# UNCOVERING THE GAMING INDUSTRY'S HIDDEN GEMS: A COMPREHENSIVE ANALYSIS OF VIDEO GAME SALES

## 1.INTRODUCTION:

## 1.1 Overview:

Video games are popular all over the world. They are enjoyed by all age group. Video game industry is huge and the spending on video games per year is huge too. Video games can be undertaken for entertainment or fun and sometimes used as an education tool. Video games can teach people to be more confident and to work towards their goals. In recent years however the emergence of social networks, smartphones and tablets introduced new categories such as mobile and social games.

Sales of different games vary due to the preferences of local people over different regions. There are different genres, publishers and platforms for video games. This analysis comprises of the dataset with nearly 16599 video games based on different regions, platforms, publishers and the sales globally and regionally since the year 1980 extracted from Kaggle sources. The analysis and visualizations were performed using two different software such as SQL and tableau.

## 1.2 Purpose:

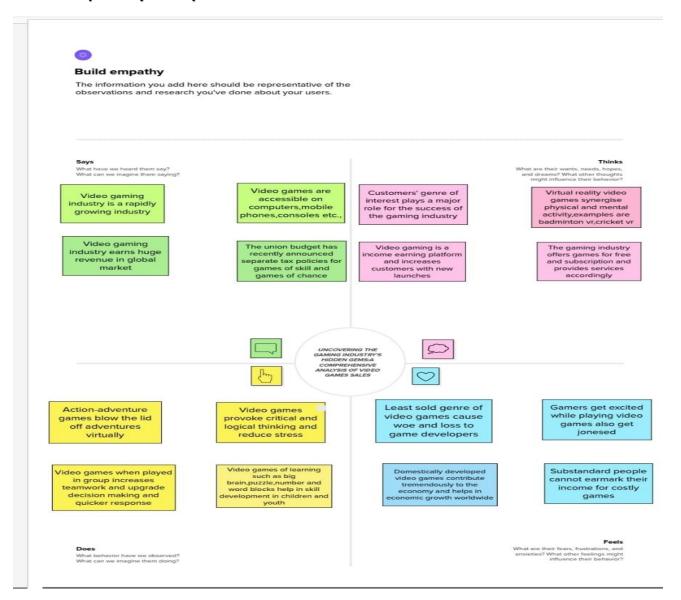
The aim of this project was to analyze the sales of video games in different regions such as North America (NA), Europe (EU), Japan (JP), other countries and the global sales.

The main idea was to visualize the sales for different genres, publishers and platforms. This would give the basic idea about the most popular genres, publishers and platforms among all. Also analyzing the effect of genres on sales in different regions.

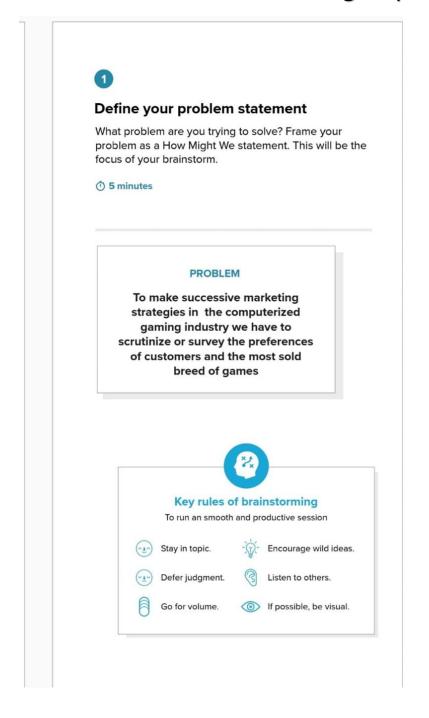
This analyzation can be used to predict the gamers 'genre of interests and the trend of the sales in the global market. Further we can overcome any drawbacks. Better marketing strategies could be arrived using the findings of the visualizations.

## 2.PROBLEM DEFINITION AND DESIGN THINKING:

# 2.1 Empathy Map



# 2.2 Ideation and Brainstorming map:





#### **Brainstorm**

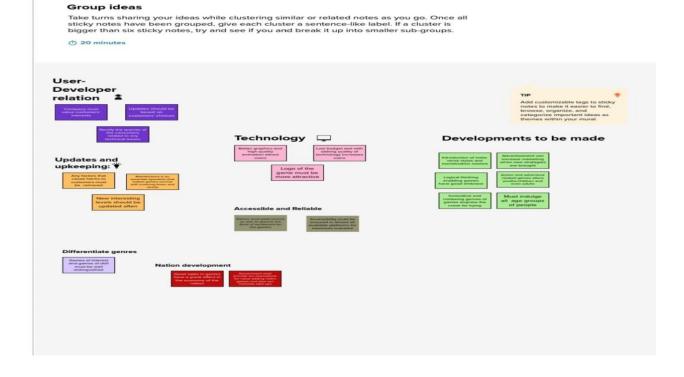
Write down any ideas that come to mind that address your problem statement.



3

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!



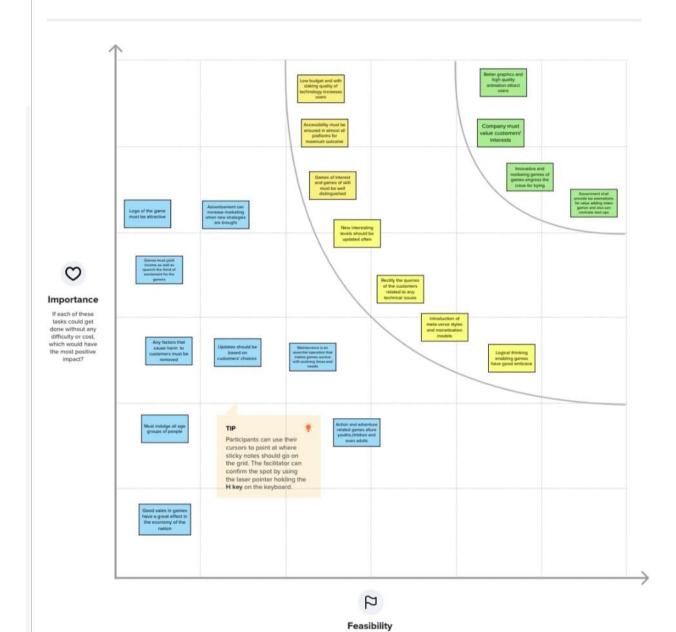




#### **Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

① 20 minutes



Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

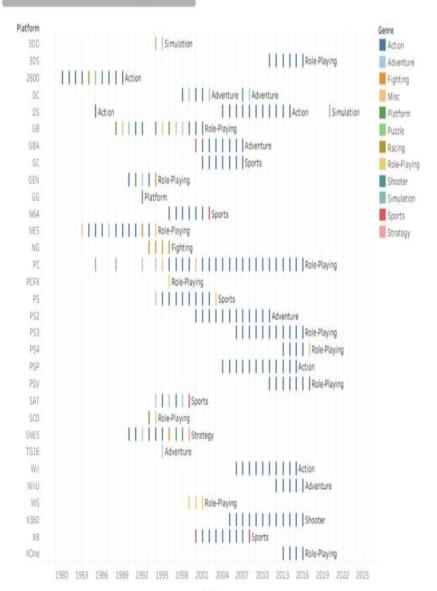
# 3.RESULT:

#### **VIDEO GAMES SALES DASHBOARD** TOP 10 EU **GENRE WITH RANK ANALYSIS** TOP 10 NA SELLING VIDEO GAMES SELLING **VIDEO GAMES** SALES IN NA-JP-EU REGIONS Theft Auto 150 TOP 5 PUBLISHERS 140 20M 130 Wi 120 Sports Duty # 400 # 200 Resort 110 **TOP 10 JAPAN SELLING VIDEO GAMES** 100 1900 1965 1990 1995 2000 2005 2010 2015 2020 Year 90 **TOTAL SALES ANALYSIS** # 80 20 70 **TOP 10 SELLING GENRES ON PLATFORMS** 611.1 521.0 516.0 EQ 459.9 368.1 395.5 50 331.5 337.0 357.8 363.5 2513 Shooter 40 201.0 199.2 201.6 30 Action 35.8 53.973.576.2 Mario Bros. Mist N 88.1 0 11.4 50.4 37.149.4 46.0 20 1980 1985 1990 1995 2000 2005 2010 2015 2020 Year

PLATFORMS VS YEAR-This chart shows the games published on different platforms since the year 1980 More number of games have been published on platforms like PS2.PS3.PC.PS4 and GB.The games in the action genre were sol.

SALES AND PUBLISHERS. This tree chart portrays the games sold by different publishers over the years. Nintendo occupies the first place and is followed by Electromic arts, Activisation, Sony Computer entertainment, Ubis

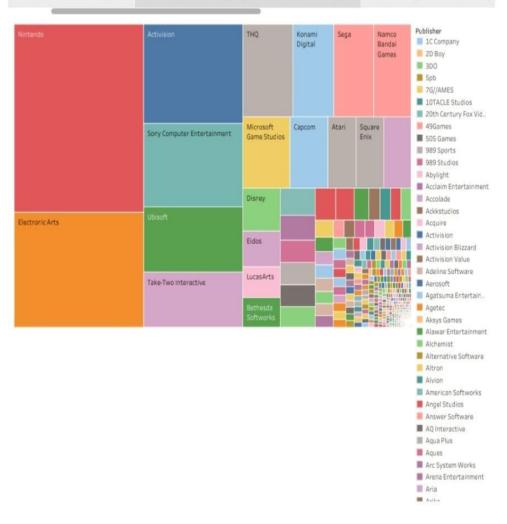
SALES OV ER DIFFER ENT GEN.



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SALES AND PUBLISHERS: This tree chart portrays the games sold by different publishers over the years. Nintendo occupies the first place and is followed by Electromic arts, Activisation, Sony Computer entertainment, Ubisoft and so on.

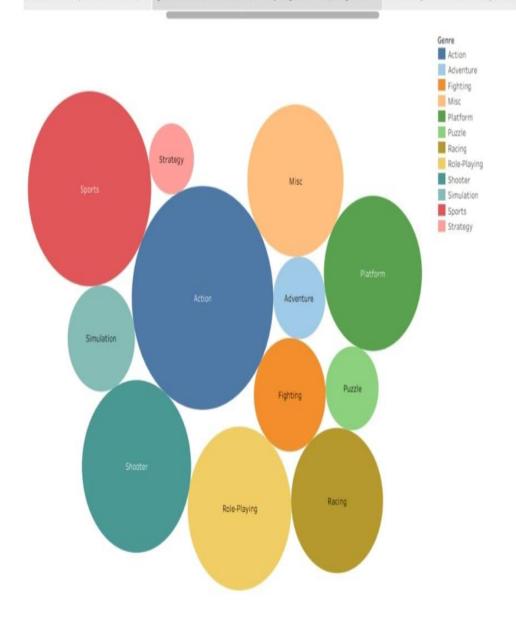
SALES OVER DIFFERENT GENRES: This is a bubble chart which displays the amount of sales of different genres over the years. The g...

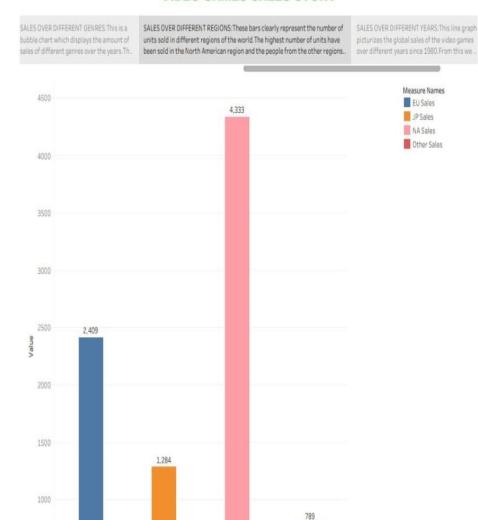


SALES AND PUBLISHERS: This tree chart portrays the games sold by different publishers over the years. Nintendo occupi...

SALES OVER DIFFERENT GENRES: This is a bubble chart which displays the amount of sales of different genres over the years. The games in the action genre have been sold the most followed by the games in the sports genre. Fro...

SALES OVER DIFFERENT REGIONS: These bars clearly represent the number of units sold in different regions of the world. The highest nu...





NA Sales

Other Sales

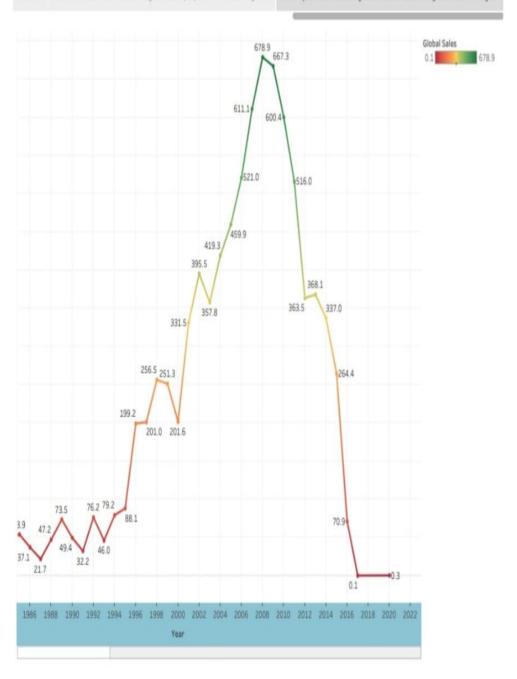
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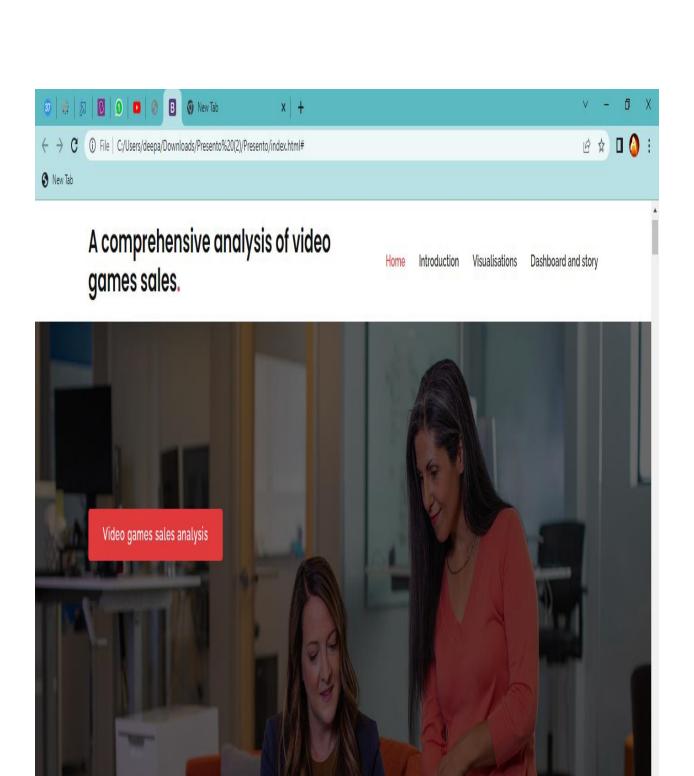
EU Sales

JP Sales

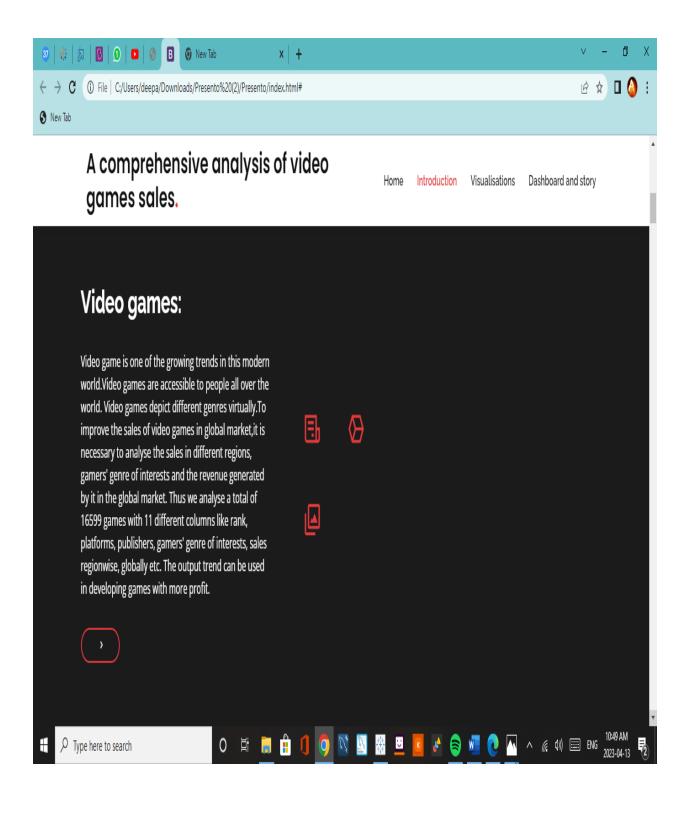
SALES OV SALES OVER DIFFERENT REGIONS: These bars clearly represent the number of ER DIFFER units sold in different regions of the world. The highest number of units have ENT GEN. been sold in the North American region and the people from the other regions.

SALES OVER DIFFERENT YEARS: This line graph picturizes the global sales of the video games over different years since 1980. From this we can deduce that the the year 2008 has the highest amount of sales. The green colour in the gra...









From these visualizations we can clearly say that DC and play stations are the most popular amongst all. Action genre is the most popular genre of all and is followed by sports and fighting respectively. Also, daito is the most popular followed by TYO and Miwasa respectively. Also, the genres that are less popular cause significant change in sales in all regions as compared to the ones that are more popular.

## 4. ADVANTAGES AND DISADVANTAGES:

## **Advantages:**

- **1. Generates Revenue:** The video game industry generates billions of dollars in revenue each year. Sales of video games, consoles, and accessories contribute significantly to this revenue. This revenue, in turn, creates jobs, supports innovation, and fuels further growth in the industry.
- **2. Creates Jobs:** The video game industry is a significant employer, with thousands of people employed in various roles such as game developers, designers, marketers, and testers. As the industry grows, so does the demand for skilled workers, creating job opportunities for people with diverse skills.
- **3. Supports Innovation:** The competition in the video game industry drives innovation. Video game companies are always looking for ways to create more immersive and engaging games that appeal to a broader

audience. This push for innovation results in new technologies, tools, and approaches that can benefit other industries as well.

**4. Provides Accessible Entertainment:** Video games provide accessible entertainment for people of all ages and backgrounds. With the increasing availability of online gaming, gamers can connect with other players from around the world, making gaming a social activity.

## **Disadvantages:**

- **1. Addiction:** Video game addiction is a growing concern, with some gamers spending hours playing games without taking breaks or engaging in other activities. This addiction can lead to negative consequences such as poor academic performance, decreased physical activity, and social isolation.
- **2. Violence:** Some video games contain violent content that can lead to aggressive behavior in some players. This concern has led to calls for stricter regulation of video game content, particularly for games with violent or sexual content.
- **3. Health Risks:** Prolonged gaming sessions can lead to various health risks such as obesity, eye strain, and carpal tunnel syndrome. Gamers need to take breaks and engage in physical activities to minimize these risks.

**4. Cyberbullying:** Online gaming can also be a breeding ground for cyberbullying. Some gamers use online anonymity to bully and harass other players, leading to emotional distress and mental health issues.

## **5.APPLICATIONS:**

- **1. Business Strategy:** Video game sales analysis can help game developers and publishers to understand market trends, consumer preferences, and competition. This knowledge can inform business strategies, such as pricing, marketing, and product development, to improve sales and profitability.
- **2. Investment Opportunities:** Investors can use video game sales analysis to identify investment opportunities in the industry. They can evaluate the financial performance of game developers and publishers, assess the potential of new technologies and trends, and make informed investment decisions.
- **3. Public Policy:** Policymakers can use video game sales analysis to inform public policy decisions related to the industry, such as regulations on content, consumer protection, and intellectual property. They can also use sales data to understand the economic impact of the industry and develop policies to support its growth.

- **4. Consumer Education:** Video game sales analysis can help educate consumers on the benefits and risks of video games. Consumers can use this knowledge to make informed decisions when purchasing and playing video games, such as choosing games with appropriate content, taking breaks to prevent addiction and minimizing health risks.
- **5. Market Trends:** Video game sales analysis can reveal market trends in terms of game genres, platforms, and consumer preferences. For example, the analysis may show that action-adventure games are the most popular genre among consumers, or that mobile gaming is growing faster than console gaming.
- **6. Sales Performance:** Video game sales analysis can provide insights into the sales performance of individual games, game developers, and publishers. For example, the analysis may show that a particular game has sold more copies on one platform than another, or that a particular publisher has seen a decline in sales over time.
- **7. Consumer Behavior:** Video game sales analysis can reveal insights into consumer behavior related to video games, such as the factors that drive purchases, the motivations behind playing games, and the impact of different types of games on behavior and attitudes. This information can help game developers and publishers understand their audience better and develop products that meet their needs and preferences.
- **8. Economic Impact:** Video game sales analysis can provide insights into the economic impact of the video game industry, such as the

revenue generated, the number of jobs created, and the impact on related industries such as hardware and software development. This information can help policymakers and investors understand the industry's importance and potential for growth.

## 6. CONCLUSION:

In conclusion, video game sales have both advantages and disadvantages. The industry generates significant revenue and employment opportunities while supporting innovation and providing accessible entertainment. However, concerns such as addiction, violent content, health risks, and cyberbullying also need to be addressed. It is crucial for gamers, parents, and policymakers to promote responsible gaming and strike a balance between the benefits and risks of video games. With proper attention and regulation, the video game industry can continue to contribute positively to society and the global economy. An understanding of these market trends and players' behavior is essential for game developers and publishers to make informed decisions and create successful games in the highly competitive video game market.

Overall, video game sales analysis will continue to play an essential role in understanding the video game industry's dynamics and identifying opportunities for growth and innovation. As the industry evolves, new applications and techniques for video game sales analysis will continue to emerge, providing valuable insights and informing decision-making for game developers, publishers, investors, policymakers, and consumers.

## 7. FUTURE SCOPE:

- **1.Emerging Technologies:** The video game industry is constantly evolving with emerging technologies such as virtual reality, augmented reality, and cloud gaming. Video game sales analysis can help game developers and publishers to understand the potential of these technologies, the consumer demand for them, and the impact they may have on the industry.
- **2. Esports:** Esports, or competitive video gaming, is becoming increasingly popular, with millions of viewers and participants worldwide. Video game sales analysis can help businesses and investors to understand the market potential of esports and make informed decisions about investment and sponsorship.
- **3.Mobile Gaming:** Mobile gaming has become a massive market in recent years, with millions of people playing games on their smartphones and tablets. Video game sales analysis can help companies to understand consumer preferences and trends in mobile gaming and develop strategies to improve sales and profitability.
- **4. Behavioral Analysis:** Video game sales analysis can help understand consumer behavior related to video games, such as the factors that drive purchases, the motivations behind playing games,

and the impact of different types of games on behavior and attitudes. Such information can inform public policy, educational initiatives, and marketing strategies.

# 8. APPENDIX:

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