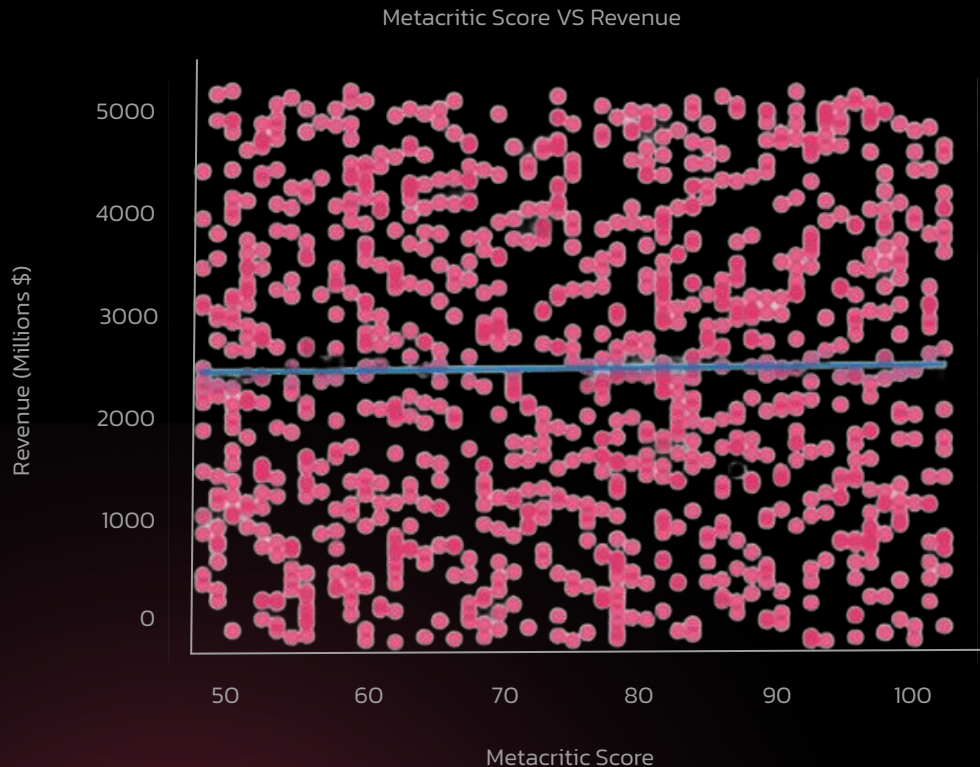


# Total Players by Genre



# Total players by Platform





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

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

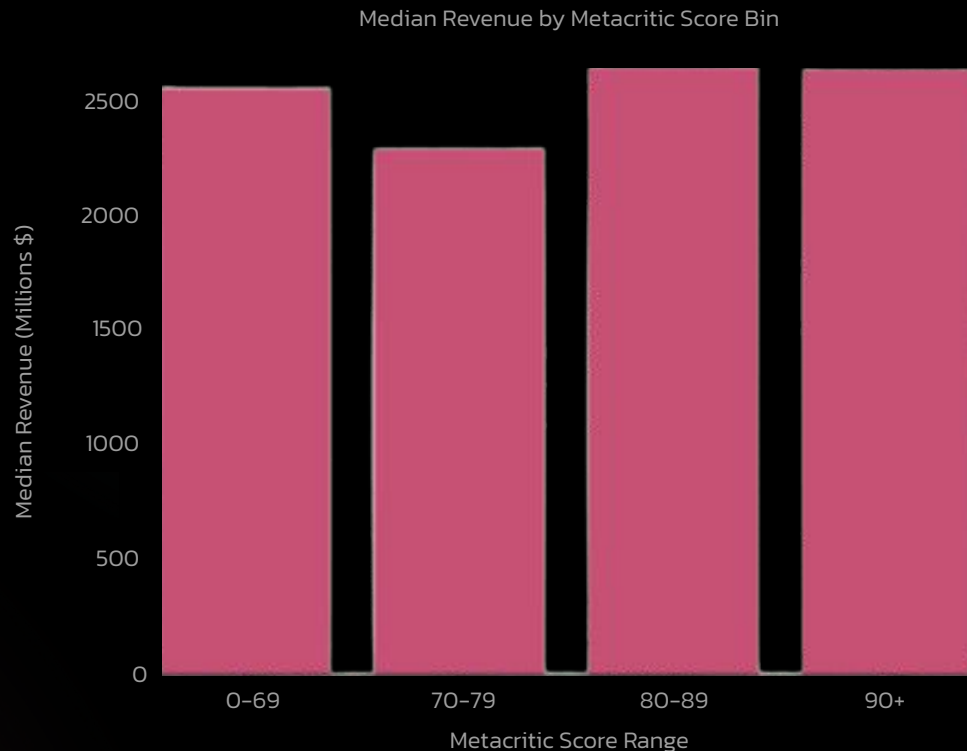
● Metacritic score

*\*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?

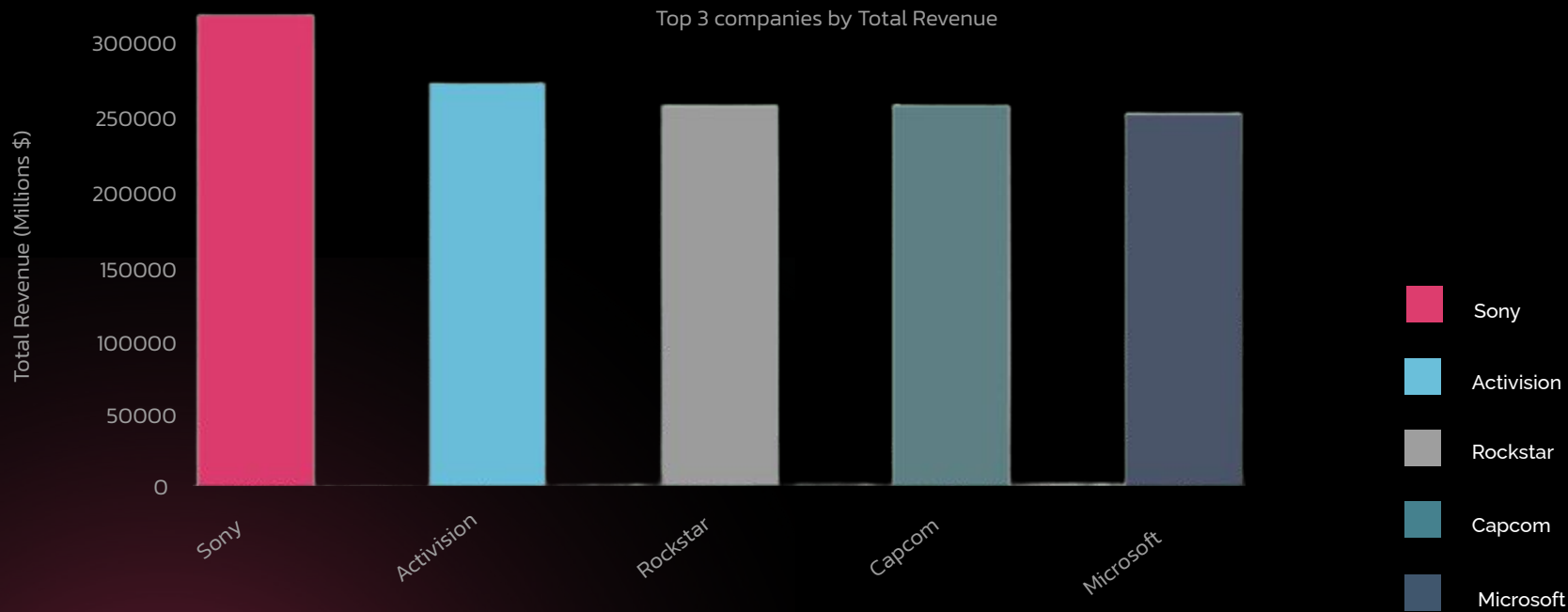


*\*Metacritic is a platform that combines the average scores from all gaming outlets that give games a review score.*



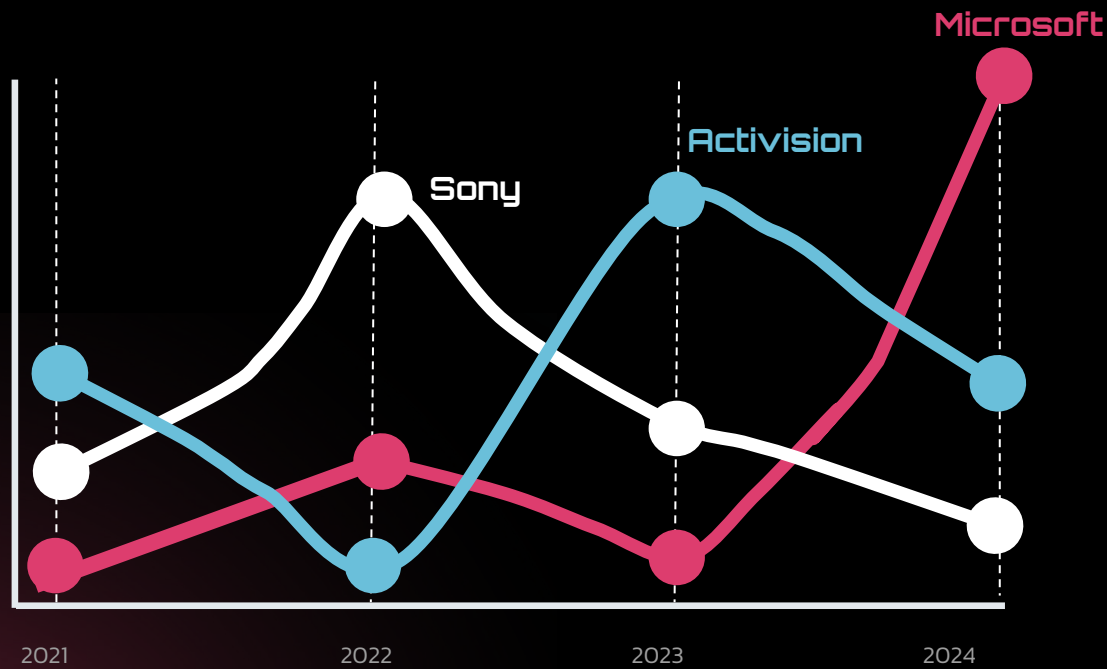
- After 80, median revenue increases sharply
- Cross-platform strategy game is on top 3 genre

# Top Developers by Revenue (in millions)





# Dev Rev Growth Over 3 years



# Which companies achieved a Metacritic score above 80 ?



Sony  
47



Microsoft  
46



Rockstar  
45



Square Enix  
44



Capcom  
44



# 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



# Ravenclaw Gaming Investment Group



Thank you!!

