

SQL FINAL PROJECT

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DATASET

Connect      

- Statistics
- dbo.region
 - Columns
 - id (PK, int, not null)
 - region_name (varchar(50))
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
- dbo.region_sales
 - Columns
 - region_id (FK, int, null)
 - game_platform_id (FK, int, null)
 - num_sales (decimal(5,2))
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
 - Dropped Ledger Tables
- Views
- External Resources
- Synonyms

```
select game_id, game_name, publisher_id, publisher_name, platform_id, platform_name, genre_id, genre_name,
       game_publisher_id, game_platform_id, region_id, region_name, release_year, num_sales as sales
from region_sales
join game_platform
    on region_sales.game_platform_id = game_platform.id
join region
    on region_sales.region_id = region.id
join game_publisher
    on game_platform.game_publisher_id = game_publisher.id
join game
    on game_publisher.game_id = game.id
join publisher
    on game_publisher.publisher_id = publisher.id
join platform
    on game_platform.platform_id = platform.id
join genre
    on game.genre_id = genre.id
```

91 %

Results Messages

		publisher_id	publisher_name	platform_id	platform_name	genre_id	genre_name	game_publisher_id	game_platform_id	region_id	region_name	release_year	sales
1		498	Take-Two Interactive	5	X360	11	Sports	3700	13031	1	North America	2009	0.11
2		300	Majesco Entertainment	4	DS	4	Misc	8011	7779	1	North America	2009	0.07
3		464	Sony Computer Entertainment	7	PS2	11	Sports	3381	11888	1	North America	2003	0.20
4		498	Take-Two Interactive	6	PS3	11	Sports	3700	13095	1	North America	2009	0.13
5		349	Myelin Media	7	PS2	4	Misc	8229	8540	1	North America	2006	0.04
6		498	Take-Two Interactive	1	Wii	11	Sports	3700	12936	1	North America	2009	0.33
7	y	532	Ubisoft	4	DS	4	Misc	7735	14802	1	North America	2008	0.07
8		532	Ubisoft	4	DS	11	Sports	3074	14719	1	North America	2007	0.46

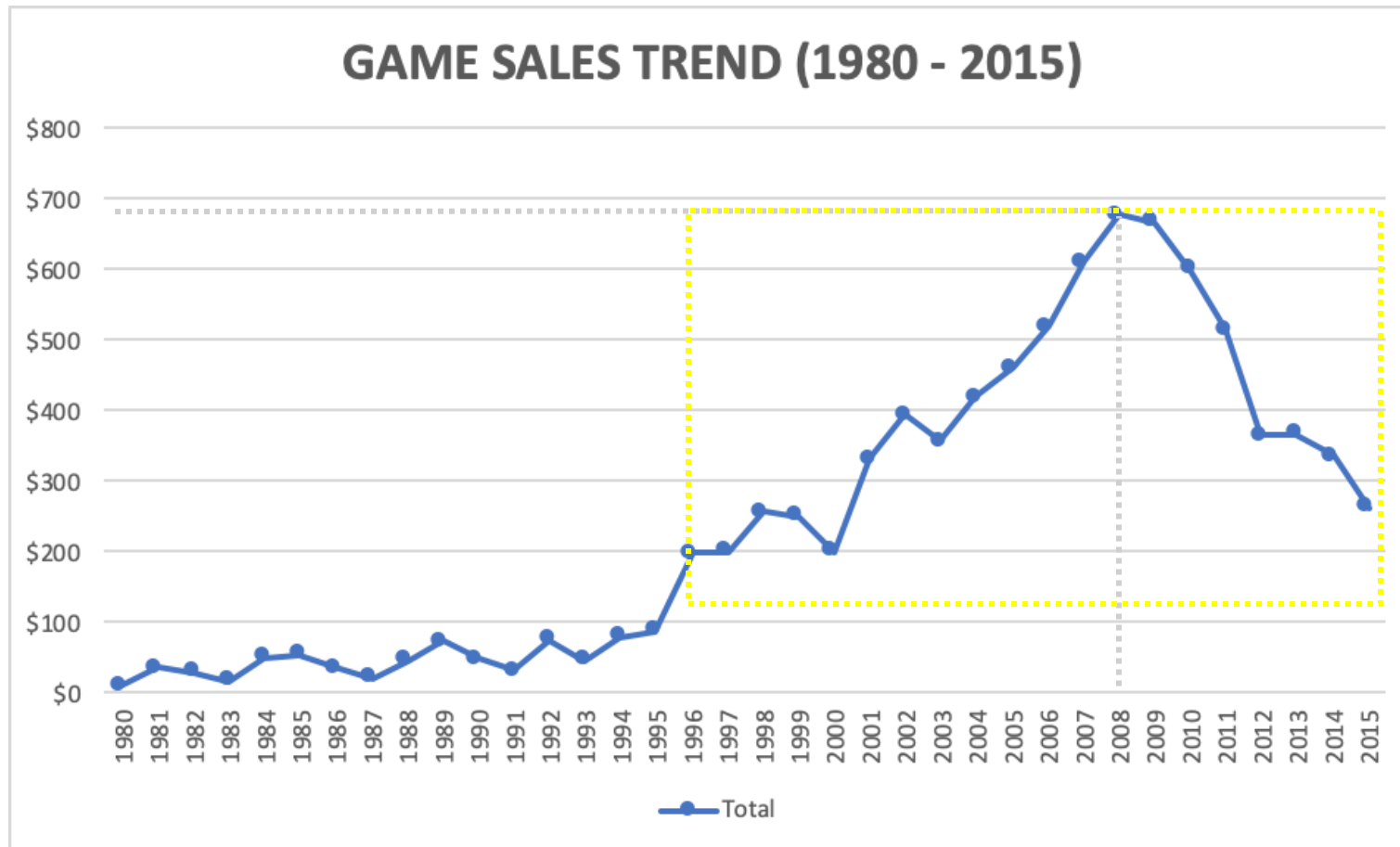
✔ Query executed successfully.

LAPTOP-M3UIC9MJ\HUMBER DB (...)	LAPTOP-M3UIC9MJ\prakt ...	video games	00:00:02	65,320 rows
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MACROENVIRONMENT ANALYSIS



TREND

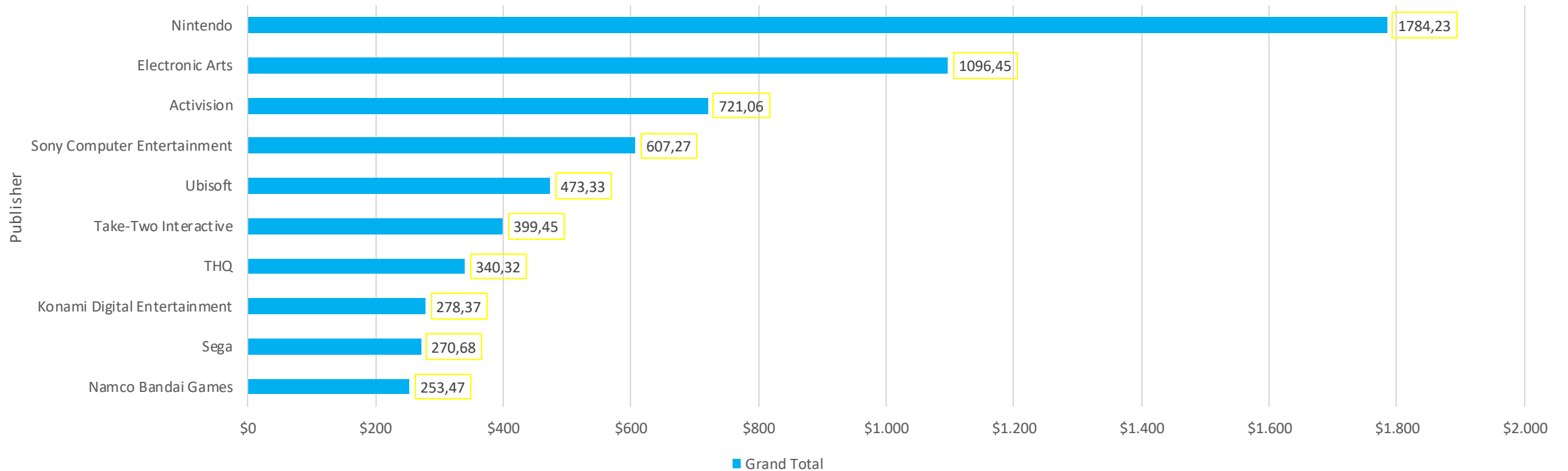


- Game sales trend constantly increasing from 1980 – 2008
- Peak of sales in 2008 – 2009 with sales amount nearly **\$700mio** per year
- Grand total sales from 1980 – 2015 is approximately **\$8,747mio**, with the **\$8,000mio (91%)** itself was achieved from 1996 - 2015

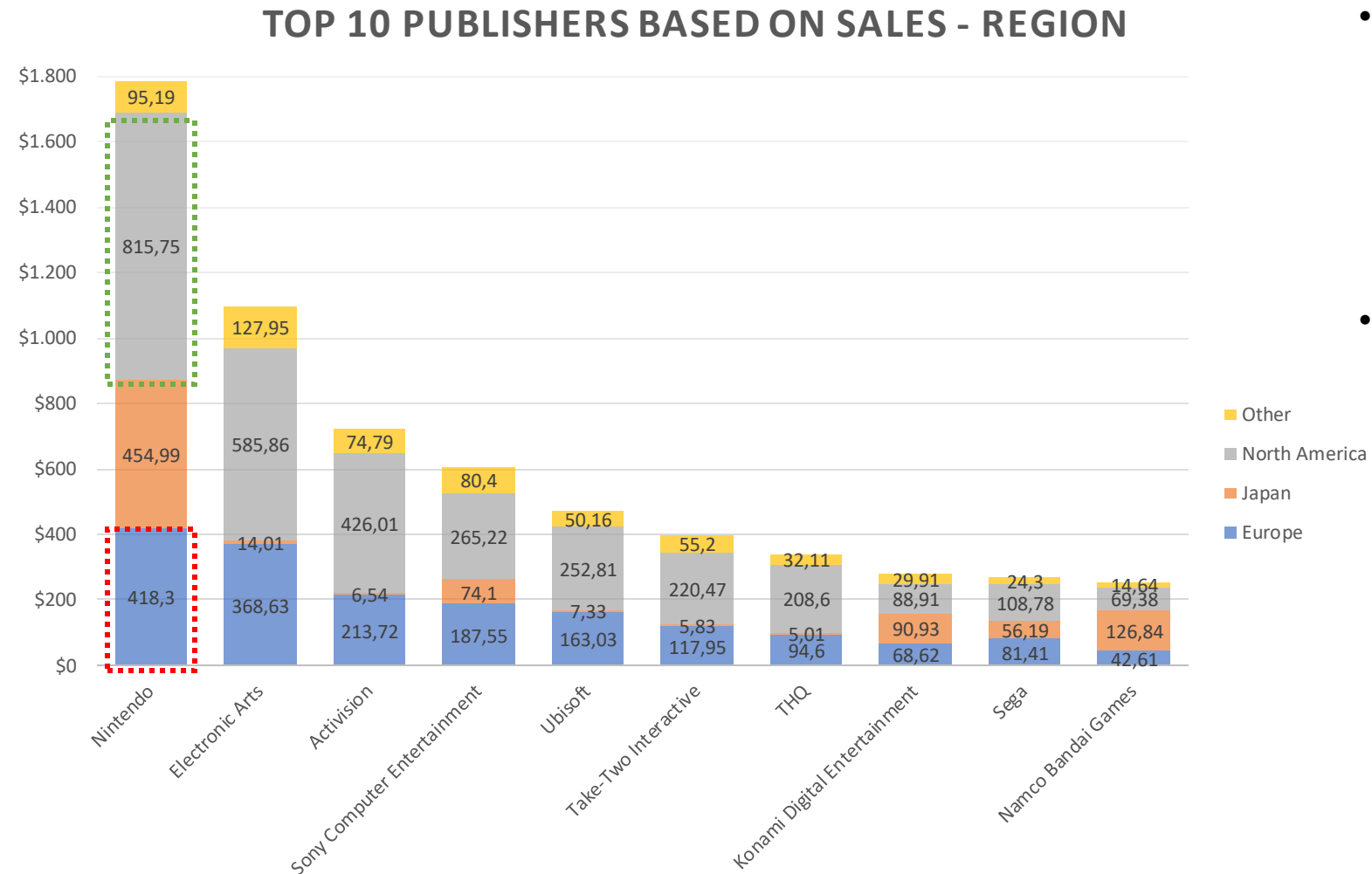
THE BIG PLAYERS

Top 10 game publishers contribute **\$6,224mio** in sales, roughly **71.1%** of all-time total sales

Top 10 Publishers - Grand Total of Sales



THE BIG PLAYERS – SALES BY REGION



- Nintendo leads the sales in almost all regions VS other Top 10 publishers; except for "Other" region where Electronic Arts sells more
- Nintendo sales mainly come from the North America region, followed by Japan, Europe and Other

Since "Other" region sales is significantly small, we will compare Nintendo's sales vs competitors:

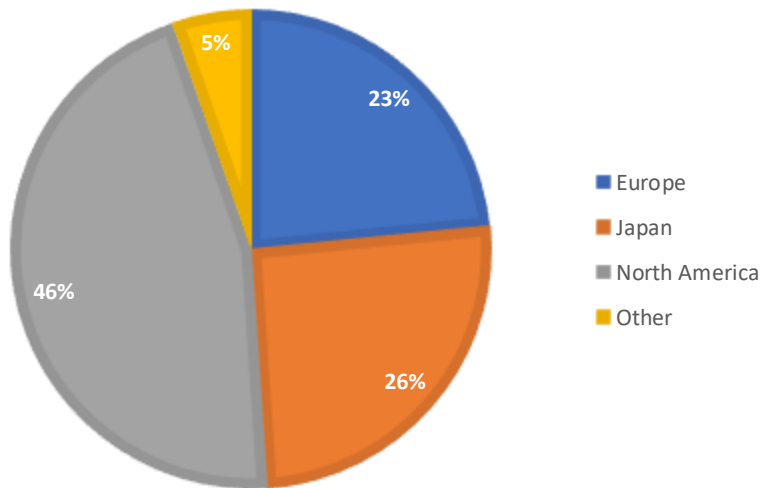
- Strongest : North America
- Weakest : Europe

NINTENDO ANALYSIS

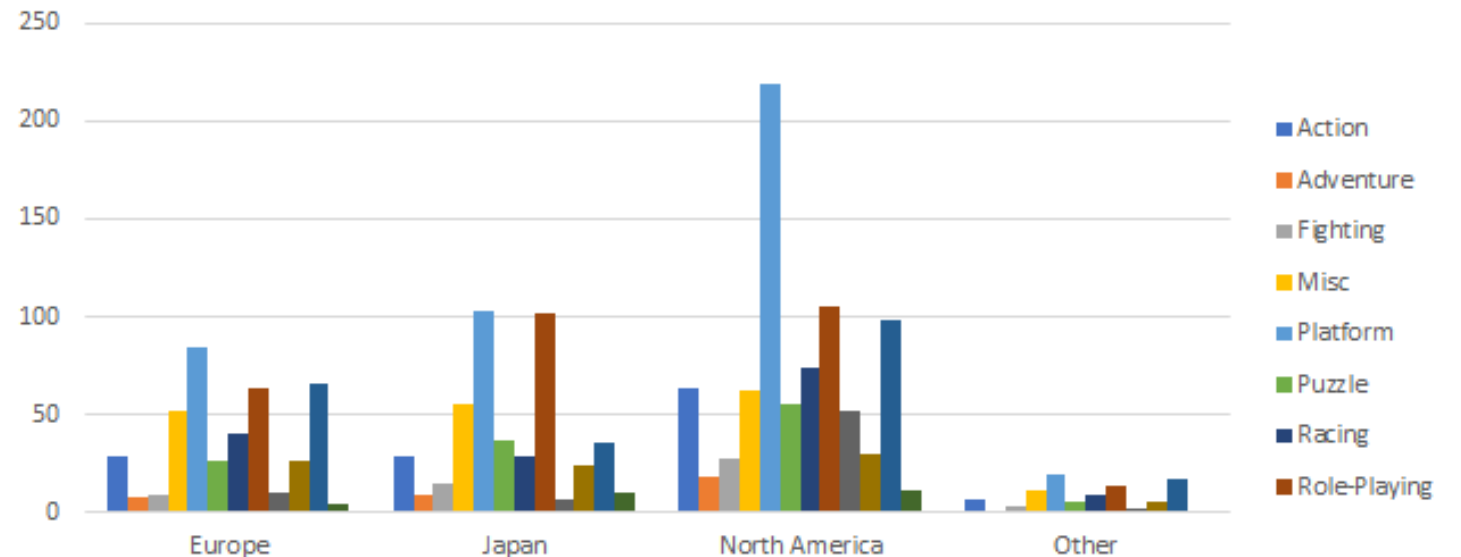


NINTENDO SALES LANDSCAPE

TOTAL OF NINTENDO SALES BY REGION



NINTENDO SALES BY GENRE FOR EACH REGION



Nintendo's **most popular** genre by far are **platform games**, while **adventure and strategy** are the **least popular**.

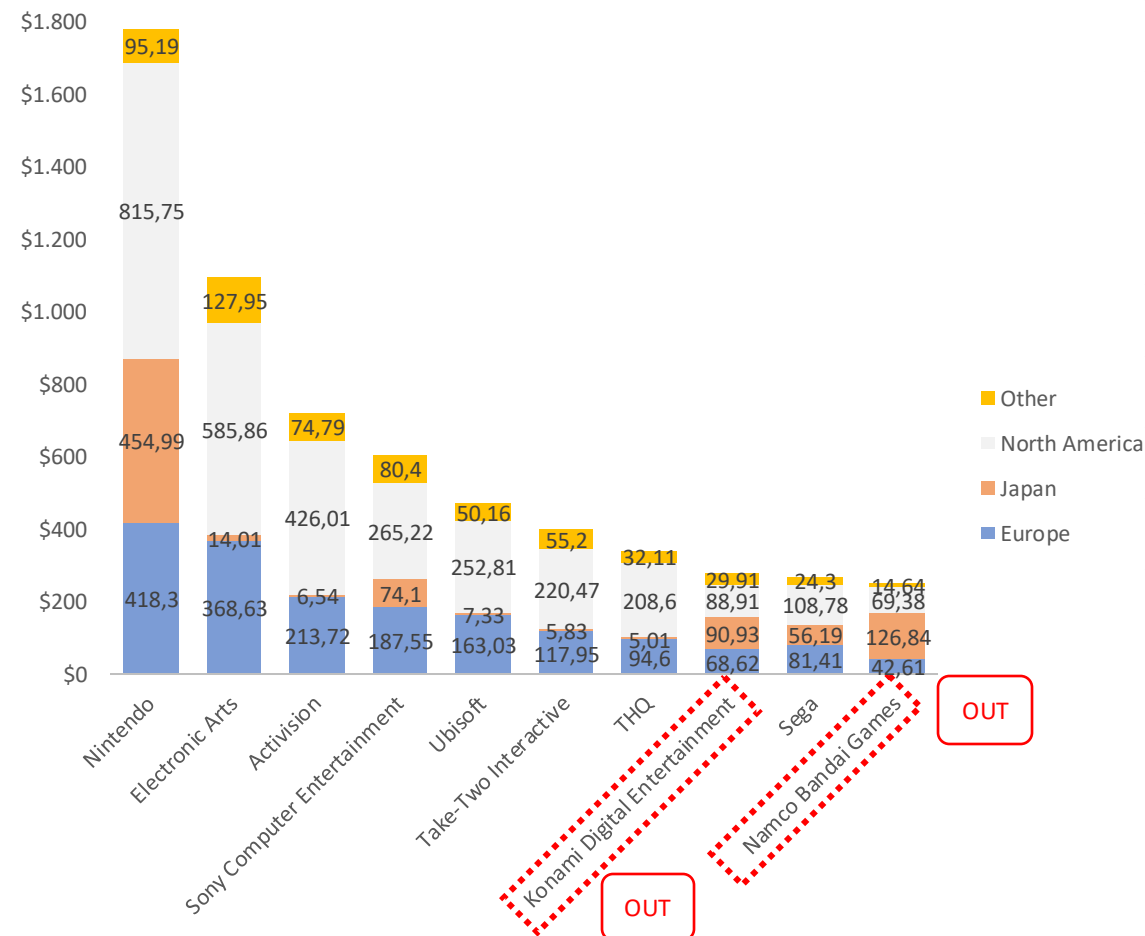
Racing games are particularly **popular in North America** compared to other regions, notably Japan.

NORTH
AMERICA

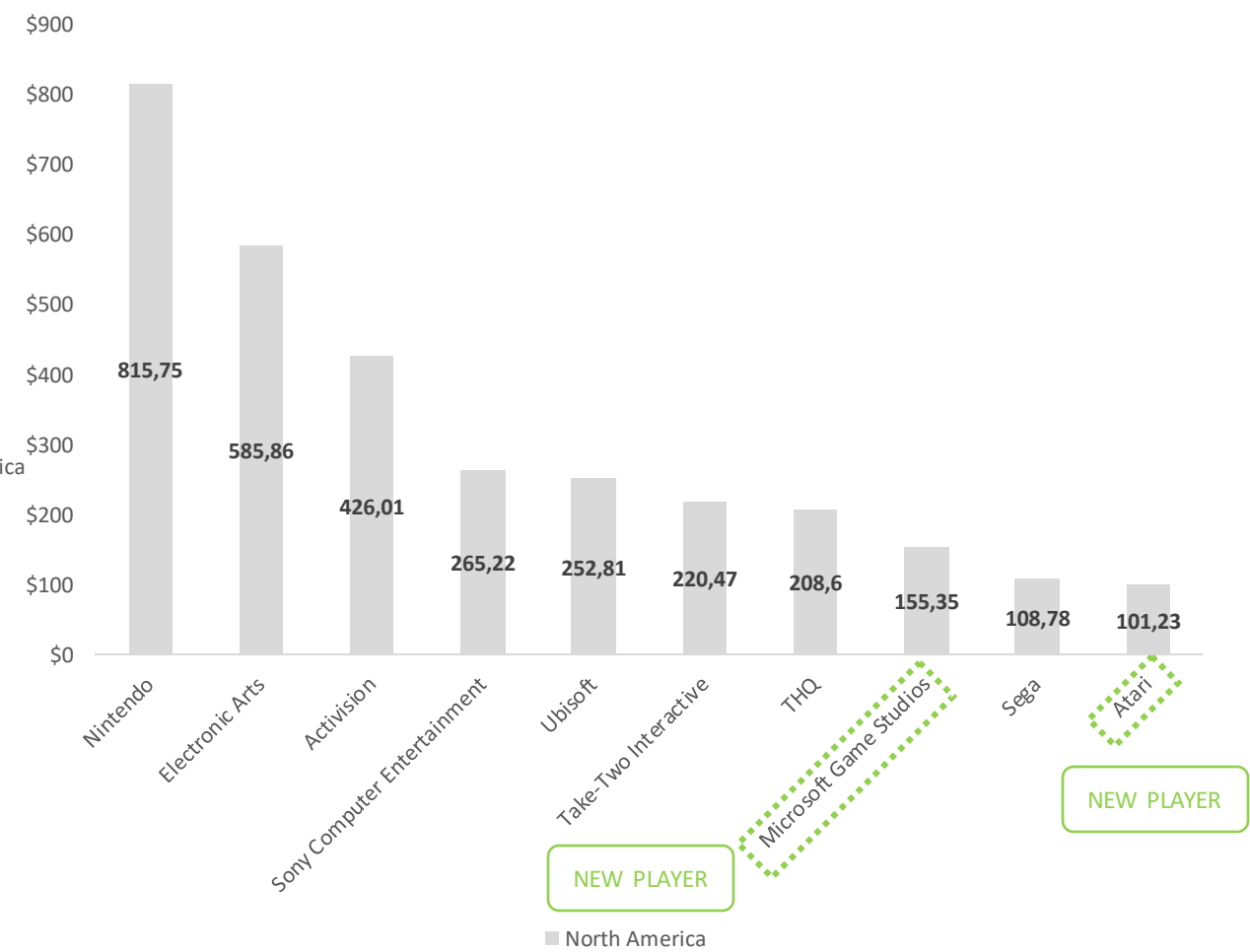


NINTENDO NORTH AMERICA VS COMPETITORS

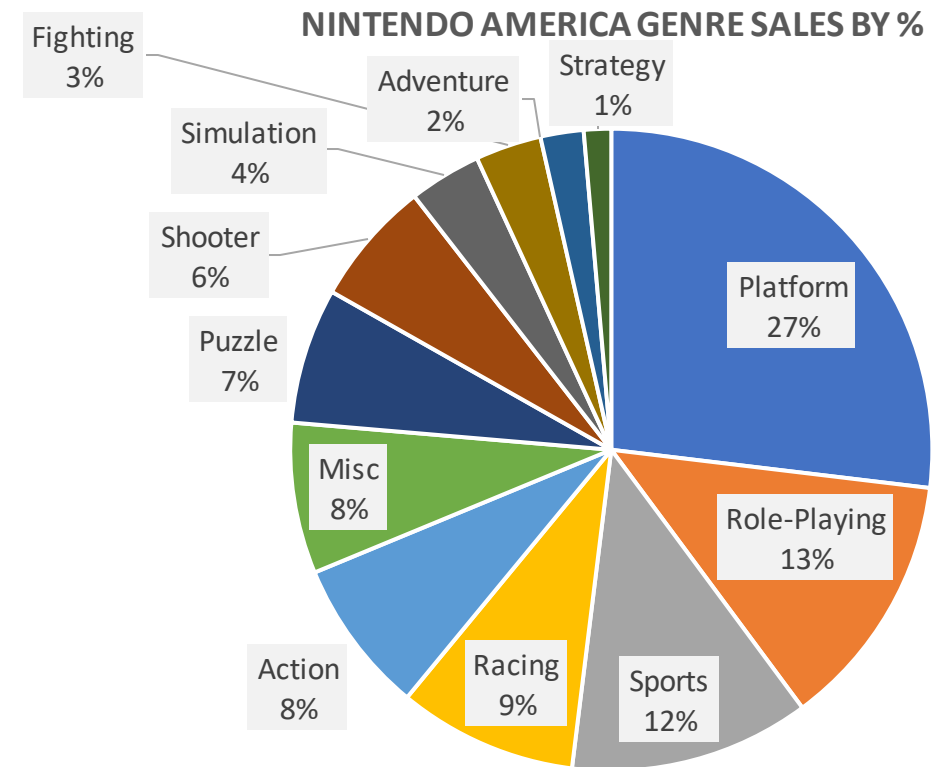
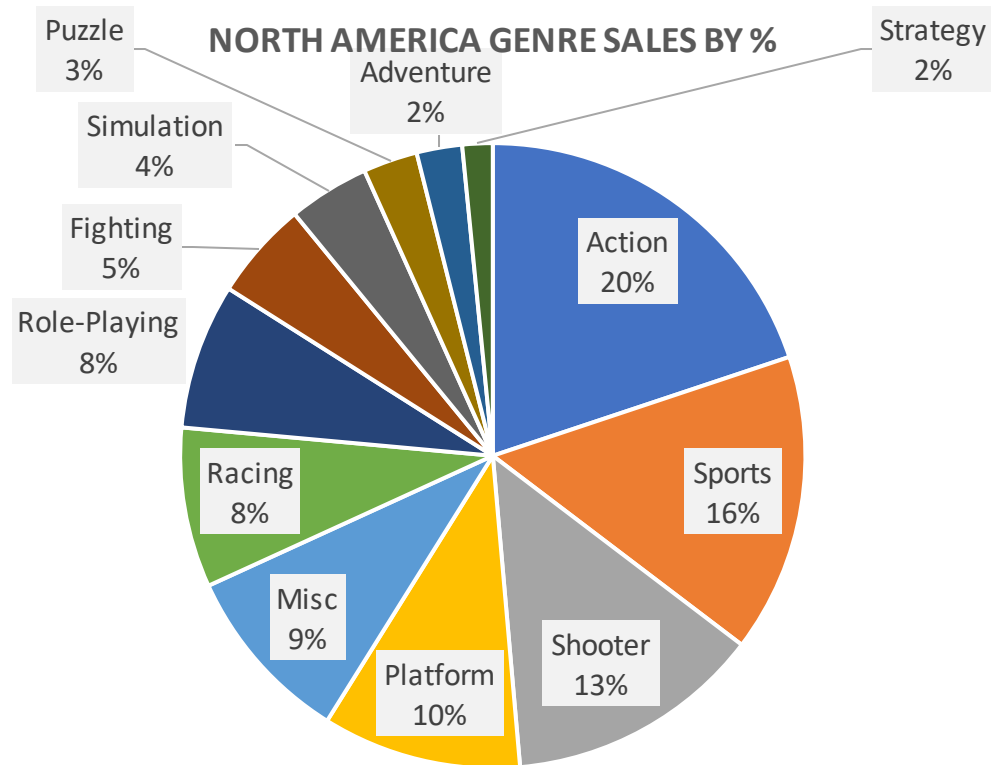
TOP 10 PUBLISHERS BASED ON SALES - REGION



TOP 10 SALES IN NORTH AMERICA

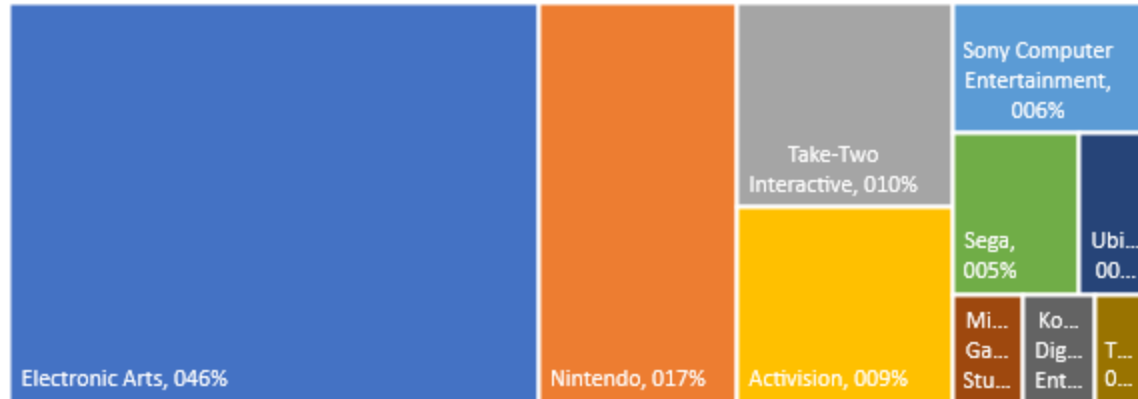


NORTH AMERICA GENRE SALES VS NINTENDO

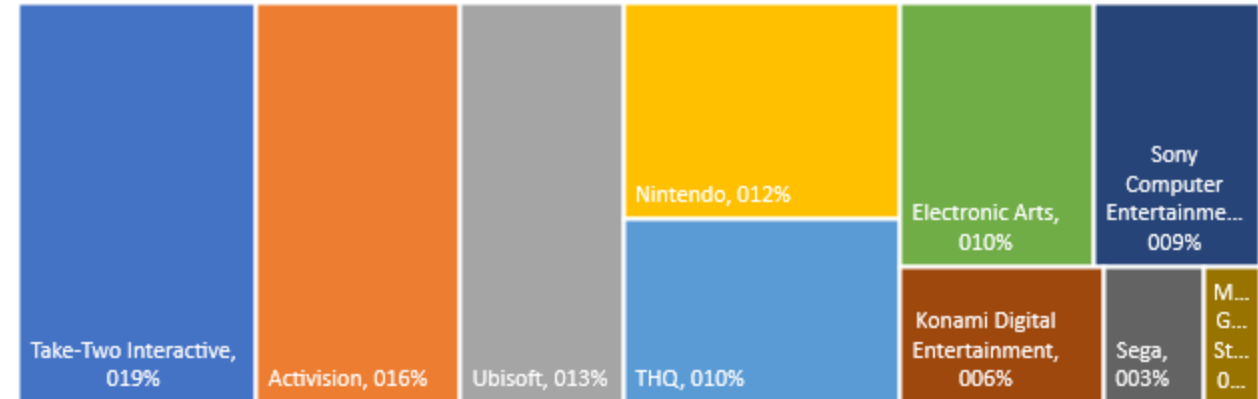


TOP 3 GENRE MARKET SHARE VS COMPETITORS

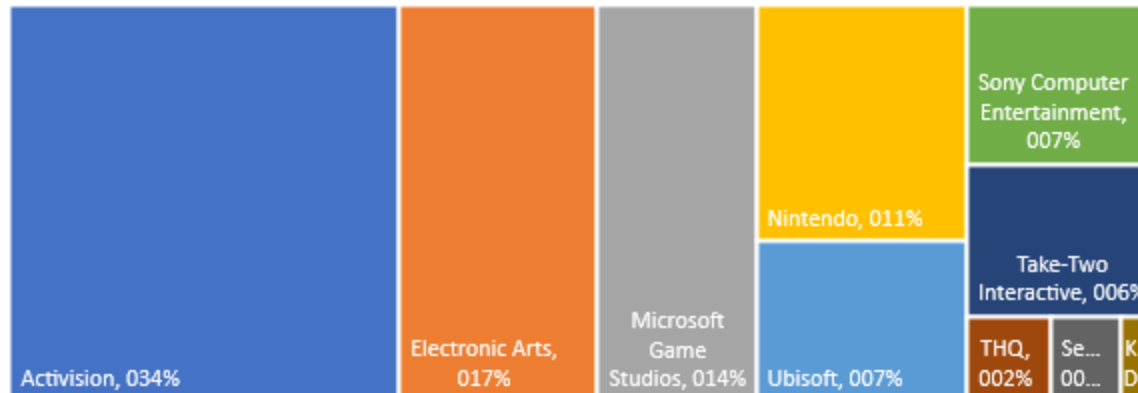
PUBLISHERS MARKET SHARE IN SPORTS GENRE



PUBLISHERS MARKET SHARE IN ACTION GENRE



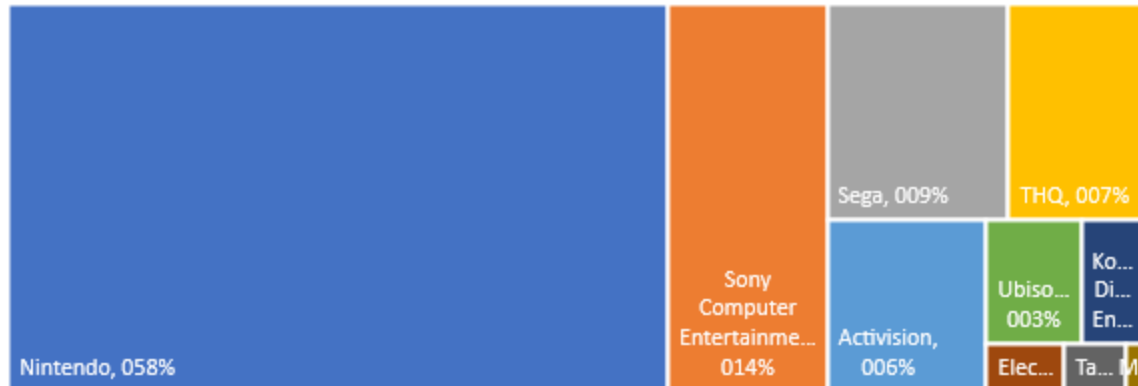
PUBLISHERS MARKET SHARE IN SHOOTER GENRE



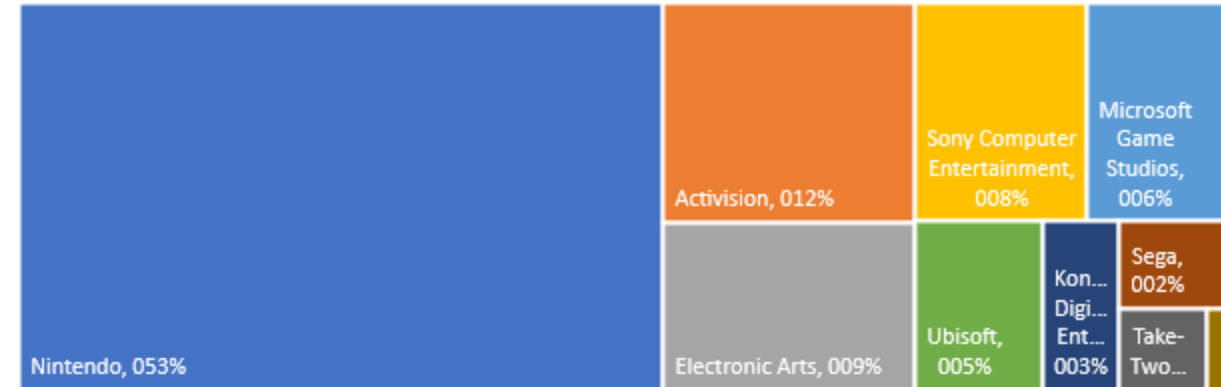
Nintendo's Market Share in Top 3 Genre in North America:
Sports : Second (3rd sales contributor / 12% for Nintendo)
Action : Fourth (5th sales contributor / 8% for Nintendo)
Shooter : Fourth (8th sales contributor / 6% for Nintendo)

NINTENDO'S TOP 3 GENRE SALES VS COMPETITORS MARKET SHARE

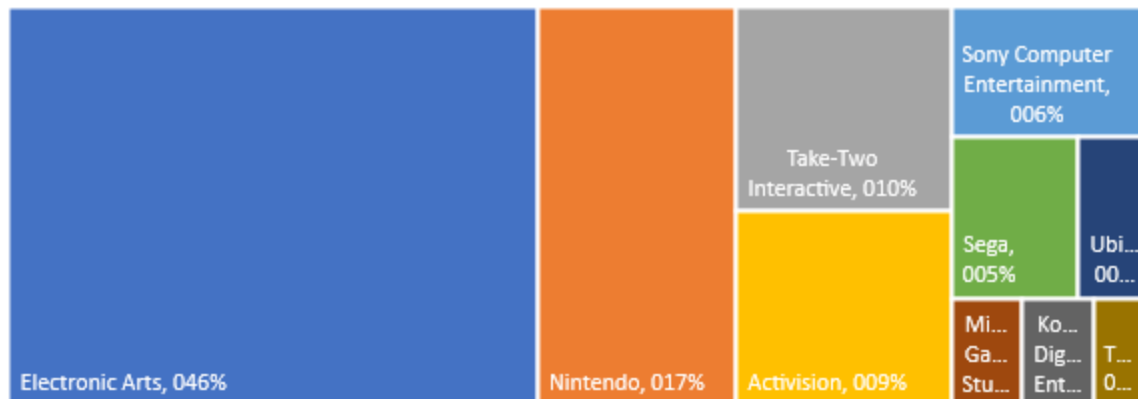
PUBLISHERS MARKET SHARE IN PLATFORM GENRE



PUBLISHERS MARKET SHARE IN ROLE-PLAYING GENRE



PUBLISHERS MARKET SHARE IN SPORTS GENRE



Nintendo's Market Share in their Top 3 Genre Sales
Platform: First (4th sales contributor / 10% for NA market)
Role-Playing: First (7th sales contributor / 8% for NA market)
Sports: Second (2nd sales contributor / 16% for NA market)

SUGGESTIONS FOR NORTH AMERICA MARKET

Develop more games into these genres to increase from their current market share:

- Sports : 17.4%
- Action : 12.03%
- Shooter : 10.97%



These 3 genres make 50%
of the total market share

Sports genre also contributes as the **second largest sales** for Nintendo's NA market, however they are far-left behind compared to Electronic Arts (46.42% vs 17.4%)

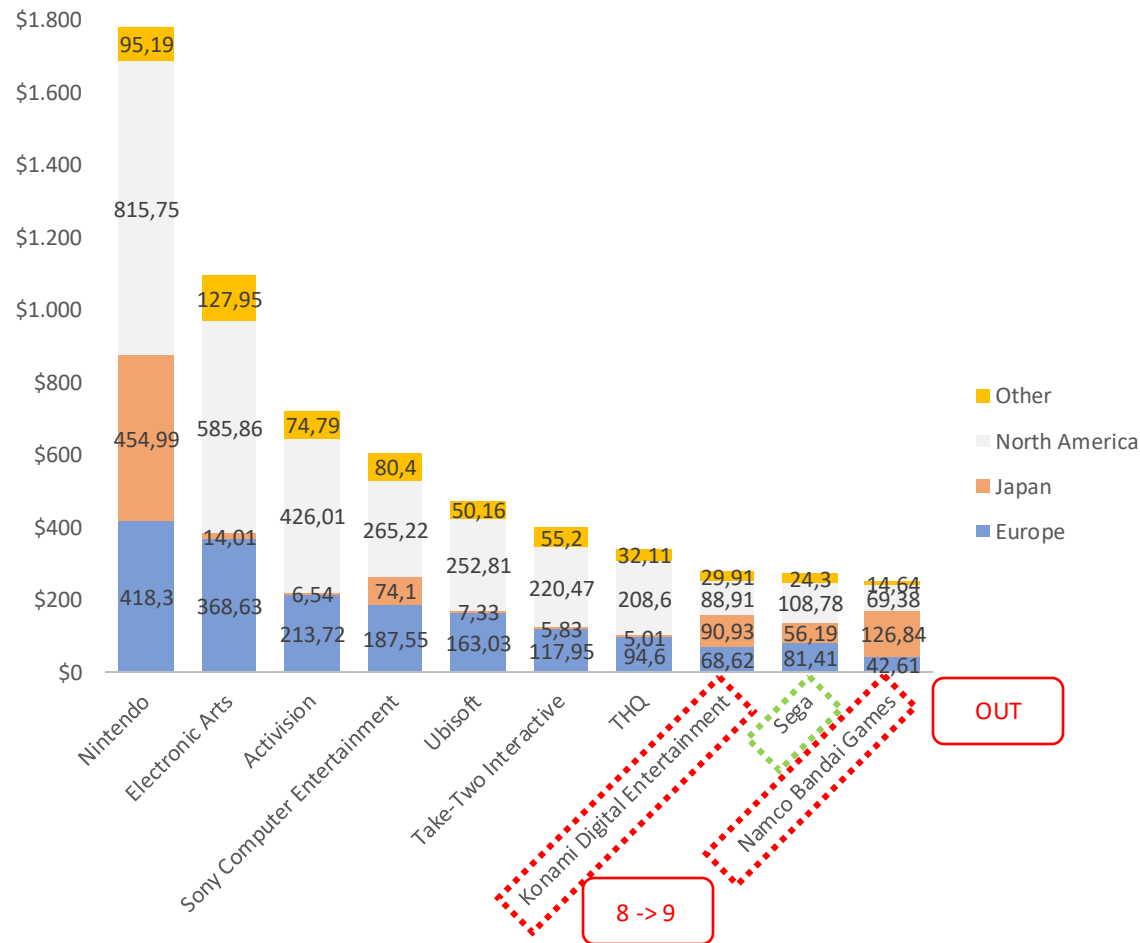


EUROPE

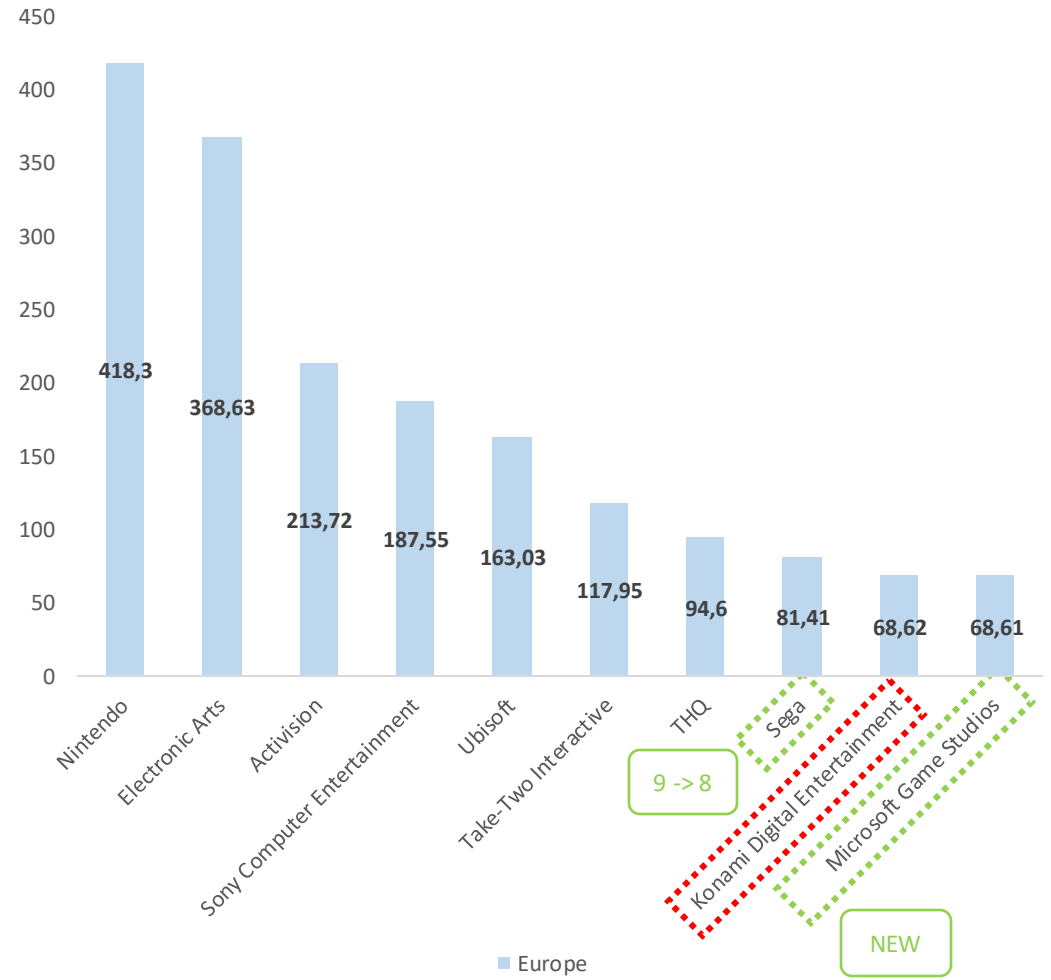


NINTENDO EUROPE VS COMPETITORS

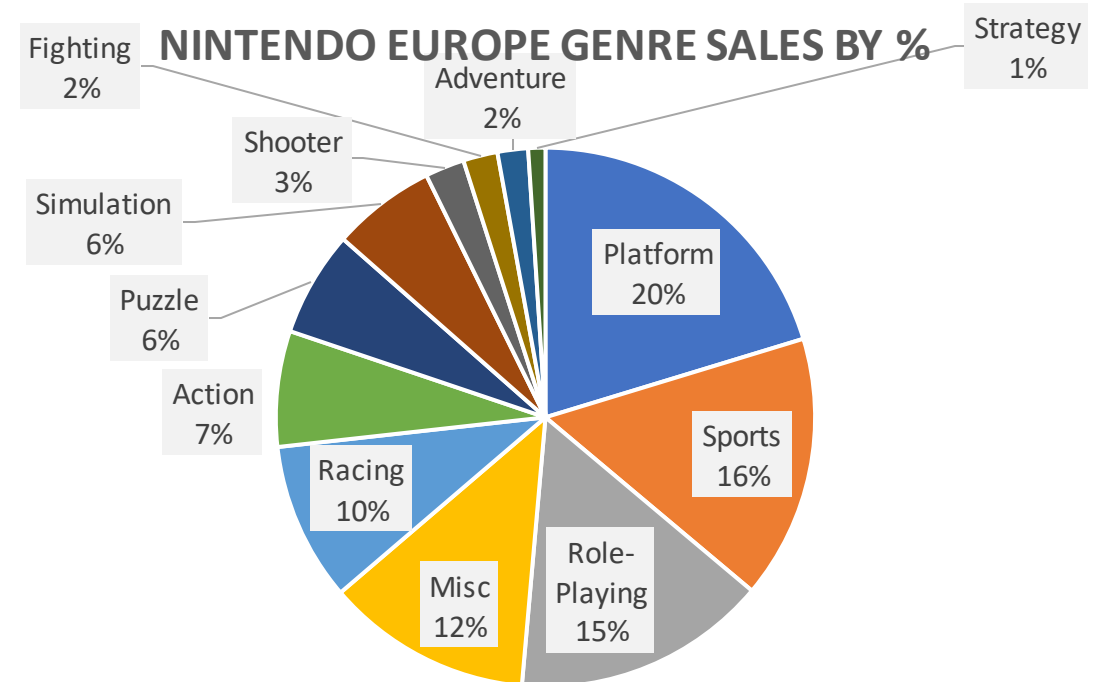
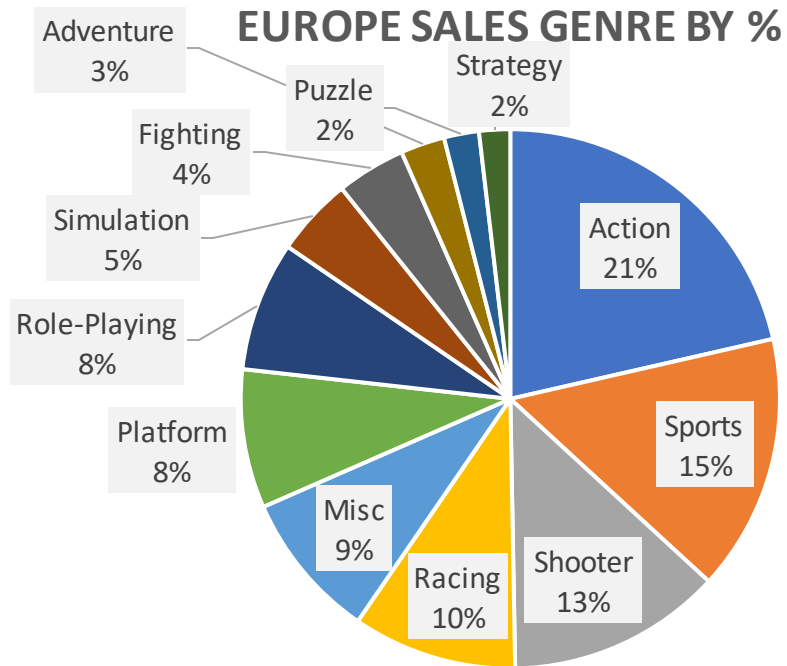
TOP 10 PUBLISHERS BASED ON SALES - REGION



TOP 10 PUBLISHER IN EUROPE

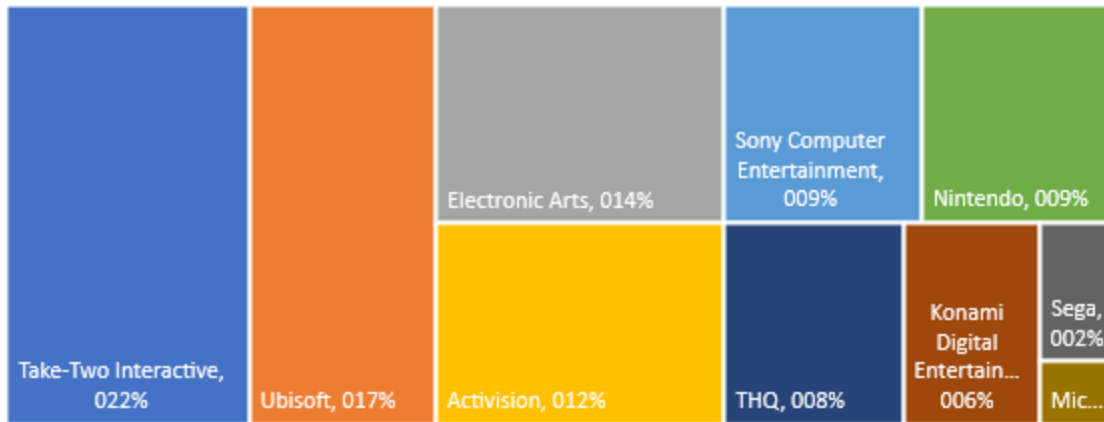


EUROPE GENRE SALES VS NINTENDO

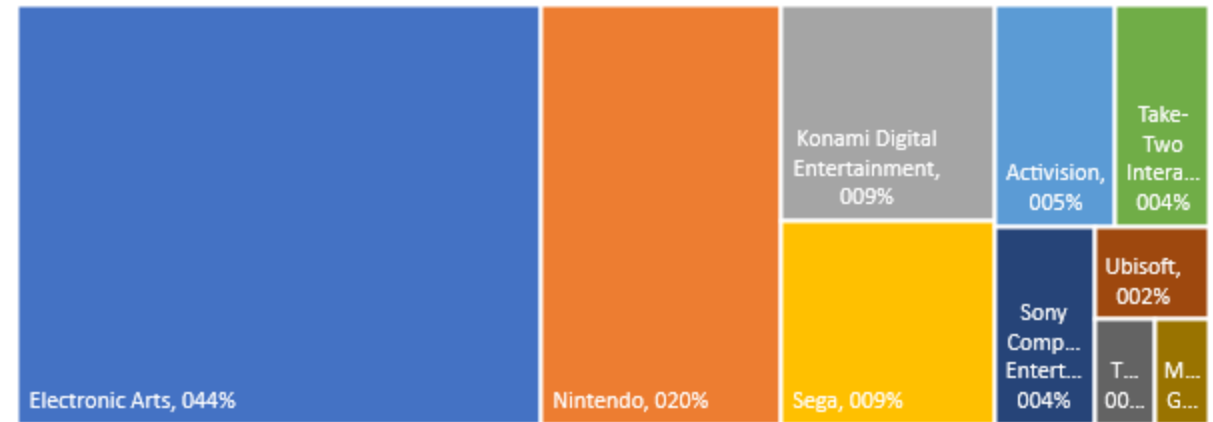


TOP 3 GENRE MARKET SHARE VS COMPETITORS

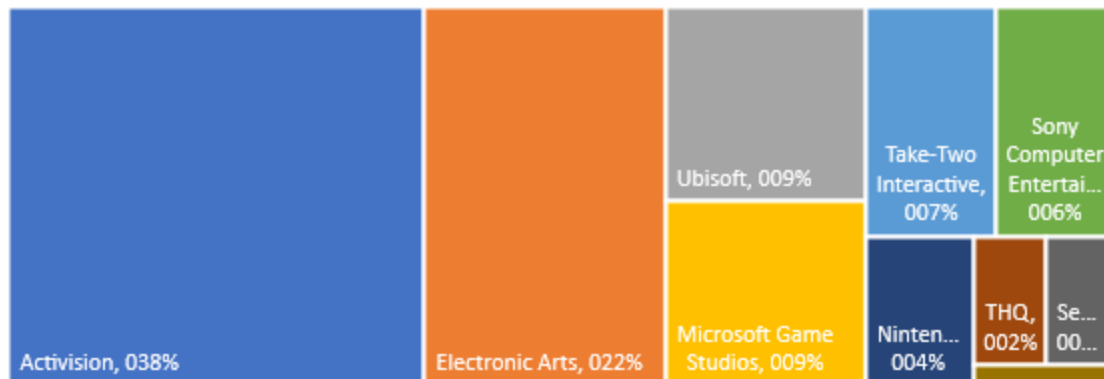
PUBLISHERS MARKET SHARE IN ACTION GENRE



PUBLISHERS MARKET SHARE IN SPORTS GENRE



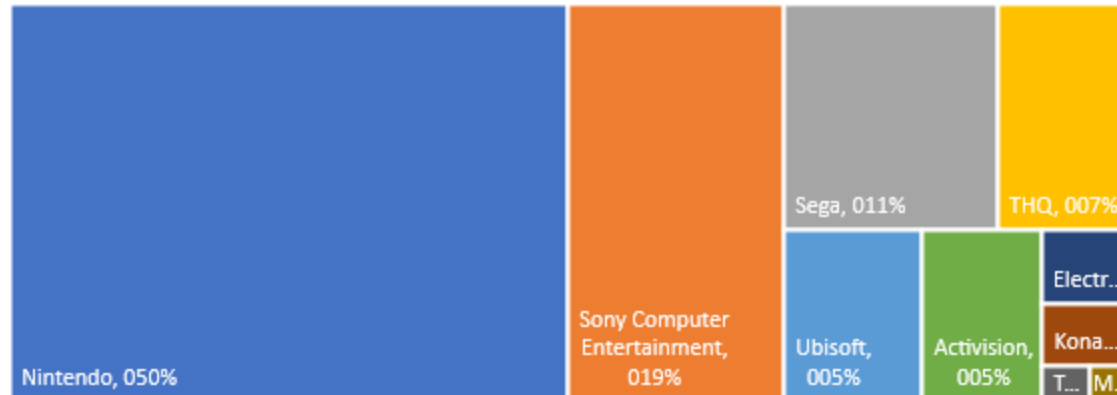
PUBLISHERS MARKET SHARE IN SHOOTER GENRE



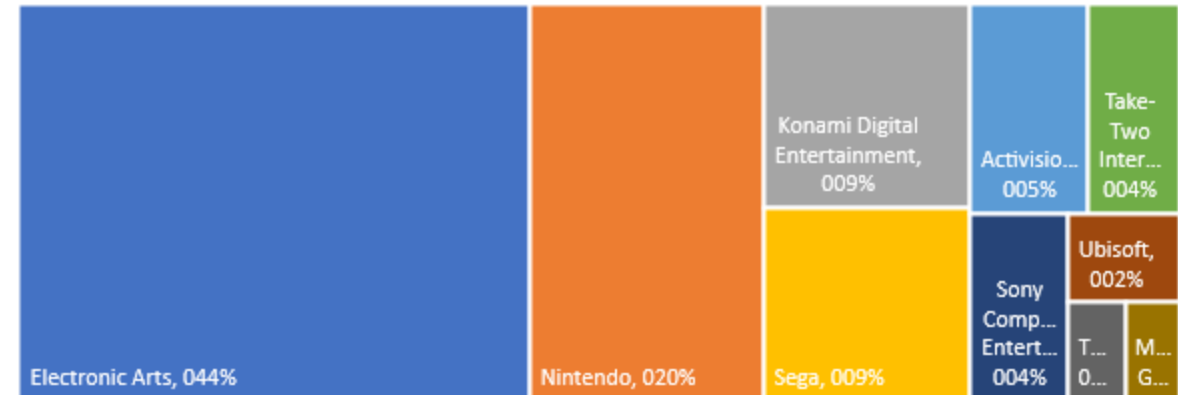
Nintendo's Market Share in Top 3 Genre in Europe:
Action : Seventh (6th sales contributor / 7% for Nintendo)
Sports : Second (2nd sales contributor / 16% for Nintendo)
Shooter : Seventh (9th sales contributor / 3% for Nintendo)

NINTENDO'S TOP 3 GENRE SALES VS COMPETITOR MARKET SHARE

PUBLISHERS MARKET SHARE IN PLATFORM GENRE



PUBLISHERS MARKET SHARE IN SPORTS GENRE



PUBLISHERS MARKET SHARE IN ROLE-PLAYING GENRE



Nintendo's Market Share in their Top 3 Genre Sales
Platform: First (6th sales contributor / 8% for EU market)
Sports: Second (2nd sales contributor / 15% for EU market)
Role-Playing: First (7th sales contributor / 8% for EU market)

SUGGESTIONS FOR EUROPE MARKET

Nintendo needs to develop more games that are relevant to the Europe market. Although their sales are still the highest in Europe compared to other publishers, they have very low market-share for genres that are generating sales in the Europe market:

- Action : Seventh – 9.03%
- Sports : Second – 20.17%
- Shooter : Seventh - 3.83%



These 3 genres make 50% of the total market share



CONCLUSION

- Nintendo to this day is still the market leader in video game industry, especially in platform and RPG games.
- However, the market is changing their preferences to sports, action and shooters games.
- If Nintendo wants to maintain their market leader status, they need to adapt to the new trends and venture on new genres that are more popular.

Strongest region: North America

Most popular genres

- Sports : 20%
- Action : 16%
- Shooter : 13%

Weakest region: Europe

Most popular genres

- Action : 21%
- Sports : 15%
- Shooter : 13%

```
mirror_mod = modifier_ob.  
set mirror object to mirror.  
mirror_mod.mirror_object  
operation == "MIRROR_X":  
mirror_mod.use_x = True  
mirror_mod.use_y = False  
mirror_mod.use_z = False  
operation == "MIRROR_Y":  
mirror_mod.use_x = False  
mirror_mod.use_y = True  
mirror_mod.use_z = False  
operation == "MIRROR_Z":  
mirror_mod.use_x = False  
mirror_mod.use_y = False  
mirror_mod.use_z = True  
selection at the end -add  
mirror_ob.select= 1  
modifier_ob.select=1  
context.scene.objects.active  
("Selected" + str(modifier_ob.  
mirror_ob.select = 0  
= bpy.context.selected_object  
data.objects[one.name].select  
print("please select exactly  
-- OPERATOR CLASSES ----  
types.Operator):  
X mirror to the selected  
object.mirror_mirror_x"  
mirror X"  
context):  
context.active_object is not
```

SQL QUERY SCREENSHOTS

```
SQLQuery6.sql - LA...UIC9MJ\prakr (53))* X
on game_publisher.publisher_id = publisher.id
join platform
on game_platform.platform_id = platform.id
join genre
on game_genre_id = genre.id)

select sum(sales) as yearly_sales, release_year from cte group by release_year
```

100 %

Results Messages

	yearly_sales	release_year
1	11.38	1980
2	35.68	1981
3	28.88	1982
4	16.80	1983
5	50.35	1984
6	53.95	1985
7	37.08	1986
8	21.70	1987
9	47.21	1988
10	70.45	1989

Query executed successfully.

```
SQLQuery6.sql - LA...UIC9MJ\prakr (53))* X
on game_publisher.publisher_id = publisher.id
join platform
on game_platform.platform_id = platform.id
join genre
on game_genre_id = genre.id)

select top 10 sum(sales) as sales, publisher_name from cte group by publisher_name order by sales desc
```

100 %

Results Messages

	sales	publisher_name
1	1784.23	Nintendo
2	1096.45	Electronic Arts
3	721.06	Activision
4	607.27	Sony Computer Entertainment
5	473.33	Ubisoft
6	399.45	Take-Two Interactive
7	340.32	THQ
8	278.37	Konami Digital Entertainment
9	270.68	Sega
10	259.47	Namco Bandai Games

Query executed successfully.


```

on game_publisher.publisher_id = publisher.id
join platform
on game_platform.platform_id = platform.id
join genre
on game_genre_id = genre.id)

select sum(sales) as sales, publisher_name, region_name from cte group by publisher_name, region_name
order by sales desc

```

100 %

Results Messages

	sales	publisher_name	region_name
1	815.75	Nintendo	North America
2	585.86	Electronic Arts	North America
3	454.99	Nintendo	Japan
4	426.01	Activision	North America
5	418.30	Nintendo	Europe
6	368.63	Electronic Arts	Europe
7	265.22	Sony Computer Entertainment	North America
8	252.81	Ubisoft	North America
9	220.47	Take-Two Interactive	North America
10	219.70	Activision	Europe

Query executed successfully.

LAP

```

on game_publisher.publisher_id = publisher.id
join platform
on game_platform.platform_id = platform.id
join genre
on game_genre_id = genre.id)

select sum(sales) as sales, region_name, genre_name from cte where publisher_name = 'Nintendo'
group by region_name, genre_name
order by sales desc

```

100 %

Results Messages

	sales	region_name	genre_name
1	219.46	North America	Platform
2	105.63	North America	Role-Playing
3	102.36	Japan	Platform
4	101.95	Japan	Role-Playing
5	98.77	North America	Sports
6	84.90	Europe	Platform
7	73.55	North America	Racing
8	66.18	Europe	Sports
9	63.92	Europe	Role-Playing
10	62.40	North America	Action

Query executed successfully.

LAPTOP-M3UIC9MJ\HUMBER_DB (... LAPTOP-M3UIC9MJ\prkr ... video_games 00:00:00 48 rows

SQLQuery6.sql - LA...UIC9MJ\prkr (53))* ✕

```
on game.genre_id = genre.id)

select top 10 sum(sales) as sales, publisher_name, region_name from cte
where region_name = 'North America'
group by publisher_name, region_name
order by sales desc
```

100 %

Results Messages

	sales	publisher_name	region_name
1	815.75	Nintendo	North America
2	585.86	Electronic Arts	North America
3	426.01	Activision	North America
4	265.22	Sony Computer Entertainment	North America
5	252.81	Ubisoft	North America
6	220.47	Take-Two Interactive	North America
7	208.60	THQ	North America
8	155.35	Microsoft Game Studios	North America
9	108.78	Sega	North America
10	101.00	Atari	North America

Query executed successfully.

SQLQuery1.sql - LA...IC9MJ\prkr (113))* ✕

```
on game.genre_id = genre.id)

select sum(sales) as sum_sales, genre_name from cte
where region_name = 'NORTH AMERICA'
group by genre_name
order by sum_sales desc
```

100 %

Results Messages

	sum_sales	genre_name
1	861.80	Action
2	670.09	Sports
3	575.16	Shooter
4	445.99	Platform
5	402.48	Misc
6	358.57	Racing
7	326.50	Role-Playing
8	220.74	Fighting
9	181.78	Simulation
10	122.01	Puzzle
11	102.06	Adventure

Query executed successfully.

LAPTOP-M3UIC9MJ\HUMBER_DB (... LAPTOP-M3UIC9MJ\prkr ... video_games 00:00:00 12 rows

SQLQuery1.sql - LA...IC9MJ\prkr (113))*

```
on game.genre_id = genre.id)
```

```
select sum(sales) as sum_sales, genre_name from cte
where region_name = 'NORTH AMERICA' and publisher_name = 'Nintendo'
group by genre_name
order by sum_sales desc
```

100 %

Results Messages

	sum_sales	genre_name
1	219.46	Platform
2	105.63	Role-Playing
3	98.77	Sports
4	73.55	Racing
5	63.49	Action
6	61.98	Misc
7	55.74	Puzzle
8	51.39	Shooter
9	29.70	Simulation
10	27.10	Fighting
11	17.72	Adventure

Query executed successfully.

SQLQuery1.sql - LA...IC9MJ\prkr (113))*

```
on game.genre_id = genre.id)
```

```
select sum(sales) as sum_sales, publisher_name from cte
where region_name = 'NORTH AMERICA' and genre_name = 'Sports'
group by publisher_name
order by sum_sales desc
```

100 %

Results Messages

	sum_sales	publisher_name
1	263.50	Electronic Arts
2	98.77	Nintendo
3	54.68	Take-Two Interactive
4	52.19	Activision
5	32.09	Sony Computer Entertainment
6	25.65	Sega
7	14.06	Ubisoft
8	13.13	Acclaim Entertainment
9	12.17	Midway Games
10	9.69	Microsoft Game Studios
11	9.46	Konami Digital Entertainment

Query executed successfully.

LAPTOP-M3UIC9MJ\HUMBER_DB (... | LAPTOP-M3UIC9MJ\prkr ... | video_games | 00:00:00 | 163 rows