

CHRIS MURPHY

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# VIDEO GAMES SALES DATA CHALLENGE

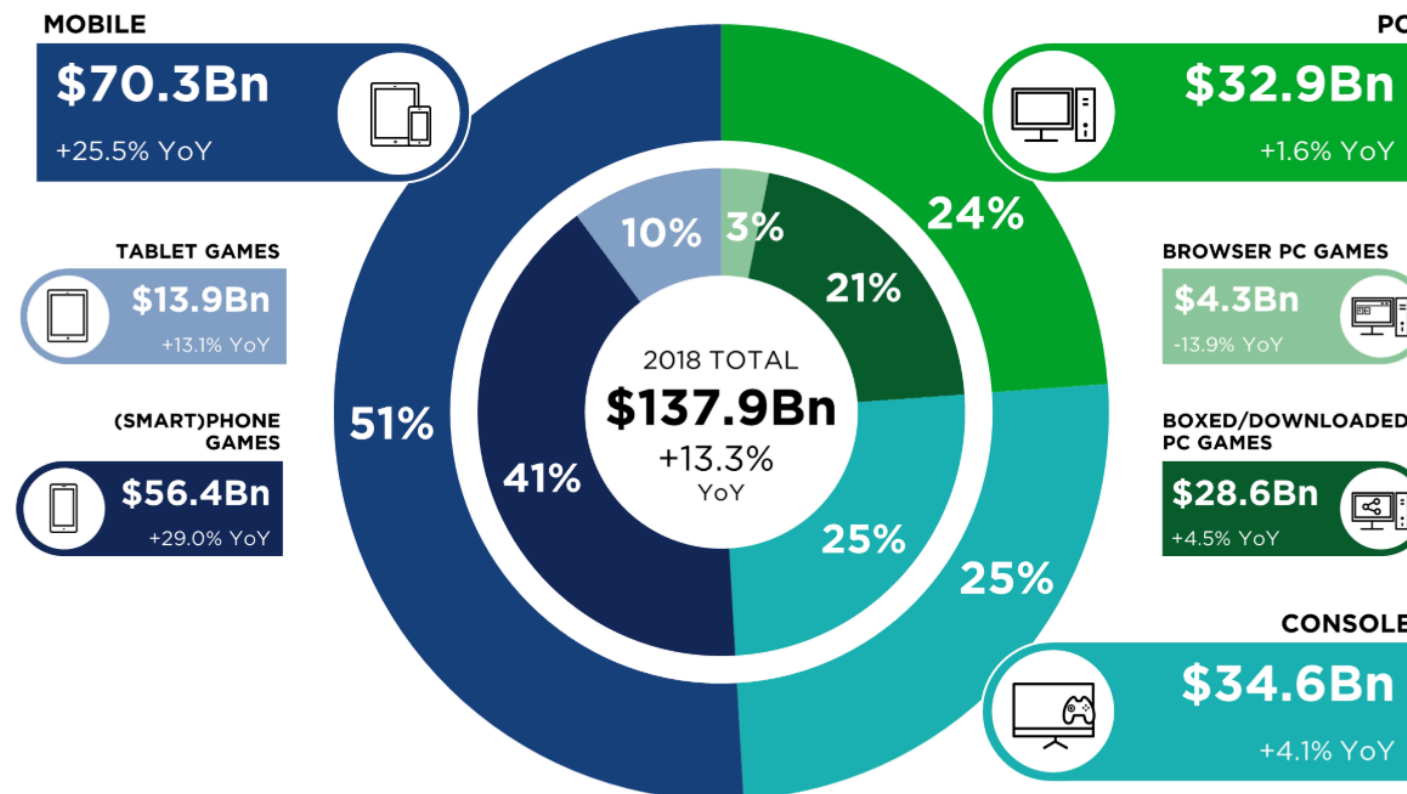
# THE VIDEO GAME INDUSTRY IS BOOMING



## 2018 GLOBAL GAMES MARKET

PER DEVICE & SEGMENT WITH YEAR-ON-YEAR GROWTH RATES

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Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report  
[newzoo.com/globalgamesreport](http://newzoo.com/globalgamesreport)

# VIDEO GAMES SALES CHALLENGE

- ▶ Given a list of 16,598 video games w/ at least 100k copies sold

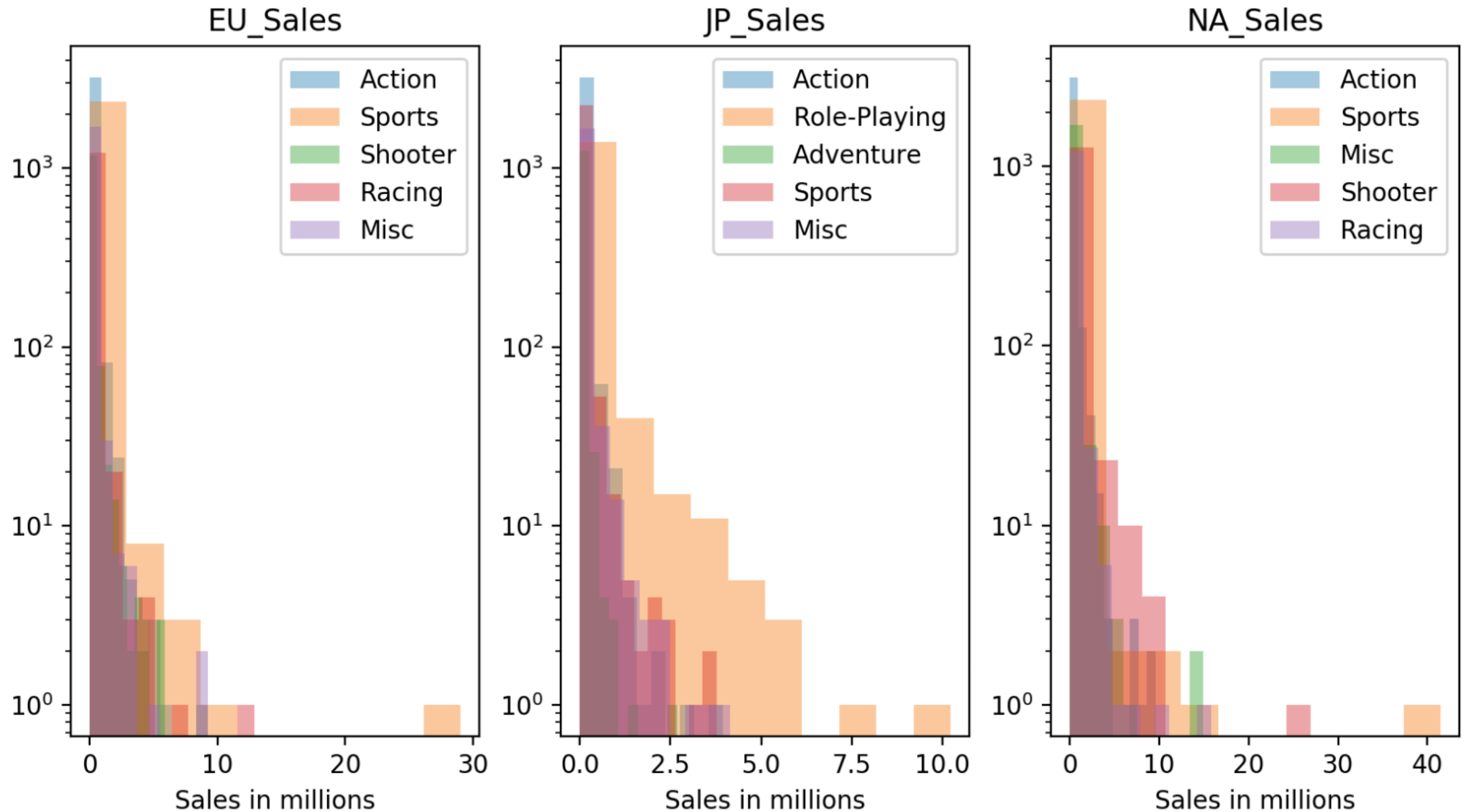
Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales
1	Wii Sports	Wii	2006.0	Sports	Nintendo	41.49	29.02	3.77	8.46	82.74
2	Super Mario Bros.	NES	1985.0	Platform	Nintendo	29.08	3.58	6.81	0.77	40.24
3	Mario Kart Wii	Wii	2008.0	Racing	Nintendo	15.85	12.88	3.79	3.31	35.82
4	Wii Sports Resort	Wii	2009.0	Sports	Nintendo	15.75	11.01	3.28	2.96	33.00
5	Pokemon Red/Pokemon Blue	GB	1996.0	Role-Playing	Nintendo	11.27	8.89	10.22	1.00	31.37

- ▶ What are the major differences between the North American, European, and Japanese markets?
- ▶ What video game genres are trending in each market?
- ▶ What features about a video game are most indicative of its success?

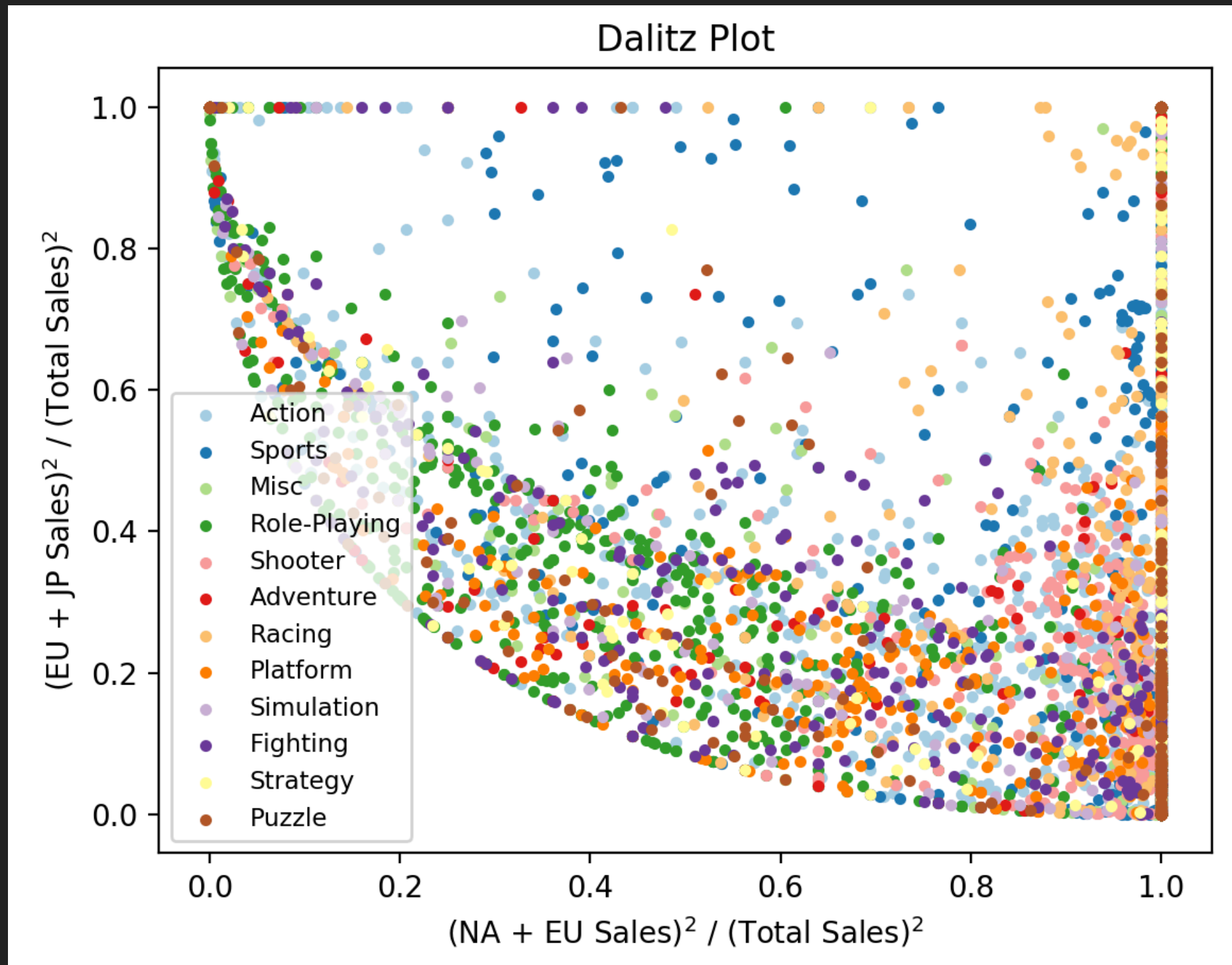
# DIFFERENCES BETWEEN THE MAJOR MARKETS

- ▶ Market sizes
  - ▶ North American: 4.4B units sold
  - ▶ European: 2.4B units sold
  - ▶ Japanese: 1.3B units sold
- ▶ Nintendo dominates the Japanese market
  - ▶ 125 games w/ > 1M units sold
  - ▶ next highest publisher, Sony, only has 16

# VIDEO GAME GENRE TRENDS



# VIDEO GAME GENRE TRENDS



## FUTURE DIRECTIONS

- ▶ What features of a video game are most indicative of its success?
  - ▶ Sales data highly correlated (Rank anti-correlated)
  - ▶ Use Random Forest – good for determining feature importance
  - ▶ Other features categorical – need an encoder



THANK YOU!



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