Team 12

Video Game Sales Rank

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Motivation

- What: Video games industry is a very lucrative
- How: optimize different genres platforms for video games
- Who: Demographics are significantly from region to region

Why visualization?

- The trend of overall market sales
- Analyze the empirical causes
- Infer strategy for companies and effects

DataSet & Methodology

- From : VGChartz http://www.vgchartz.com/gamedb/
- Year[1980-2016]; 16323 rows × 16 columns

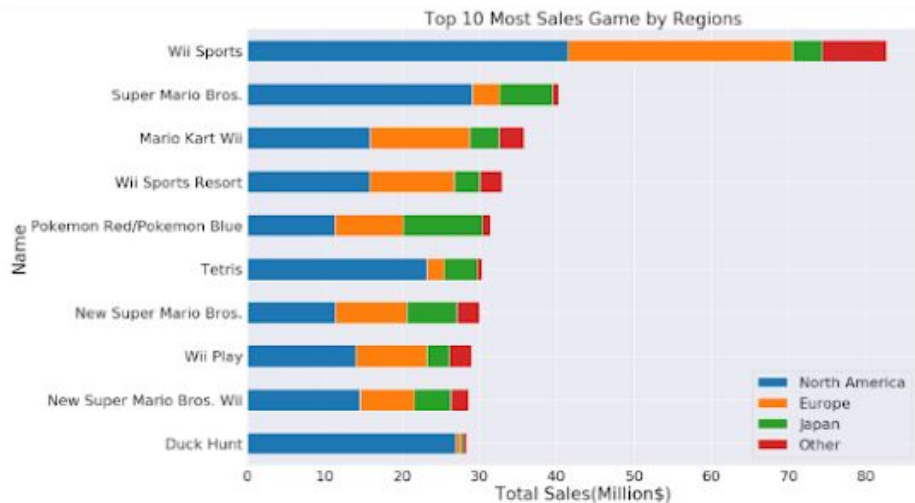|	Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales
0	1	Wii Sports	Wii	2006.0	Sports	Nintendo	41.49	29.02	3.77	8.46	82.74
1	2	Super Mario Bros.	NES	1985.0	Platform	Nintendo	29.08	3.58	6.81	0.77	40.24
2	3	Mario Kart Wii	Wii	2008.0	Racing	Nintendo	15.85	12.88	3.79	3.31	35.82
3	4	Wii Sports Resort	Wii	2009.0	Sports	Nintendo	15.75	11.01	3.28	2.96	33.00
4	5	Pokemon Red/Pokemon Blue	GB	1996.0	Role-Playing	Nintendo	11.27	8.89	10.22	1.00	31.37

- Counting frequency; Sorting; Calculating Average
- Pandas; Seaborns; matplotlib

Overall Sales Trend
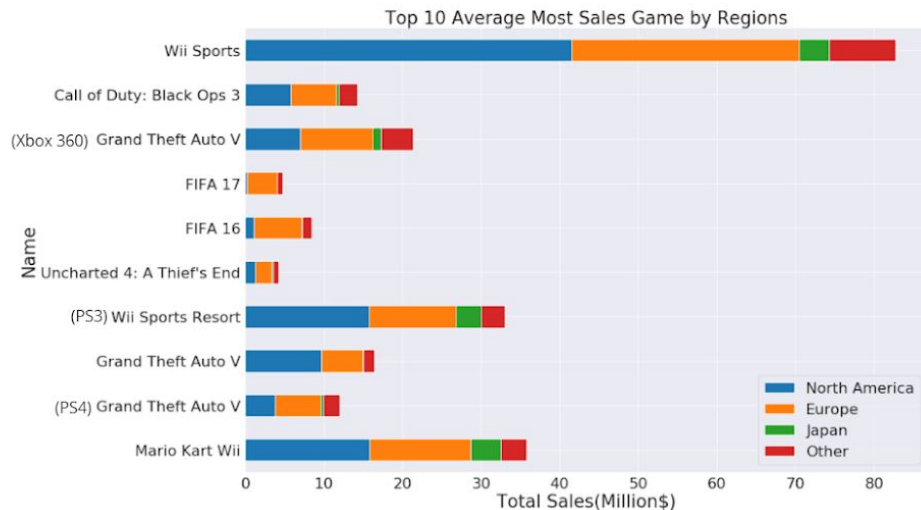
- Time Release Date vs. Regional Economic Constraint
- Japanese Debt Crisis 2013
- American Recession 2008
- European Debt crisis 2010

Total Sales on different region

Top Ten Game Sales

Top 10 Most Sales Game by Regions
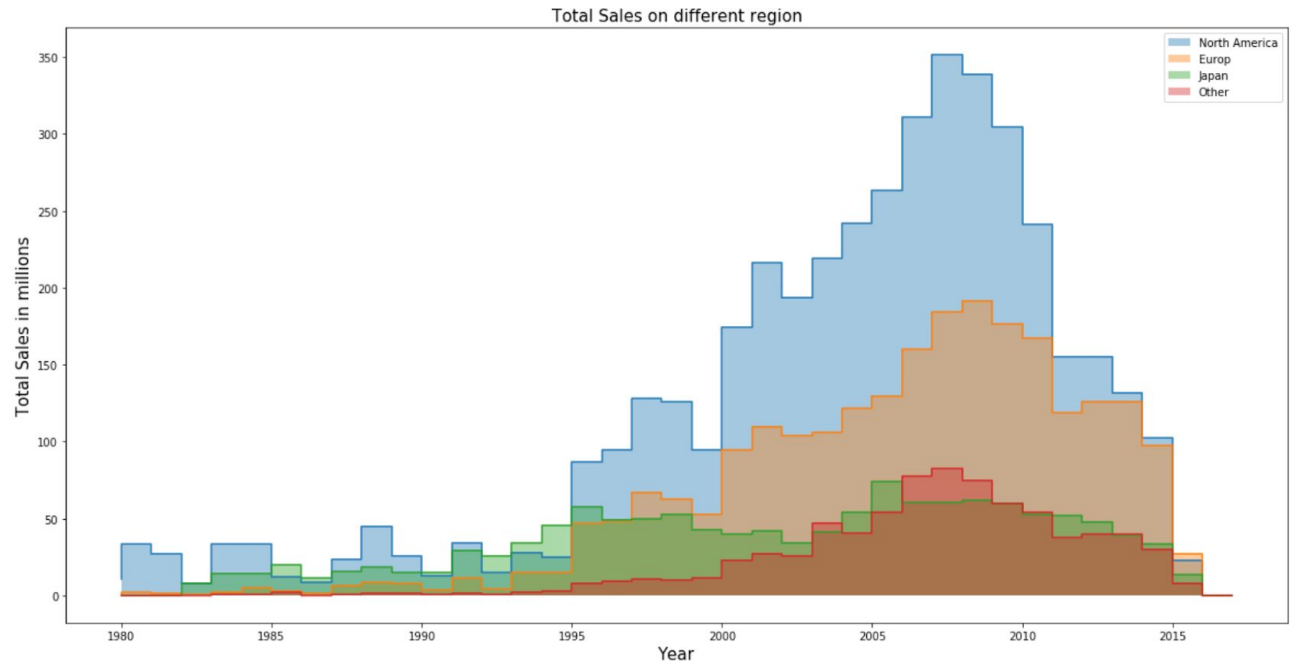
Top 10 Average Most Sales Game by Regions

- Not normalized
- Most popular video games

- Normalized by years released
- New games have bigger market after

Platform Classification

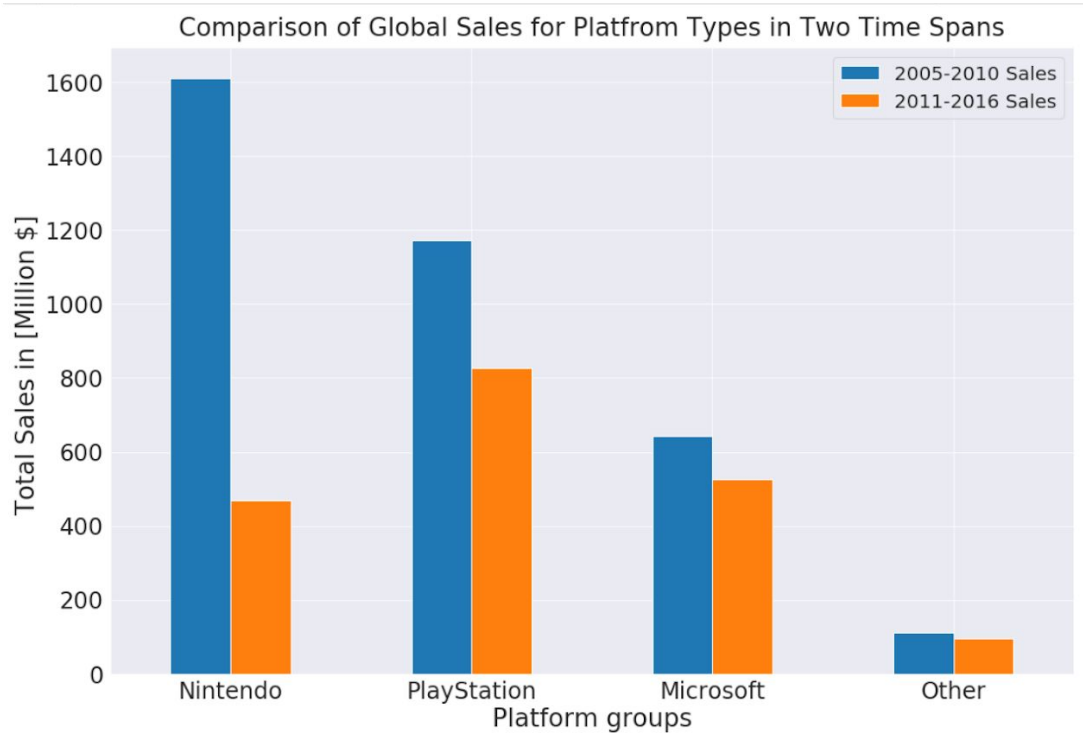| PlayStation	PS2, PS3, PS4, PlayStation, PSP, PlayStation Vita
Nintendo	Wii, WiiU, Nintendo Entertainment System, Game Boy, Nintendo DS, Nintendo 3DS, Nintendo 64, Super Nintendo Entertainment System, Nintendo Game Boy Advance
Microsoft	Xbox, Xbox One, Xbox 360
Other	PC, 2600, GC, GG, GEN, DC, SAT, SCD, WS, NG, TurboGrafx-16, 3DO Interactive Multiplayer, NEC PC-FX

- PlayStation and Nintendo has relatively equivalent sales
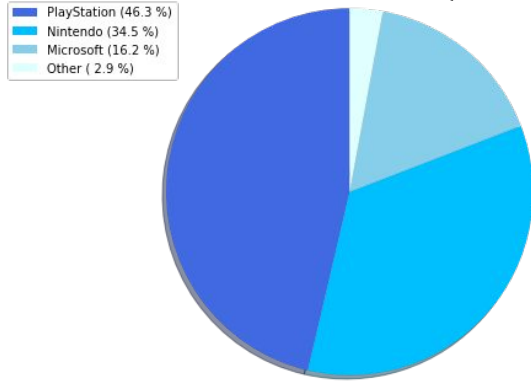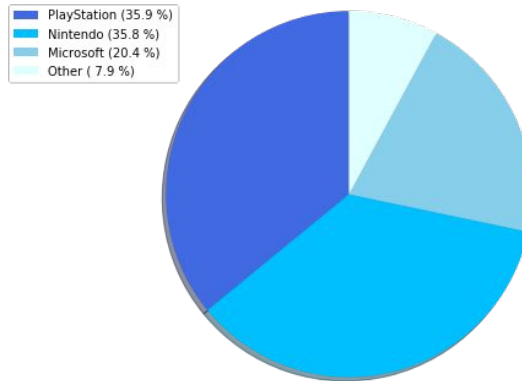
Platform sales in Global

PlayStation (41.4 %)
Nintendo (35.5 %)
Microsoft (16.0 %)
Other (7.1 %)
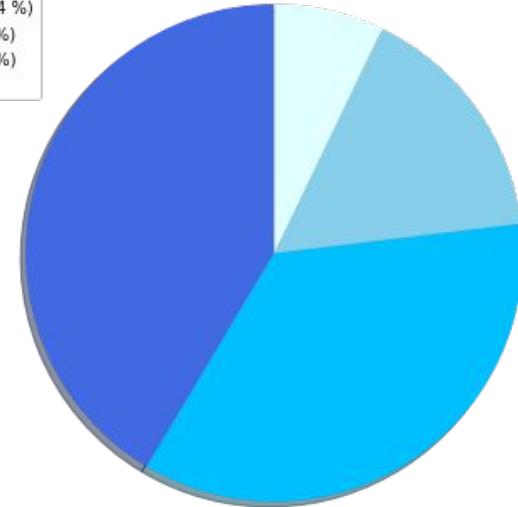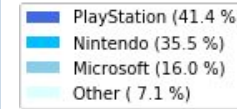
Platform Sales Trend--Total

Comparison of Global Sales for Platfrom Types in Two Time Spans

- Nintendo sales decreased dramatically

Platform Sales Trend--Area

Platform sales in Europe
- PlayStation (46.3 %)
- Nintendo (34.5 %)
- Microsoft (16.2 %)
- Other (2.9 %)
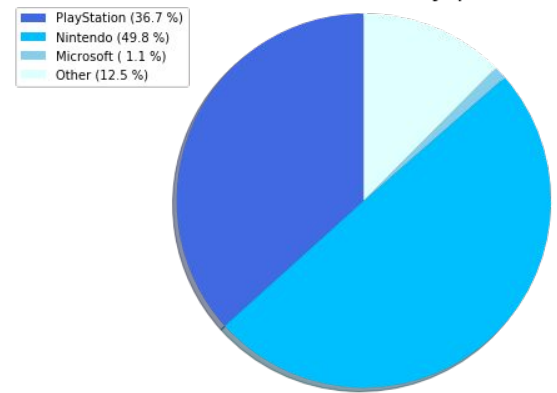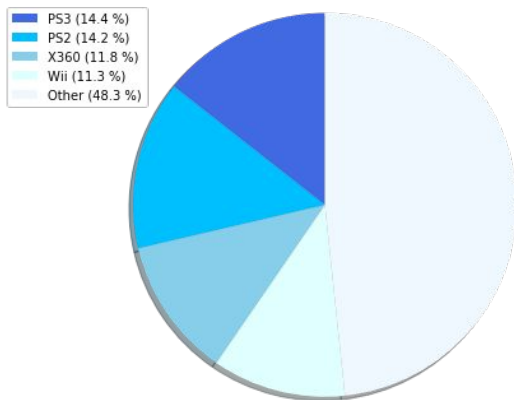
Platform sales in North America
- PlayStation (35.9 %)
- Nintendo (35.8 %)
- Microsoft (20.4 %)
- Other (7.9 %)

Platform sales in Japan
- PlayStation (36.7 %)
- Nintendo (49.8 %)
- Microsoft (1.1 %)
- Other (12.5 %)

Top 4 Platform sales in Europe
- PS3 (14.4 %)
- PS2 (14.2 %)
- X360 (11.8 %)
- Wii (11.3 %)
- Other (48.3 %)

Top 4 Platform sales in NorthAmerica
- X360 (14.1 %)
- PS2 (13.7 %)
- Wii (11.9 %)
- PS3 (9.2 %)
- Other (51.2 %)

Top 4 Platform sales in Japan
- DS (13.7 %)
- PS (10.9 %)
- PS2 (10.8 %)
- SNES (9.1 %)
- Other (55.5 %)

Game types total sale——trend

Comparison of Global Sales for Genre in Two Time Spans
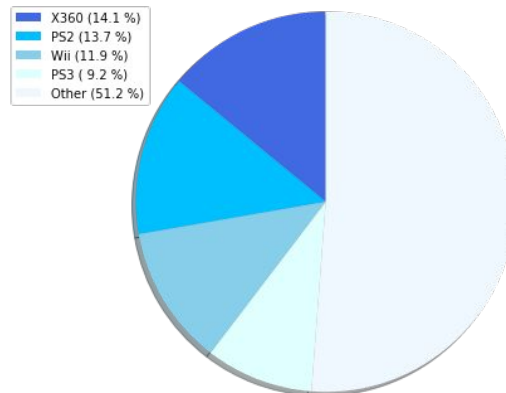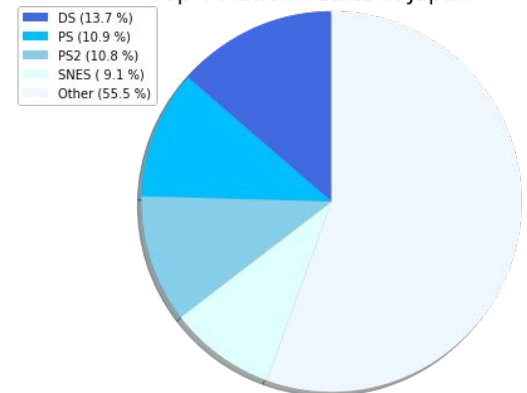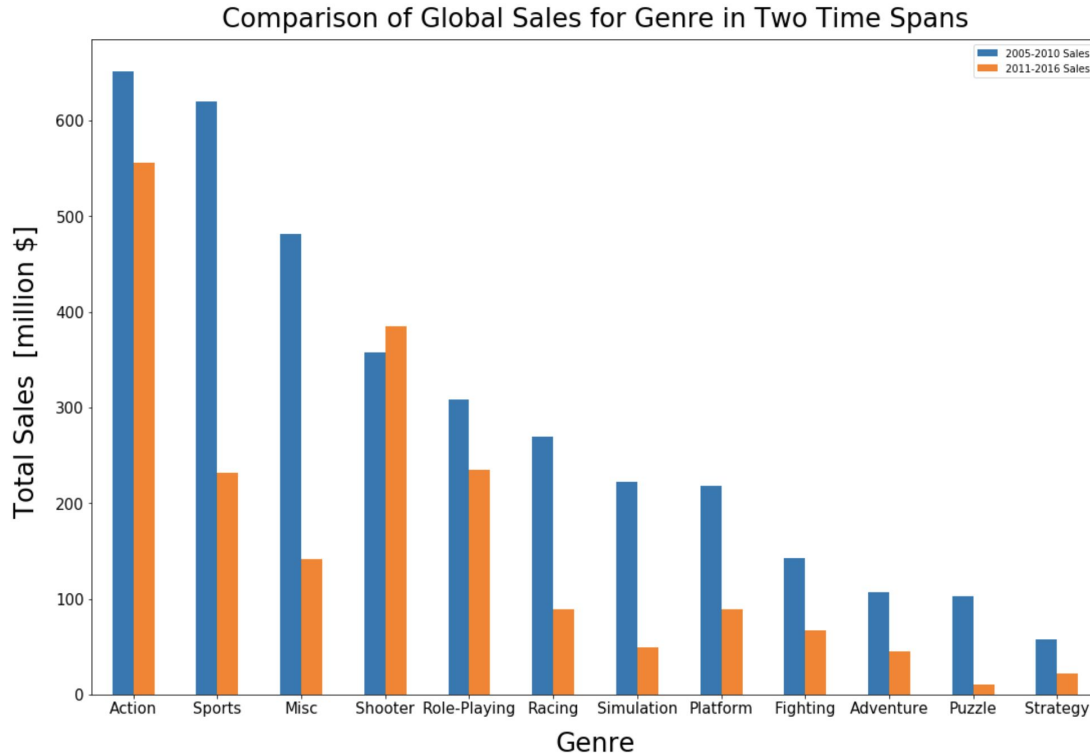
- The hot sale of shooter games lasts longer

Game types total sale——trend

Global sales vs. year of top 5 genres
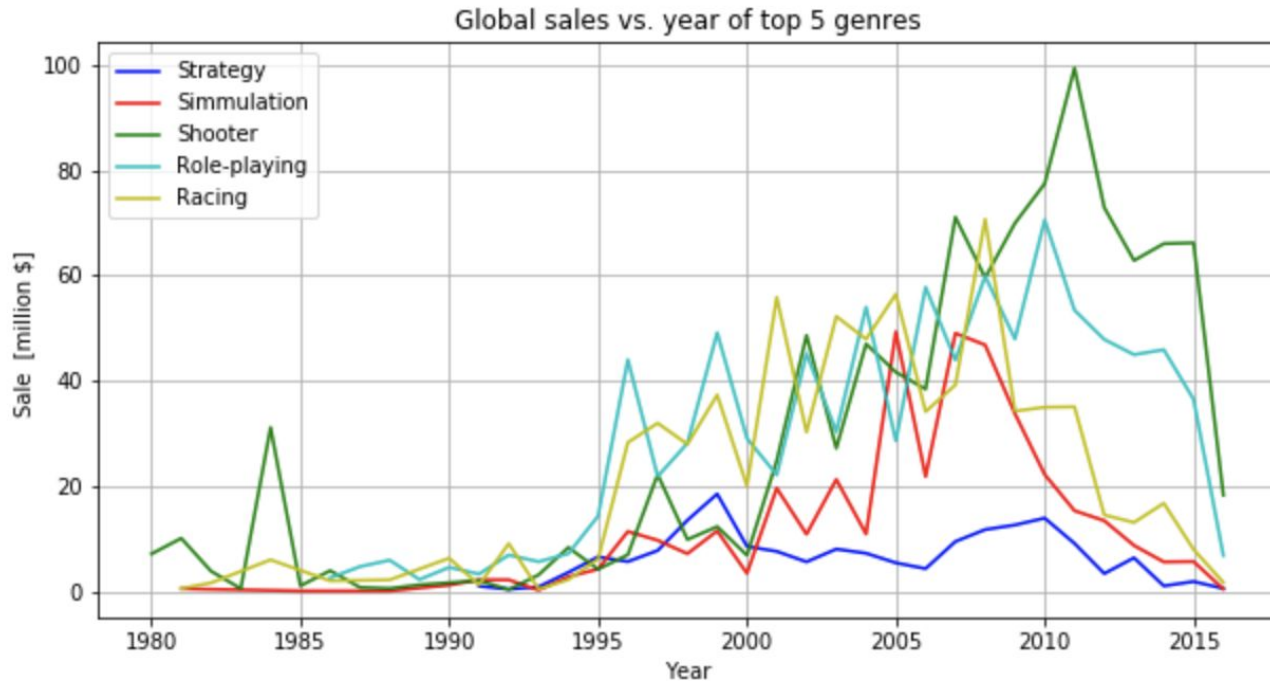
- Independent of time fluctuation, preference of game types maintain consistency

Game types sale——trend (area)

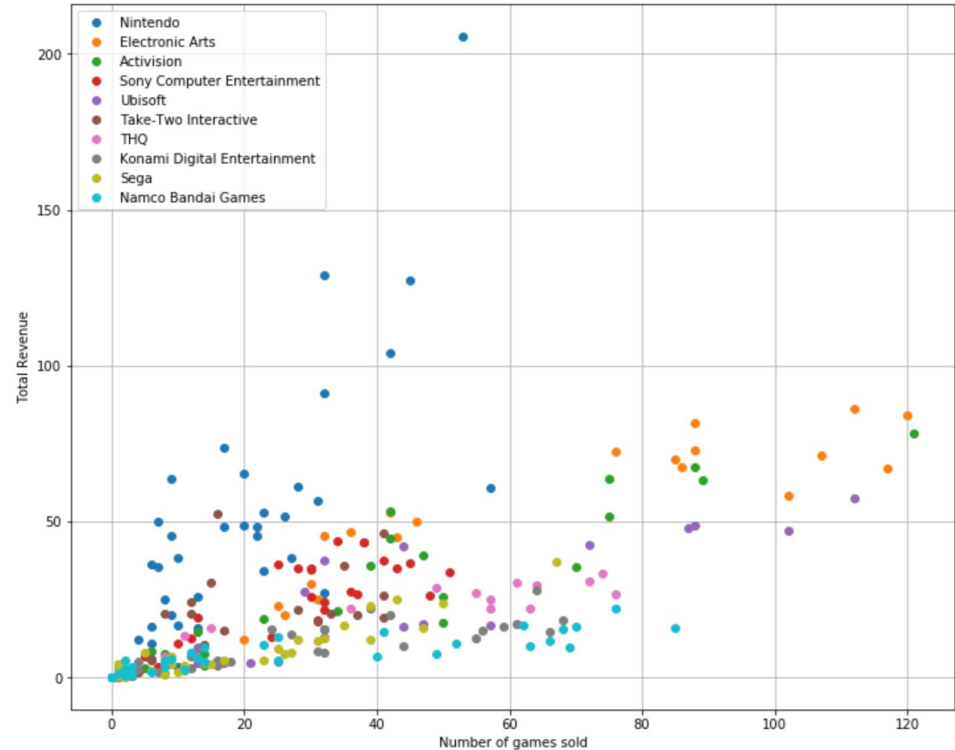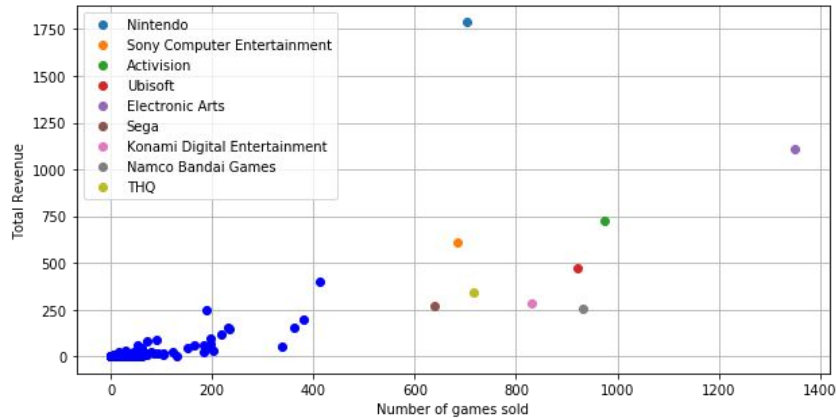NA sales vs. year of top 5 genres

EU sales vs. year of top 5 genres

JP sales vs year of top 5 genres
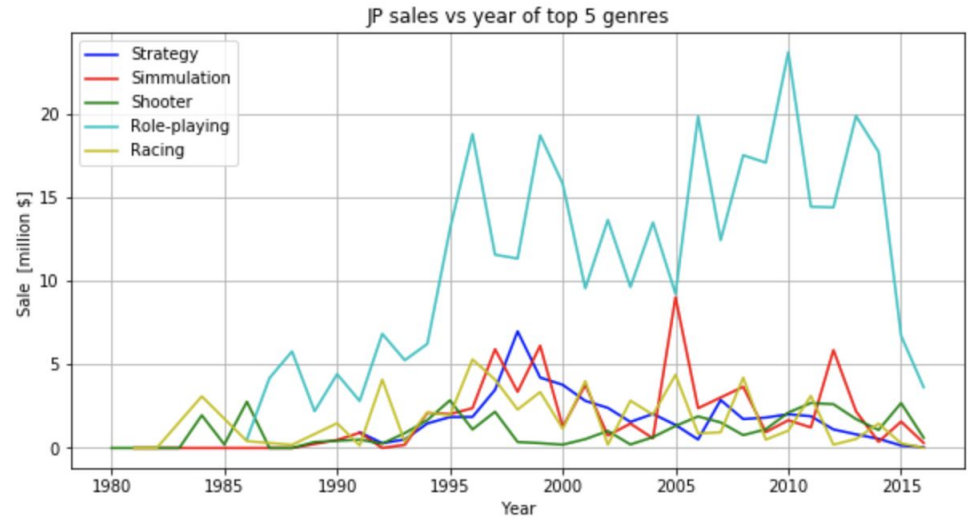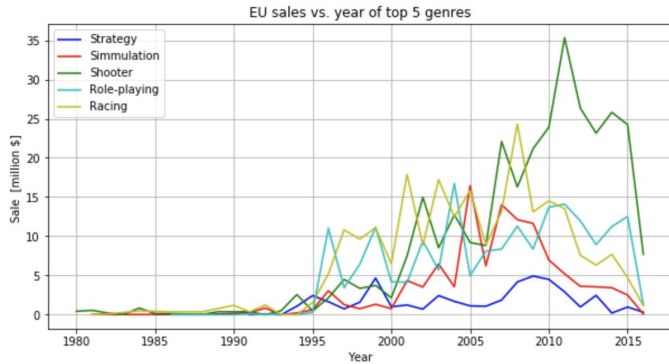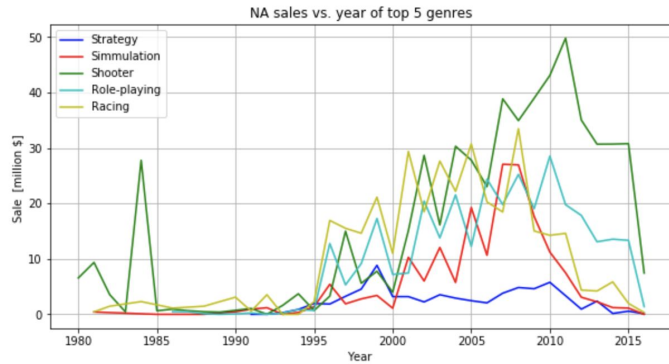
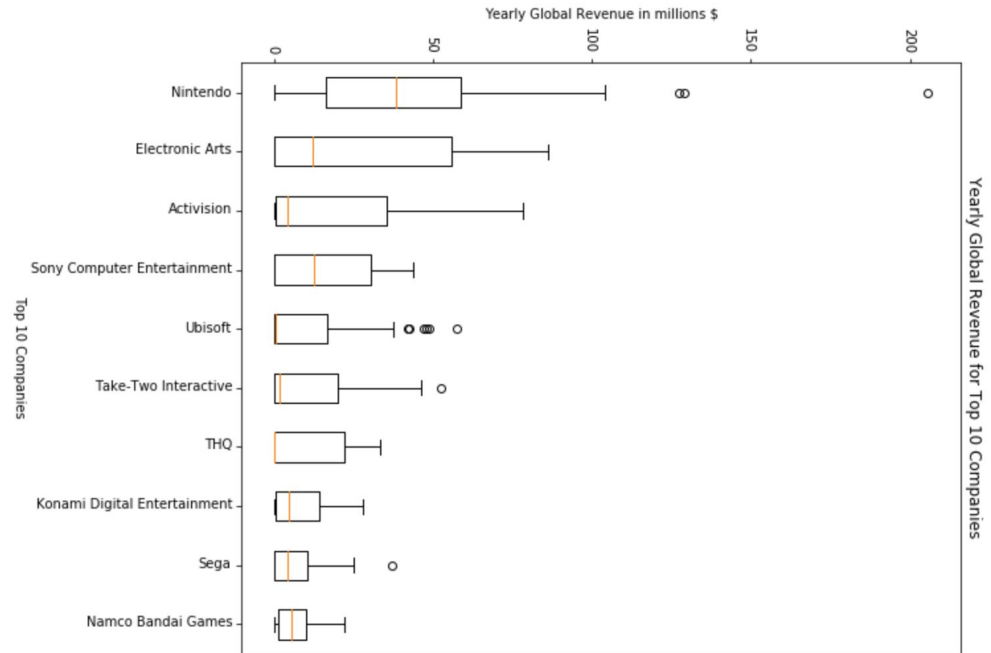- Japan shows the preference of different game types

Strategies

- It is better to specialize rather than brute-force release volumously

Strategies

- On average per year
  - Yearly rate > overall gains

Questions