- Video game industry keeps thriving these years;

- Many game companies need market researches;
- Websites like Metacritic have the data, but those data are not well organized or visualized;

- My preliminary analyses provide insights on: genre, platform, release country and rating;

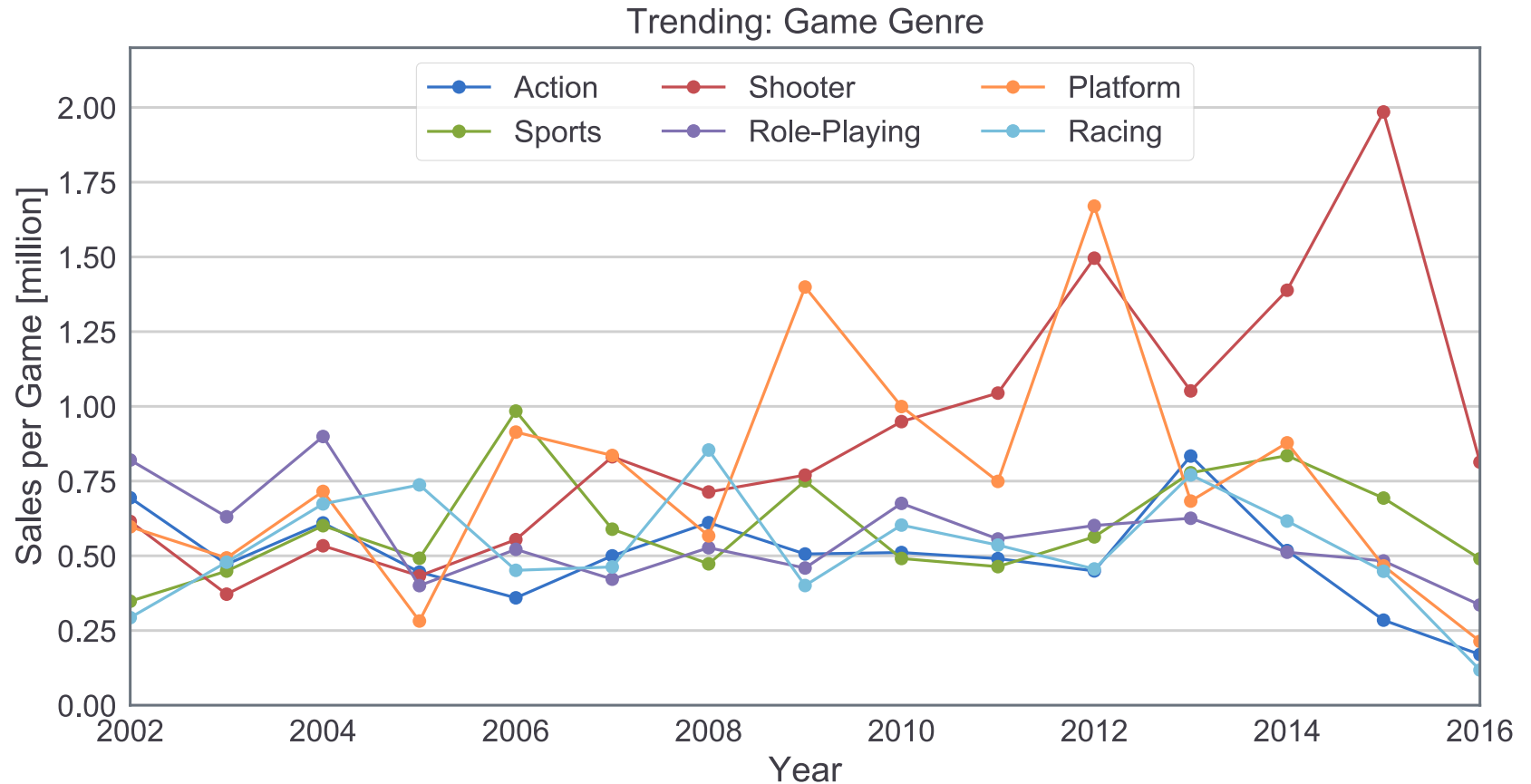- Goal is to build a webpage to provide game company with intuitive information.

How Game Genre Affect Sales?
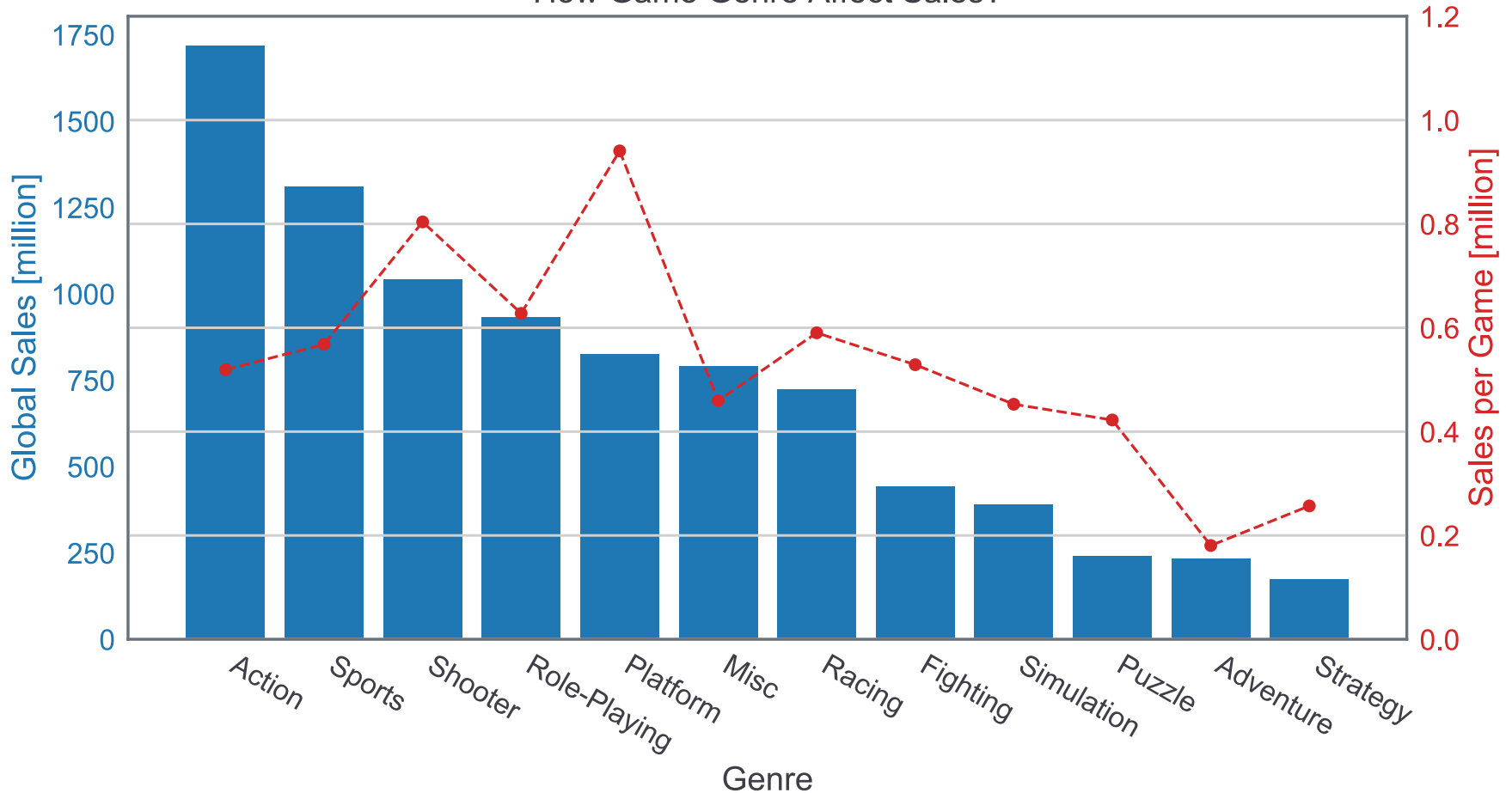
- Action, sports and shooter have largest sales;
- But platform has largest sales per game.

Trending: Game Genre
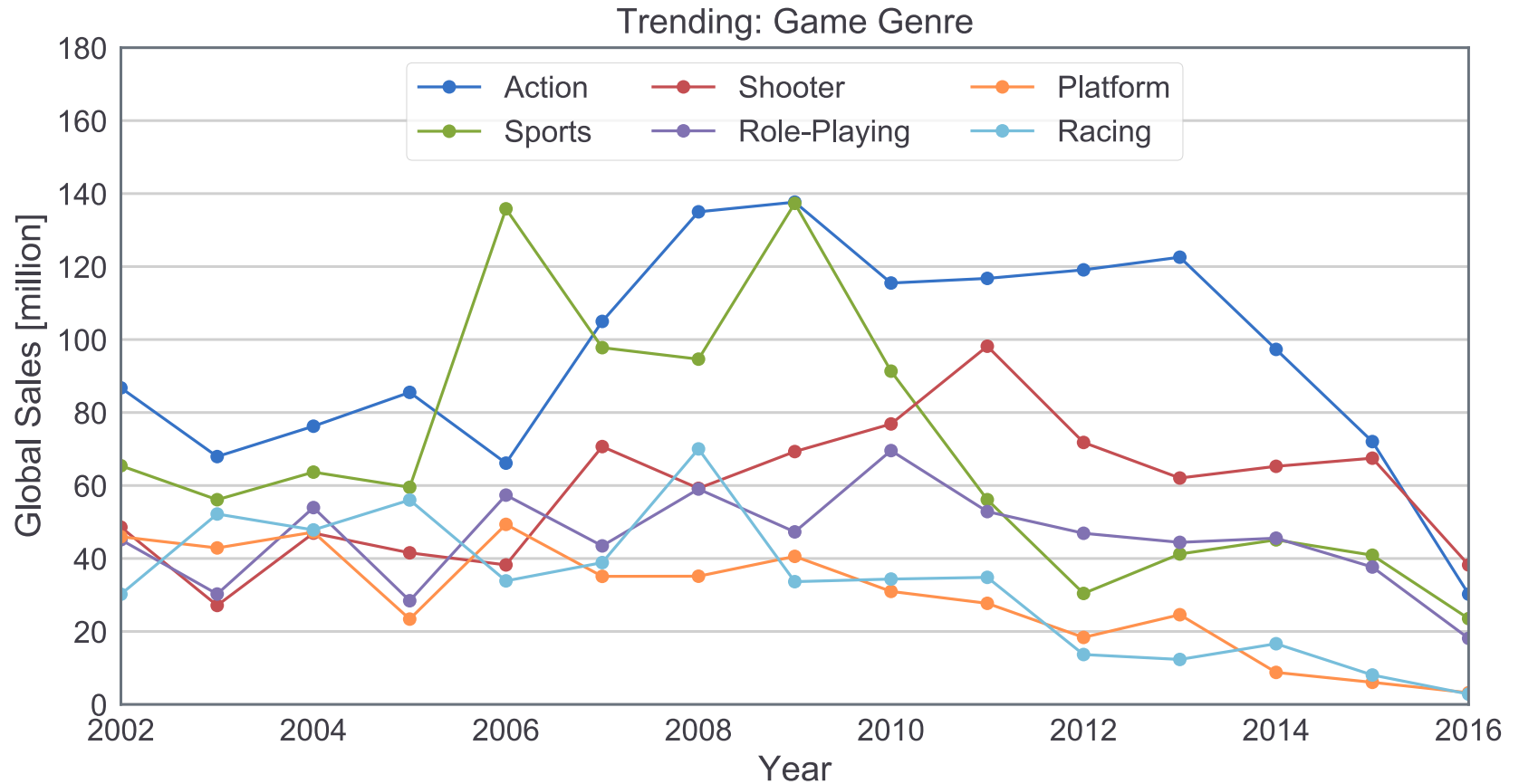
- Sales of most genres dropped after 2009;
- Action games sales dropped dramatically.

Trending: Game Genre

- Sales per game oscillate: no big drop;
- Shooter games sells best recently;
- Market in platform game seem to saturate.

- Conclusions and suggestions on game genre:
  - Action game donates total sales, but sales dropped in recent years;
  - Shooter game perform well recently, though 2017 and 2018 data needed for confirmation;
  - Oscillations observed in sales per game: not wise to release same genre every year;

- Future work: digital downloads will impact traditional sales, need to check the data accuracy: learning scraper…

Console war: number of games
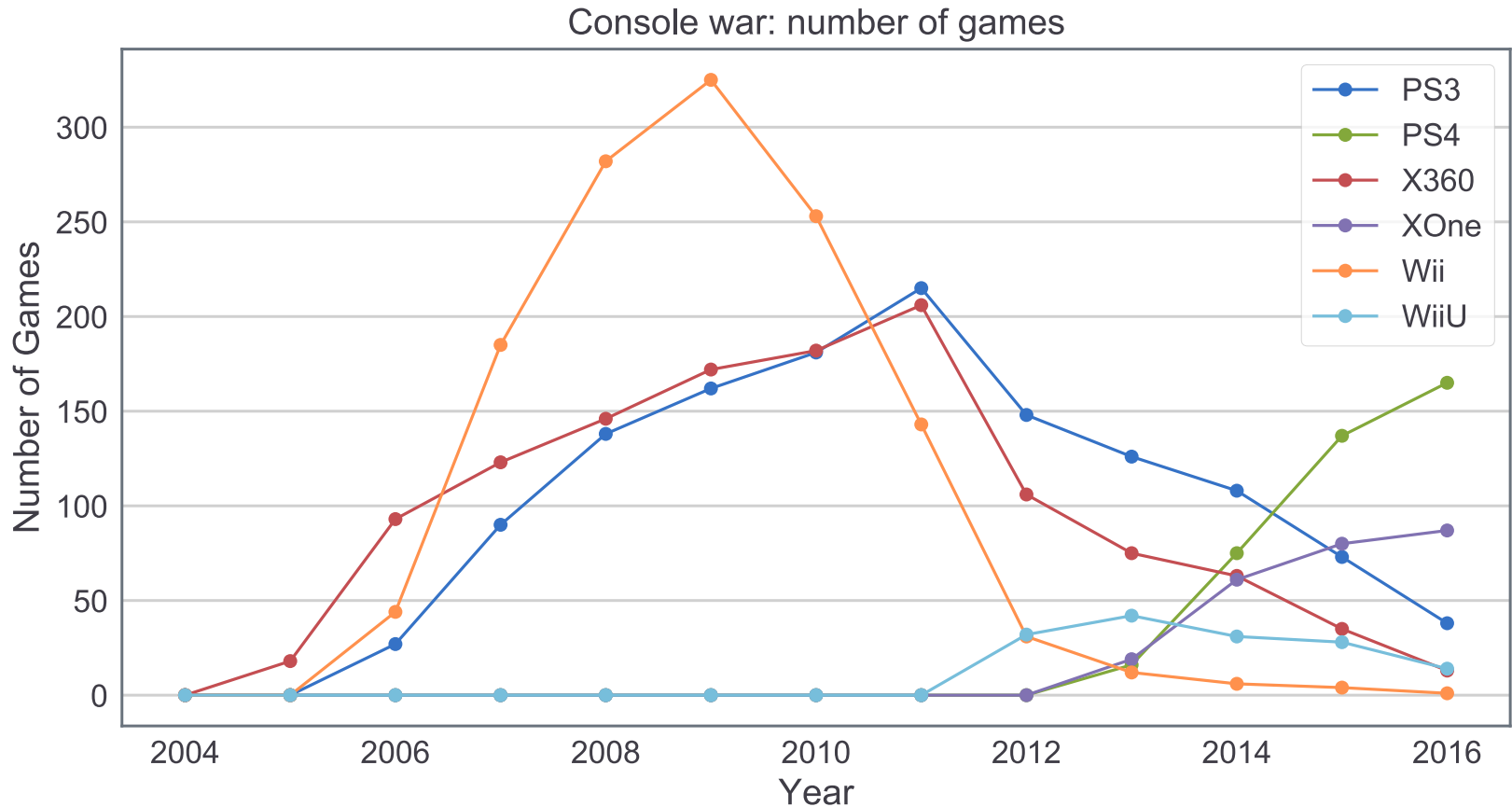
- In last generation, much more games released for Nintendo Wii;
- In this generation, Wii U no longer supported by many games;
- PS4 wins over XboxOne by a large margin: more games on PS4.
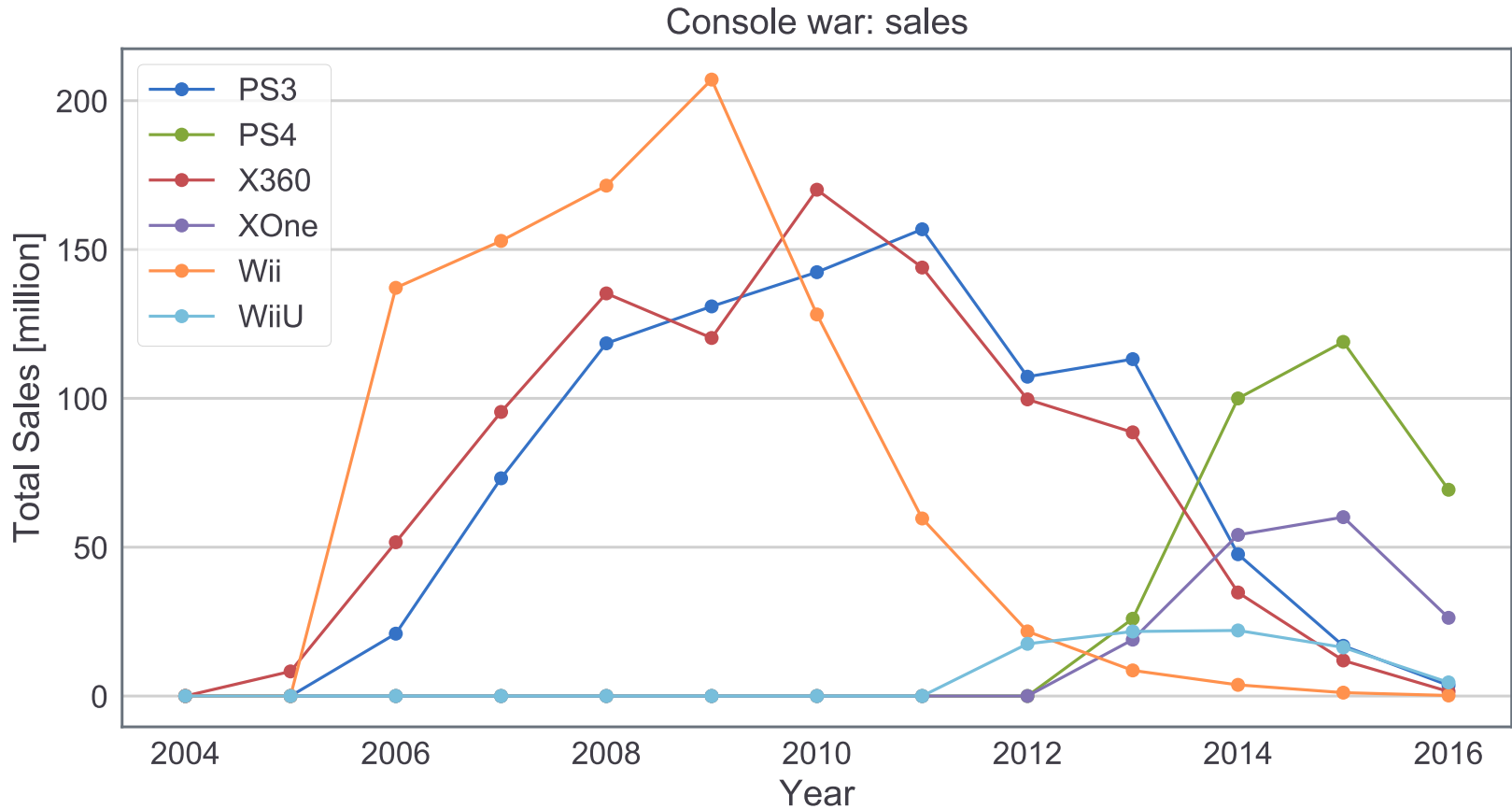
Console war: sales

- Global sales have the same story
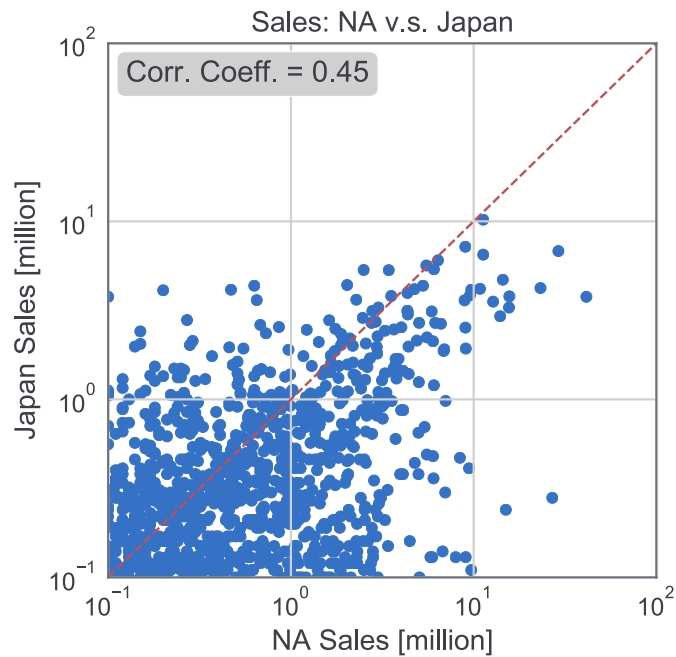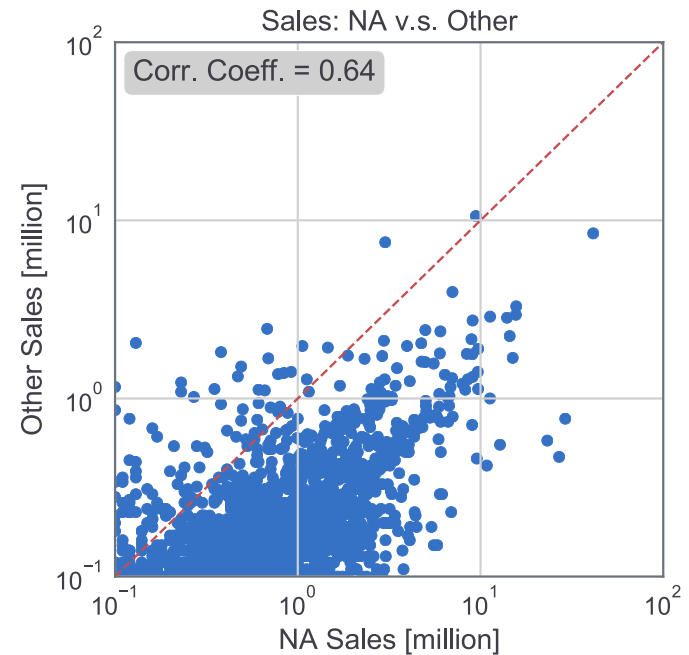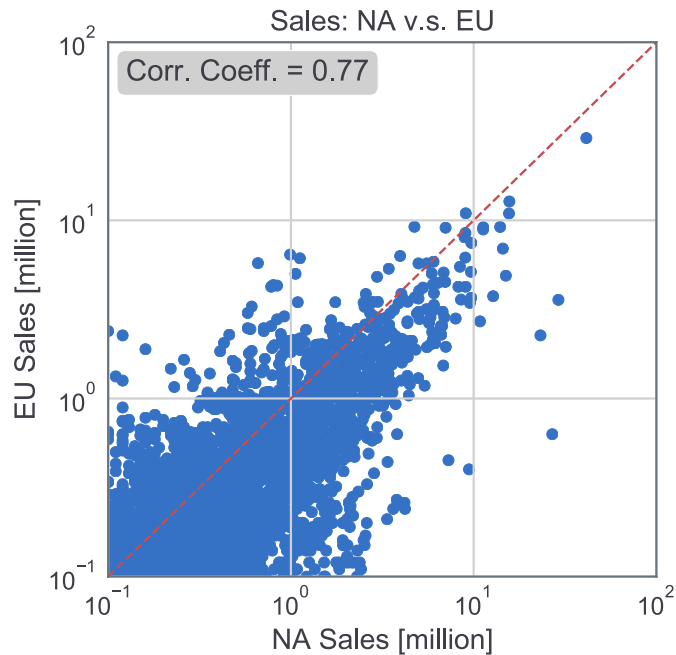- Last gen: Wii > PS = Xbox
- This gen: PS > Xbox > Wii

- Conclusions on console war:
  - Nintendo did great with Wii, but Wii U is a big failure: innovation v.s. hardware?
  - Sony's PS perform stably, it beats Xbox in this gen's competition: exclusive games?
  - Microsoft lost the console war against Sony: Xbox One needs better hardware?

- Future work: three improved consoles were released last year: Switch, PS4 pro and Xbox One X. They were trying to solve the issues mention above. Data will tell the outcome.

Trending: Region
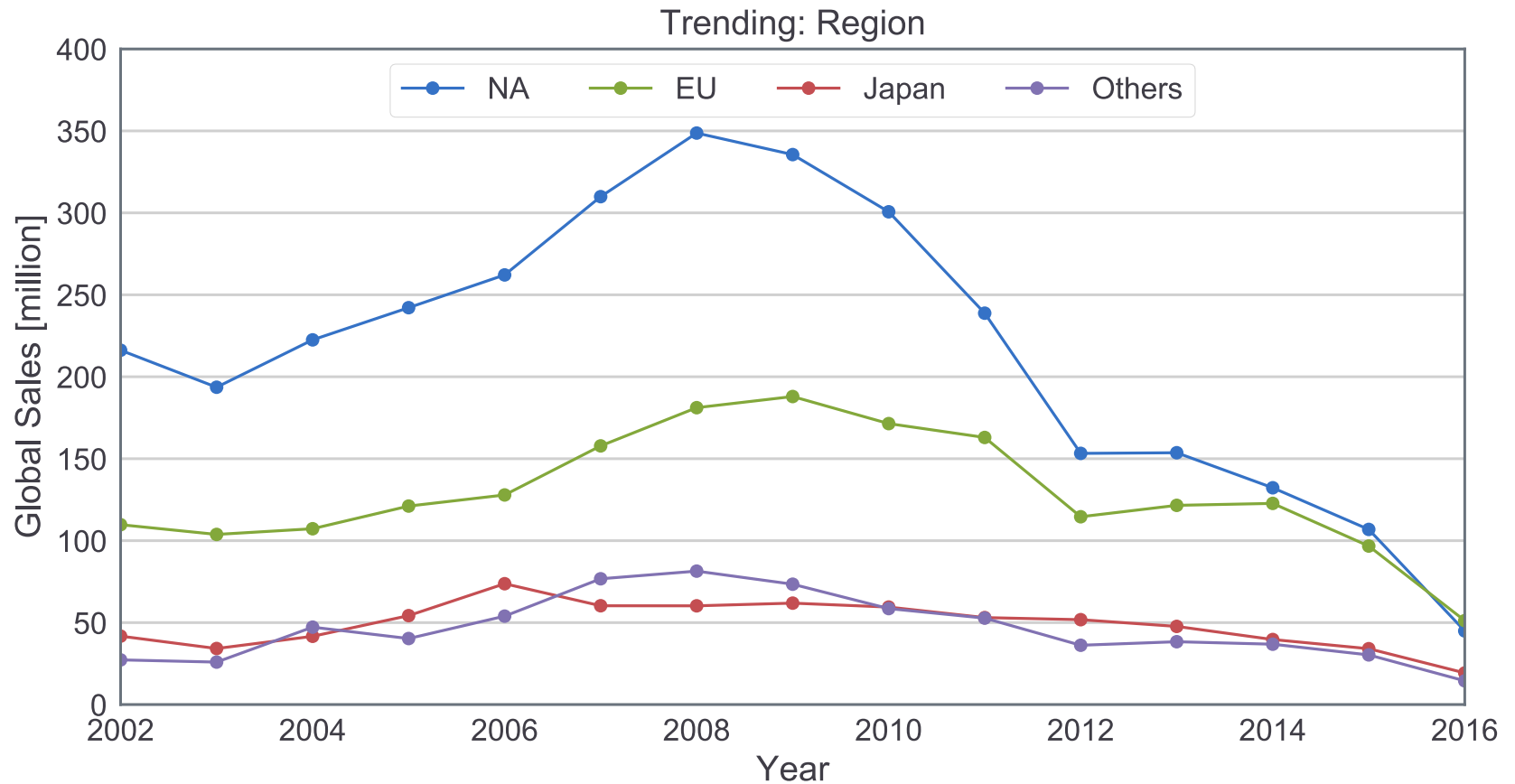
- Global sales: NA > EU > Japan = Others;
- All market shrinks in recent years, especially in NA.

Sales: NA v.s. EU — Corr. Coeff. = 0.77

Sales: NA v.s. Other — Corr. Coeff. = 0.64

Sales: NA v.s. Japan — Corr. Coeff. = 0.45

- Correlation between NA and EU markets is quite strong;

- NA market weekly correlated with Japan market;

- Clear offset observed in other regions compared with NA.

- Conclusions and suggestions on regional sales:
  - NA market has much more shares than EU, Japan or others;
  - Markets in all regions shrink in recent years: impact from digital downloads?
  - NA market is more correlated with EU, and localization in Japan or other regions might not be profitable

- Future work: players in different regions have different taste, more careful analyses will help promote new games.

How Game Rating Affect Sales?
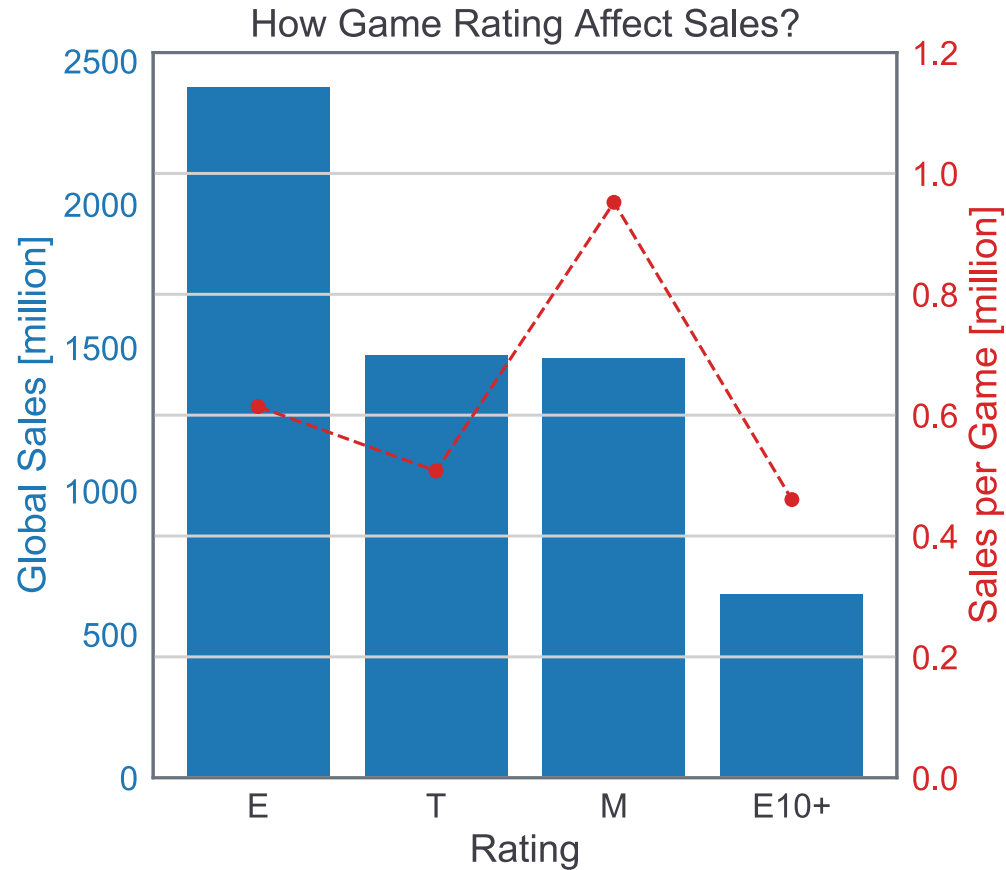
- Overall, rating E sells the best;
- Rating M sells most per game;

Trending: Game Rating
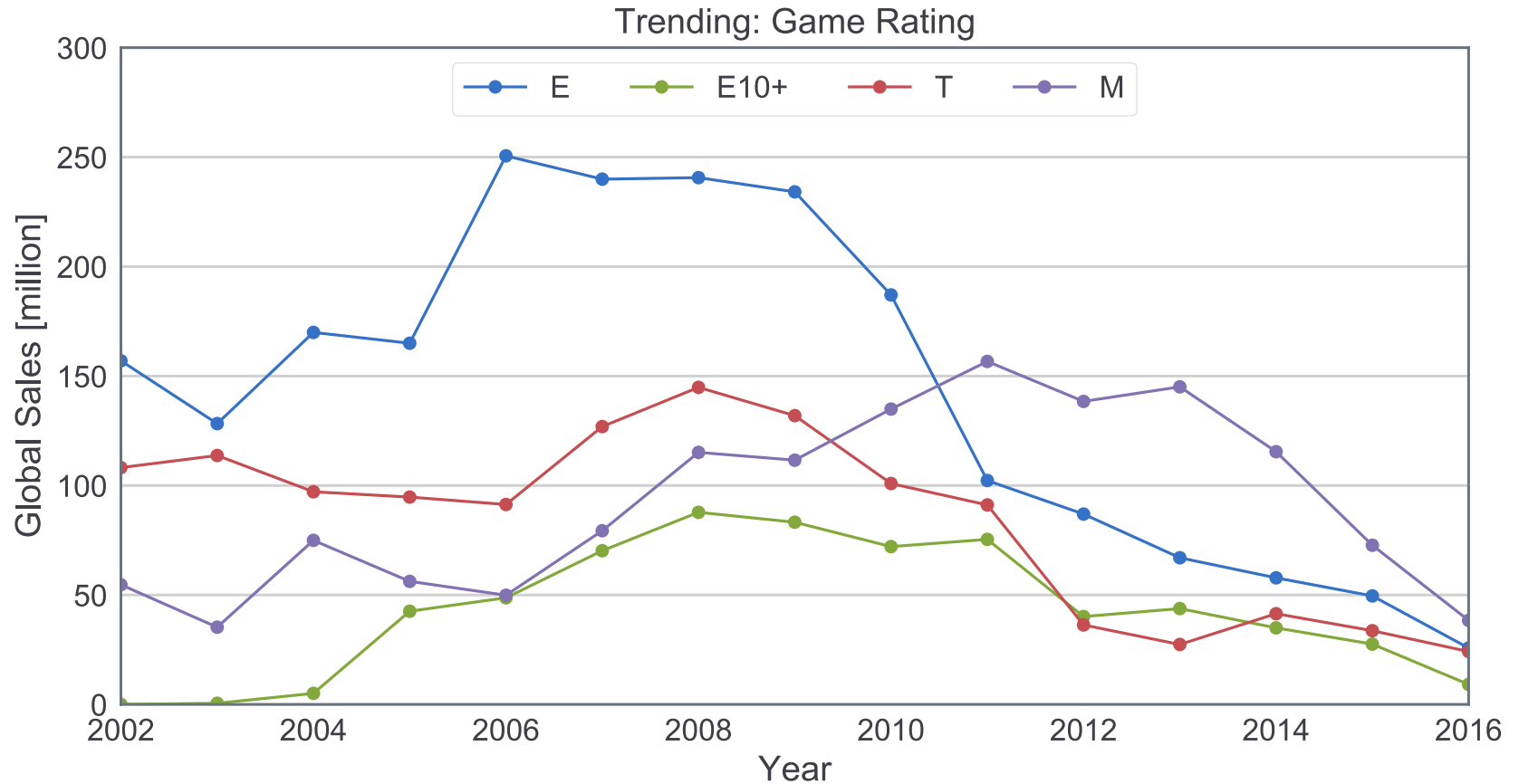
- Rating E sales dropped significantly after 2009;
- Rating M dominated the market after 2009;

- Conclusions on game rating:
  - 10 years ago, most games are rated E;
  - Now game market is flooded with rated M;
  - No surprise since adults have the money to invest on games, and people look for thrilling in games.

- Future work: analyze why sales with rated E are dropped dramatically in recent years. Maybe this goes together with the fall of Nintendo, since Nintendo is famous for making good rating E games.