Gaming Industry: Sales Drivers for Games

Cime Ajouz
James Janovsky
Rashmi Francis
Victor Fonseca

December/2019

What makes a game sell well?

Genre, target market, licensed platforms

What type of game to release, where and for which systems?

Ratings

Correlate historical ratings to historical sales

Sales prediction

Prepare a database that can help in future predictive endeavors

Project walkthrough

DATA COLLECTION

- Dataset "Video Games Sales" (Kaggle, 2016), based on a scrape of VGChartz.com

- RAWG API, scraped for this project

- Key: game name

DATASET COMPILATION

- Levenshtein Distance Ratio, for strings comparison

Ex.:
- Street Fighter 2
- Street Fighter II
- Street Fighter 2 – The World Warrior

EXPLORATORY ANALYSIS

- Analyzing sales in function of some drivers
- Correlation analysis ratings x sales

> TOOLS WE USED:

- BeautifulSoup
- Requests
- Json
- Pandas
- Numpy
- Matplotlib
- Seaborn

Data dictionary

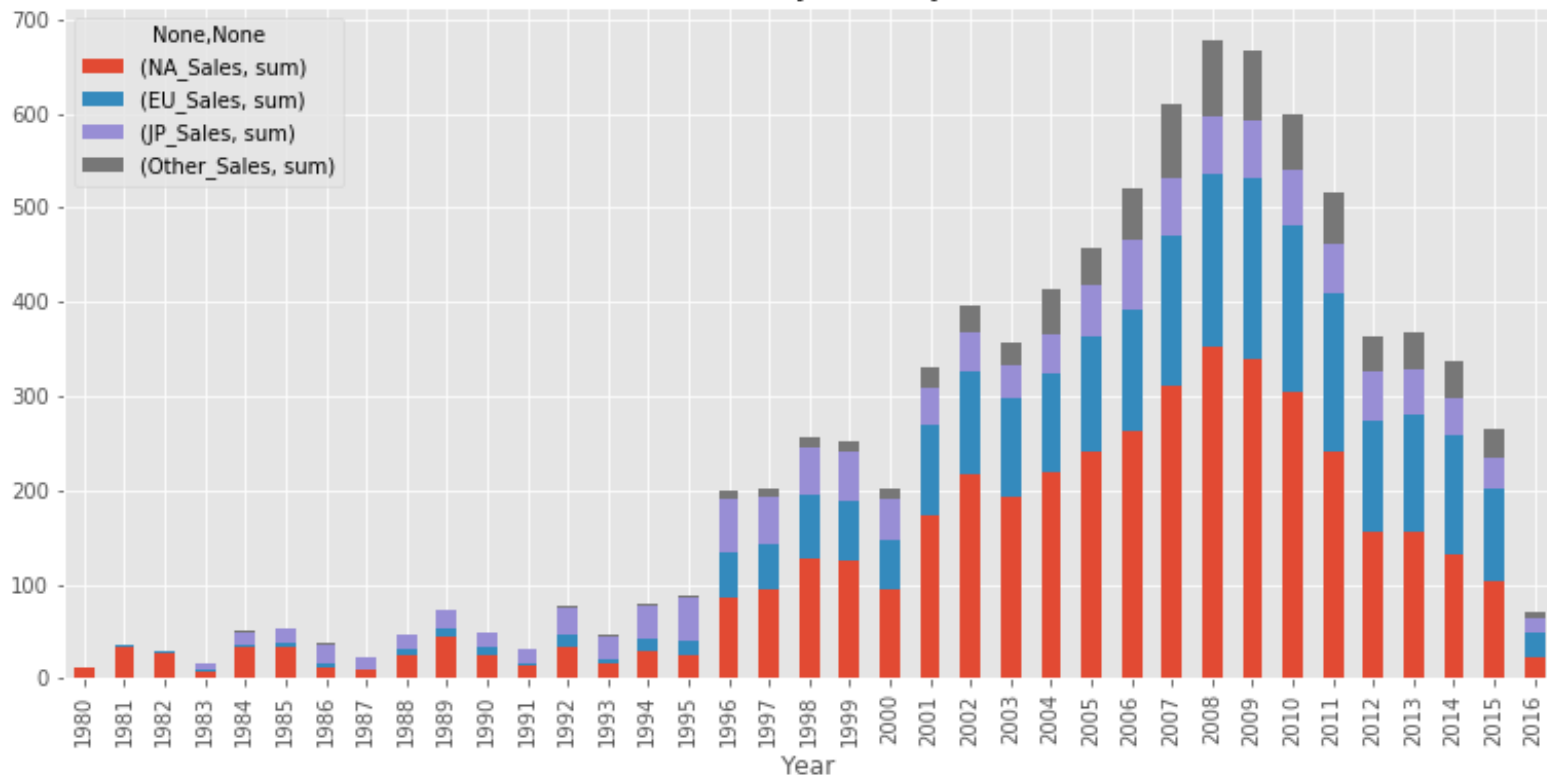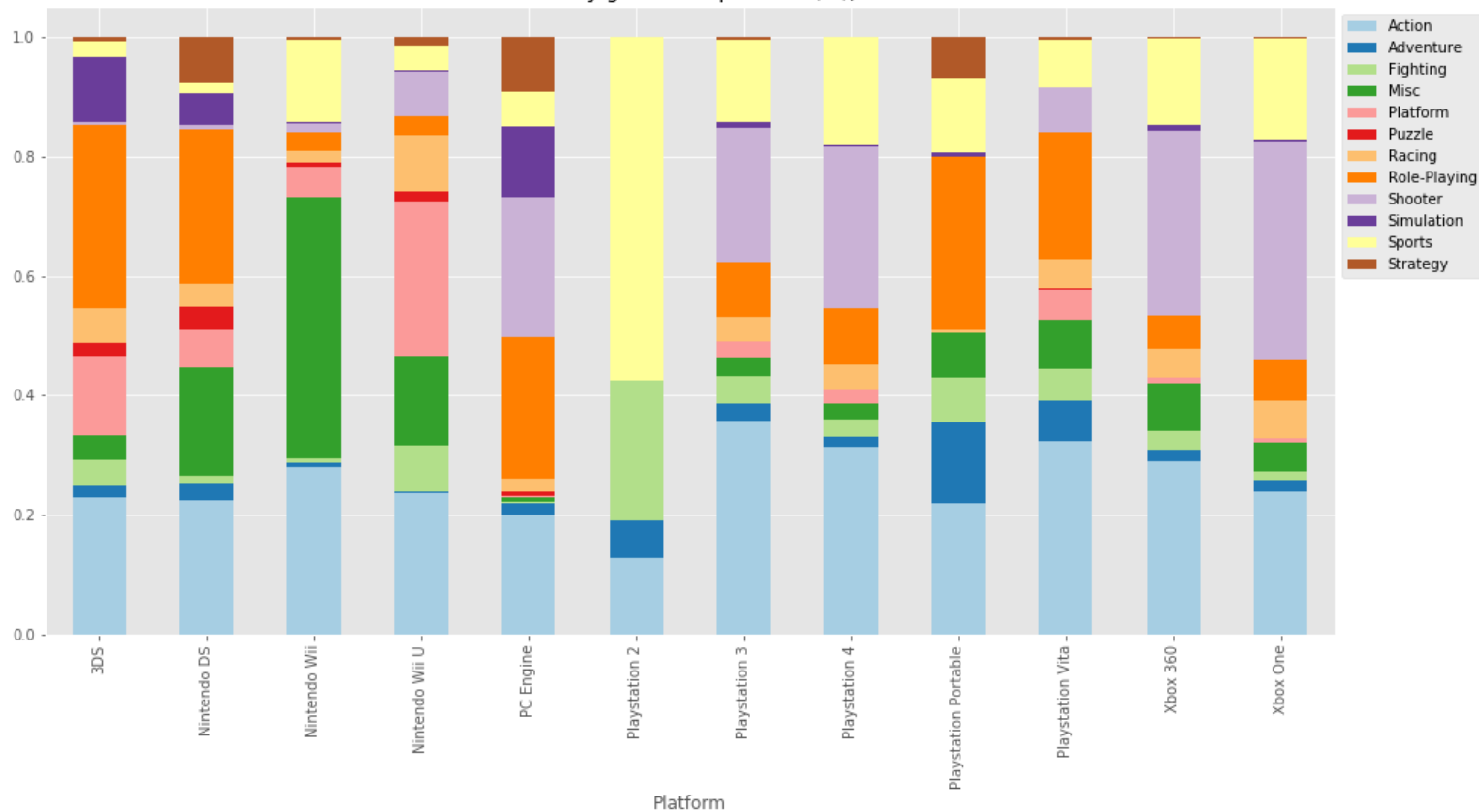| Source	Attribute name	Description
Video Game Dataset (Kaggle)	Name	Game name
	Platform	Platform (console) for which the game was released
	Year	Year of release
	Genre	Genre of the game
	Publisher	Publisher of the game
	NA_Sales	Sales in North America (in millions of units)
	EU_Sales	Sales in Europe (in millions of units)
	JP_Sales	Sales in Japan (in millions of units)
	Other_Sales	Sales in the rest of the world (in millions of units)
	Global_Sales	Total sales (worldwide)
RAWG API	API_release_date	Release date (used to confirm the game matching)
	API_playtime	Game estimated playtime
	API_rating	Game rating for RAWG users (1-5)
	API_n_platforms	Number of platforms for which the game was released
	API_search_name	Game name found on the API ((used to confirm the game matching)

CHART 1 - Yearly Sales by Market

Legend:
- (NA_Sales, sum)
- (EU_Sales, sum)
- (JP_Sales, sum)
- (Other_Sales, sum)

CHART 2 - Games sales by genre and platform (%), from 2010 to 2016

Legend:
- Action
- Adventure
- Fighting
- Misc
- Platform
- Puzzle
- Racing
- Role-Playing
- Shooter
- Simulation
- Sports
- Strategy

Platform (x-axis): 3DS, Nintendo DS, Nintendo Wii, Nintendo Wii U, PC Engine, Playstation 2, Playstation 3, Playstation 4, Playstation Portable, Playstation Vita, Xbox 360, Xbox One

Thank you