VIDEO GAME SALES

ANALYSIS REPORT

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REPORT OUTLINE

Dataset

Data Cleaning Process

Data Visualizations

Regression Analysis

Hypothesis

DATASET

VIDEO GAME SALES

The dataset contains a list of video games with sales greater than 100,000 copies

Sales in Millions

NA_Sales - Sales in North America

EU_Sales - Sales in Europe

JP_Sales - Sales in Japan

Other_Sales - Sales in Rest of the World

Global_Sales - Total Worldwide Sales

'**Misc**' Genre

diverse category that encompasses games that don't fit neatly into specific genres
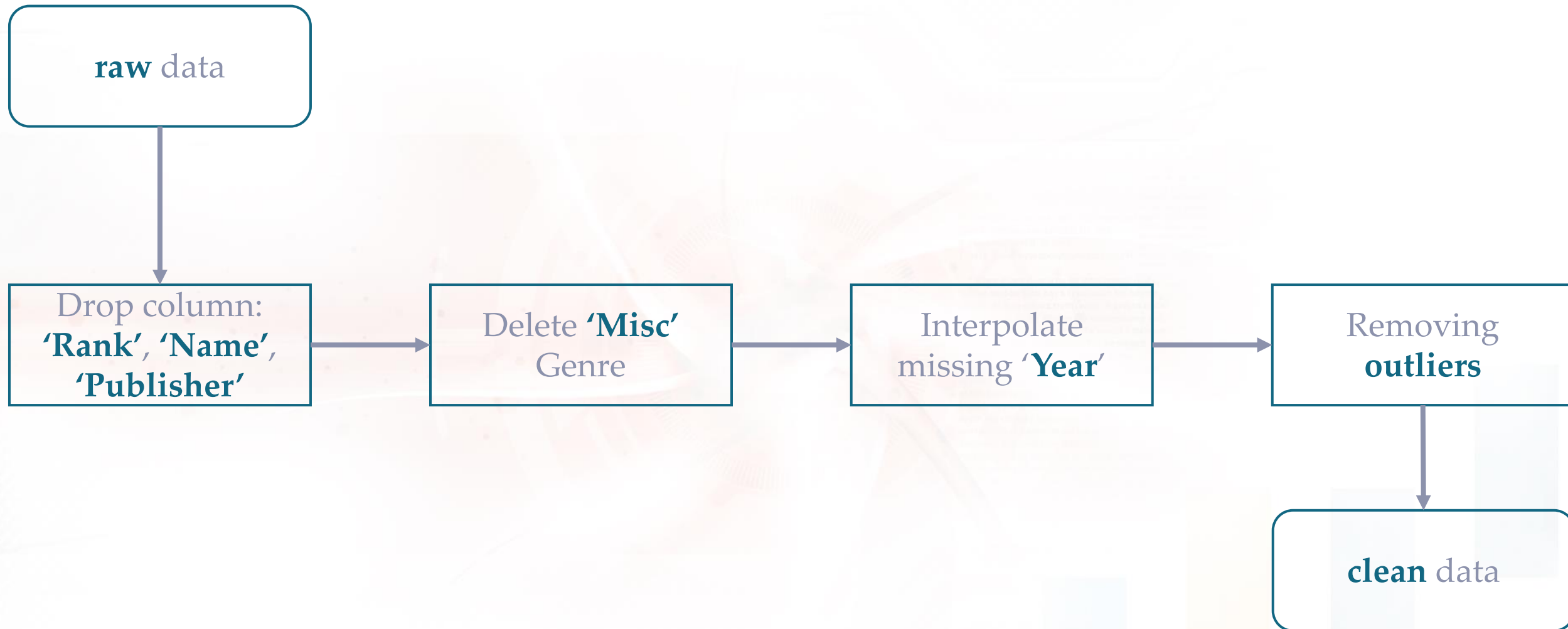
'**Action**' Genre

Games that emphasize physical challenges, hand-eye coordination, and reaction time.

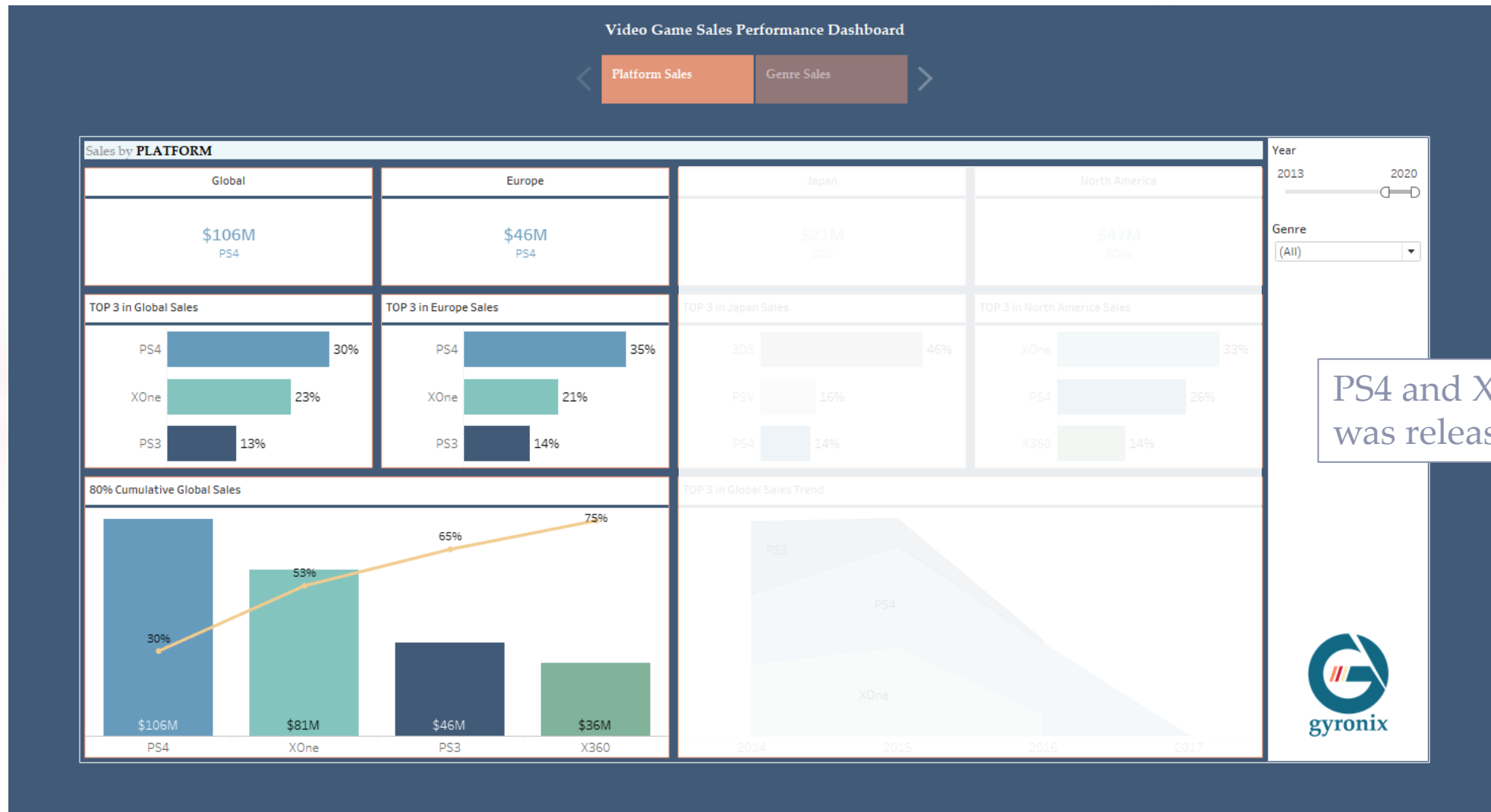*e.g. platform, shooter, beat'em ups, and more*

DATA CLEANING

raw data

Drop column:
'Rank', **'Name'**, **'Publisher'**

Delete **'Misc'** Genre

Interpolate missing '**Year**'

Removing **outliers**

clean data

DATA VISUALIZATION

PLATFORM SALES

Video Game Sales Performance Dashboard

Platform Sales | Genre Sales

Sales by PLATFORM

Global	Europe	Japan	North America
$106M PS4	$46M PS4	$21M 3DS	$47M XOne

TOP 3 in Global Sales

- PS4 — 30%
- XOne — 23%
- PS3 — 13%

TOP 3 in Europe Sales

- PS4 — 35%
- XOne — 21%
- PS3 — 14%

TOP 3 in Japan Sales

- 3DS — 46%
- PSV — 16%
- PS4 — 14%

TOP 3 in North America Sales

- XOne — 33%
- PS4 — 26%
- X360 — 14%

80% Cumulative Global Sales

- PS4 $106M — 30%
- XOne $81M — 53%
- PS3 $46M — 65%
- X360 $36M — 75%

TOP 3 in Global Sales Trend

PS3 / PS4 / XOne — 2014 2015 2016 2017

Year: 2013 — 2020

Genre: (All)

PS4 and Xbox One was released in **2013**

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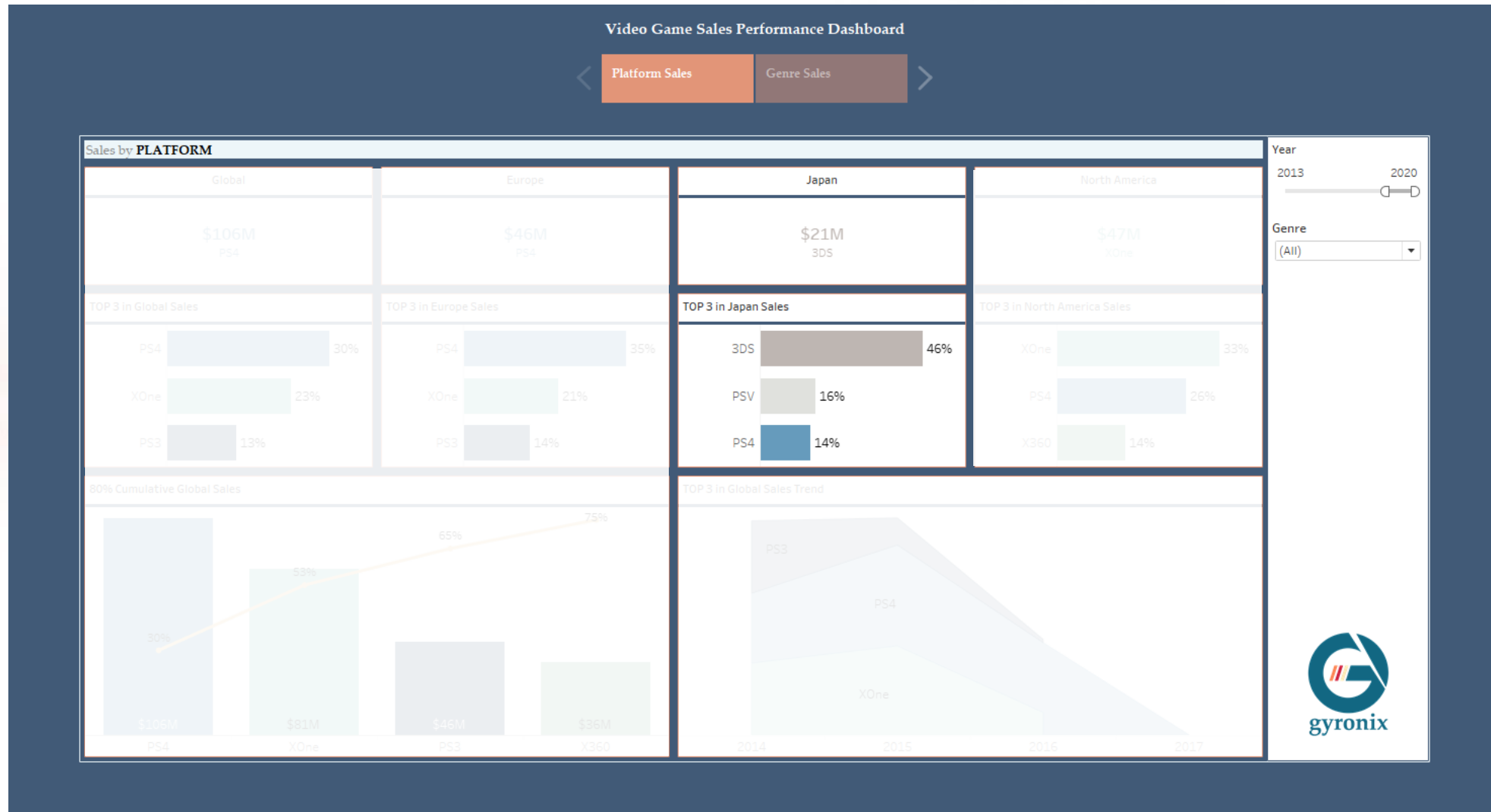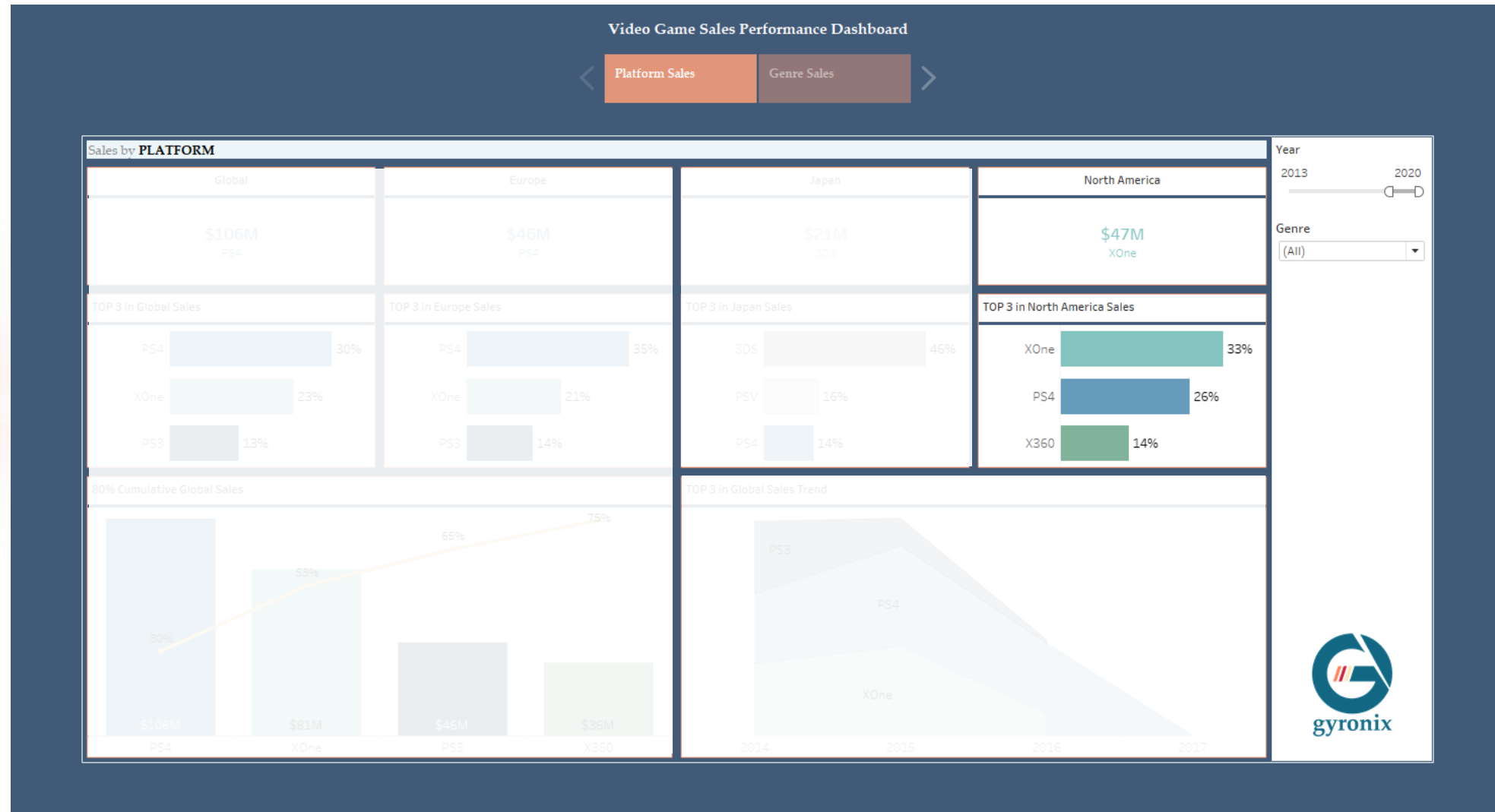
2 years after released (2015), **PS4** outperformed Xbox One by **$6M**
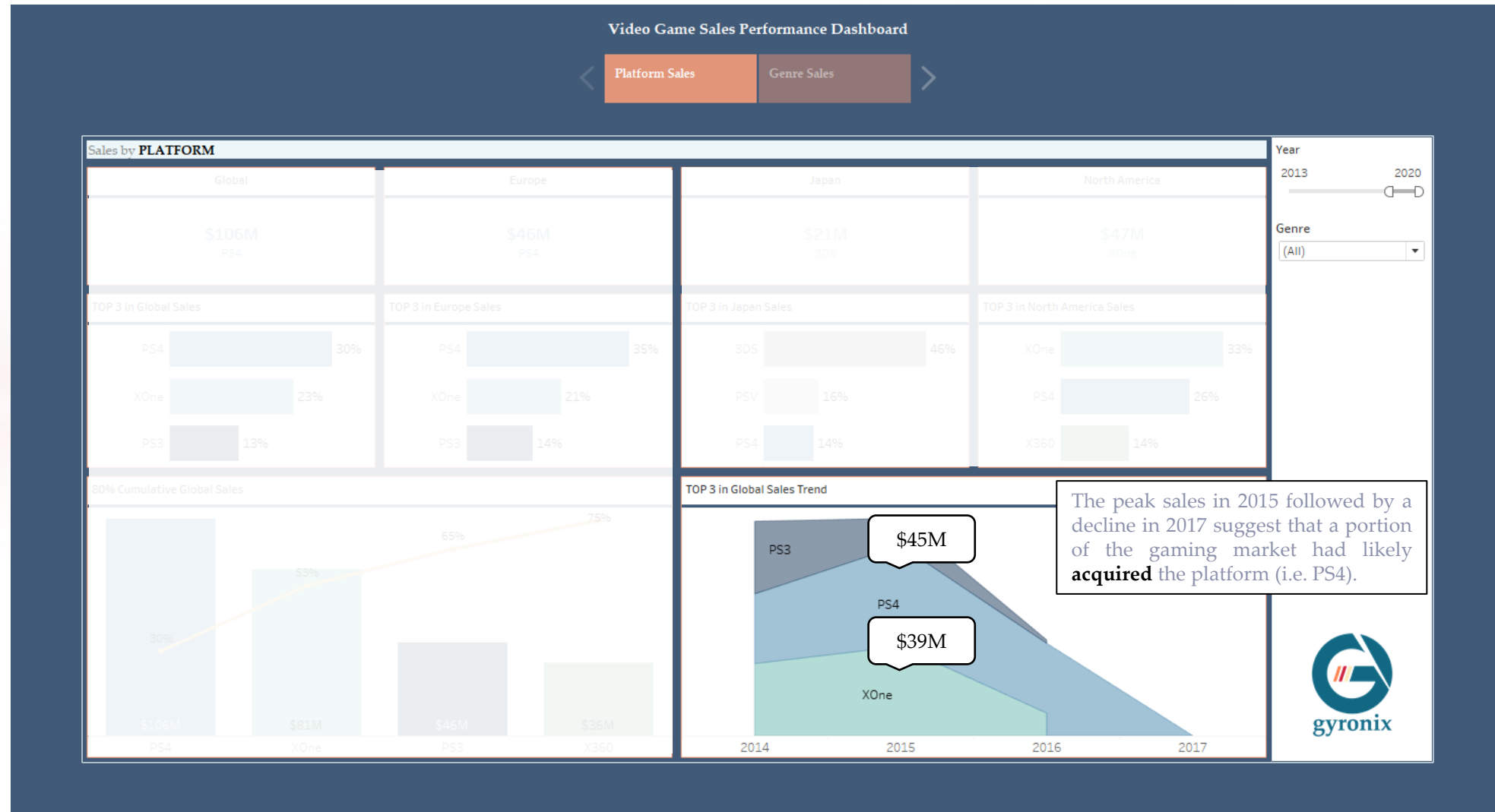
Xbox One is the preferred platform for Shooter genre

Video Game Sales Performance Dashboard

GENRE SALES
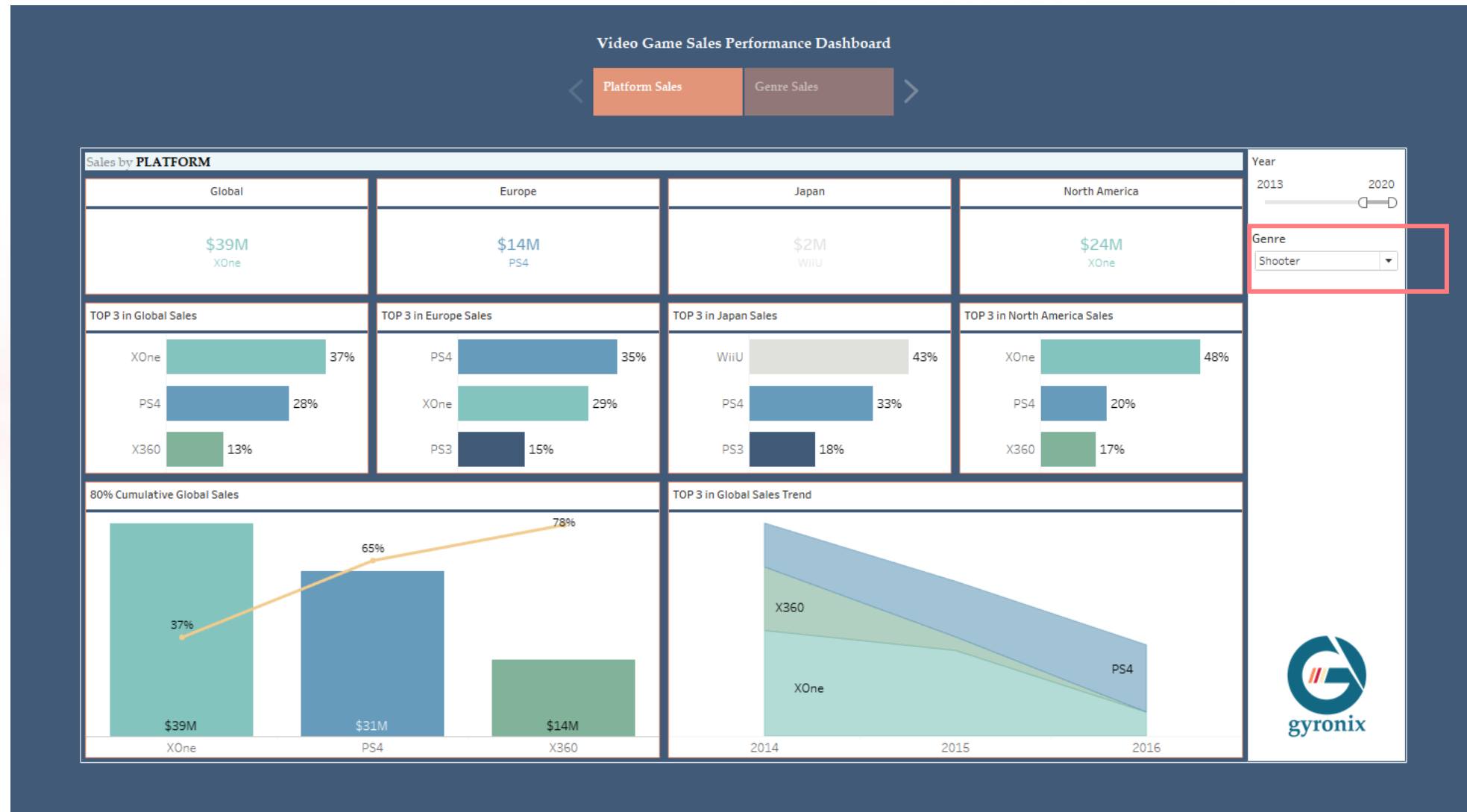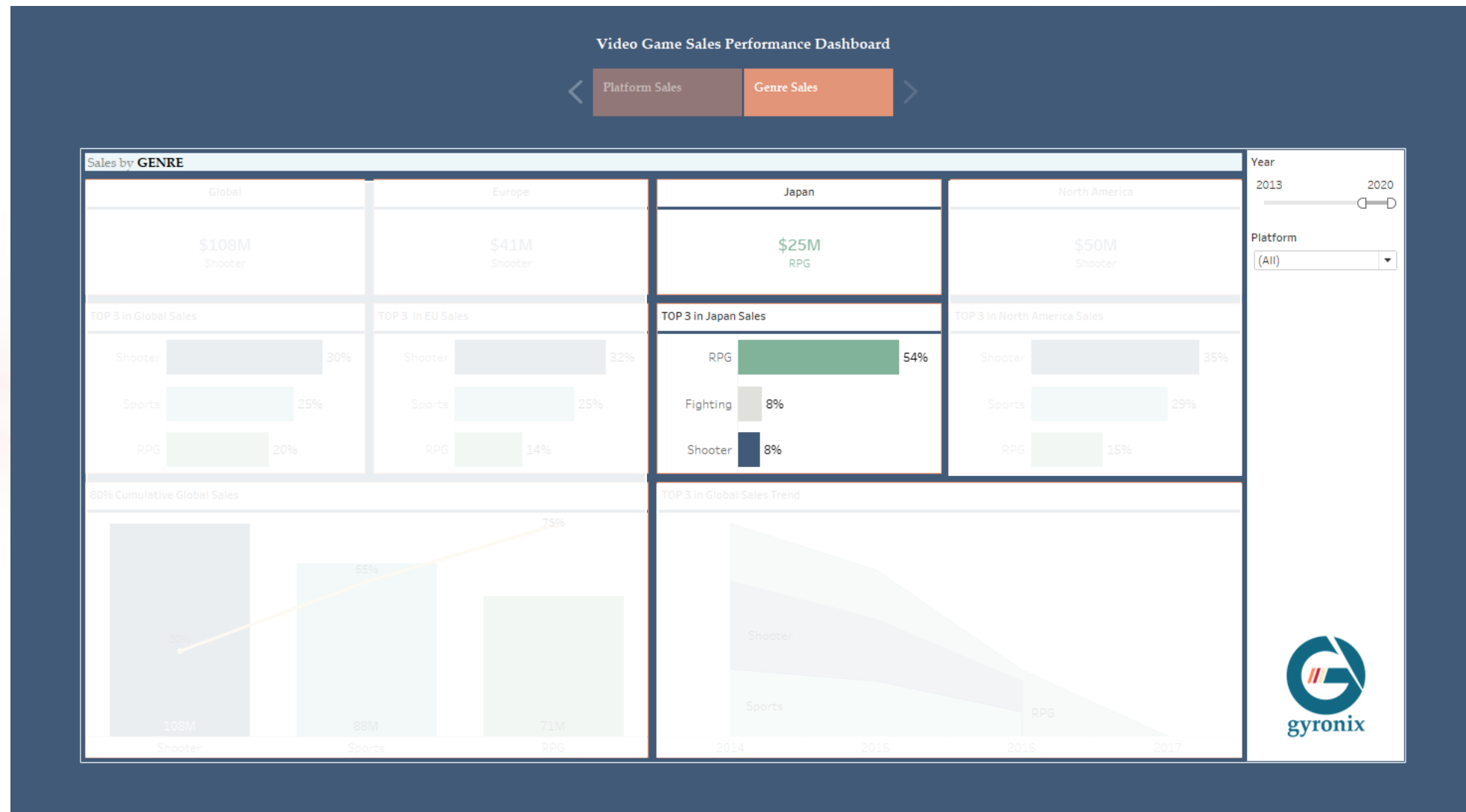
Video Game Sales Performance Dashboard

Video Game Sales Performance Dashboard

Platform Sales	Genre Sales

Sales by **GENRE**

Global	Europe	Japan	North America
$40M Shooter	**$19M** Shooter	$3M RPG	$16M Sports

TOP 3 in Global Sales

Shooter	32%
Sports	28%
RPG	15%

TOP 3 in EU Sales

Shooter	34%
Sports	23%
RPG	14%

TOP 3 in Japan Sales

RPG	41%
Shooter	20%
Sports	11%

TOP 3 in North America Sales

Sports	36%
Shooter	31%
RPG	13%

80% Cumulative Global Sales

Shooter	Sports	RPG
32%	59%	74%
40M	35M	19M

TOP 3 in Global Sales Trend

Shooter
Sports
RPG

2013 2014 2015 2016 2017

Year
2013 — 2020

Platform
PS4

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Shooter genre takes 48% of Global Xbox One Sales
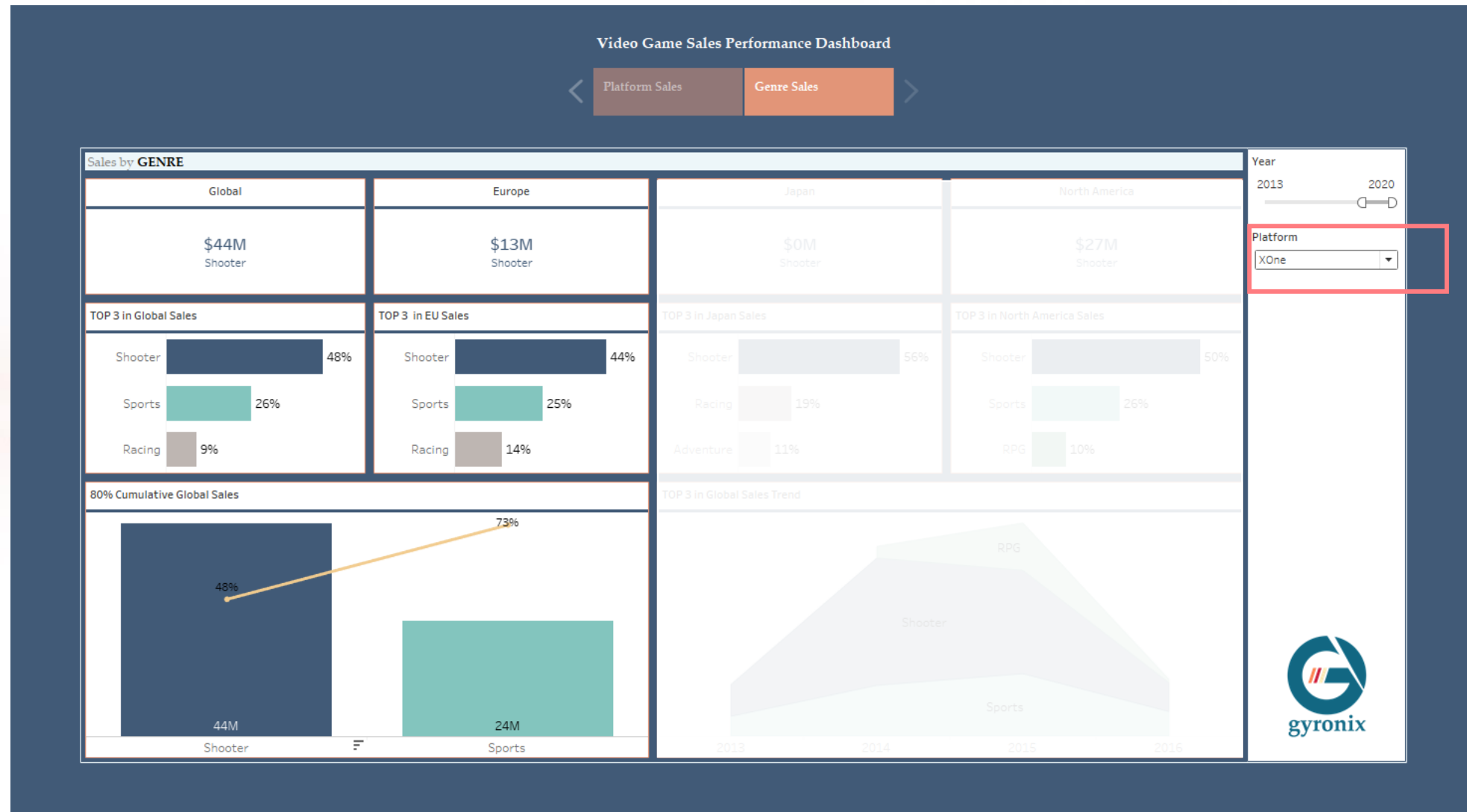
REGRESSION ANALYSIS

The regression equation predicts **25%** of

the variability in the model

Model Summary

S	R-sq	R-sq(adj)	R-sq(pred)
0.537671	24.79%	23.46%	21.34%

Regression Equation

$$Global\_Sales = 1.0751 - 0.4743\ Platform\_PC + 0.0\ Platform\_PS4 - 0.3530\ Platform\_PSV$$
$$- 0.6897\ Genre\_Adventure - 0.589\ Genre\_Fighting - 0.482\ Genre\_Racing$$
$$- 0.5752\ Genre\_RPG + 0.0\ Genre\_Shooter - 0.529\ Genre\_Strategy$$

Coefficients

Term	Coef	SE Coef	T-Value	P-Value	VIF
Constant	1.0751	0.0782	13.74	0.000	
Platform					
PC	-0.4743	0.0763	-6.21	0.000	1.44
PSV	-0.3530	0.0682	-5.18	0.000	1.59
Genre					
Adventure	-0.6897	0.0975	-7.07	0.000	2.58
Fighting	-0.589	0.125	-4.71	0.000	1.45
Racing	-0.482	0.114	-4.22	0.000	1.44
RPG	-0.5752	0.0896	-6.42	0.000	2.52
Strategy	-0.529	0.120	-4.40	0.000	1.43

Reference Level,

Platform: **PS4**

Genre: **Shooter**

HYPOTHESIS

In conclusion, for optimal video game market investment, it is advisable to consider investing in both **PS4 and Xbox One**, with additional consideration for **PC** and **PSV** based on regression analysis results. In terms of genres, **Shooter** and **Sports** games emerge as wise investments, with a potential consideration for **Fighting** games based on regression analysis outcomes. Furthermore, it's important to note the preference of the **Japanese** for **portable** platforms and **role-playing** games, while the **American** market tends to favor **Xbox One**."