



Game Design Analysis

다음 분기에 어떤 게임을 설계하는 것이 좋을까

AI_07 강동우

장르

플랫폼

게임

EDA & DATA PREPROCESSING

(16598, 9)

Year 데이터 이상치 보완 작업

9.0 → 2009 , 97.0 → 1997

Publisher 데이터 결측값 보완 작업

NaN → Unknown

Sales 데이터 이상치 보완 작업

0.04 0.34M 2560K → 0.04 0.34 2.56

전체 출고량 열(컬럼) 생성

Total_Sales = (NA_Sales + EU_Sales + JP_Sales + Other_Sales)

나머지 결측데이터 제거

.drop

(16277, 10)

전체 출고량과 나라별 출고량의 연관성 정도 (상관계수)

94

미국

90

유럽

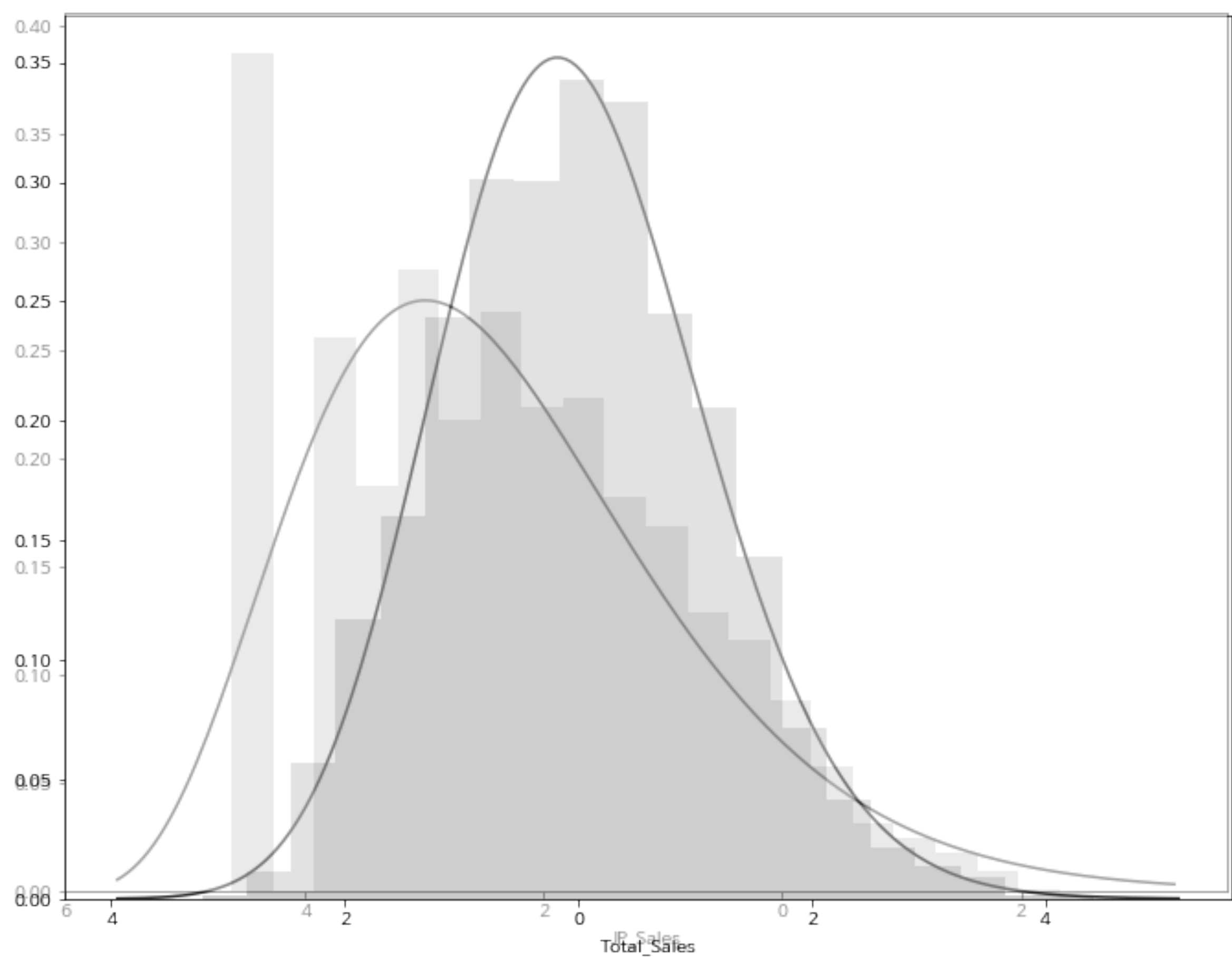
61

일본

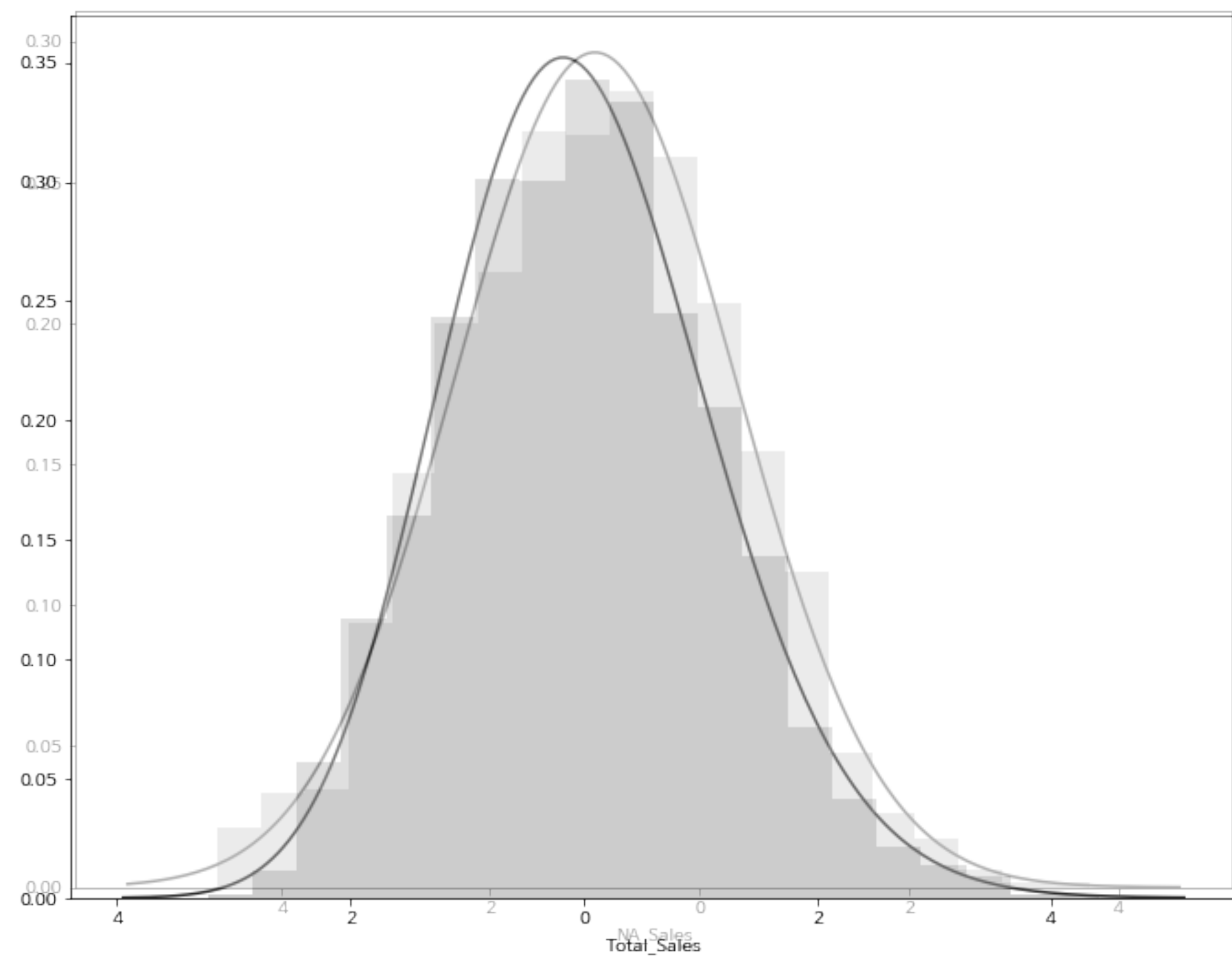
75

다른나라들

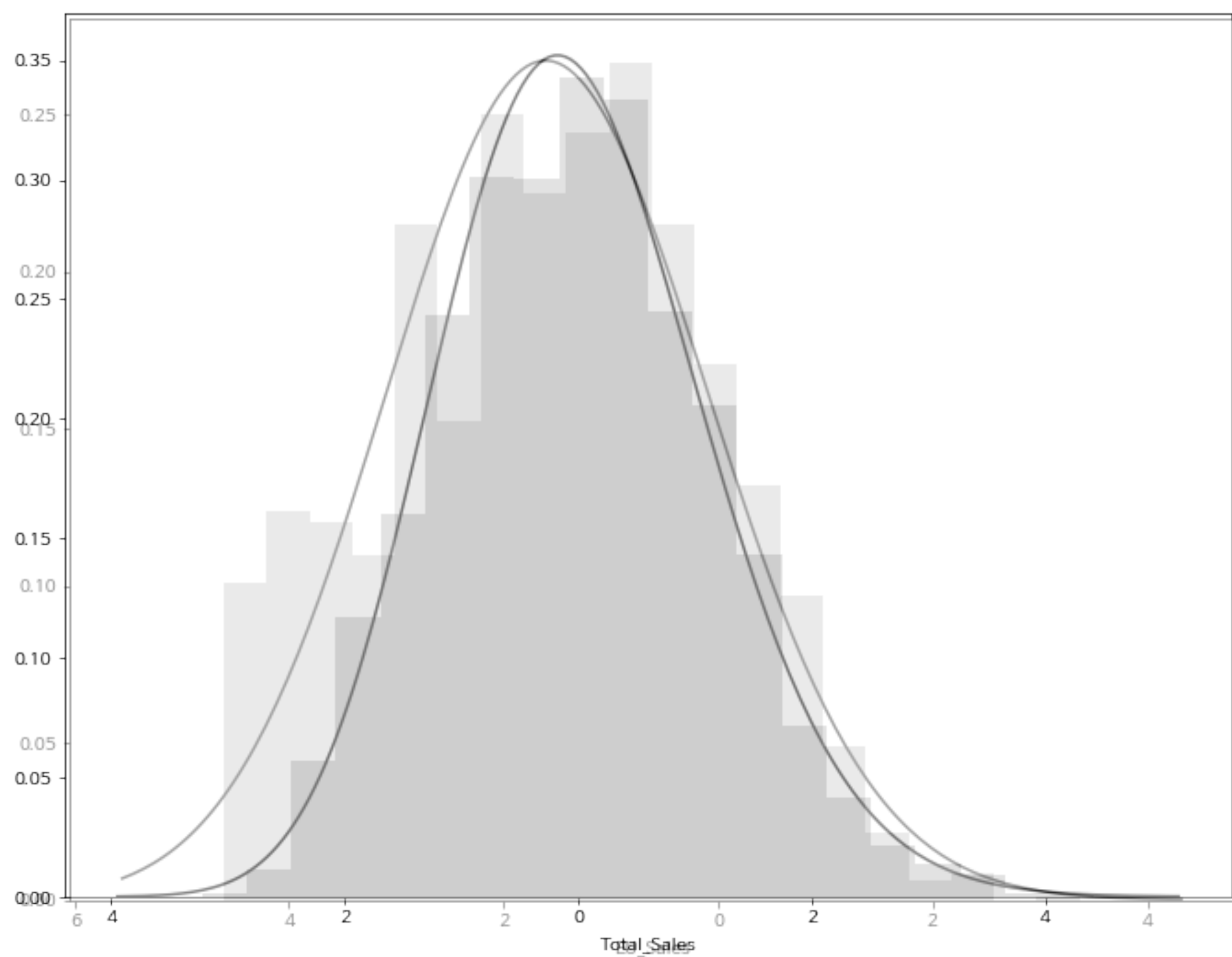




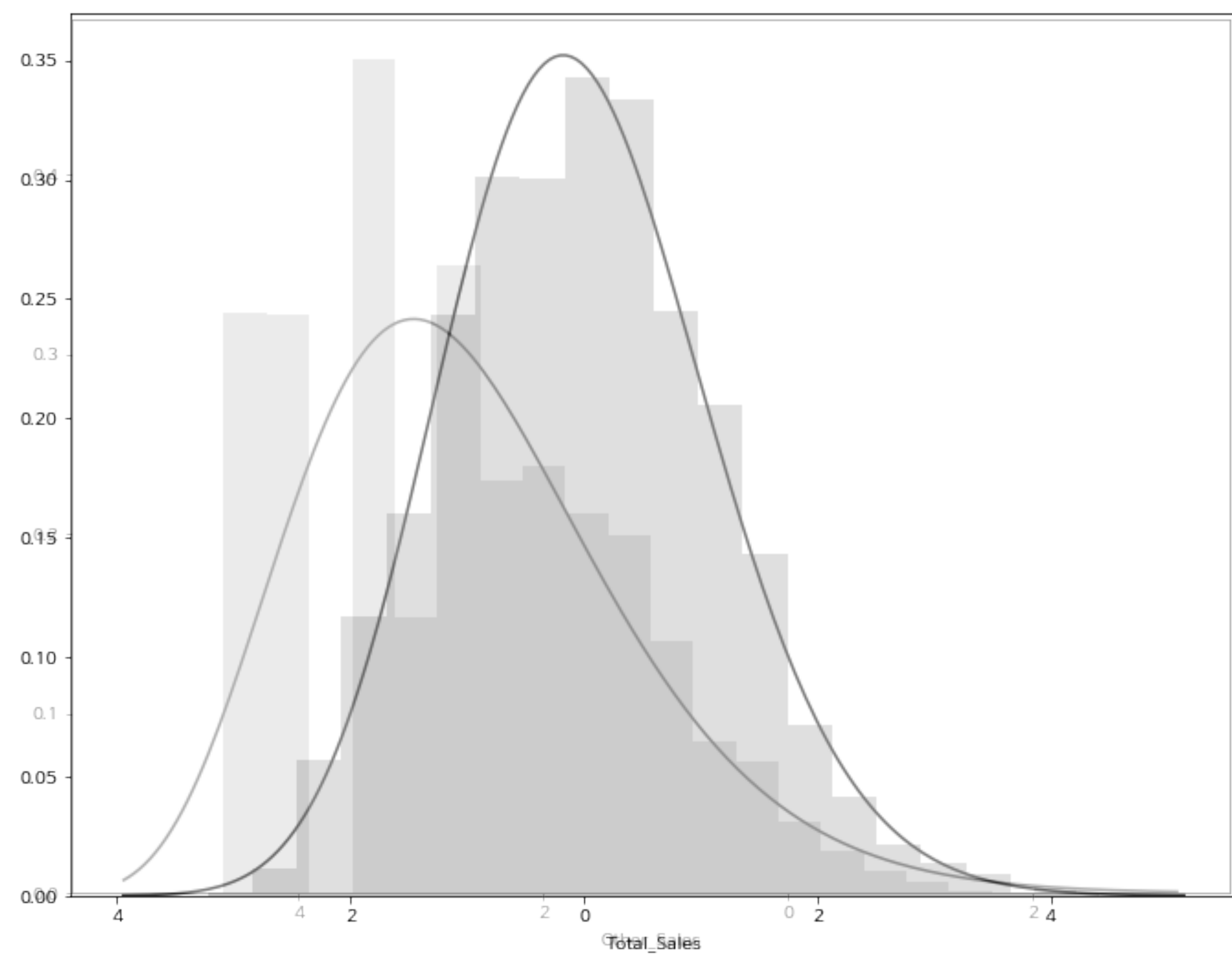
일본



미국

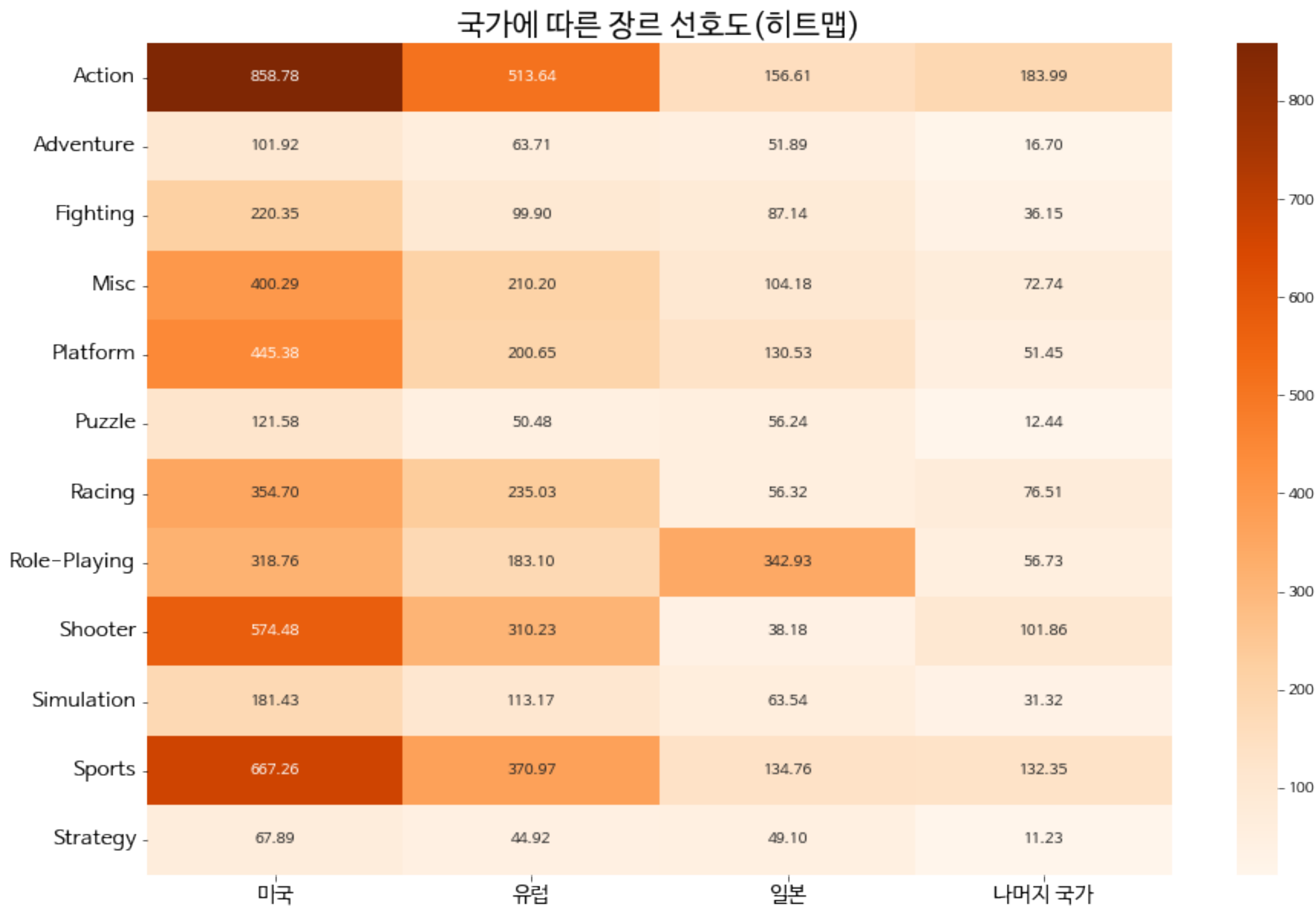


유럽



다른 나라

Genre



미국, 유럽, 나머지 국가 **액션** > 스포츠 > 슈팅

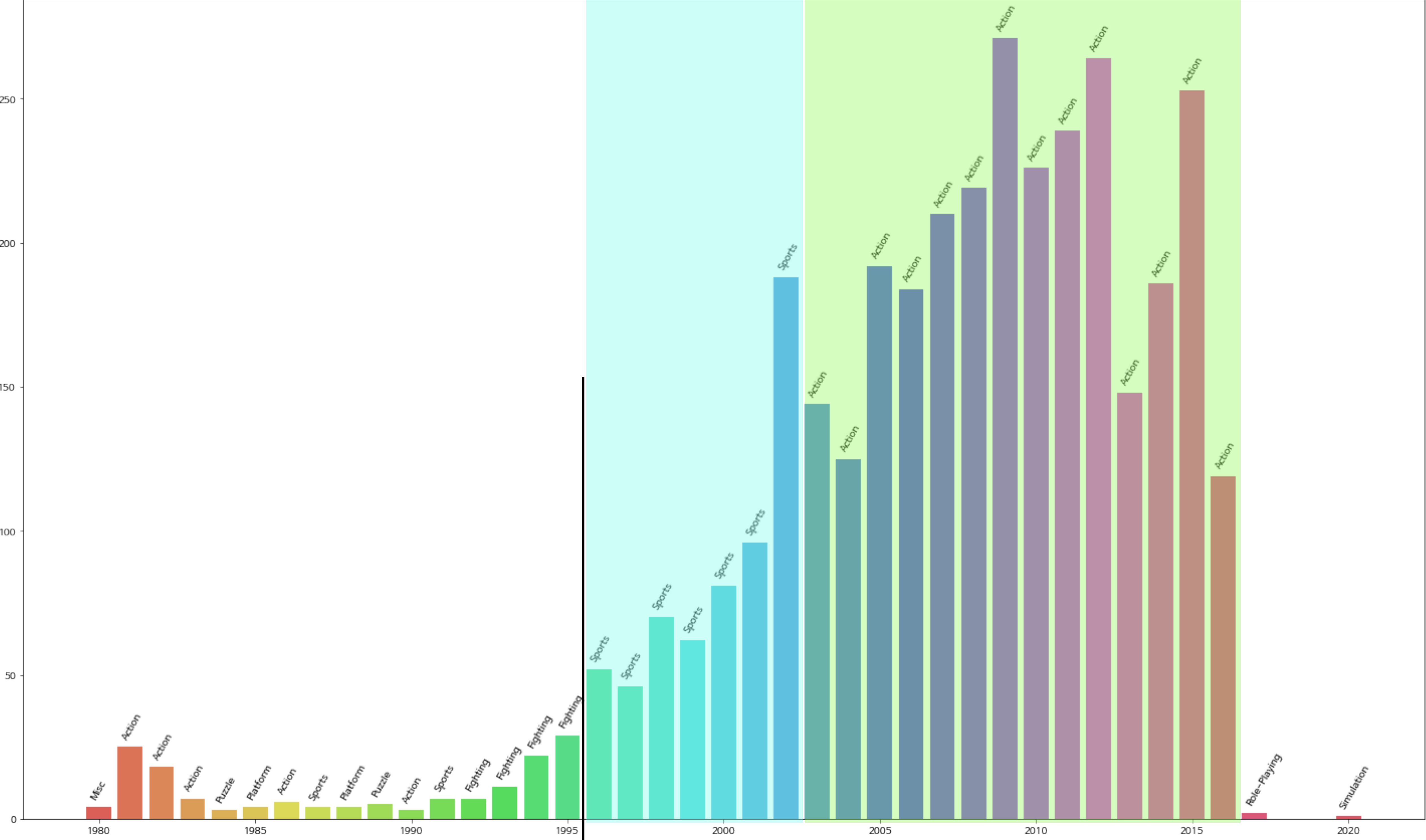
일본 **롤플레이잉** > **액션** > 스포츠

연도별 게임 장르의 트렌드

출시

판매

연도별 게임 트렌드(출시)

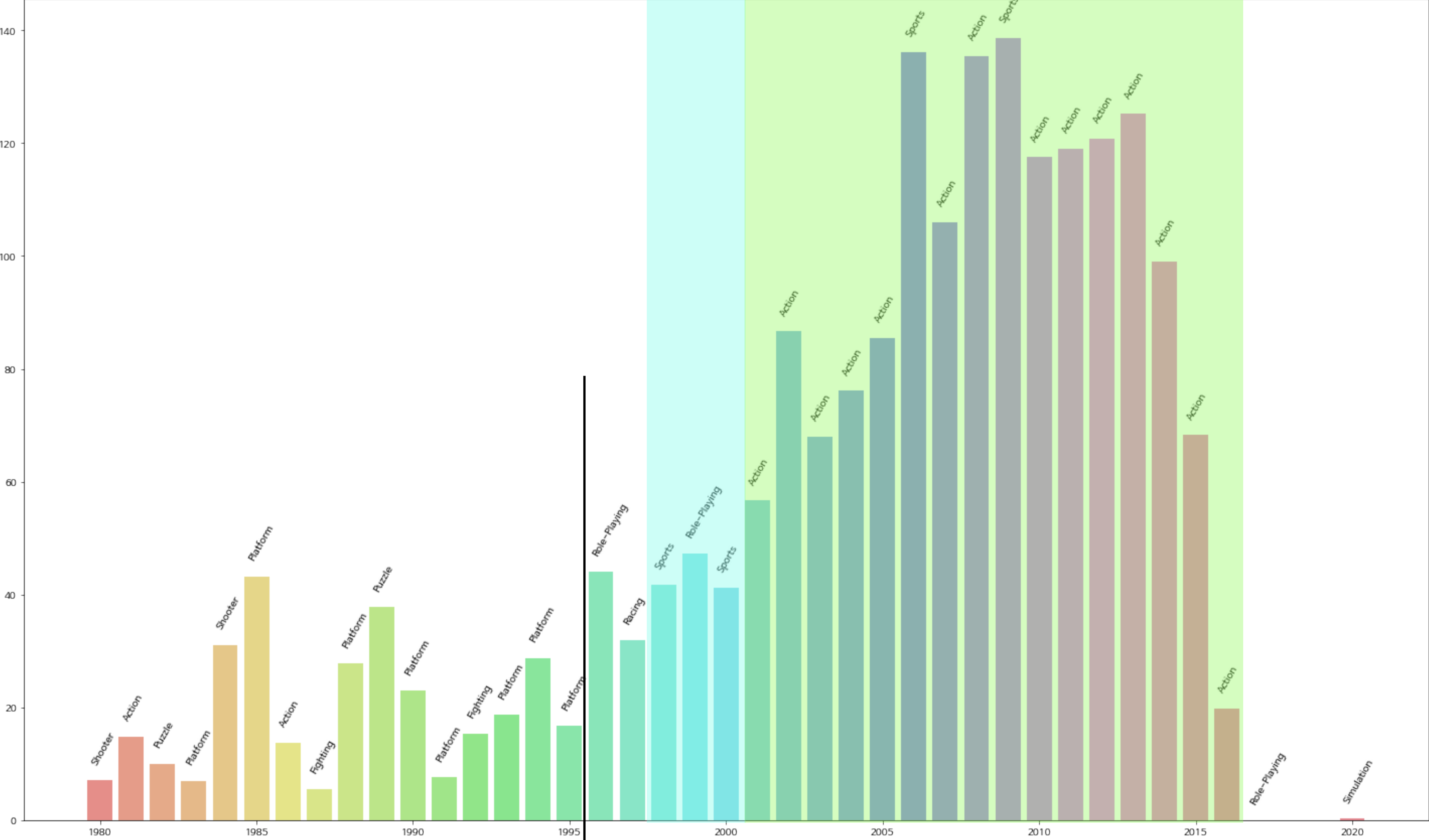


스포츠



액션

연도별 게임 트렌드(판매)



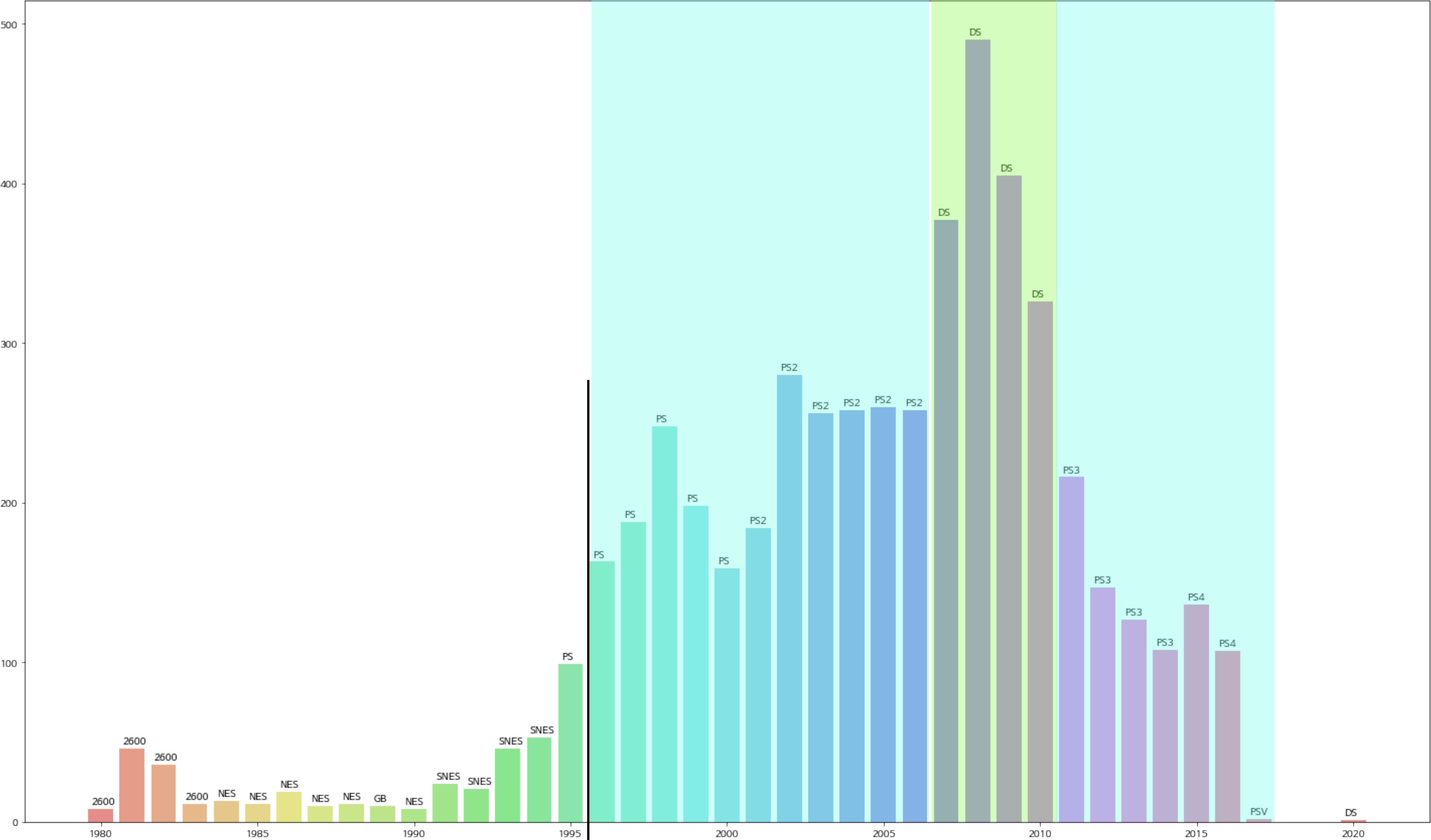
스포츠



액션

Platform

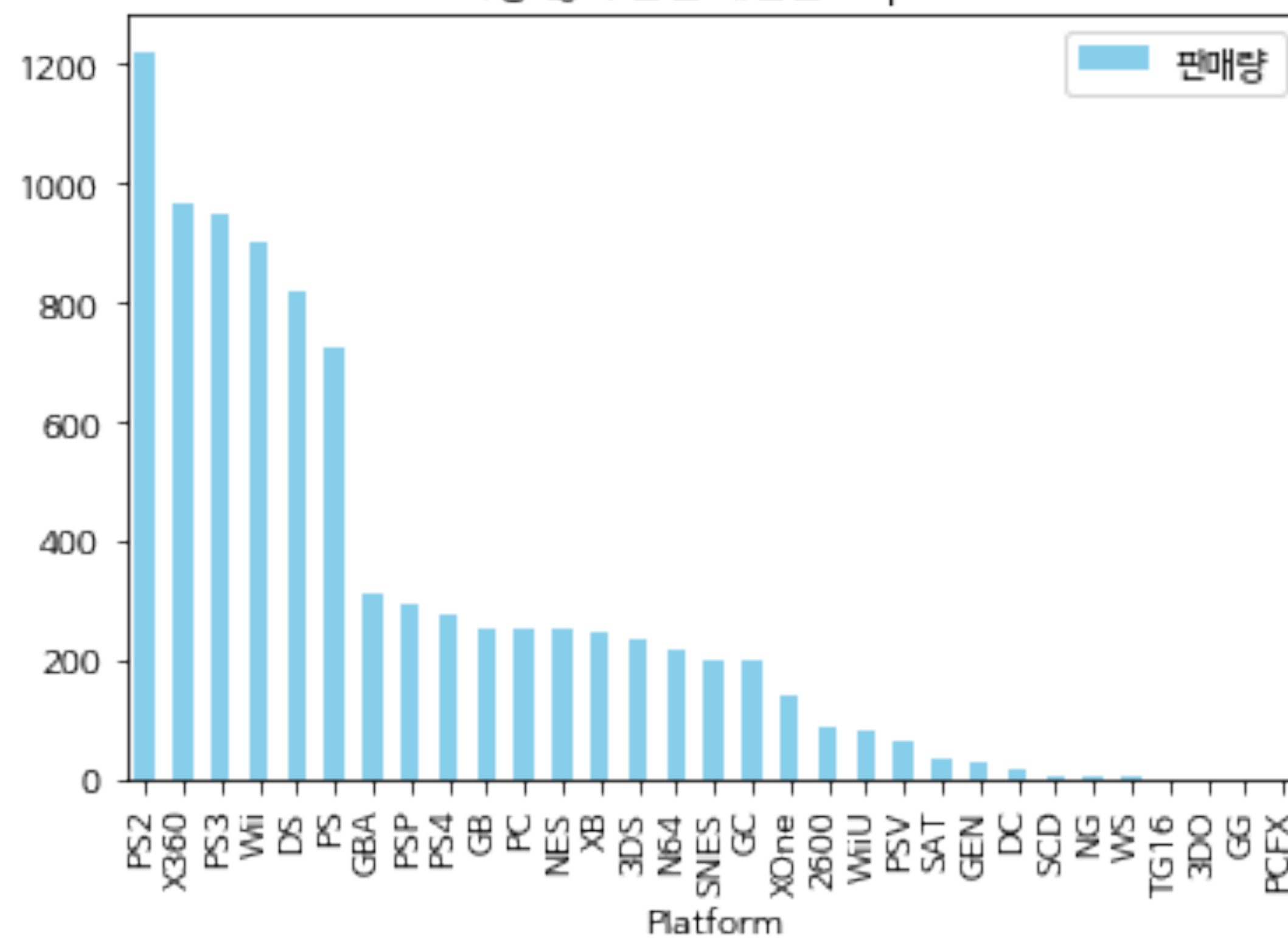
연도별 플랫폼 트렌드



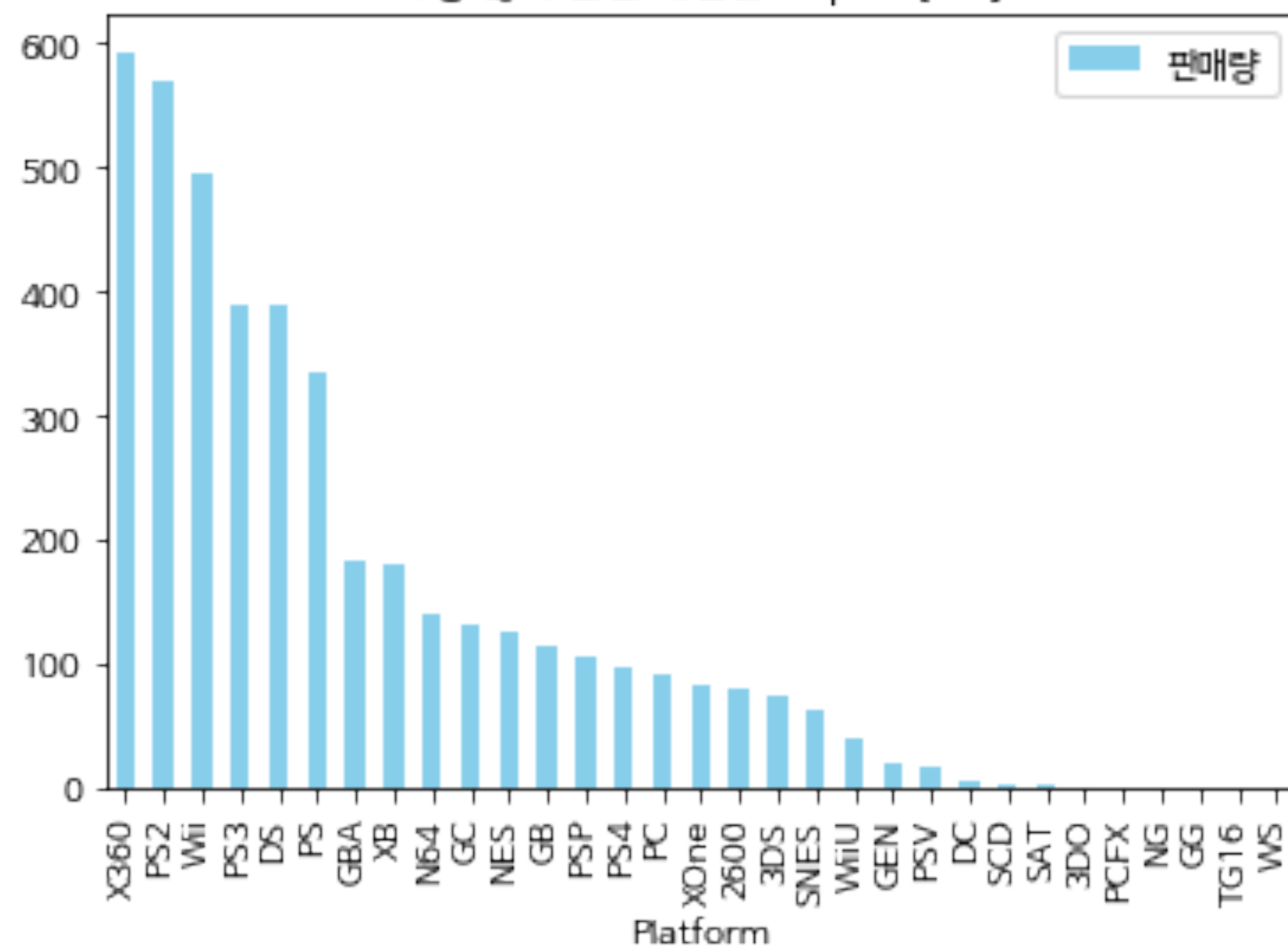
NINTENDO DS



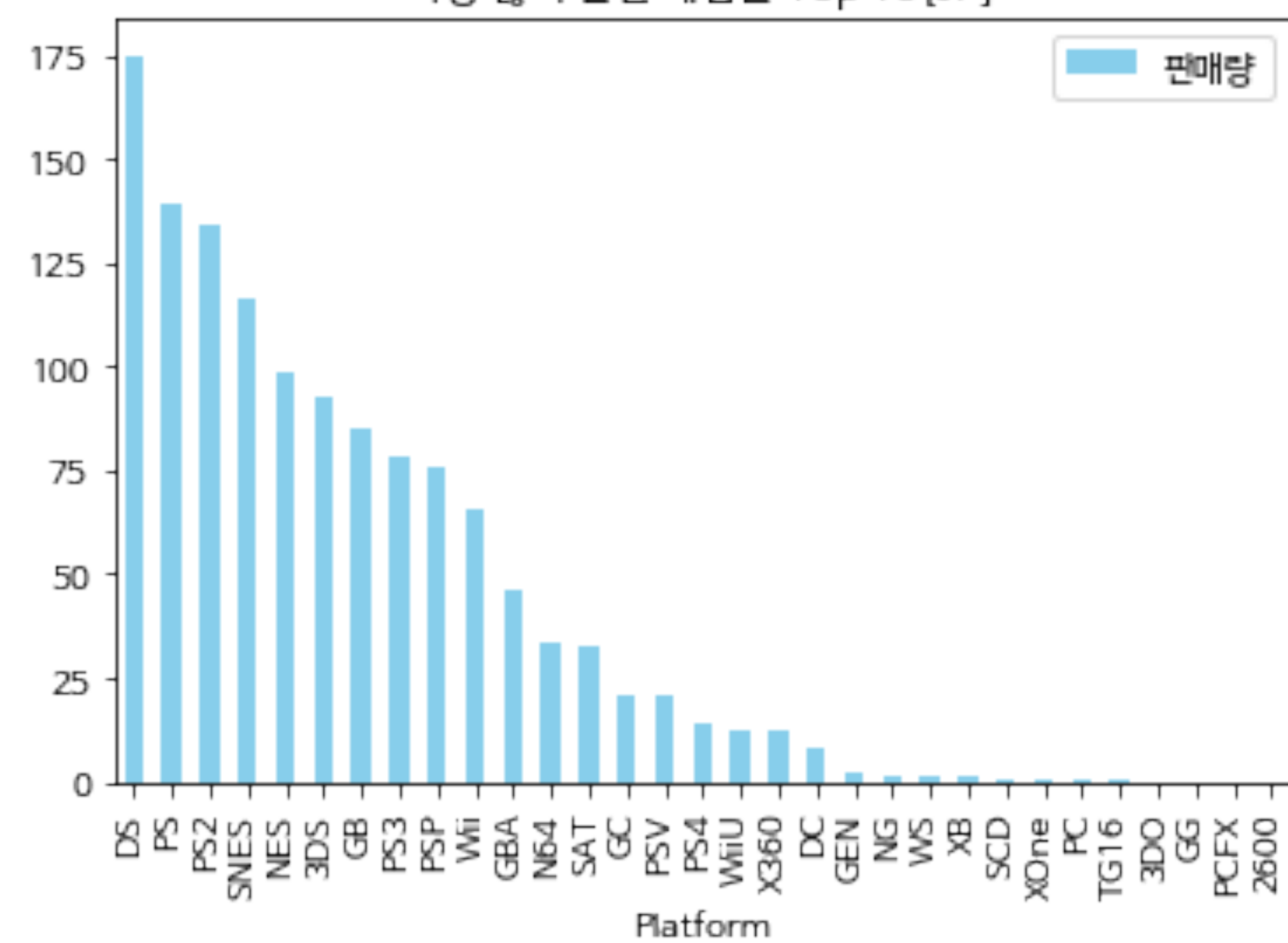
가장 많이 팔린 게임들 Top 10



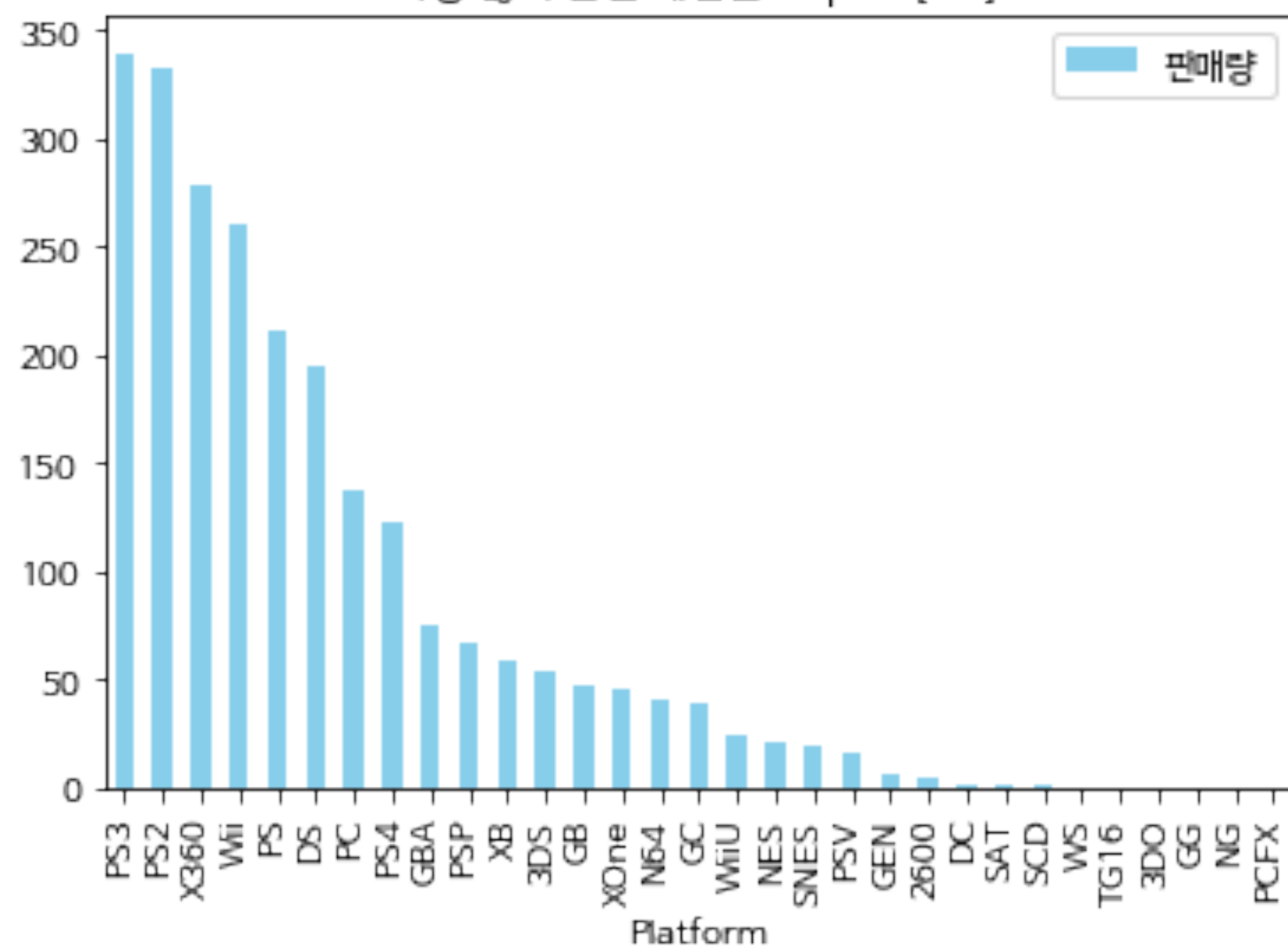
가장 많이 팔린 게임들 Top 10[NA]



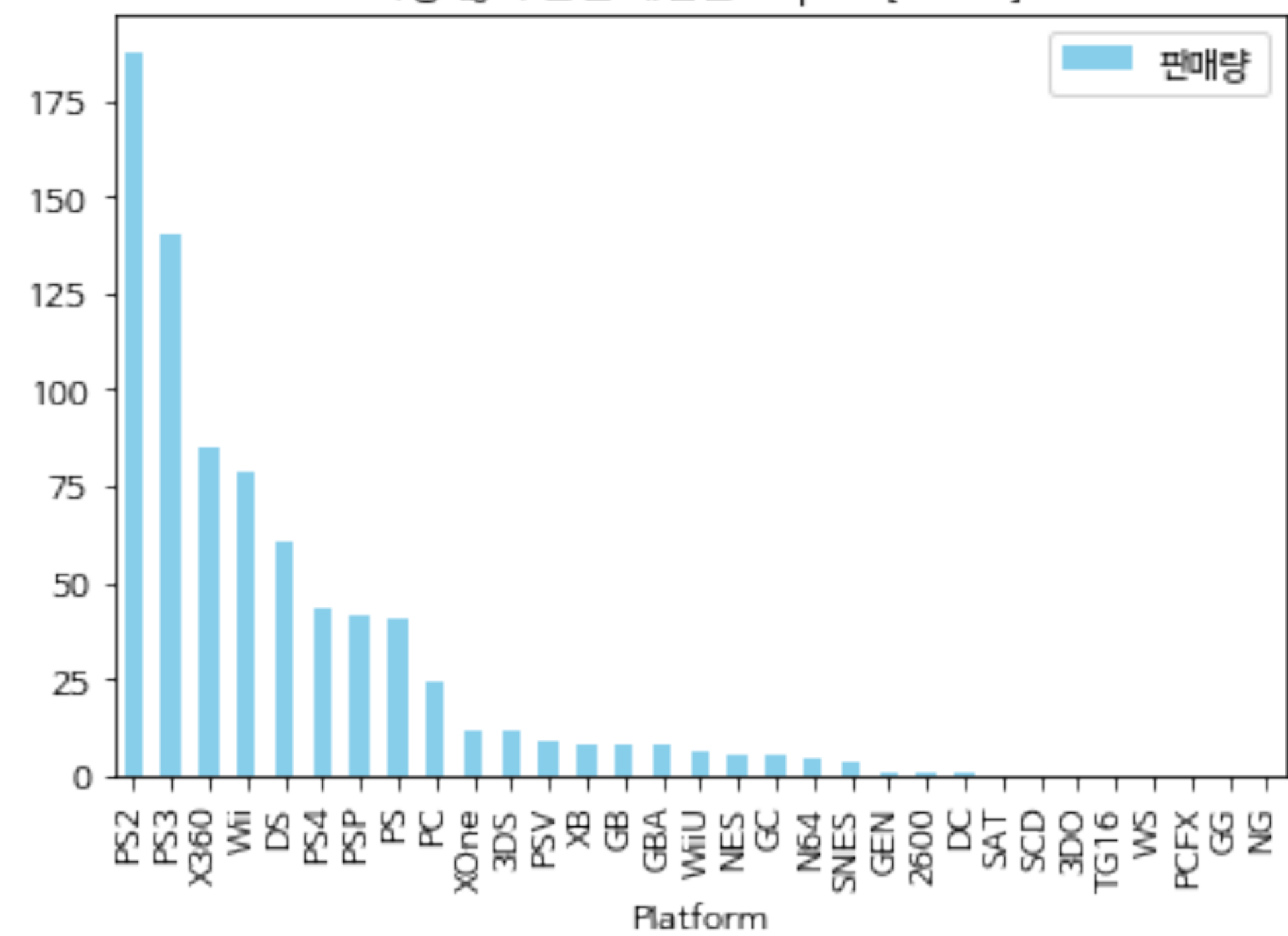
가장 많이 팔린 게임들 Top 10[JP]



가장 많이 팔린 게임들 Top 10[EU]



가장 많이 팔린 게임들 Top 10[Other]



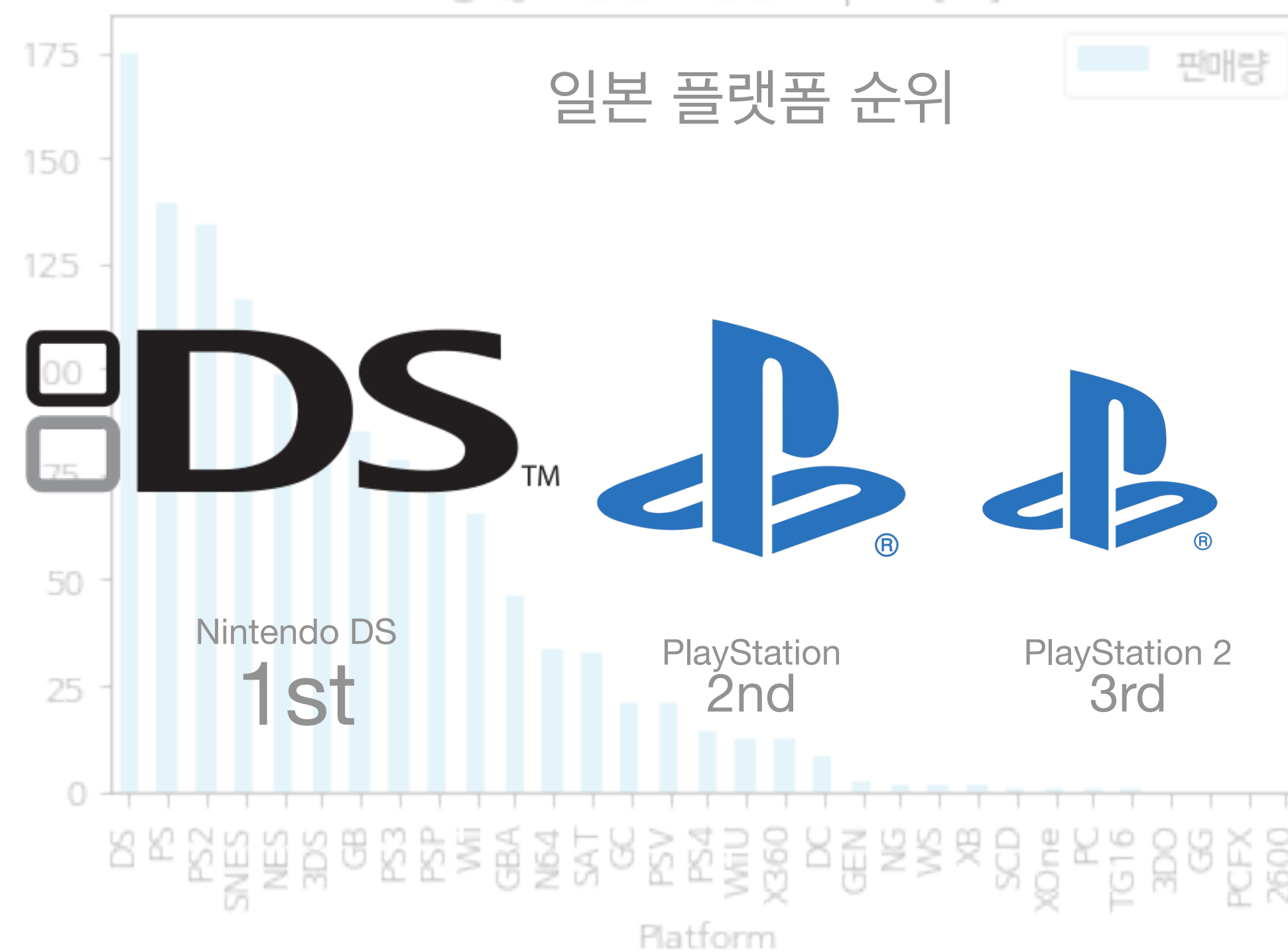
가장 많이 팔린 게임들 Top 10



가장 많이 팔린 게임들 Top 10[NA]



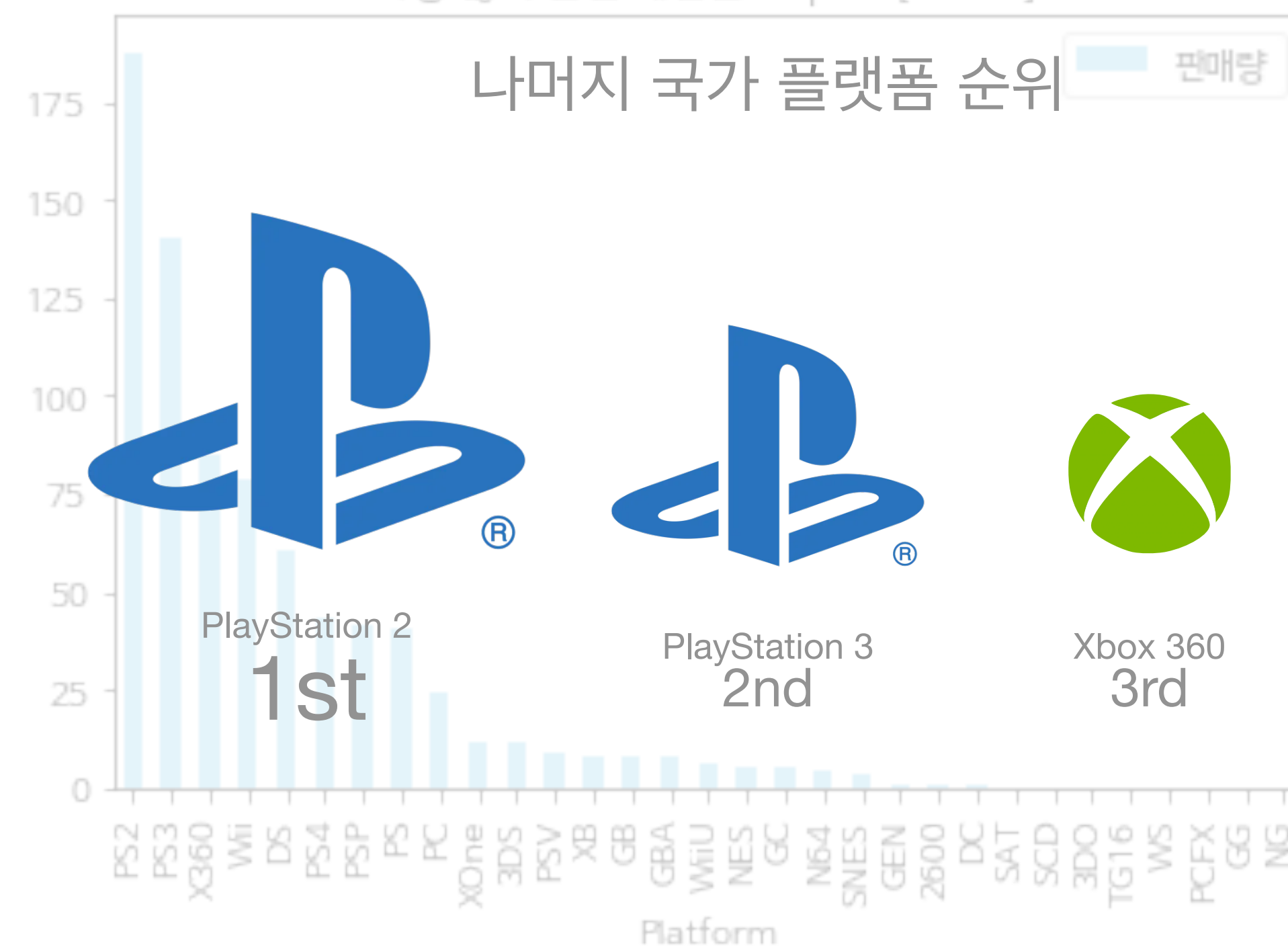
가장 많이 팔린 게임들 Top 10[JP]



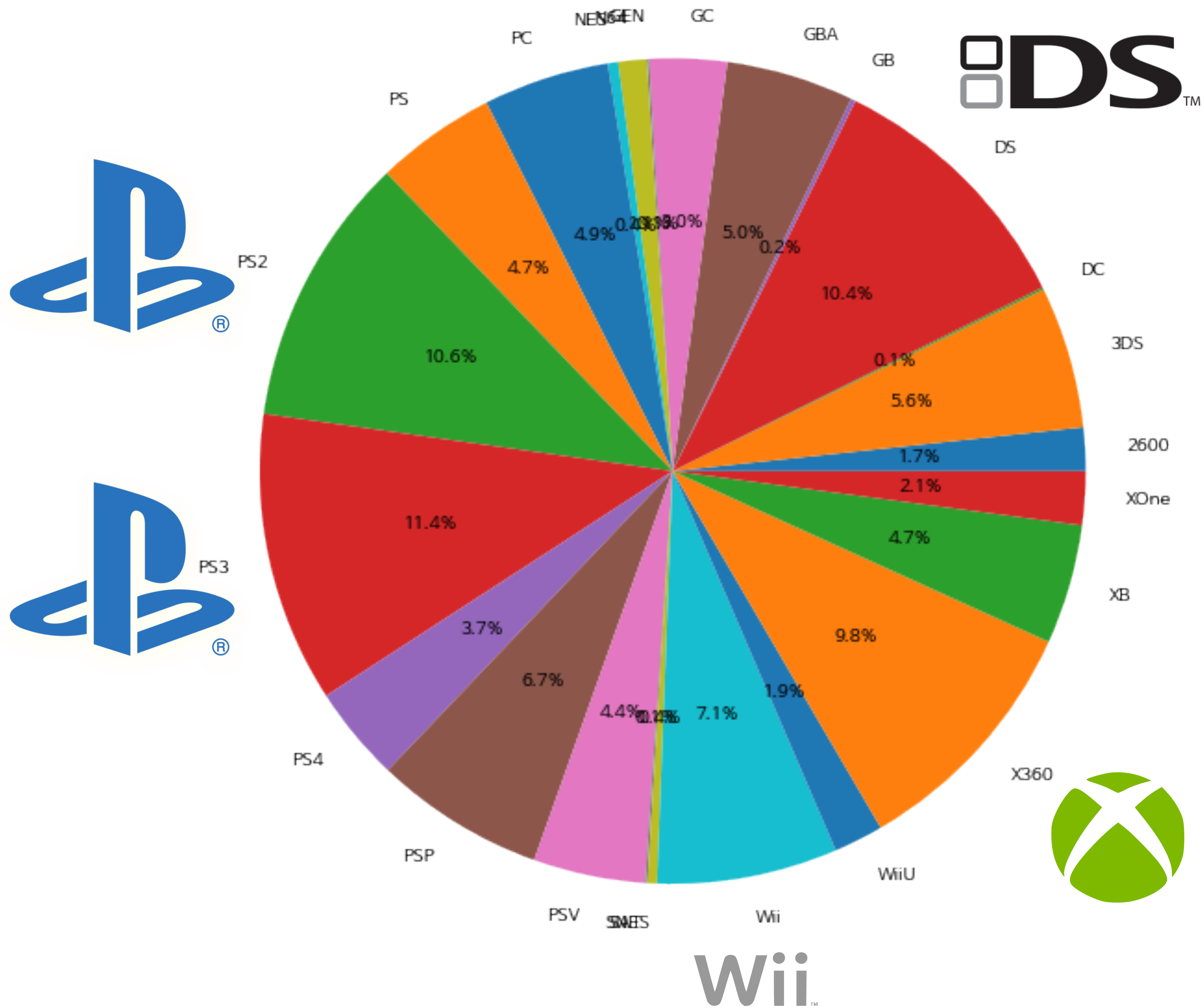
가장 많이 팔린 게임들 Top 10[EU]



가장 많이 팔린 게임들 Top 10[Other]

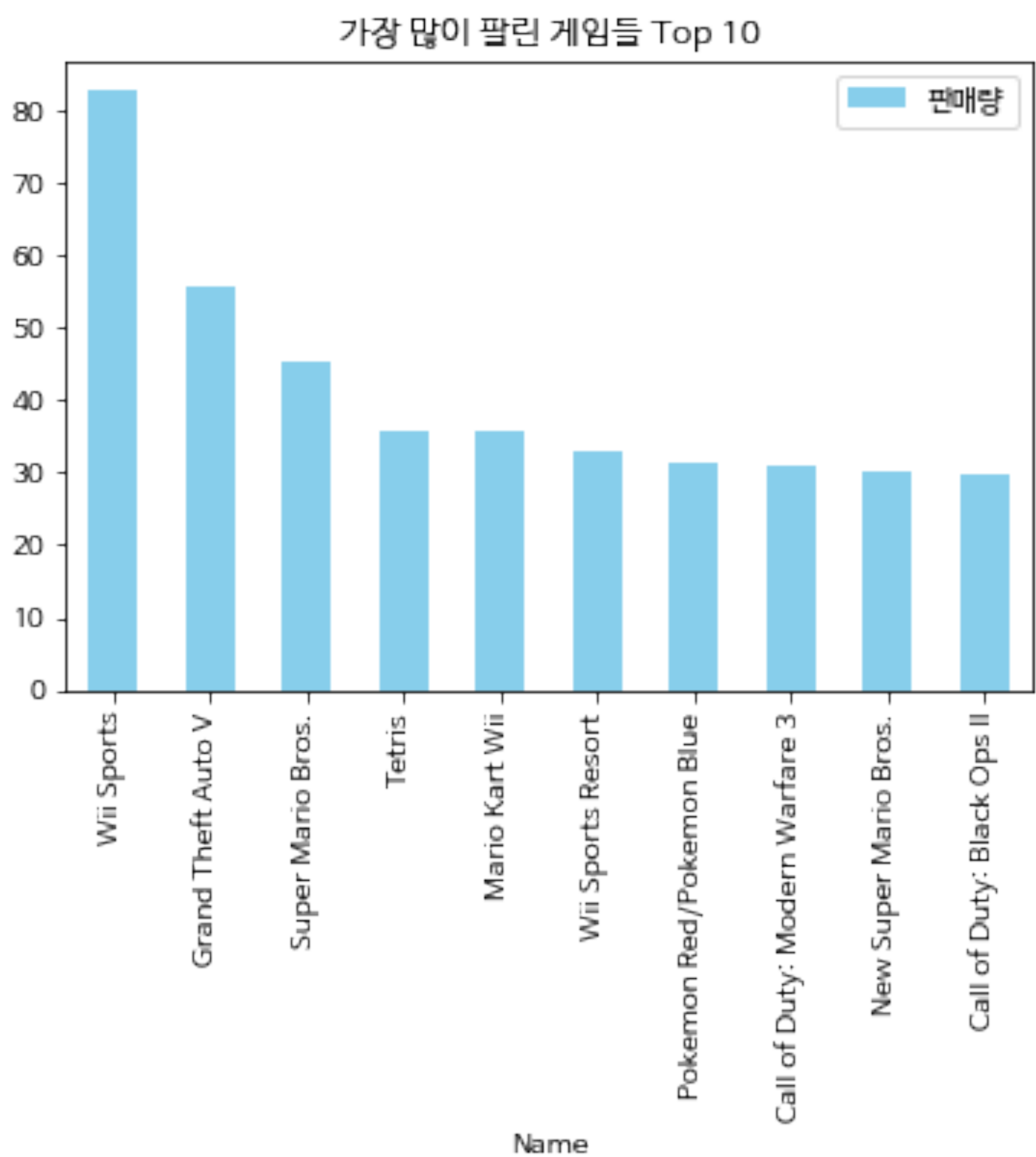


액션장르 게임의 플랫폼 비율



Game

발매사에 따른 게임의 출고량 분석



Wii 
Sports

83M

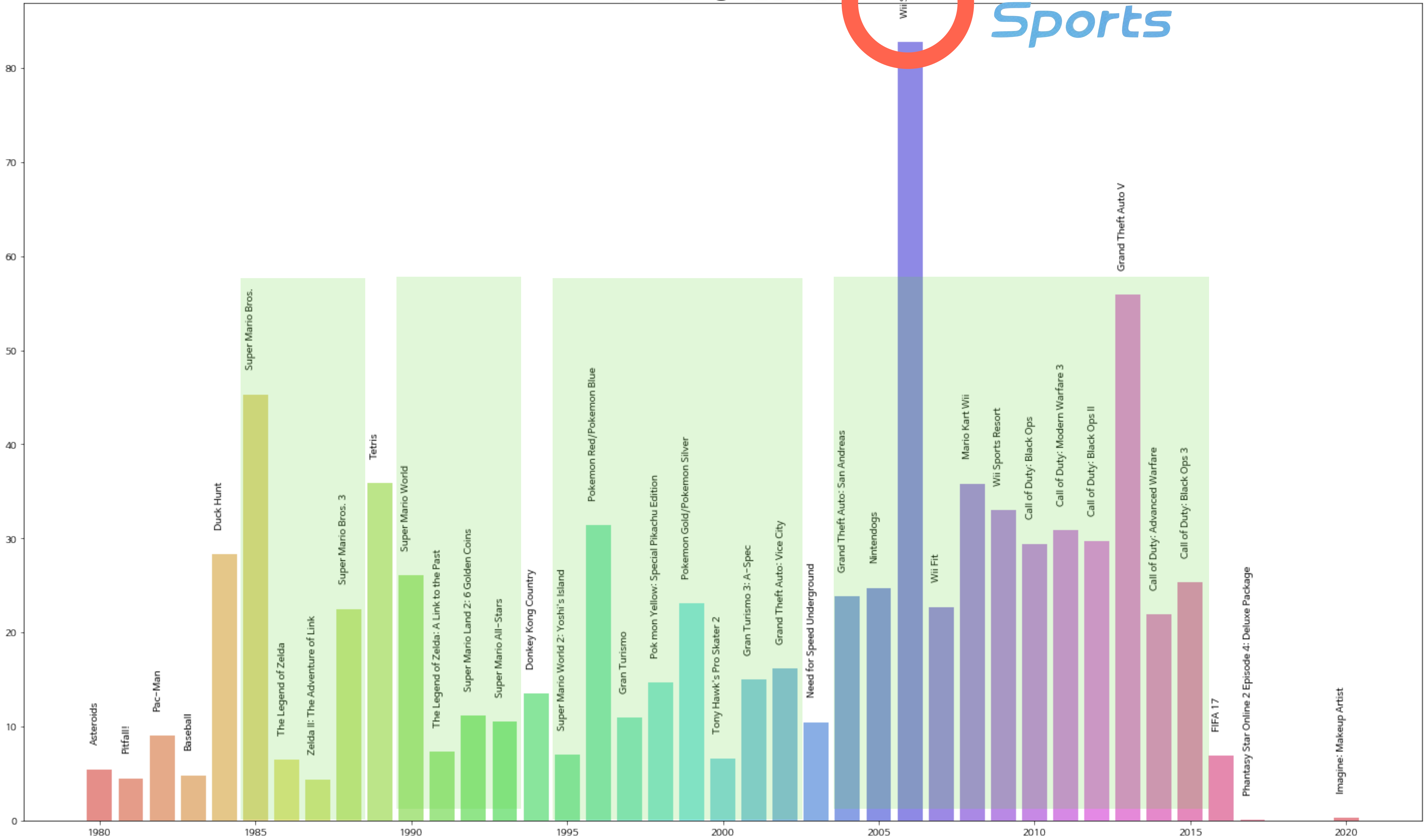
grand
theft
auto 

56M



40M

연도별 출고량이 높은 게임



Trend Similarity

“Series”

Wii 
Sports

THE LEGEND OF
ZELDA

**SUPER
MARIO**

POKÉMON


GRAN TURISMO
THE REAL DRIVING SIMULATOR
SPORT

**grand
theft
auto**

CALL OF DUTY

Data Preprocessing

Missing Data & Outlier

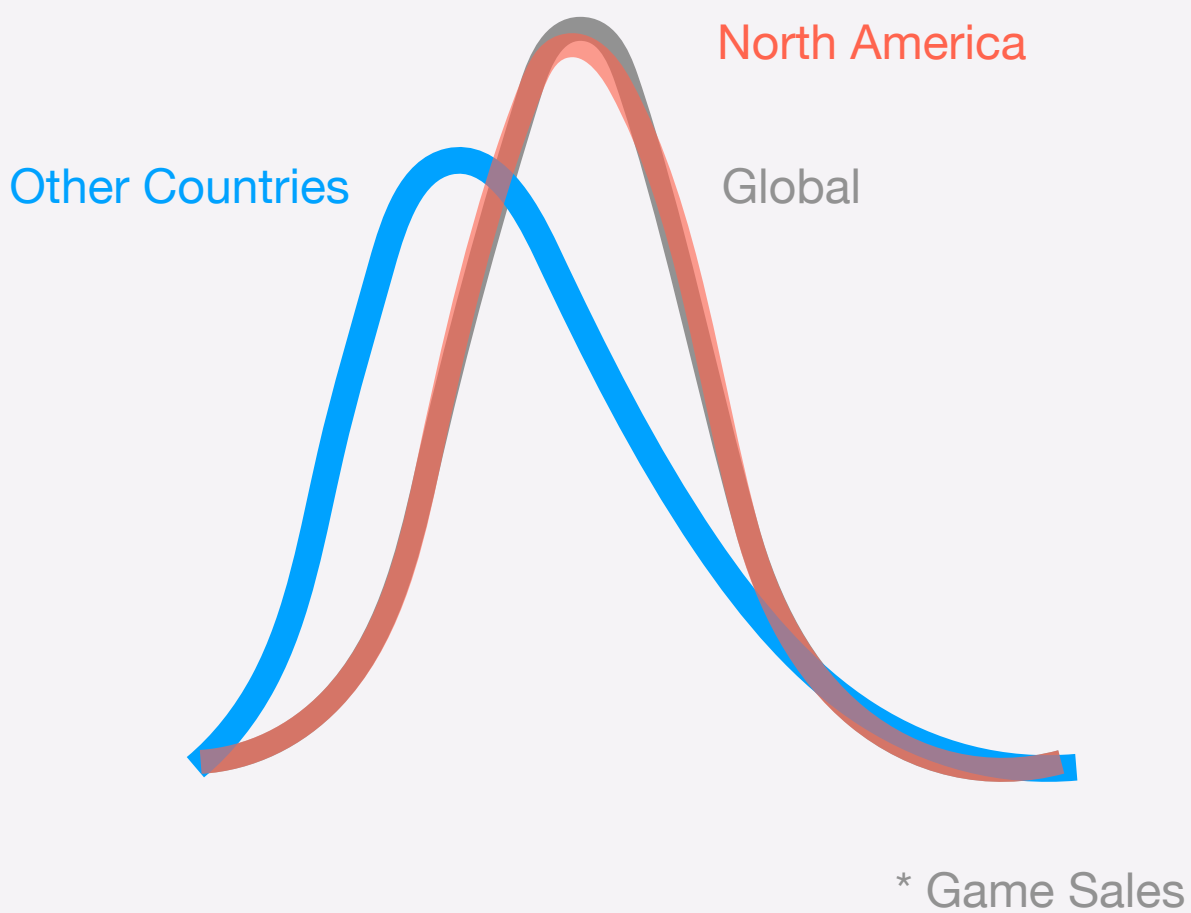


Which game had a good sales record?

* 1980 ~ 2019



Compared to other countries,
North America
has a similar correlation
to the statistics of all countries.



The most popular
game platform



PlayStation 2 & PlayStation 3

2169M



Xbox360
969M



Nintendo Wii
900M

The **Publisher** that
sold a lot of games.



It seems to sell various game genres rather than action genres.
This statistic was overwhelming.

The ranking of **Publisher**
based on **Action genre** sales.



Take - two interactive Publisher is the No. 1 action genre.

North America likes
Action genre a lot.



Trend Similarity
“Series”



2006 / 2007
/ 2008 / 2009

CALL OF DUTY

2010 / 2011 / 2012 / 2014 / 2015 / 2016



2001 / 2002 / 2004 / 2013

Since 2004

The **Action genre** has become a trend in video games.

결론

다음 분기에 어떤 게임을 설계하는 것이 좋을까

액션 장르의 롤 플레잉적인 요소가
포함되어있는 시리즈물 게임

