



Project Presentation: Video Game Industry & Sales

Presented by October Prolet's
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STAT206 – 001
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Project Goal

- Understand what happened to video game industry since 1980s
- Identify major trend in genre and platform
- Possible causation of the trend
- Test and visualize the hypothesis
- Recommendations for stakeholder (Investors, gamers, and developers)

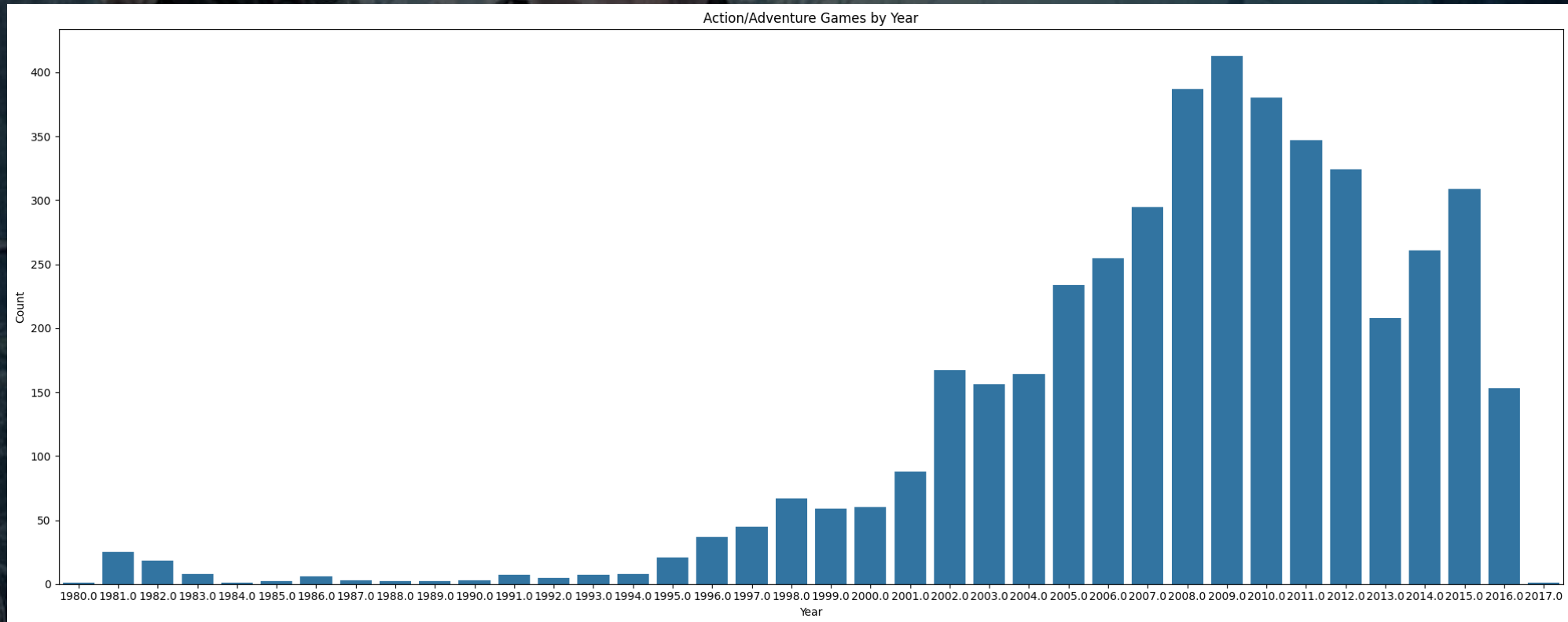
Methods & Datasets used

- Descriptive analysis (bar plots, scatter plots, trend lines)
- Sorting/filtering
- Statistical tools (coefficients)
- Datasets used:
 - vgsales.csv (original file from class)
 - vgs2024.csv (obtained through Kaggle)
 - vgsSteam.csv (online public sources)
 - GameTB.csv (organized by group member for analysis)

Q1: Have the game genre Action Adventure been on the increase since 1980?

From vgsales data set:

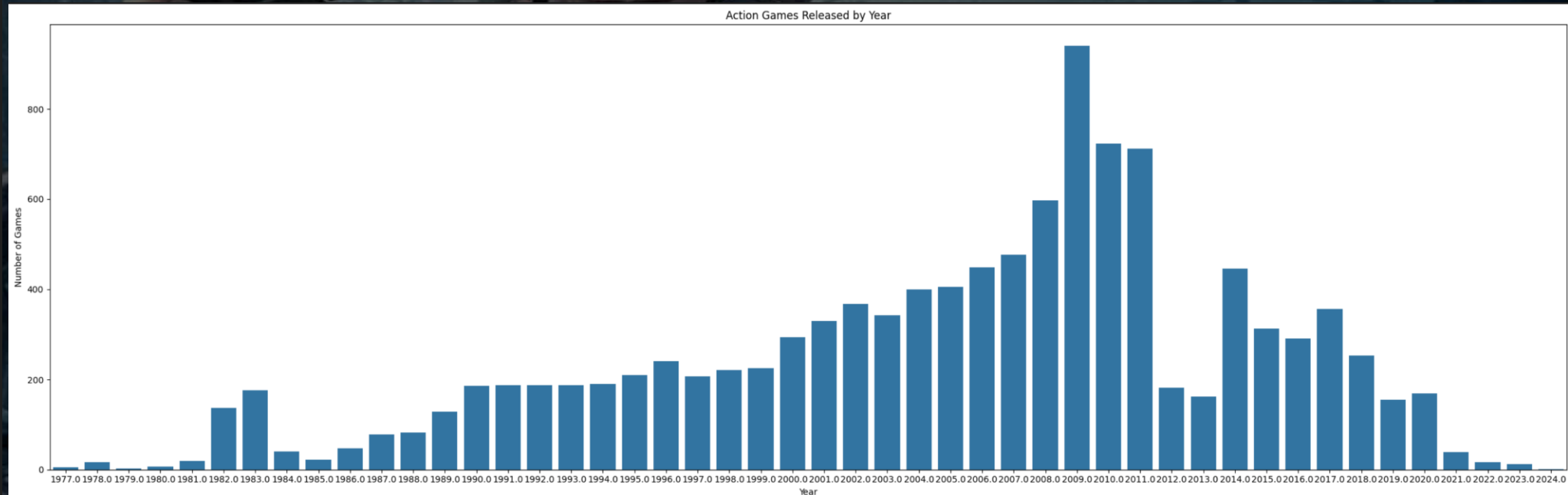
Genre	
Action/Adventure	4602
Sports	2346
Misc	1739
Role-Playing	1488
Shooter	1310
Racing	1249
Platform	886
Simulation	867
Fighting	848
Strategy	681
Puzzle	582



Q1: Have the game Genre Action Adventure been on the increase since 1980?

From vgs2024 data set:

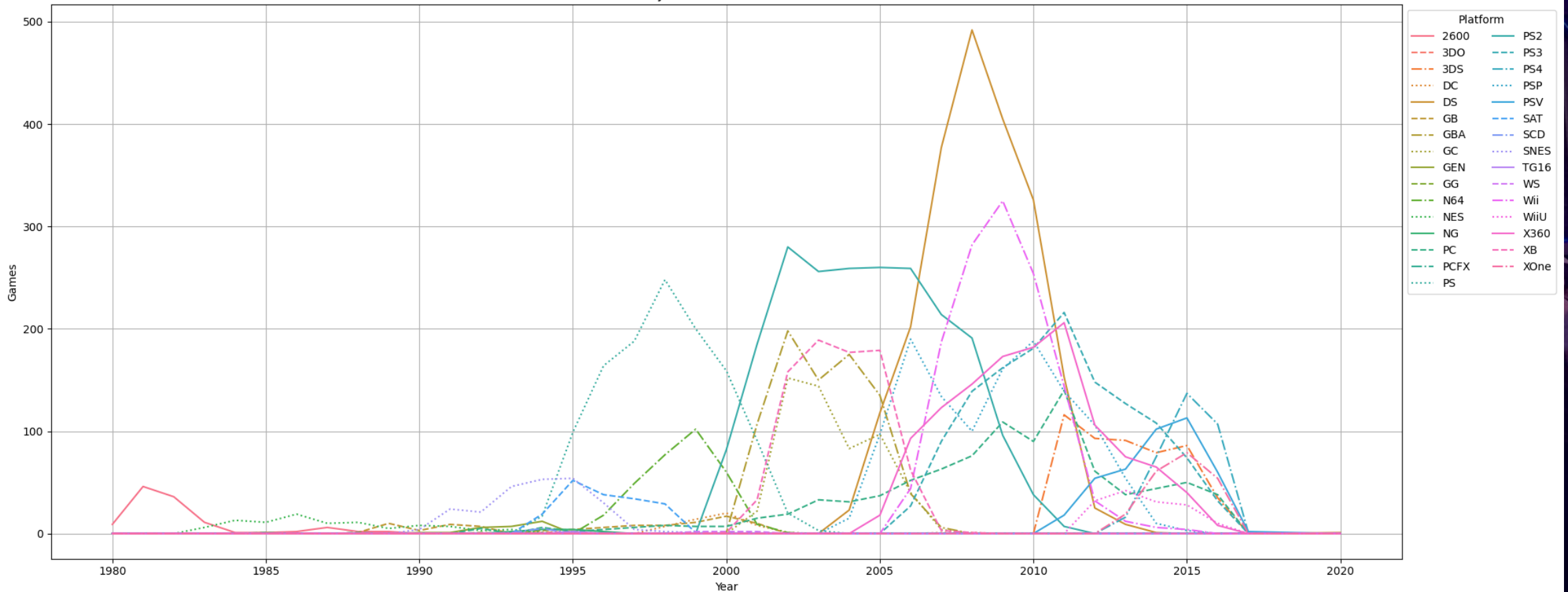
genre	
Misc	6567
Action	5253
Adventure	4140
Role-Playing	3632
Sports	3206
Shooter	3051
Strategy	2687
Puzzle	2447
Simulation	2258
Platform	1991
Racing	1896
Fighting	1362
Action-Adventure	646
Visual Novel	307
Music	146
Party	88
MMO	62
Education	27
Board Game	25
Sandbox	7



Expanding the Scope

What is the reason behind the decline in 2012 and onward?

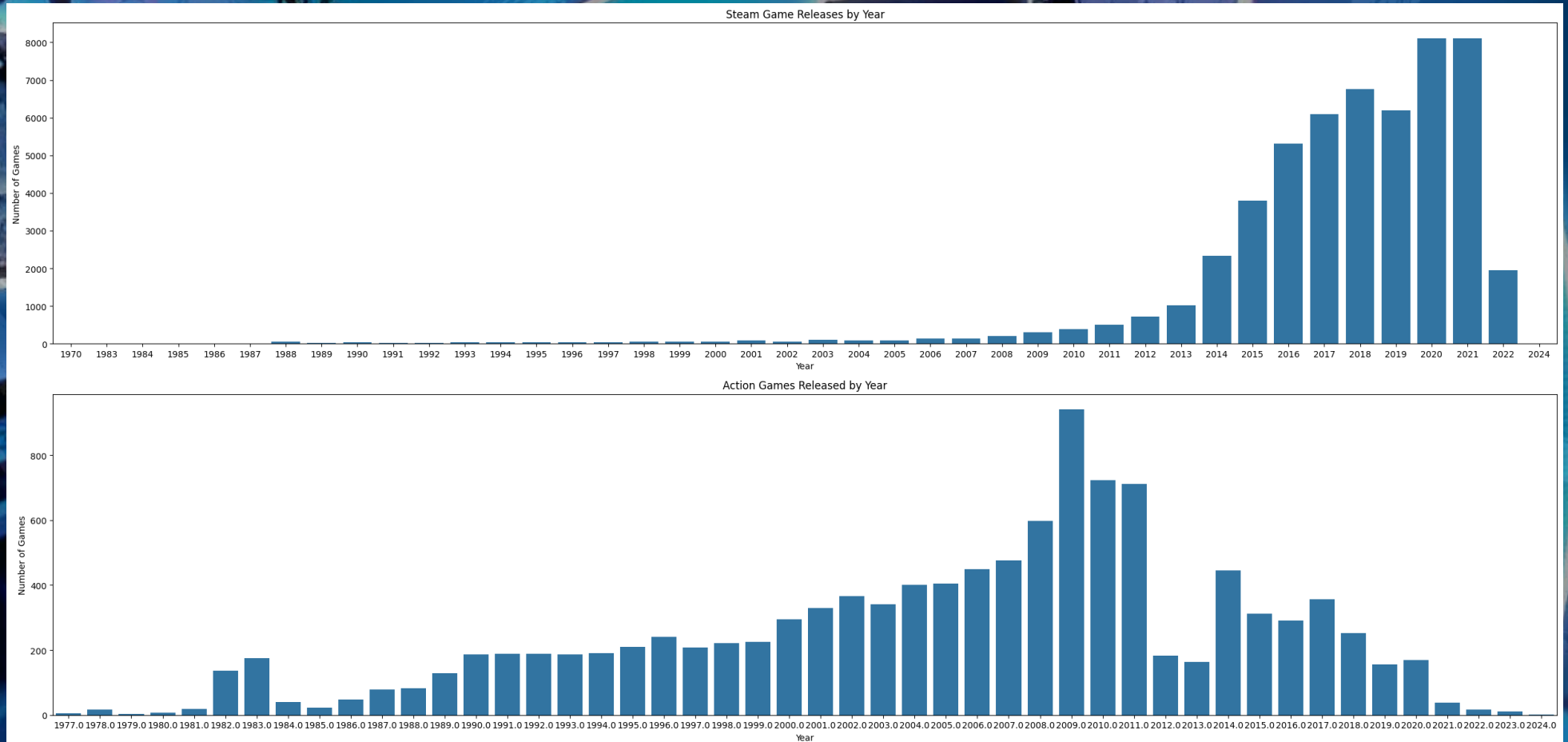
Game by Platform from 1980 to 2017



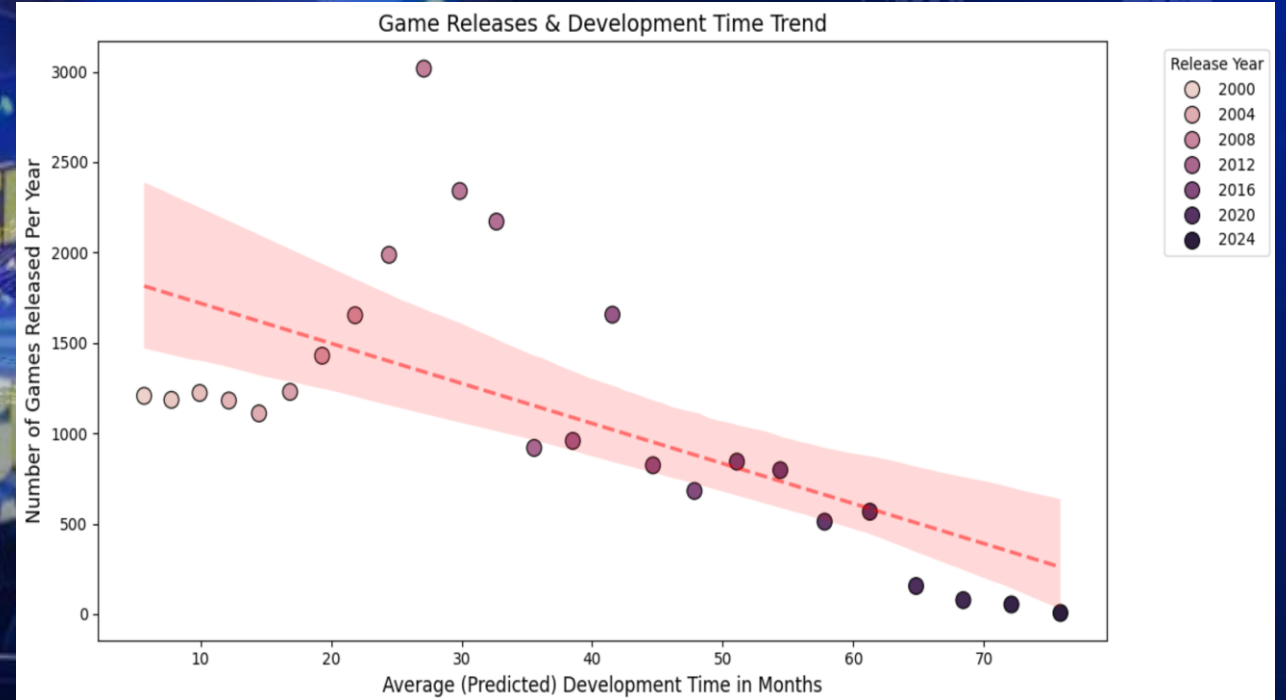
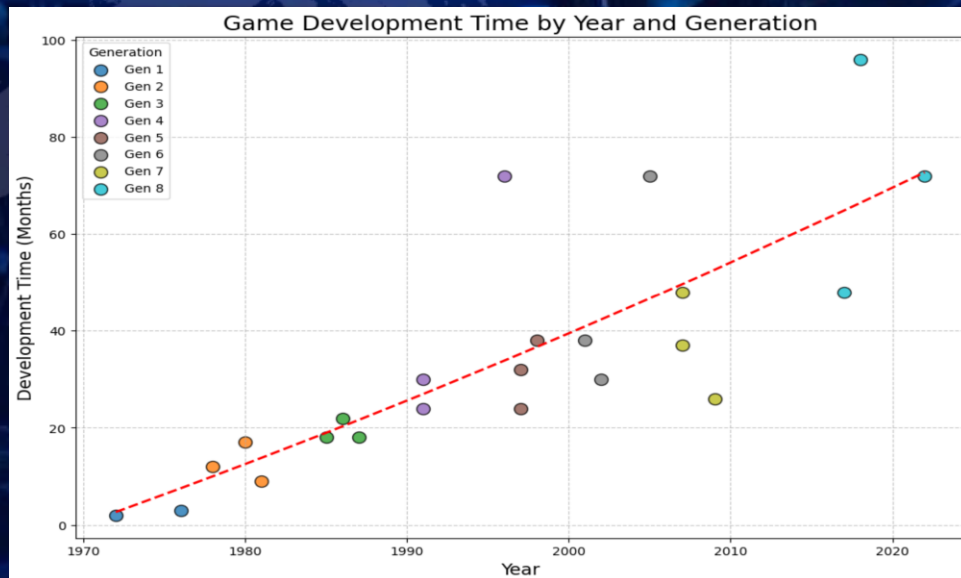
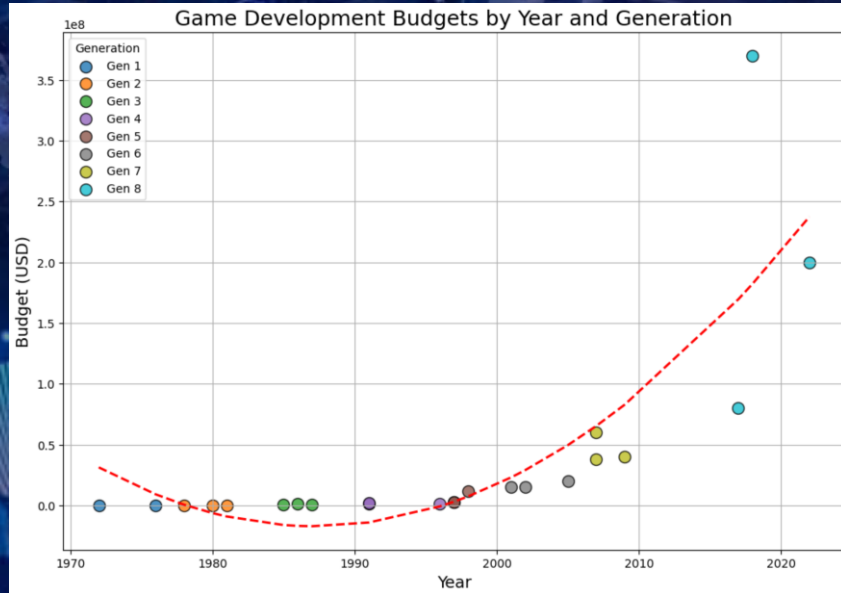
Q2: Is the rise of PC platforms correlated with the sharp decline of console game releases?

From vgsSteam data set (keep in mind the scale different)

Game_Type	
Action/Adventure	20211
Indie	16842
Strategy	5350
Simulation	4859
RPG	4714
Sports	1114



Q3: Is the sharp decline in video game release correlated with the increasing development cost & time spent on consoles?



Importance

- Informative for the stakeholders:
- Investors in the industry: what is the best platform/genre to invest in as of 2025 (identify the most profitable sector)
- Video game player: The best way to get into gaming (platform) and what genre has the most options
- Game developer: what platform to release, what genre has the most competition, what are the expectations for budget and development cycle

Limitations

- Lack of exact predictability for future trends
- Limited to only the publicly available data
- Unable to perform many statistical tests due to predominantly nominal variables (t-test, mean test, regression, etc.)

Thank You

