

# TITLE

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

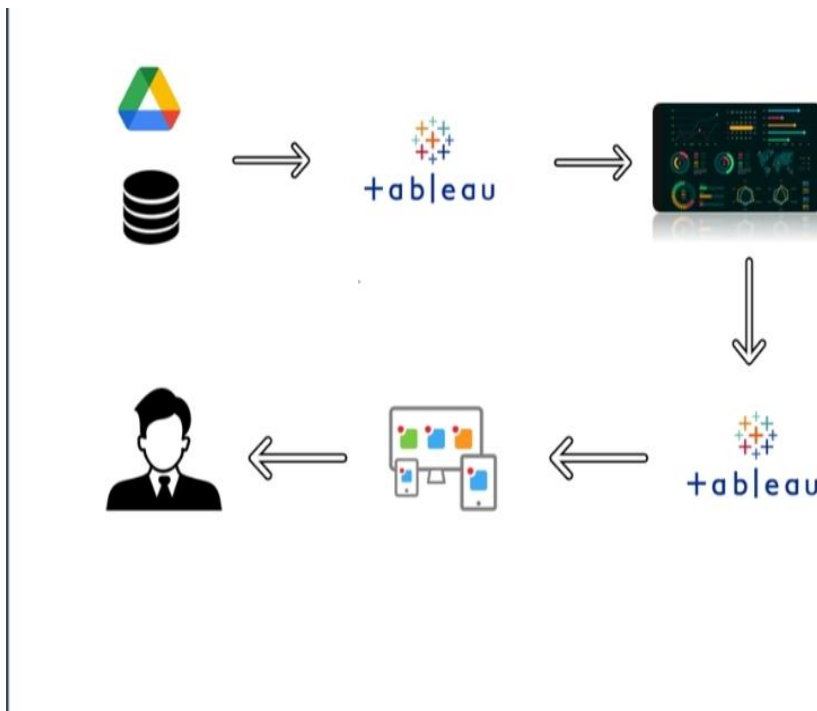
### INTRODUCTION:

=>Video games are popular all over the world.

=>They are enjoyed by all ages. =>Video game industry is huge and the spending on video games per year is huge too.

=>Sales of different types of games vary widely between countries due to local preferences.

## TECHNICAL ARCHITECTURE OF VIDEO GAME SALES:

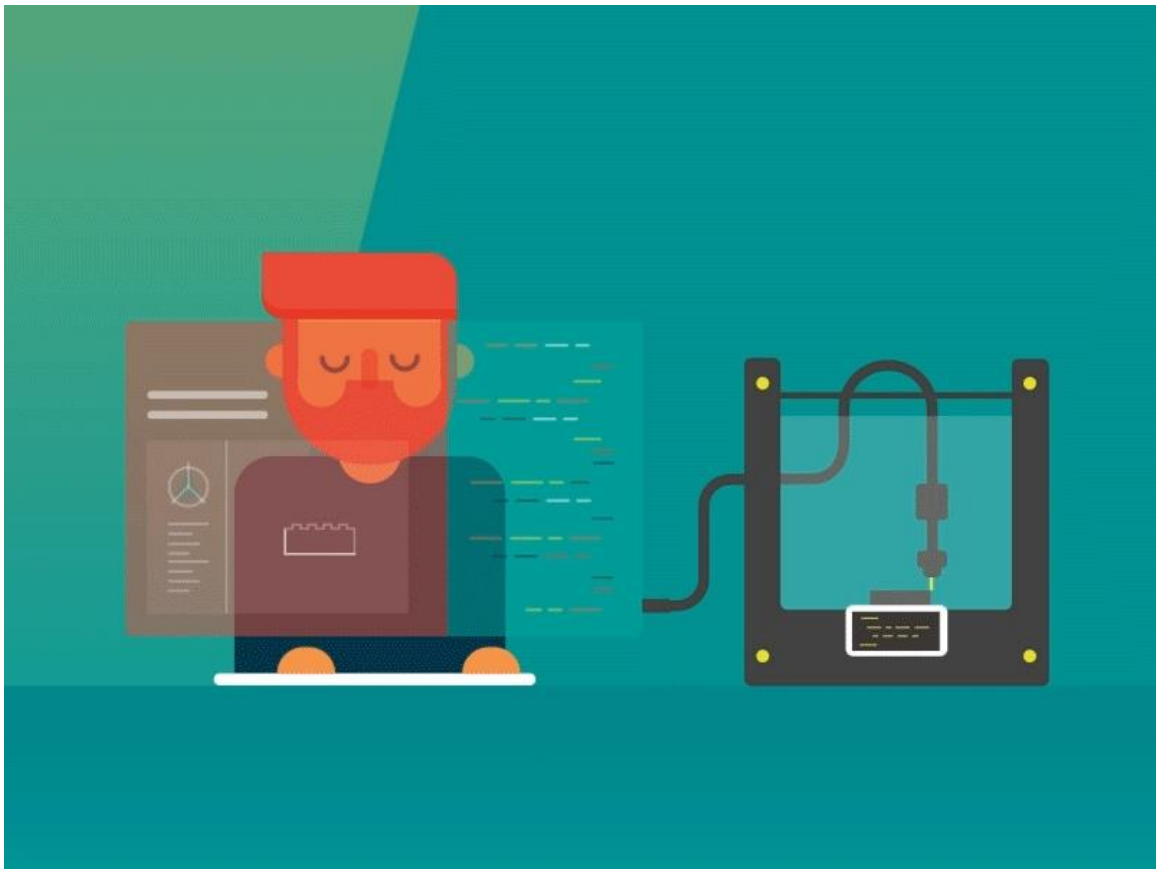


### ANALYTICS:

- 1. The user can choose a specific region and year, and the data and graphs in the dashboard would be altered correspondingly.
- 2. It should contains top 5 game platforms by sales in descending order corresponding to a chosen region and year.

- 3. If the sales of the game platform and genre is above 25%, highlight it automatically.
- 4. It should contain top 5 game genres by sales in descending order corresponding to a chosen region and year.
- 5. It should contain video game sales from the earliest year to the most recent year corresponding to a chosen region.

# OVERVIEW



Video game sales analysis is the process of collecting and analysing data about the sales of video games .

## CONTENTS OF SUMMARY:

According to a comprehensive research report by Market Research Future (MRFR),

=> “Video Game Market information by Gaming Device, by Gaming Type, by End-user and Region – forecast to 2027” market was valued at 155.9 billion in 2019 and industry size to grow at a compound annual growth rate of 14.5% by 2026.

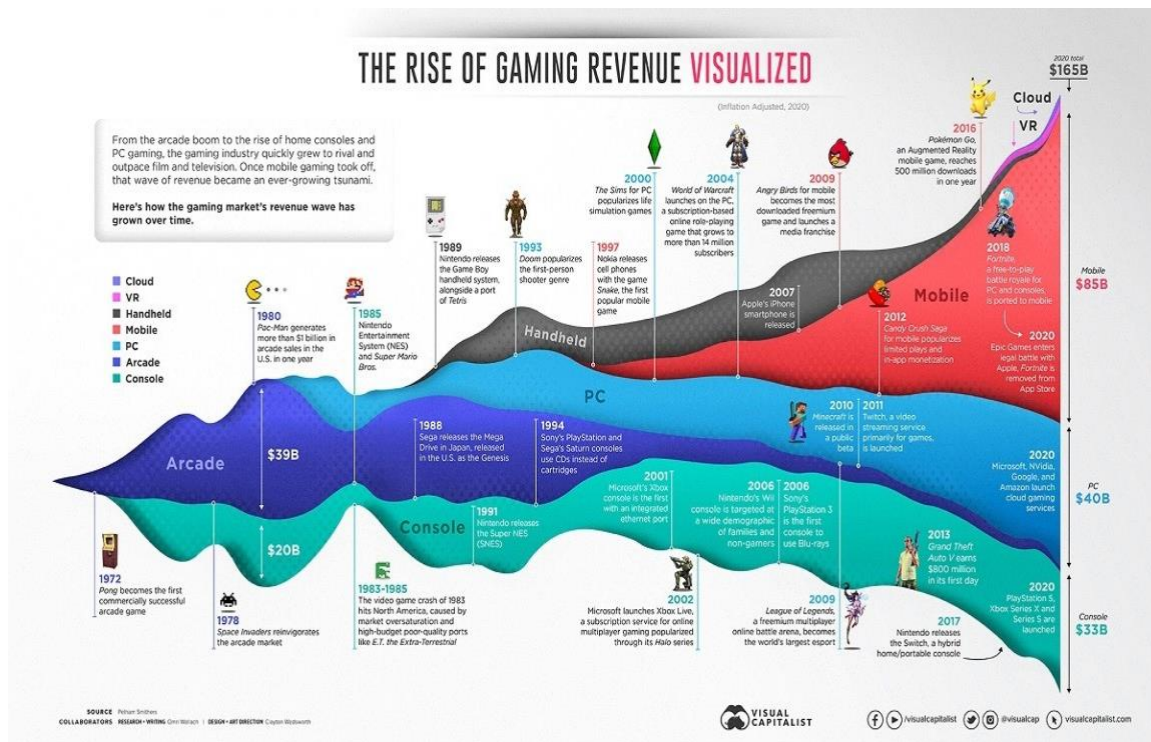
=>Video games are gaining traction at a rapid pace due to rise of online platforms and easy access to games due to secure payment methods.

=>Development of games with a focus on interactive experiences can drive the market demand.

=>In this report, Exploratory Data Analysis will be performed to give more insights about Video Games Sales.

=>The process includes Data Input, Data Inspection, Data Cleansing & Coertions, Data Summary, Data Transformation & Visualization, and Data Explanation.

The objective of this report is to give insights and a possible business recommendation.



# DETERMINATION OF VIDEO GAMES SALES:

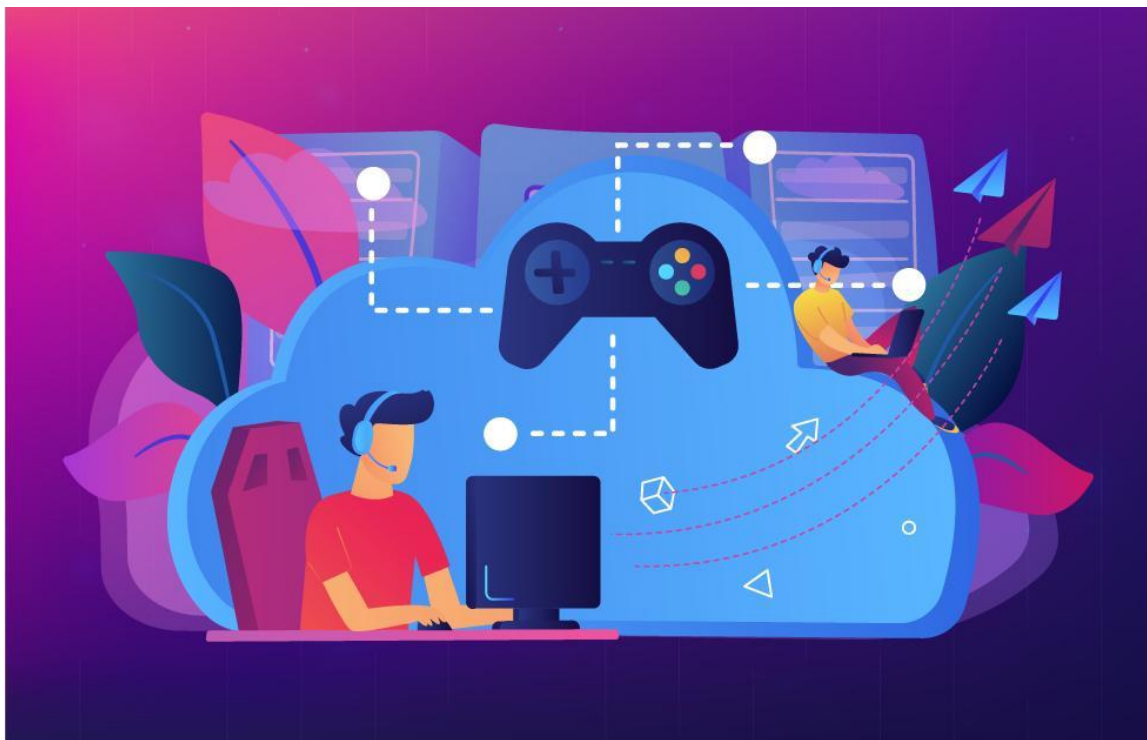
## Important links and extensions:

1. Import Libraries and loading Dataset
2. Exploratory Data Analysis (EDA) on Genre, Platform and Publisher
  - Most popular Genre, Platform and Publisher
  - What is the relationship between Genre, Platform and Publisher?
3. Exploratory Data Analysis (EDA) on Sales
  - Which year had the highest Sales worldwide?
  - Which Genre, Platform and Publisher had the highest Sales worldwide?
  - What is the region Sales by Genre, Platform and Publisher?
  - What is the video game' Sales ranking by region?
4. Prediction of Global Sales
  - Ridge regression
  - Tuning Ridge hyperparameter
5. Classification of Sales category
  - Random Forest Classifier
  - Feature Importance

## DATA INPUT:

The video games sales data used consists of several variables with the following details:

- Rank : Ranking of overall sales
- Name : The games name
- Platform : Platform of the games release (i.e. PC,PS4, etc.)
- Year : Year of the game's release
- Genre : Genre of the game
- Publisher : Publisher of the game
- NA\_Sales : Sales in North America (in millions)
- EU\_Sales : Sales in Europe (in millions)
- JP\_Sales : Sales in Japan (in millions)
- Other\_Sales : Sales in the rest of the world (in millions)
- Global\_Sales : Total worldwide sales



## PROJECT DESCRIPTION:

**Video game sales analysis is the process of collecting and analyzing data about the sales of video games in order to understand market trends and consumer behavior.**

**This type of analysis can be useful for a variety of purposes, including identifying the most popular games and genres, predicting future sales, and developing marketing strategies.**

**Video game sales analysis typically involves collecting data from Kaggle sources.**

This data may include information about the number of units sold, the retail price, and the platforms on which the games are played. Once the data has been collected, it is typically analyzed using tableau.

The results of the analysis can be used to identify trends and patterns in the market, and to make informed decisions about the development and marketing of video games.

Video game sales analysis may be conducted by game developers, publishers, retailers, and other industry professionals.

It is an important part of the video game industry, as it helps to understand the needs and preferences of consumers and to identify opportunities for growth and innovation.

Analysing sales data from more than 16,500 games. This dataset contains a list of video games with sales greater than 100,000 copies.

## VIDEO GAME SALES ANALYSIS:-

### 1. Video game sales Group 8

2. OBJECTIVES • Type of video game • Publisher of video game • Platform of video game • Sales of a video game Analyse the data along the following parameters

3. Over the years Releases Sales

4. For whom are the video games made ?

5. Releases over the years

6. Sales over the years

7. Which ones are popular?

8. Regional popularity North America Europe



9. Regional popularity Japan

10. Regional popularity Rest of the world

11. Conclusion • Number of releases peaked year 2010 but now have declined. • Although the number of games targeted at teens are less but have maximum sales. • Most popular genre around the world is action except for Japan, where role playing games are more popular. Gametype

12. Publisher popularity

13. Publisher popularity in Japan

14. Publisher popularity in EU

15. Publisher popularity in North America

16. Do more games released mean better publisher rating?

17. Correlation between number of releases and rating Number of games released  
Metacritic rating of publisher Number of games released 1.00000 -0.35177 Metacritic  
rating of publisher -0.35177 1.00000

18. Conclusion • More games released lead to poor publisher rating • Japan and the west have different gaming preferences. Publisher

19. Net Sales of different platforms

20. Rise and Fall of PS2

21. Reasons For Decline 2005

22. Reasons For Decline 2007

23. Reasons For Decline 2009

24. Reasons For Decline 2011

25. Popular platform in recent years 2015 2016

# ADVANTAGES:-

## ***Extremely high engagement:***

*Engagement is one of the most important marketing metrics*

## **High quality content:**

Content is the most important component of digital media.

## **Interactive Brand Storytelling:**

The importance of Brand Storytelling.

## **Better message retention:**

A consequence of a great game, created specifically thinking about its message.

## **Loyalty through entertainment**

Don't neglect the fun factor- thanks to it, you can turn curious people into costumers, and costumers into fans.

## **Determine the participation rules and conditions**

It is important that the instructions of your giveaway are clear and preferably short.

## **SET YOUR GOAL**

There are different approaches to different goals. Is your goal to generate more engagement.



THE GAMING MARKET IS GOING GLOBAL. THEREFORE, UNDERSTANDING THE BENEFITS OF VIDEO GAME LOCALIZATION MATTERS A LOT FOR YOUR BUSINESS. BECAUSE A VAST MAJORITY OF GAMES DON'T PLAY A VIDEO GAME UNLESS IT IS IN THEIR NATIVE LANGUAGE.

BENEFITS:

- \***Skyrocket Your Sales.**
- \***Make Your Gamers Feel Important.**
- \***Better App Store Rankings.**
- \***Larger Target Market.**
- \***Offer Unique Experience To Gamers.**
- \***Helps You Stay Ahead in a Fierce Competition.**
- \***Effective video games localization.**

# DISADVANTAGE:-

Video games can teach us high-level thinking skills, but too much of anything can be bad. Some consequences of playing these games are listed below.

## **\*Addiction**

Video games are designed to be addictive, so it is essential to have some self-control. Especially people with poor impulse control or who have a hard time fitting in are most vulnerable to game addiction.

## **\*Social Replacement**

Video games often act as a replacement for real-time human connections. People who find themselves playing hours upon hours of video games may find themselves losing touch with the relationships they've built with other people.

## **\*Obesity**

New studies show that the risk of being overweight increases with every hour people spend on virtual play. Lack of motion and overplaying lead to muscle pain as well. Moreover, the addiction to these games leads to sleep deprivation which contributes to obesity.

### **\*Stress**

Video game addiction could lead to other levels of psychological stress as well. Gamers may suffer from low self-esteem, have social anxieties, or even suffer from depression.

### **\*Could Limit Academic Process**

**Although video games can improve the strategic thinking decision-making process, they can also deteriorate them. Students who use their free time to play video games can struggle to keep up with school/college.**

### **\*Violence**

Children playing violent video games depict a lack of self-control and an increase in emotional arousal. While violent video games could have different effects on different people, they are all concerning.

**So, it is better to choose games you feel are appropriate for both you and your children.**

### **To Conclude**

**Video games aren't bad for you as long as you aren't overdoing. So, enjoy your downtime and relax with your games but get out there and keep your life as diverse as possible as well, because eventually, you have got to win the game of life.**

## 10 Reasons Why Playing Video Games Is Good for Your Brain

Video Game Play is Proven to Increase...



Memory



Mood



Spatial  
Visualization



Social Skills



Perception and  
Vision



Physical Fitness



Decision Making



Youthfulness



Problem Solving  
Skills



Curiosity and  
Learning

If you're searching for a new video game or console, check out the selection at [Record Head](#).

Visit us today or shop our online supply to find exactly what you're looking for!



West Kewaunee, Wisconsin  
Established 1972

# APPLICATION:-

## 1. Socialize

When playing online games. There is always a tendency to get socialize. Online gaming allows communication to take place between players of different regions. They can interact with each other while having fun. This will not only help them to get socialized, at the same time they will be a better team player.



## **2. Concentration**

**Frequently playing online games will make children's brain to function quicker and overall improve their memory power. Some online games require extensive planning and problem solving skills to complete levels. Therefore, children need to be mentally more active and concentrated.**

## **3. Analytical Skills**

**While also online gaming helps to improve analytical skills. Using these skills, gamers should be able to respond quickly to the changes in the game. Even these analytical skills will be useful in real life where there is a need of immediate problem solving.**

## **4. Relaxation**

**Online games are also known to promote relaxation. Obviously, games are one of the popular choices for entertainment. People with anxiety and depression can play online games to relieve stress. Not only children, even adults play online games for relaxation.**

## **5. Revenue**

Online gaming also makes it possible to earn money as long as it is a right platform. Based on the level of hardwork, they can significantly earn potential rewards. But only under the condition of 18 or above age. With increasing revenue, children might show positive attitude towards gaming.

## **6.Health Concerns**

Prolonged time spent in online gaming can have adverse effects on your physical health. Online gamers often spend too much of time staying in one position without much of any physical activities. The result of this can be seen in the form of shoulder and back pain.

Moreover, staring at a computer or a phone screen for a long time can lead to various eye problems including blurry vision. All this can bring negative effects to our body.

## **7.Cost**

The major cost of online gaming comes from the charges of internet connection. The internet Service Provider (ISP) may impose large data charges depending on the time the user spends for gaming.

Some online games also requires players to have online accounts which is normally with a monthly fee. In-game purchases are also

included where a player can upgrade their elements by paying a sum of fee.

## 8.Security

When playing online games, there is always a risk of hacking. Players enter their personal information in online gaming for various reasons. If a hacker manages to hijack these information, they could use it for illegal activities. As a result, the reputation of the player could be destroyed within seconds.



**RESULT :**

A video game is an electronic game that involves interaction with a user interface to generate visual feedback on a two- or three-dimensional video display device such as a touchscreen, virtual reality headset or monitor/TV set. Since the 1980s, video games have become an increasingly important part of the entertainment industry, and whether they are also a form of art is a matter of dispute.



## FINAL CONCLUSION:-

Nintendo dominating sales with its game like Super Mario Bros, Wii Sports. In early 1980's to 2010's North America is dominating sales, with Japan changing places multiple times with North America till 1996, North America spikes and overthrown Japan as dominate sales region. Genre Platform has the most top 10 games by sales, thanks to Super Mario Bros series.

Most of games sales are under 5 millions.





