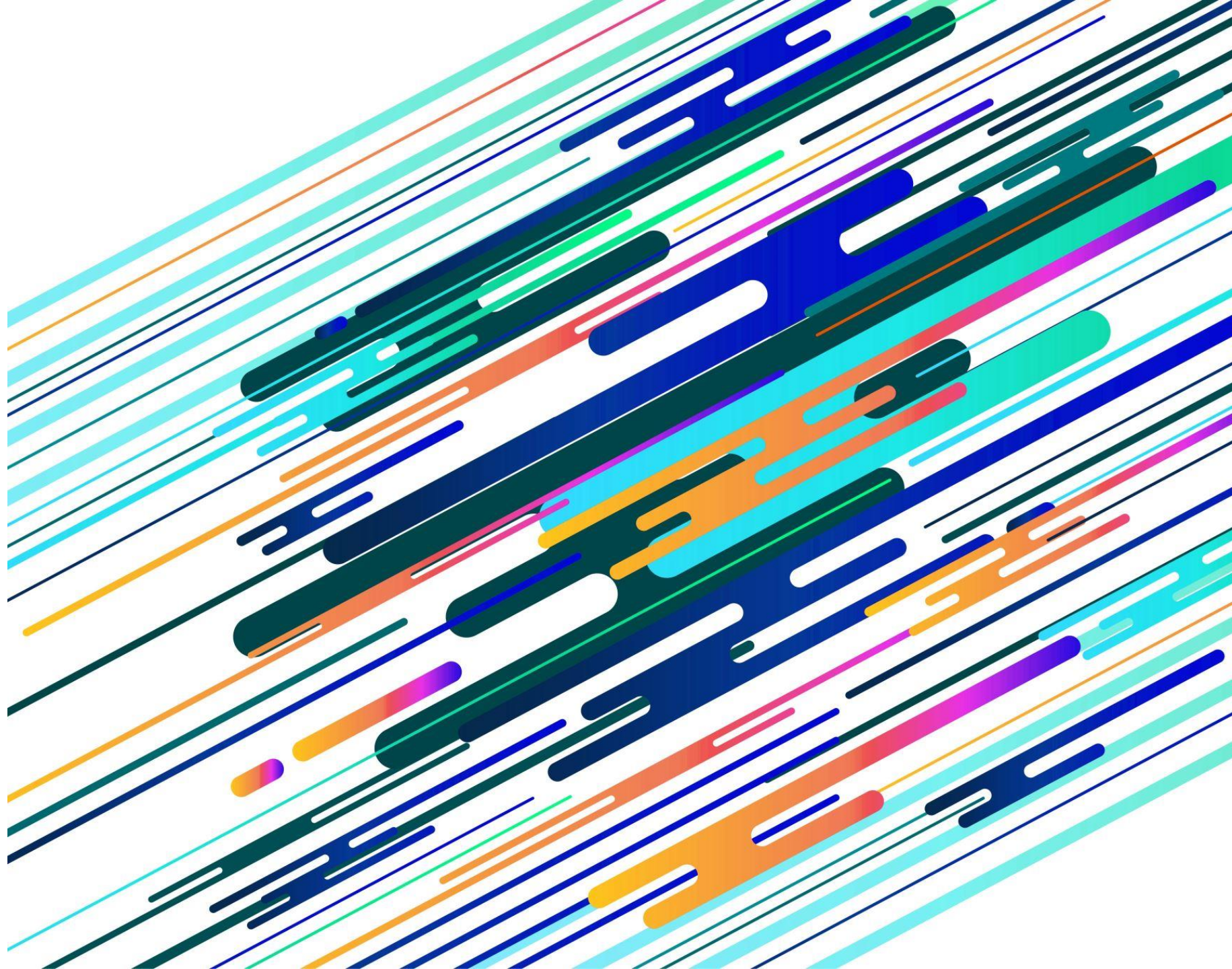


Video Game Market Analysis

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Problem

- ▶ What factors influence the success of video games in different global market?
- ▶ More importantly this encompasses various aspects:
 - ▶ Regional Sales Trend
 - ▶ Genre Popularity
 - ▶ Platform Performance
 - ▶ Publisher Impact





Dataset

- ▶ The dataset has around 16291 rows and 11 columns
- ▶ With the following variables:
 - ▶ Rank - Shows the global rank of each game in terms of their overall sales
 - ▶ Name - Name of the video game
 - ▶ Platform - The platform on which the game was released
 - ▶ Year - The year in which the game was released
 - ▶ Genre - The genre of the game
 - ▶ Publisher - The company that published the game
 - ▶ NA_Sales - North American region sales
 - ▶ EU_Sales - European Region sales
 - ▶ JP_Sales - Japanese Region sales
 - ▶ Other_Sales - Other Region Sales
 - ▶ Global_Sales - Global Region Sales
 - ▶ (here sales are in 1Million units)

Table Design

```
✓ CREATE TABLE vg(  
    Rank int PRIMARY KEY,  
    Name varchar(300),  
    Platform varchar(30),  
    Year int,  
    Genre varchar(34),  
    Publisher varchar(50),  
    NA_Sales decimal(10,2),  
    EU_Sales decimal(10,2),  
    JP_Sales decimal(10,2),  
    Other_Sales decimal(10,2),  
    Global_Sales decimal(10,2)  
);
```

Query Query History

```
1 --sales of recent games
2 ✓ SELECT name, year, na_sales, EU_Sales,
3     JP_Sales, Other_Sales,Global_Sales
4 FROM vg
5 ORDER BY year desc
6 LIMIT 5;
```

	name character varying (300)	year integer	na_sales numeric (10,2)	eu_sales numeric (10,2)	jp_sales numeric (10,2)	other_sales numeric (10,2)	global_sales numeric (10,2)
1	Imagine: Makeup Artist	2020	0.27	0.00	0.00	0.02	0.29
2	Brothers Conflict: Precious Baby	2017	0.00	0.00	0.01	0.00	0.01
3	Phantasy Star Online 2 Episode 4: Deluxe Package	2017	0.00	0.00	0.01	0.00	0.01
4	Phantasy Star Online 2 Episode 4: Deluxe Package	2017	0.00	0.00	0.03	0.00	0.03
5	Far Cry: Primal	2016	0.59	1.16	0.06	0.33	2.13

Recent Sales Trend

The following query depicts sales of games that came in recent years.

	publisher character varying (50) 🔒	total_games bigint 🔒
1	Electronic Arts	1339
2	Activision	966
3	mco Bandai Games	928
4	Ubisoft	918
5	Komi Digital Entertainment	823

```
1 --top 5 publishers that has the most games
2 ▼ SELECT publisher, COUNT(*) as total_games
3 FROM vg
4 GROUP BY publisher
5 ORDER BY total_games DESC
6 LIMIT 5;
```

Top tier publishers

Following query shows top 5 most popular publishers that are dominating the gaming industry.

Popular European Game

- Following query shows the game that have been quite popular in Europe along with its available platform.

```
1  --game along with it's gaming platform that had the highest european sales
2  ▼ SELECT name,platform,year, EU_Sales
3  FROM vg
4  ORDER BY EU_Sales desc
5  LIMIT 1;
```

	name character varying (300) 🔒	platform character varying (30) 🔒	year integer 🔒	eu_sales numeric (10,2) 🔒
1	Wii Sports	Wii	2006	29.02

Cumulative North American Sales Trend

```
--cumulative sales for each game platform using window function
SELECT name, platform, year, na_sales,
       SUM(na_sales) OVER (PARTITION BY name ORDER BY year) AS cumulative_sales
FROM vg;
```

Data Output Messages Notifications



	name character varying (300)	platform character varying (30)	year integer	na_sales numeric (10,2)	cumulative_sales numeric
1	'98 Koshien	PS	1998	0.15	0.15
2	.hack//G.U. Vol.1//Rebirth	PS2	2006	0.00	0.00
3	.hack//G.U. Vol.2//Reminisce	PS2	2006	0.11	0.11
4	.hack//G.U. Vol.2//Reminisce (jp sales)	PS2	2006	0.00	0.00
5	.hack//G.U. Vol.3//Redemption	PS2	2007	0.00	0.00
6	.hack//Infection Part 1	PS2	2002	0.49	0.49
7	.hack//Link	PSP	2010	0.00	0.00
8	.hack//Mutation Part 2	PS2	2002	0.23	0.23

Total rows: 1000 of 16290 Query complete 00:00:00.260

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Game with the highest global sales

- ▶ Following query shows the game that was fan favorite all around the world

Query Query History

```
1 --game with highest global sales
2 ▼ SELECT name,year,Global_sales
3 FROM vg
4 WHERE Global_sales =(SELECT MAX(Global_sales)FROM vg)
5 GROUP BY name,year,Global_sales;
```

Data Output Messages Notifications

	name character varying (300) 🔒	year integer 🔒	global_sales numeric (10,2) 🔒
1	Wii Sports	2006	82.74

Query

Query History

1

--total sales of each genre

2

SELECT genre, SUM(na_sales) AS total_sales

3

FROM vg

4

GROUP BY genre

5

ORDER BY total_sales desc;

Data Output

Messages

Notifications

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	genre character varying (34) 🔒	total_sales numeric 🔒
1	Action	861.77
2	Sports	670.09
3	Shooter	575.16
4	Platform	445.99
5	Misc	396.92
6	Racing	356.93
7	Role-Playing	326.50
8	Fighting	220.74
9	Simulation	181.78
10	Puzzle	122.01
11	Adventure	101.93
12	Strategy	67.83

Total North American Sales of each genre

- The following query shows genre which depicted highest sales in North American region

Global sales of gaming platforms

- The following query showcases most popular gaming platform as depicted by their total global sales.

```
1  --top 10 gaming platforms that are played globally
2  v SELECT platform, SUM(Global_Sales) as total_global_sales
3  FROM vg
4  GROUP BY platform
5  ORDER BY total_global_sales desc
6  LIMIT 10;
7
```

Data Output			Messages	Notifications
	platform character varying (30)	total_global_sales numeric		
1	PS2	1233.46		
2	X360	969.60		
3	PS3	949.35		
4	Wii	909.81		
5	DS	817.20		
6	PS	727.39		
7	GBA	305.62		
8	PSP	291.71		
9	PS4	278.10		
10	PC	254.70		

Query Query History

```
1 SELECT platform, SUM(EU_Sales) as Europe_Sales
2 FROM vg
3 GROUP BY platform
4 ORDER BY Europe_Sales desc
5 LIMIT 10;
```

Data Output Messages Notifications

	platform character varying (30)	europa_sales numeric
1	PS3	340.47
2	PS2	332.63
3	X360	278.00
4	Wii	264.35
5	PS	212.38
6	DS	194.05
7	PC	137.35
8	PS4	123.70
9	GBA	72.49
10	PSP	67.16

Popular European Gaming Platform

- Following query shows most liked gaming platform in the region of Europe

Query Query History

```
1 SELECT platform, SUM(JP_Sales) as Japan_Sales
2 FROM vg
3 GROUP BY platform
4 ORDER BY Japan_Sales desc
5 LIMIT 10;
```

	platform character varying (30)	japan_sales numeric
1	DS	173.31
2	PS	139.78
3	PS2	137.54
4	SNES	116.55
5	NES	98.65
6	3DS	97.30
7	GB	85.12
8	PS3	79.21
9	PSP	75.89
10	Wii	68.28

Popular gaming platform in Japan

- ▶ Following depicts gaming platform that are sold the highest and have high popularity in Japan

Popular North American Games Trend

Query Query History

```
1 --the year,game and the associated platform showing highest sales
2 ✓ SELECT year,name,platform, SUM(na_sales) as total_sales
3 FROM vg
4 GROUP BY year,name,platform
5 ORDER BY total_sales desc
6 LIMIT 10;
```

	year integer	name character varying (300)	platform character varying (30)	total_sales numeric
1	2006	Wii Sports	Wii	41.49
2	1985	Super Mario Bros.	NES	29.08
3	1984	Duck Hunt	NES	26.93
4	1989	Tetris	GB	23.20
5	2008	Mario Kart Wii	Wii	15.85
6	2009	Wii Sports Resort	Wii	15.75
7	2010	Kinect Adventures!	X360	14.97
8	2009	New Super Mario Bros. Wii	Wii	14.59
9	2006	Wii Play	Wii	14.03
10	1990	Super Mario World	SNES	12.78

- Query displays North American Sales of the most popular games along with their years

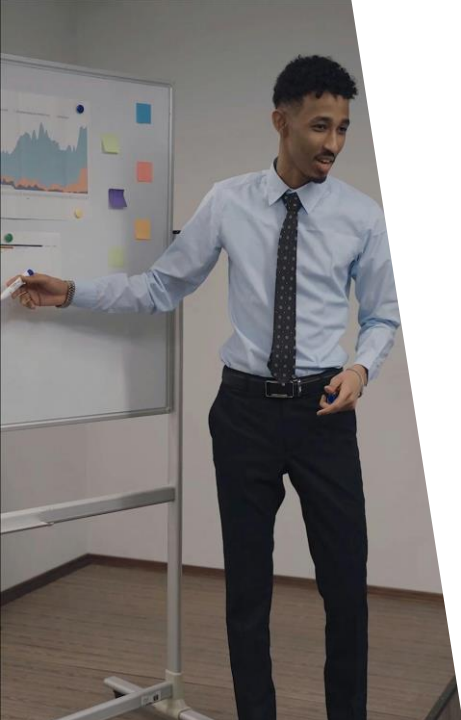
Query Query History

```
1 SELECT year, SUM(Global_Sales) as Worldwide_Sales
2 FROM vg
3 WHERE year >= 2000
4 GROUP BY year
5 ORDER BY Worldwide_Sales desc;
```

Global Sales Trend for games release in the year 2000 and later

- The following query showcases the overall global sales trend of games released from 2000 onwards

	year integer	worldwide_sales numeric
1	2008	678.90
2	2009	667.30
3	2007	609.92
4	2010	600.29
5	2006	519.33
6	2011	515.80
7	2005	458.51
8	2004	414.01
9	2002	395.52
10	2013	368.11
11	2012	363.49
12	2003	357.85
13	2014	337.03
14	2001	331.47
15	2015	264.44
16	2000	201.56



Insights

- ▶ Recent Sales Trend
 - ▶ Some of the recent games released fails to capture market attention depicting quite low sales value. Only winner seems to be Far Cry Primal. Consumers demand something new and unique.
- ▶ Top Tier Publishers
 - ▶ EA, Activision, mcoBandai Games, Ubisoft and Komi Digital Entertainment tends to dominate the gaming industry in the North American Region.
 - ▶ Replicating publishing strategies used by these publishers can be beneficial.
- ▶ Wii Sports tends to rule the gaming market in Europe.
 - ▶ Developing games in Wii games platform can be profitable in the future.





Insights

- ▶ Cumulative North American Sales Trend
 - ▶ From observing the trend pattern in cumulative sales it can be easier for strategists to further understand overall growth pattern in the North American Sales Market.
- ▶ Highest global sales tend to favor Wii Sports depicting it as a potential growth milestone in the industry.
- ▶ Action, Sports and Shooters games tend to be fan favorite and can be considered a profitable segment to grow in the North American gaming industry.
- ▶ Gaming trend Sales platform tends to favor PS2 globally, PS3 in Europe, DS in Japan while Wii in North America.
- ▶ Global Sales in the gaming market tends to be the highest in the period of 2008, 2009 and 2007.





► Thank You!