

DATA ANALYTICS CAPSTONE PROJECT

VIDEO GAMES SALES & RATINGS

Jayapura Team M-25



OUR TEAM



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Business Background



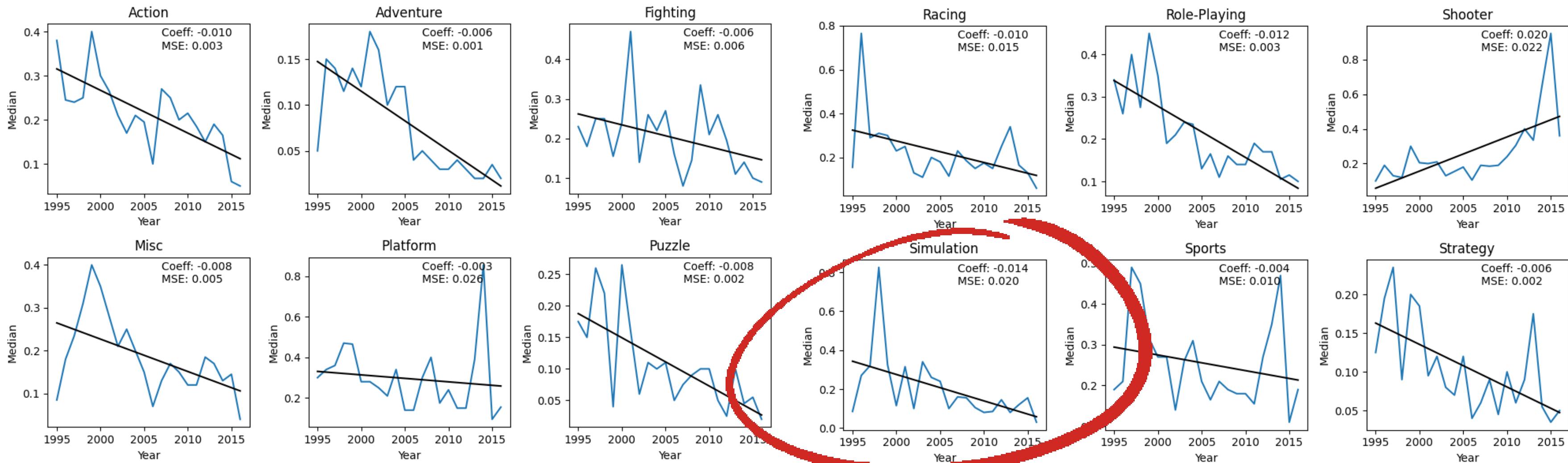
A video game, also known as a computer game, is an electronic game that can be interacted with using an input device, such as a controller, keyboard, or joystick. Video games can be used for entertainment and relaxation, but they can also be used for competitions and for computer learning.

The gaming market is constantly evolving, and technological advancements are opening new possibilities for game developers to create more immersive and engaging experiences through emerging technologies like cloud and VR gaming.

BUSINESS OVERVIEW

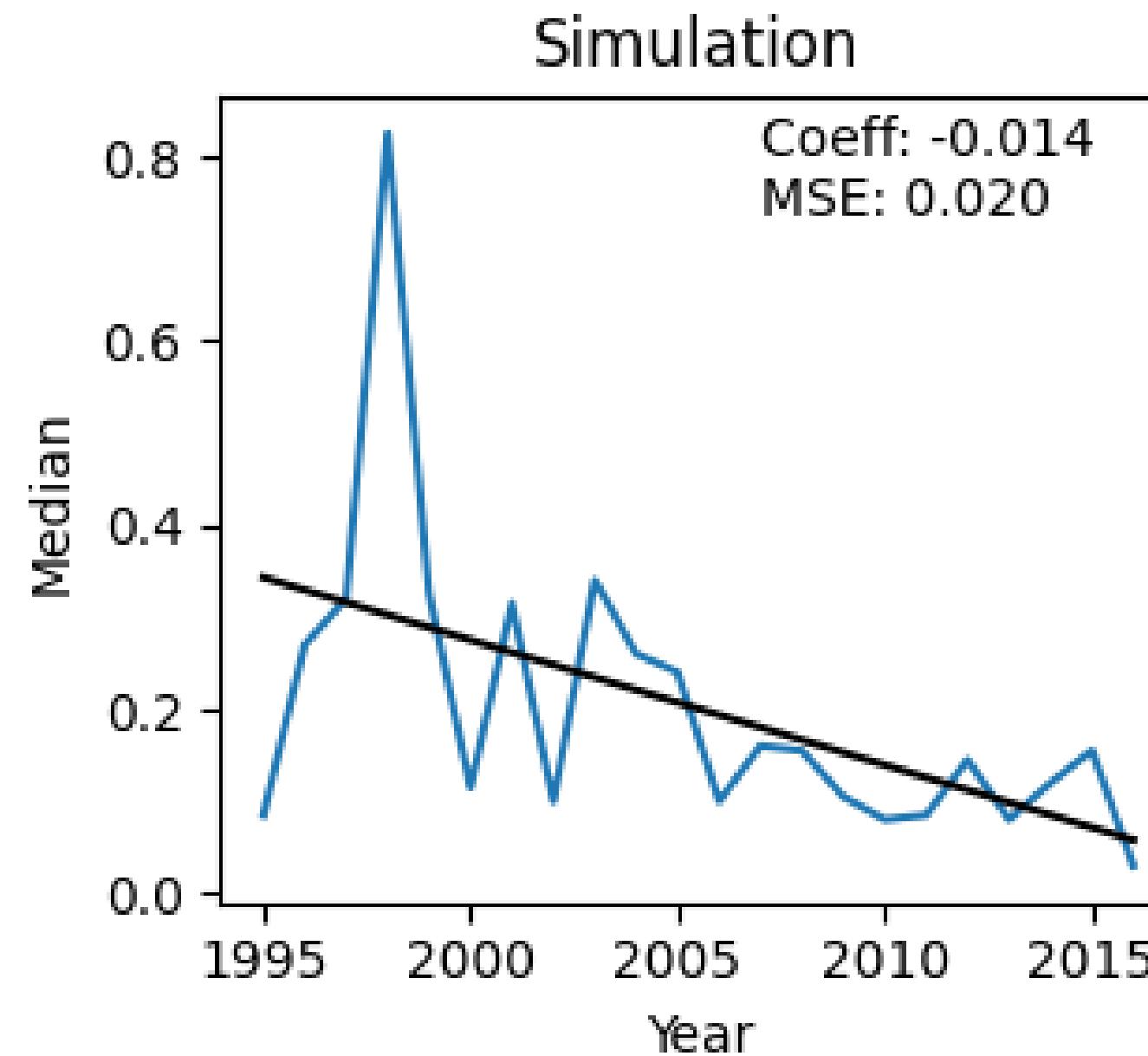


All game genres except Shooter have shown a decline in sales from 1995 to 2016.



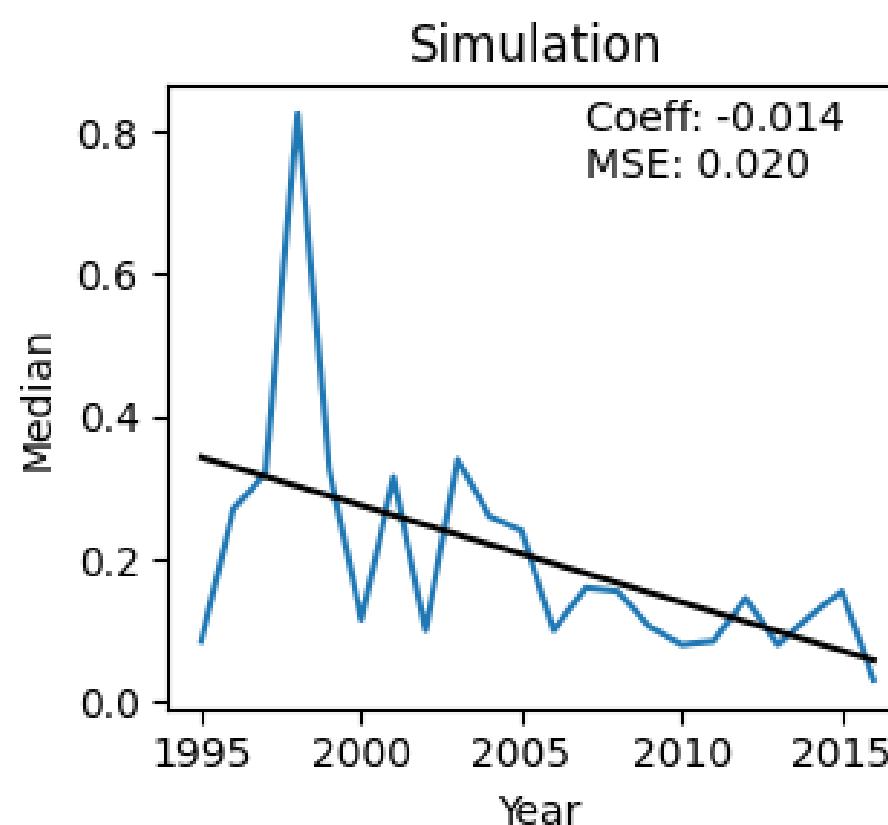
BUSINESS SITUATION

Among the declining genres, Simulation games are one of the genres with the biggest decline in sales.



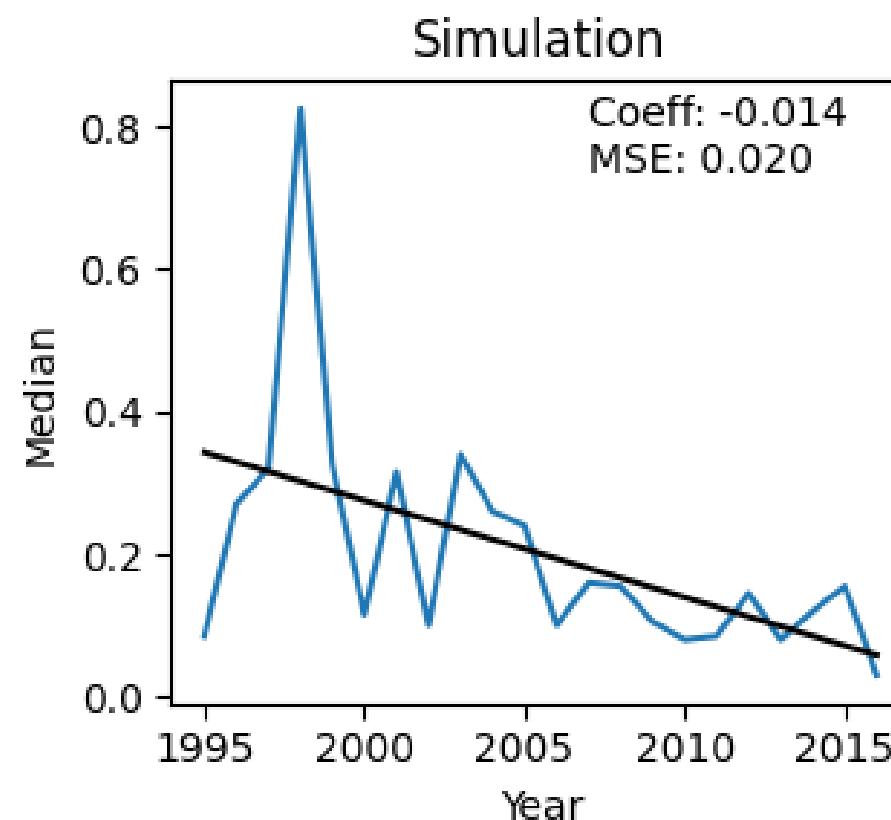
BUSINESS SITUATION

with average global sales of 17.45 million, an increase in sales of 37.94% was obtained from the results of calculating sales for the current period with sales for the previous period and then calculated in percentage form.



Sales Growth = Penjualan periode saat ini - Penjualan periode sebelumnya X 100
Penjualan periode sebelumnya

PROBLEM STATEMENT



How to increase 37.9% sales of the simulation genre globally next year

Problem Definition & Planning



STEPS OF ANALYSIS



**Business
Understanding**



**Data
Understanding**



**Data
Preparation**



Visualization



**Evaluation &
Validation**



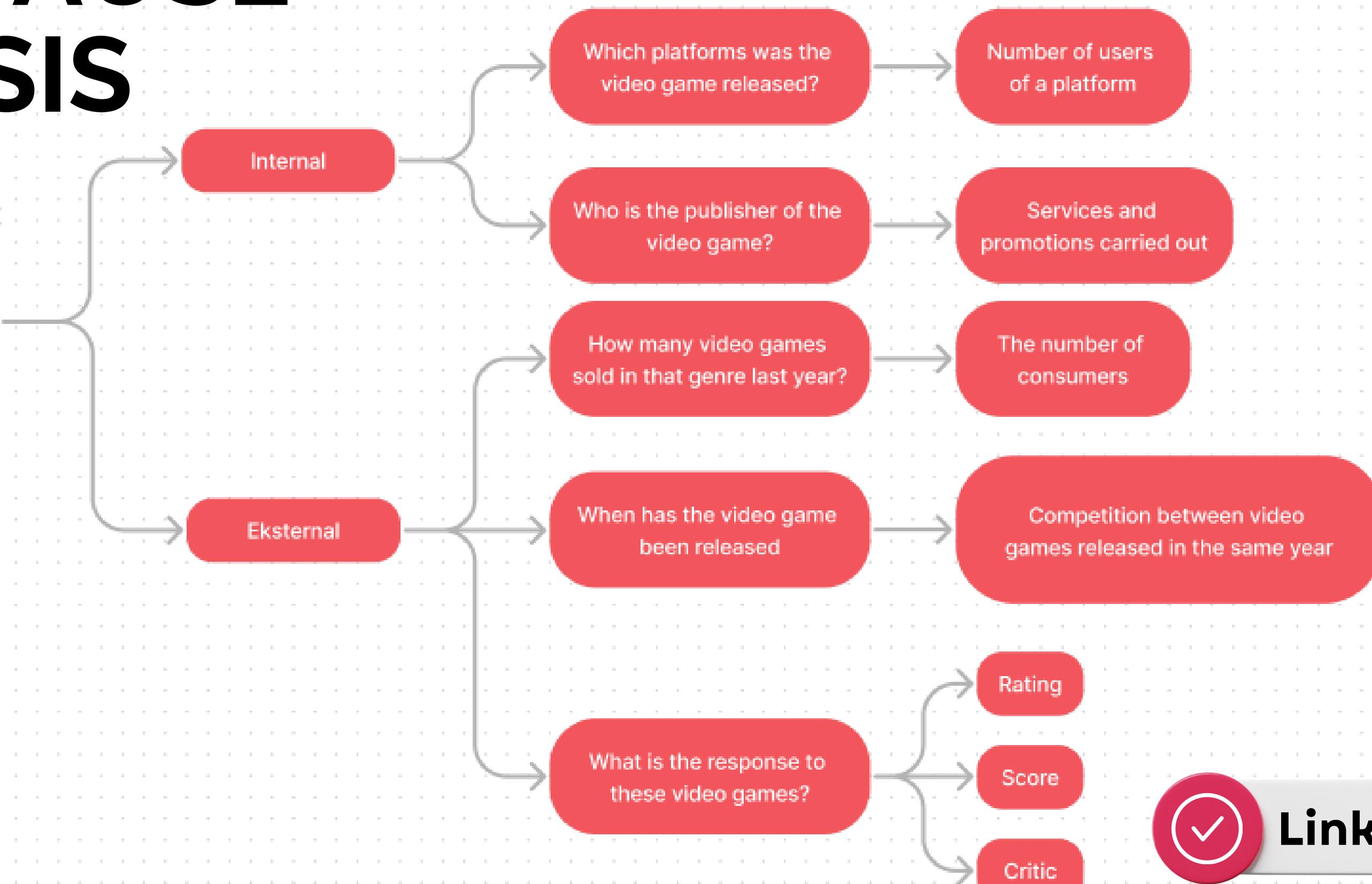
EDA & Modeling



ROOT CAUSE ANALYSIS

Problem Statement

How to increase the sales percentage of the simulation genre globally in 2024



Link RCA

Root Cause Analysis is tool used to break down complex problems into smaller, manageable components to analyze and solve them systematically.

Data Cleaning Process



PROCESS



Remove Duplicate

Check data duplicates using the "Remove Duplicate" feature in the spreadsheet



Irrelevant Data

Remove rows in data that don't have any values/irrelevant values

- Format date_add to numbers
- Check misplaced data in all columns



Remove Null Data

Remove data that does not have a release year because it will create confusion in the aggregation process

- Remove data whose release year was 2017 because the data was only obtained in January and did not have the potential for further analysis.



Type Formatting & Extra Spaces

Check data duplicates using the "Remove Duplicate" feature in the spreadsheet

- Check misplaced data in all columns

DATA SET



Only uses data from
year 1995 - 2016

Video Games Cleaned star cloud

File Edit Tampilan Sisipkan Format Data Alat Ekstensi Bantuan

Search: Hanya lihat 100% A1

	A	B	C	D	E	F	G	H	I	J	K	L
1	Name	Platform	Year_of_Release	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales	User_Count	
2	0 Wii Sports	Wii	2006	Sports	Nintendo	41.36	28.96	3.77	8.45	82.54	324	
3	2 Mario Kart Wii	Wii	2008	Racing	Nintendo	15.68	12.8	3.79	3.29	35.57	712	
4	3 Wii Sports Reso	Wii	2009	Sports	Nintendo	15.61	10.95	3.28	2.95	32.78	193	
5	4 Pokemon Red/P G		1996	Role-Playing	Nintendo	11.27	8.89	10.22	1	31.37		
6	6 New Super Mari	DS	2006	Platform	Nintendo	11.28	9.15	6.5	2.88	29.81	433	
7	7 Wii Play	Wii	2006	Misc	Nintendo	13.96	9.18	2.93	2.84	28.92	129	
8	8 New Super Mari	Wii	2009	Platform	Nintendo	14.48	6.95	4.7	2.25	28.38	595	
9	10 Nintendogs	DS	2005	Simulation	Nintendo	9.05	10.95	1.93	2.74	24.67		
10	11 Mario Kart DS	DS	2005	Racing	Nintendo	9.71	7.48	4.13	1.9	23.22	465	
11	12 Pokemon Gold/F G		1999	Role-Playing	Nintendo	9	6.18	7.2	0.71	23.1		
12	13 Wii Fit	Wii	2007	Sports	Nintendo	8.92	8.03	3.6	2.15	22.7	146	
13	14 Kinect Adventure	X360	2010	Misc	Microsoft Game	15.02	4.91	0.24	1.69	21.86	106	
14	15 Wii Fit Plus	Wii	2009	Sports	Nintendo	9.01	8.49	2.53	1.77	21.79	52	
15	16 Grand Theft Auto	PS3	2013	Action	Take-Two Interac	7.02	9.14	0.98	3.97	21.12	4,009	
16	17 Grand Theft Auto	PS2	2004	Action	Take-Two Interac	9.43	0.4	0.41	10.57	20.81	1,606	
17	19 Brain Age: Train	DS	2005	Misc	Nintendo	4.74	9.2	4.16	2.04	20.15	50	
18	20 Pokemon Diamo	DS	2006	Role-Playing	Nintendo	6.38	4.46	6.04	1.36	18.25		
19	23 Grand Theft Auto	X360	2013	Action	Take-Two Interac	9.66	5.17	0.06	1.41	16.3	3,722	
20	24 Grand Theft Auto	PS2	2002	Action	Take-Two Interac	8.41	5.49	0.47	1.78	16.15	736	

Dataset

EU Sales Per Genre

NA Sales Per Genre

JP Sales Per Genre

Other Sales Per Genre

Global Sales Per Genre

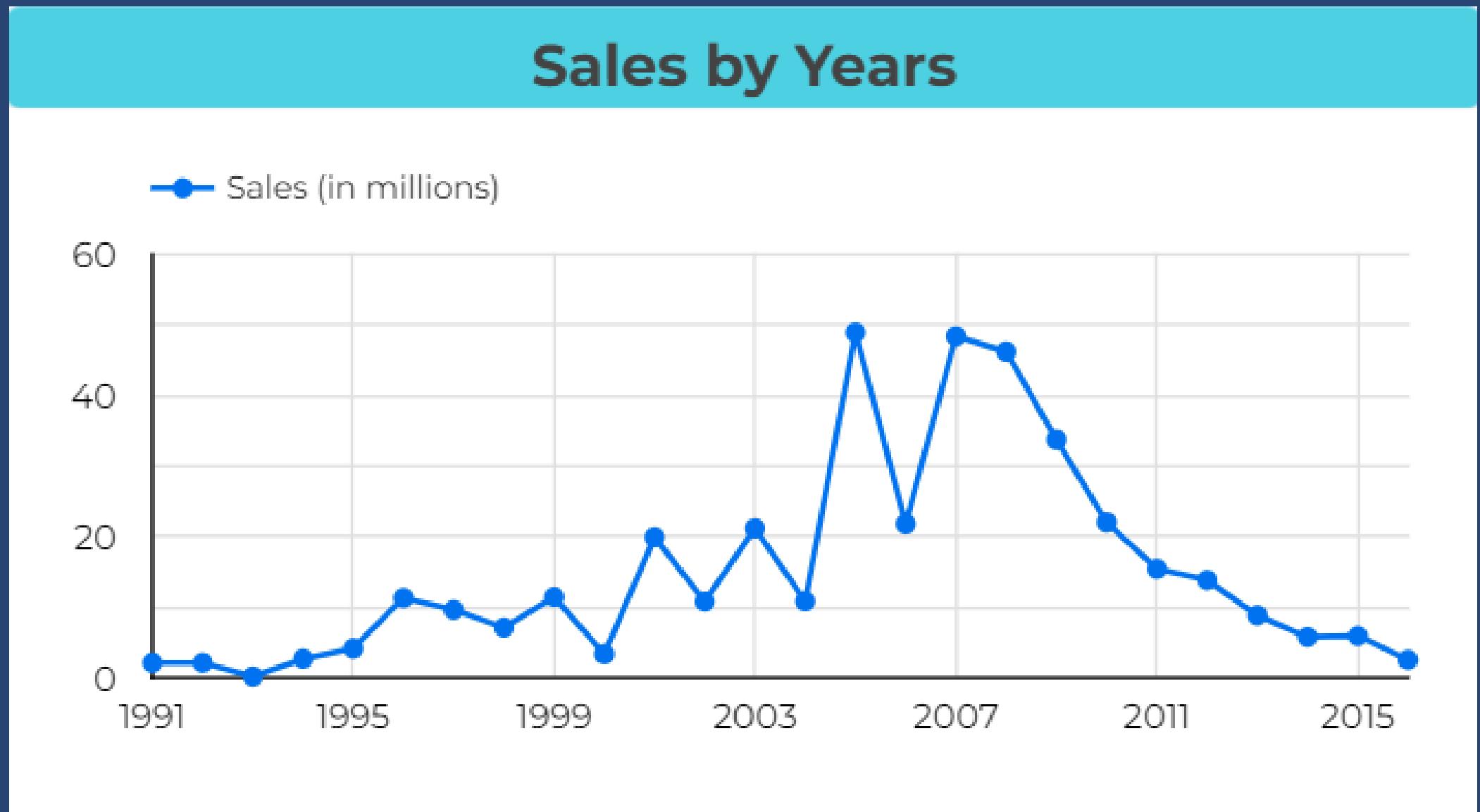
Game Jumlah Rilis

Link Dataset

Link Python

Data visualization





- The highest global sales of simulation games occurred in 2005
- Global sales of simulation games began to decline in 2007 by 0.57%

This Year Objective

Sales (in millions)

2.58

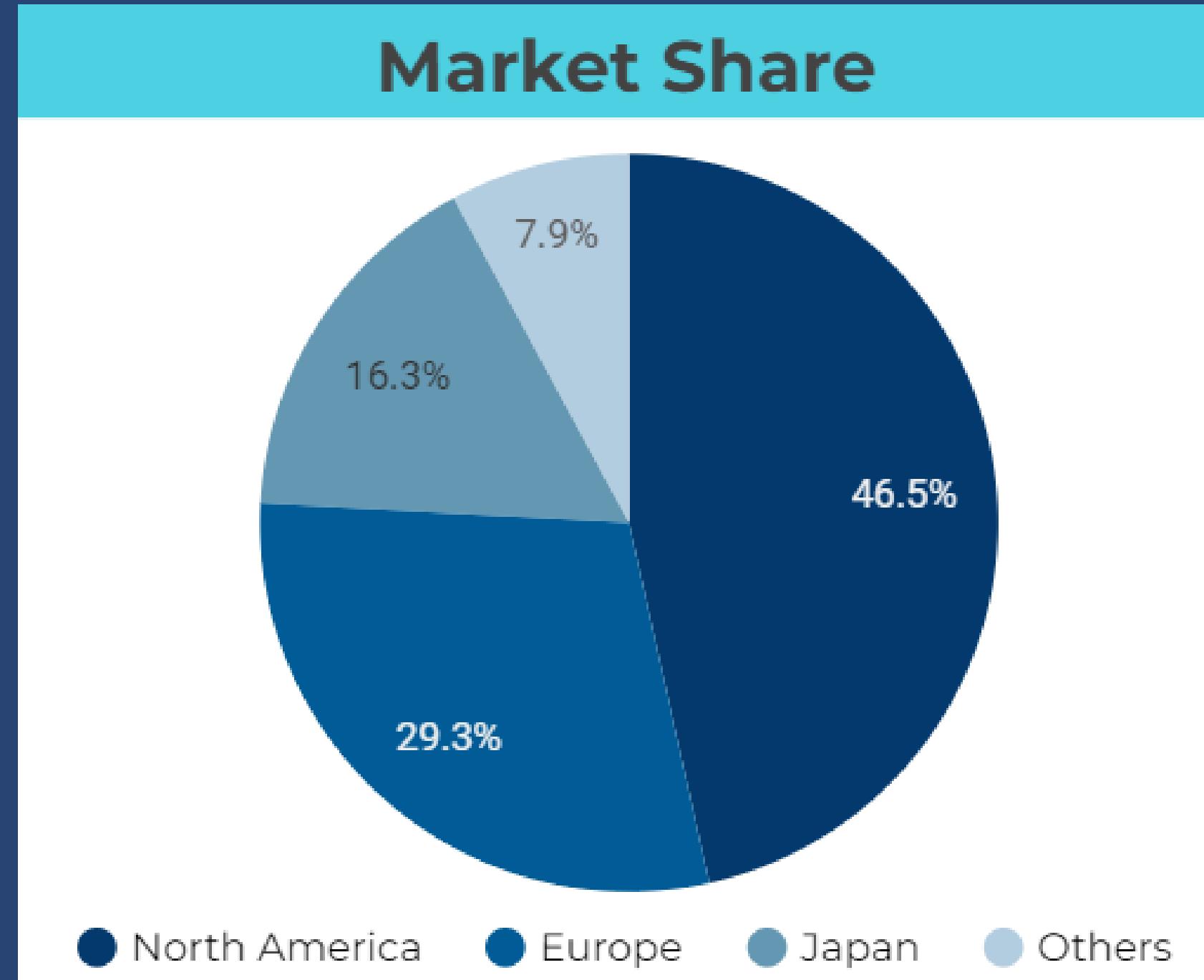
61.7%



(+) 37.9%

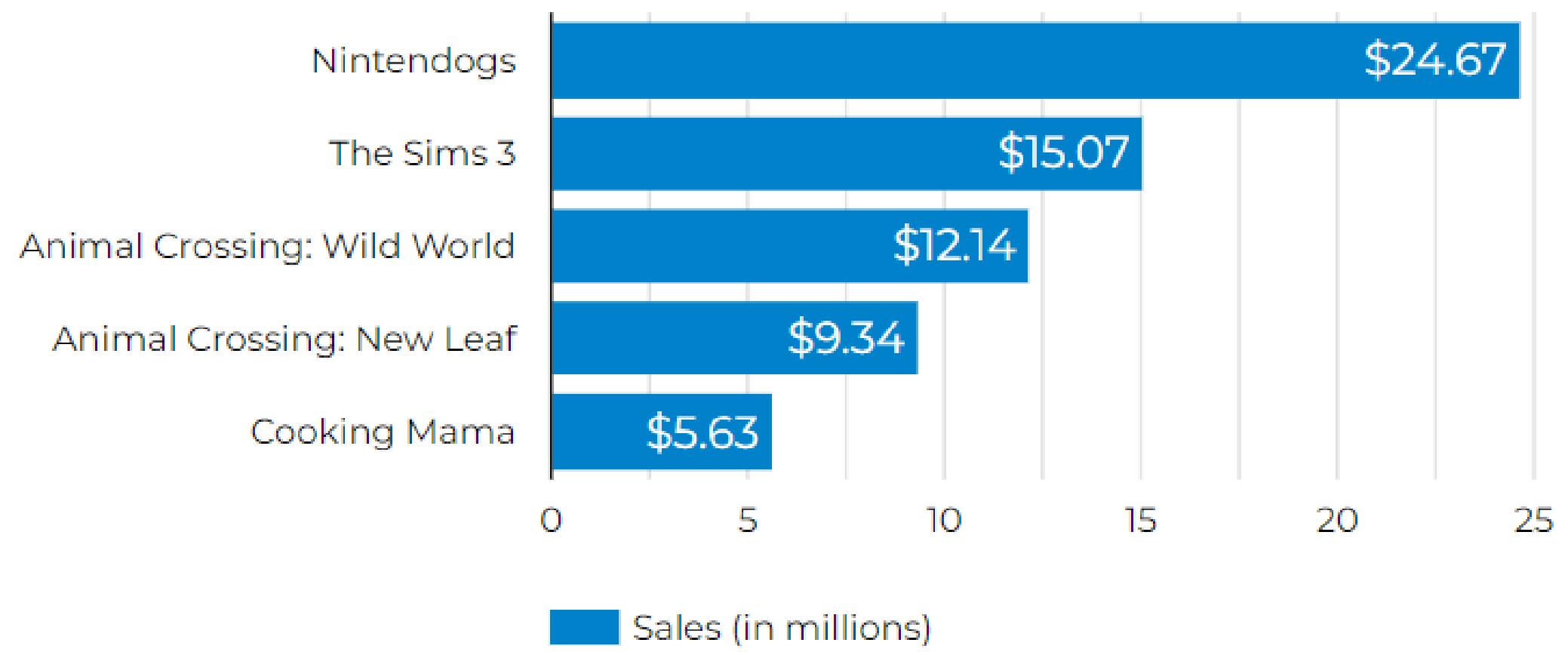
3.56

With the sales target being an increase of 37.9% from last year's sales, the success percentage has only reached 61.7% at this time



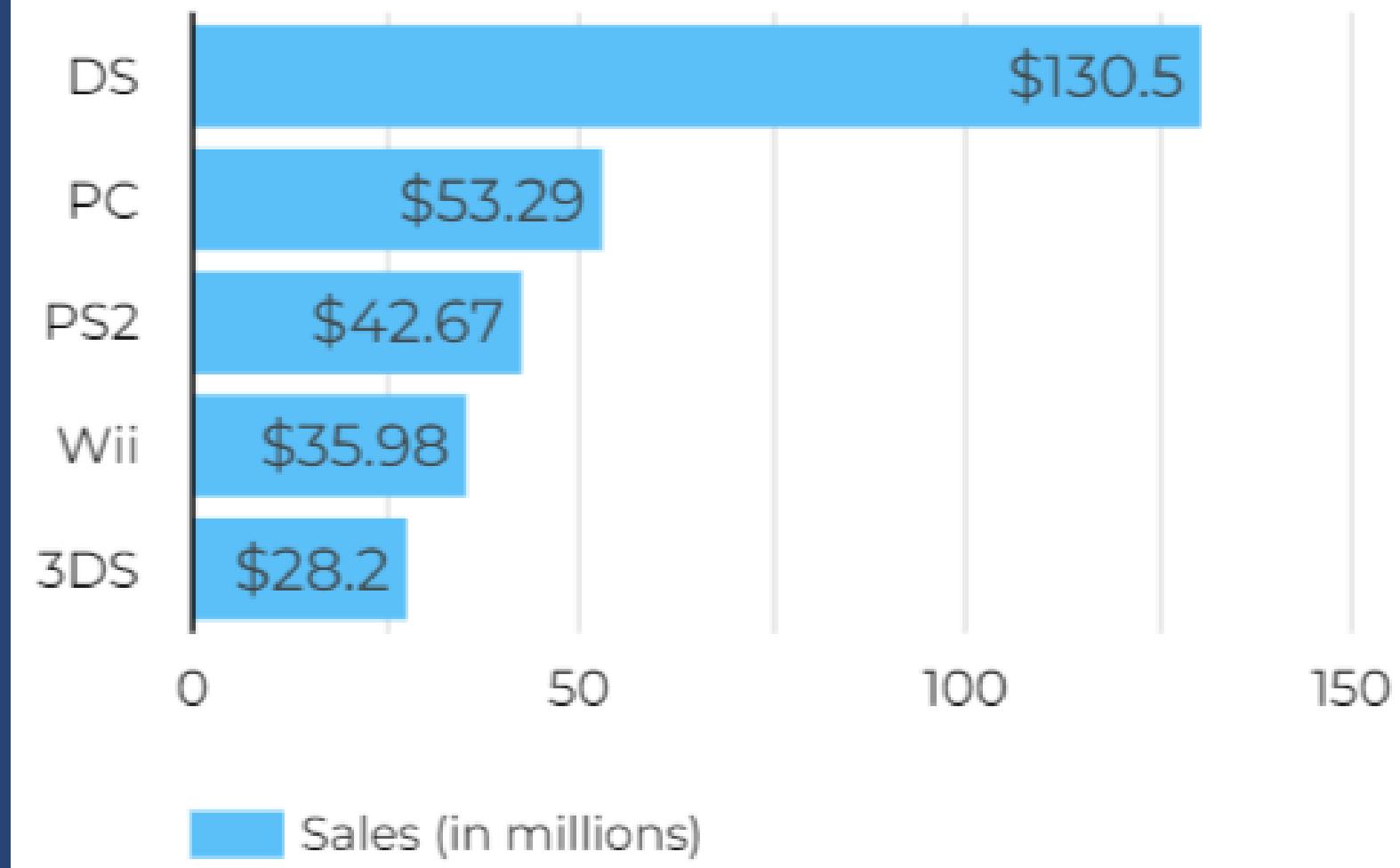
The largest global sales of simulation games are in North America at 46% of total global sales followed by Europe, Japan and other regions.

Top 5 Games by Sales



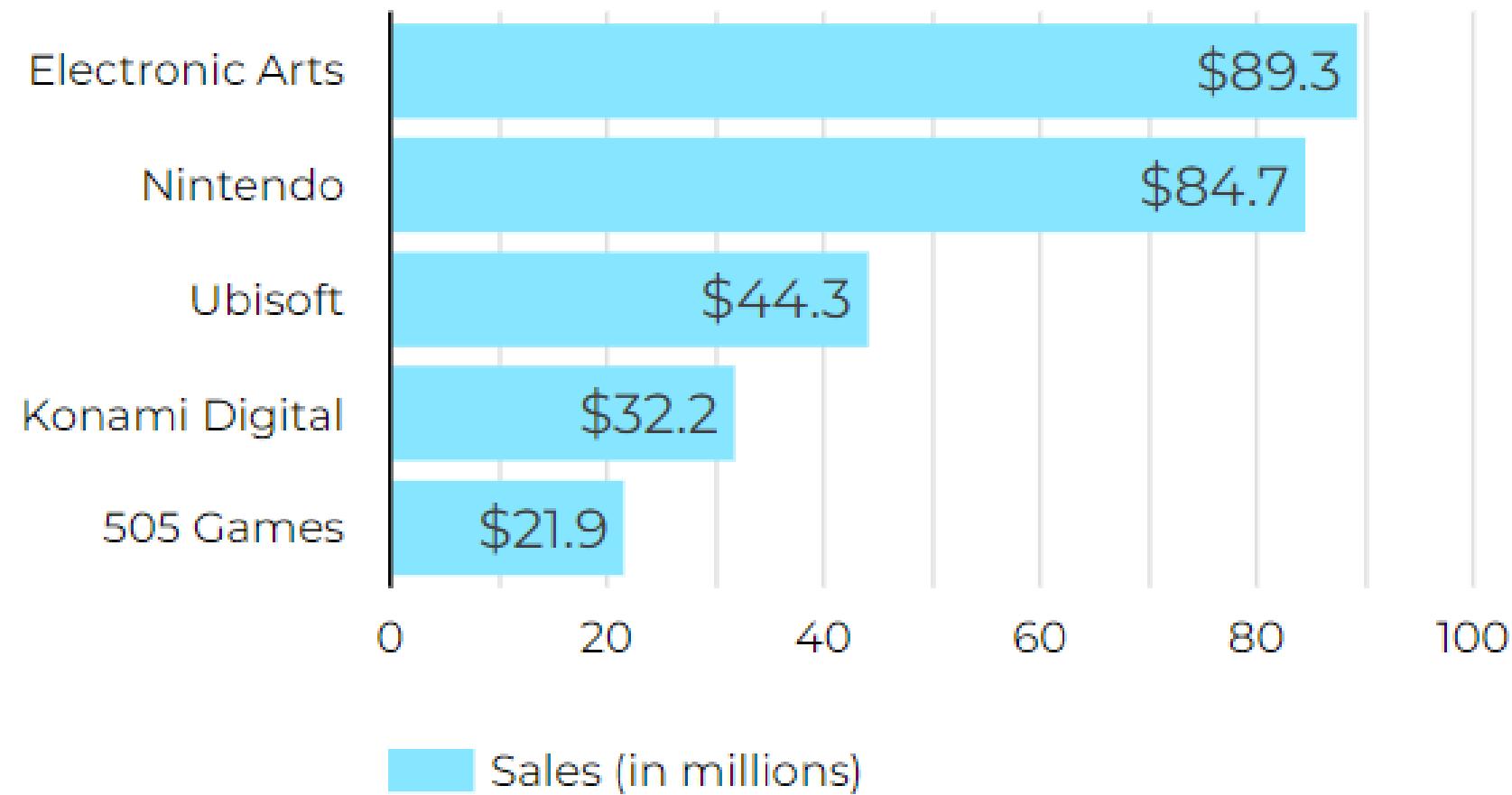
Nintendogs is the simulation game with the highest global sales with total sales of 24.67 million USD

Top 5 Platforms by Sales



DS are the platform with the highest global sales with total sales of 130.5 million USD, far outperforming other platforms

Top 5 Publishers by Sales



Electronic Arts and Nintendo are the publishers with the highest global sales with total sales of 89.3 and 84.7 million USD, far ahead of other platforms.

SIMULATION GAMES SALES

Year of Release

Between and

Area

growth sales

37.9%

Game

768

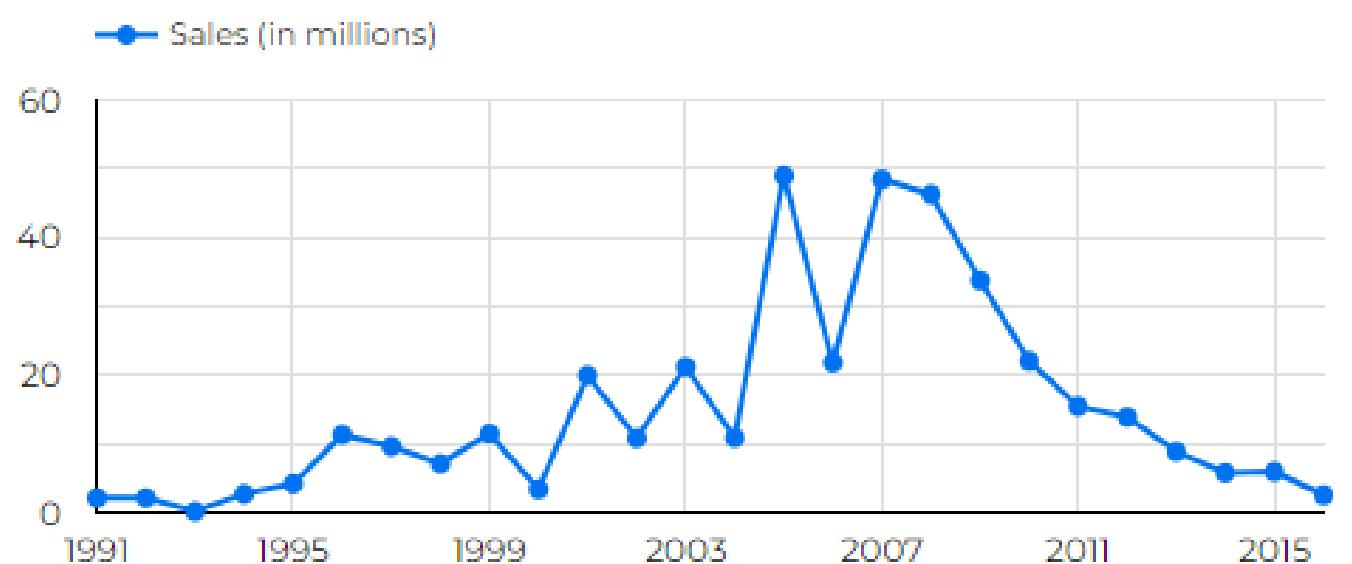
Publisher

158

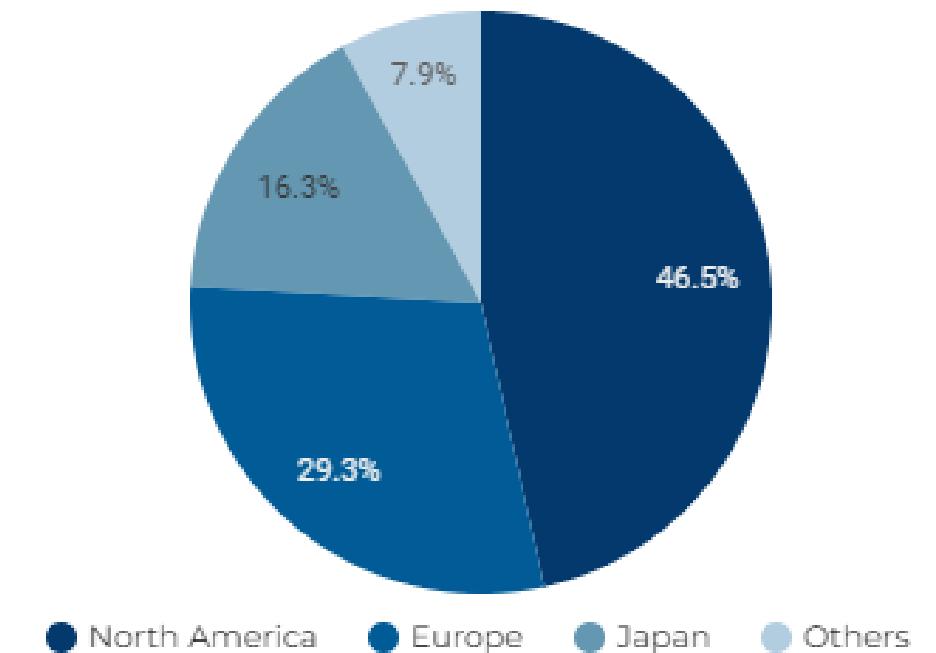
Platform

22

Sales by Years



Market Share

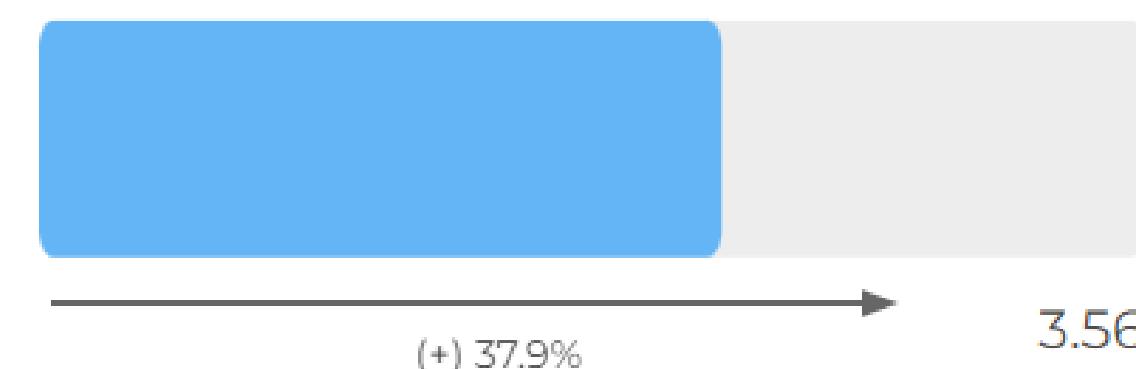


This Year Objective

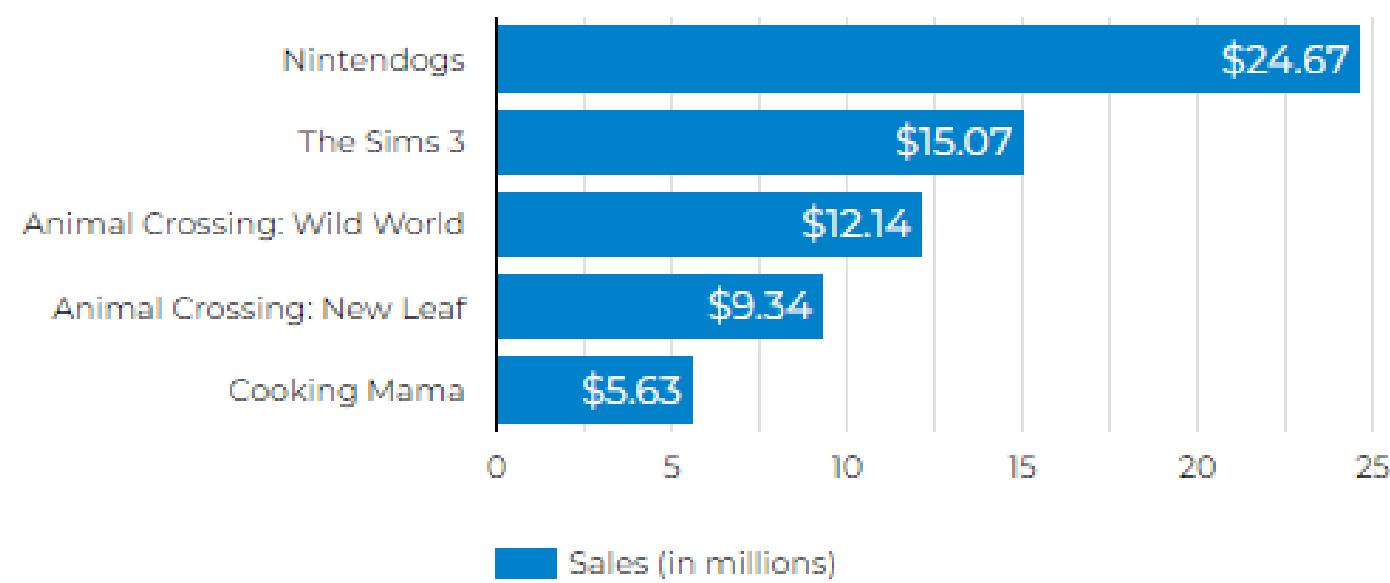
Sales (in millions)

2.58

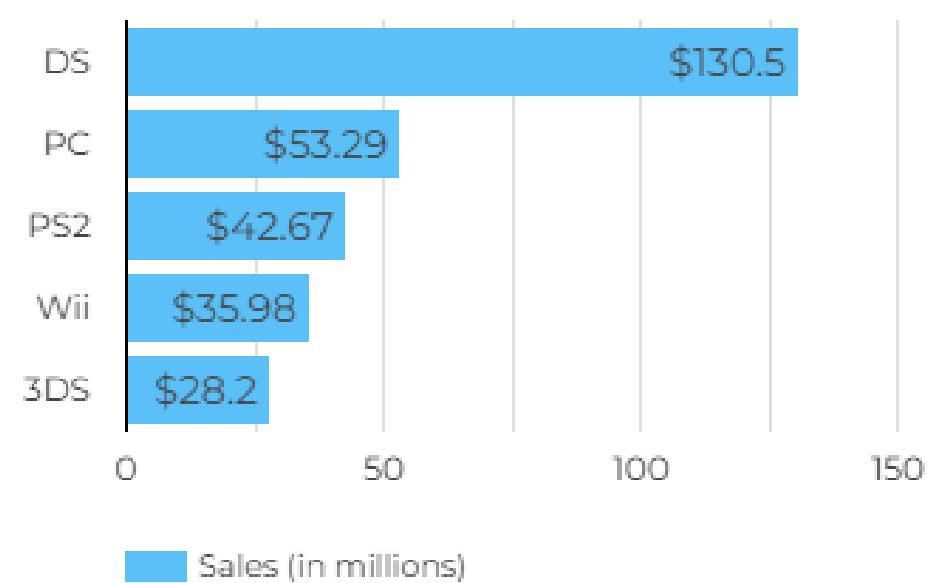
61.7%



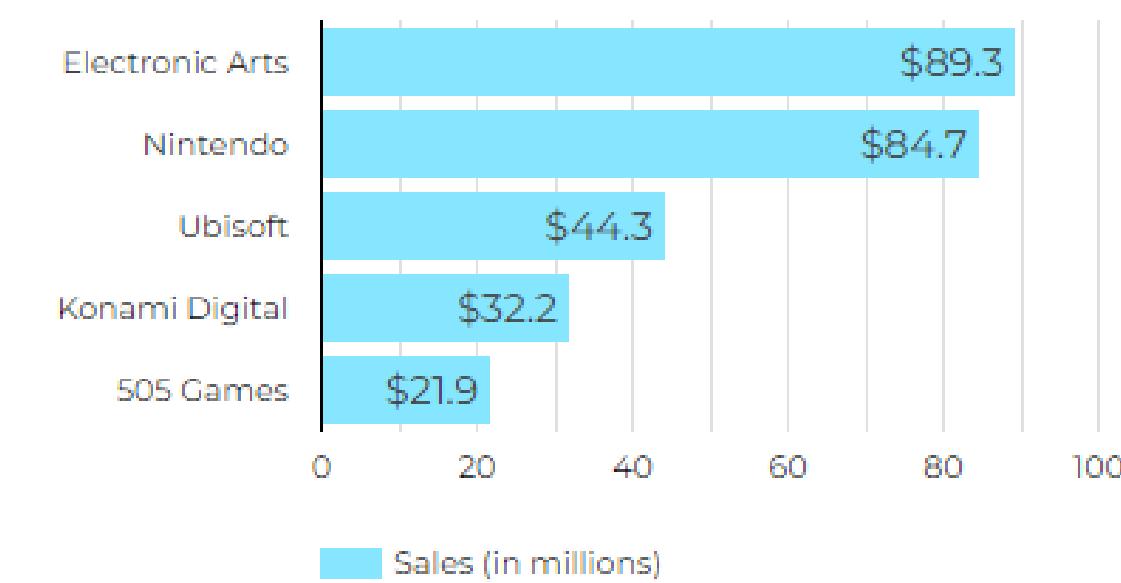
Top 5 Games by Sales



Top 5 Platforms by Sales



Top 5 Publishers by Sales



Recommendation



RECOMMENDATION

For Team Marketing



Increasing promotion of simulation games in the region with the highest sales: North America



Increasing promotions of the highest selling simulation games: Nintendogs, The Sims 3, Animal Crossing: Wild World, Animal Crossing: New Leaf, and Cooking Mama*



Increase promotion of simulation games on the highest selling platforms: DS, PC, PS2, Wii, and 3DS*



Increase promotion of simulation games on the highest selling publisher: Electronic Arts, Nintendo, Ubisoft, Konami Digital, 505 Games*

Note

*Depending on conditions in each region



RECOMMENDATION

For Team Marketing

Use the social media to carry out promotions can increase excitement and awareness before the release of the video game

Collaborate with experienced video games platforms and publisher that are able to attract the interest of potential buyers

Collaborate with artists, video game players, or influencers who are on the rise and have an interest in video games



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THANK YOU

Jayapura Team M-25

