

# GAMECO

## CASE STUDY



# Business Problem

GameCo, a fictional video game company, wants to use data to inform the development of new games. Evaluate existing video games sales data to help GameCo develop a competitive go-to-market strategy. Perform a descriptive analysis to foster a better understanding of how GameCo's new games might fare in the market.

Key business questions:

- Are certain types of games more popular than others?
- What other publishers will likely be the main competitors in certain markets?
- Have any games decreased or increased in popularity over time?
- How have their sales figures varied between geographic regions over time?

# Data Overview

- The [Video Game Sales](#) data set covers historical sales of video games (for games that sold more than 10,000 copies) spanning different platforms, genres, and publishing studios. This data was drawn from the website [VGChartz](#).
- Few important points regarding the data set:
  - It tracks the total number of units of games sold (not financial figures) from 1980 to 2016.
  - The numbers represent units sold in millions.

## Tools

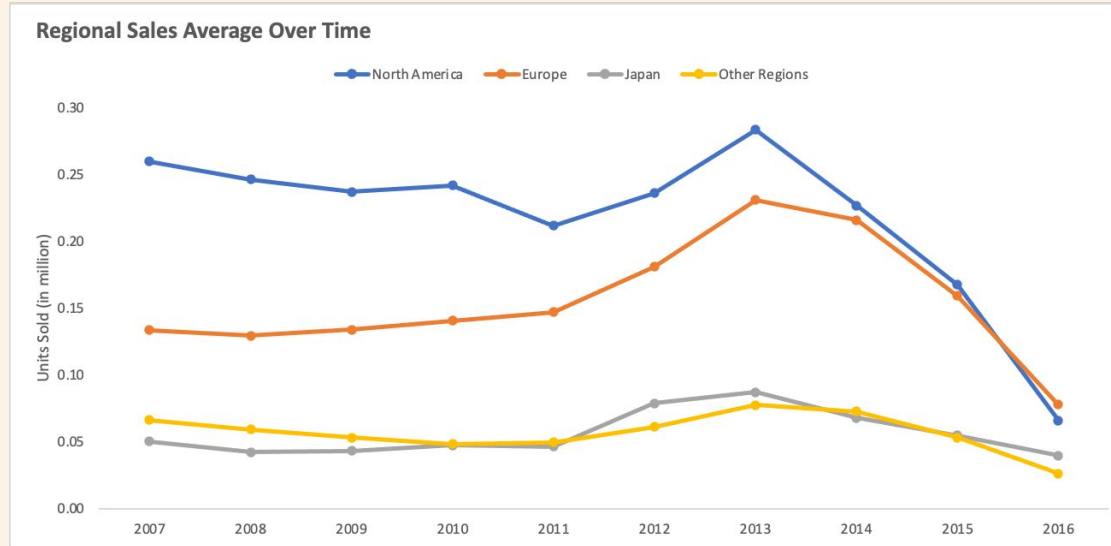
- Excel

## Analytical Methods

- |                              |                      |
|------------------------------|----------------------|
| Grouping data                | Summarizing data     |
| Pivot tables                 | Descriptive analysis |
| Visualizing results in Excel | Presenting results   |

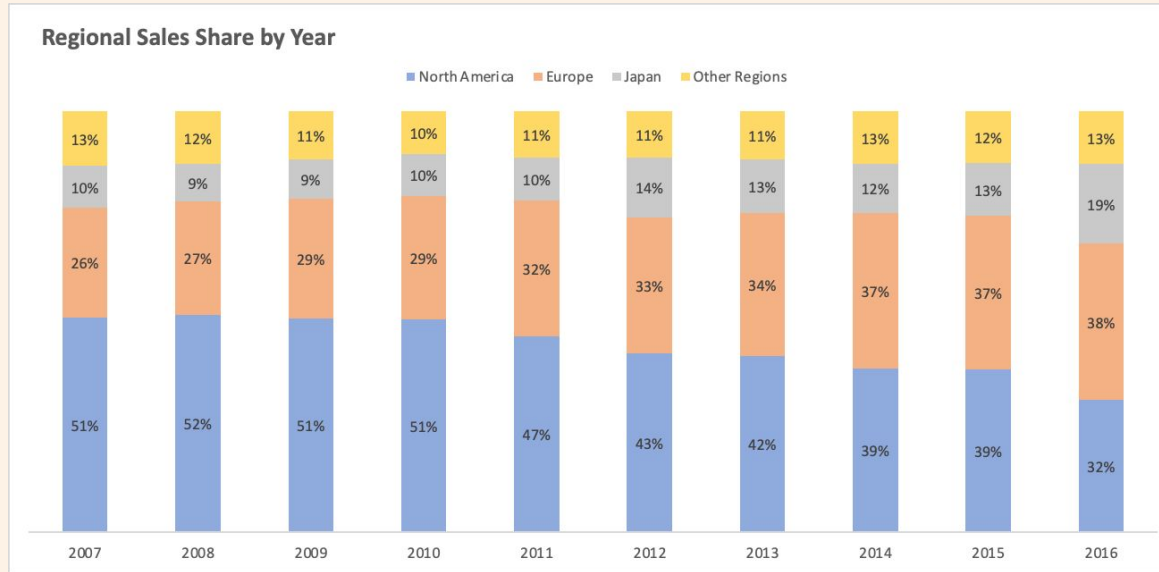
## 1. Initial Exploration

- Created a line chart to see how global sales average has moved over the years.
- After seeing a global decline in sales, dived deeper by looking into how sales average varied across various regions.
- Applied Compound Annual Growth Rate (CAGR) to evaluate how different markets performed in current years.



- 2012-2016
  - A sharp downward bent is observed in North American sales during this period with a strikingly low CAGR of -23% in its sales average.
  - On the other hand, Europe's CAGR is relatively less steep at -16%.
  - Average European sales overtook North America in 2016.

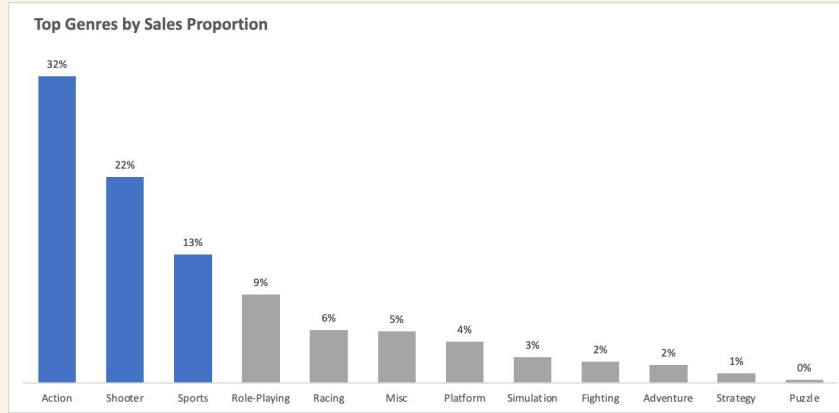
- Used a 100% stacked bar chart to understand swings in the market and check whether any market becomes dominant in terms of sales share.
- Capitalizing on this will be key information for the marketing team.



- **2011-15**
  - A period of steep sales trajectory for North America with a negative market share CAGR of -4%.
  - Europe thrives with an impressive progress made during this period with a positive market share CAGR of 3%.
  - Japan owns third largest market proving to be competent with a CAGR of 4%.
- **2016**
  - The annual growth rate of Europe was 2% as against North America's -18%.
  - Europe surpasses North America for the first time ever by gaining the largest market share among all regions by a significant difference.
- Europe is expected to have a rapid increase in sales over the next few years.
- Based on the above observations, European market interested me and this is what I specially focused on for the remainder of the project.

## 2. Insights

- With time, different attributes of video games come in and out of popularity and relevance.
- Analyzed recent data of last 5 years to forecast which of these aspects are going to be popular in 2017.
- For example, investigated popular genres by looking at the market share of each one of them and also at their sales average.



Top Genres by Sales Average	Units Sold (in million)
Shooter	0.49
Platform	0.26
Sports	0.25
Racing	0.25
Simulation	0.19
Action	0.16
Misc	0.15
Role-Playing	0.13
Fighting	0.10
Strategy	0.07
Puzzle	0.05
Adventure	0.03

- Action, shooter and sports are the top 3 genres accounting for more than 60% market share.
- These 3 genres are among the top 5 in both market share as well as sales average.
- Uncovered an interesting insight:
  - Platform ranks itself in the bottom half of market share but has the second highest sales average.
  - A similar pattern is observed in simulation as well.
- Also looked at the popular platforms and publishers in the same fashion.

## Conclusions & Recommendations

- In light of the new information, Europe is anticipated to emerge as the potential dominant market.
- Place a higher priority on advertising funds for European market with a focus on the below attributes:
  - Popular genres: Action, shooter and sports
  - Popular platforms: PS4, PS3 and X360
  - Popular publishers: Electronic Arts, Activision, Ubisoft and Nintendo

## Final Project Deliverable

- [Presentation](#)

## Next steps and further research

- Track KPI revealing how customers in different markets react to the budget redistribution.
- Further research needs to be done in the Japanese market, seeing that Japan shows the promise of a lucrative sales market.
- Investigate the reasons behind rapidly decreasing sales in North America, considering its historical leadership over other regions.