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

Introduction

Overview

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.

Purpose

There are several branches of analytics, such as marketing analytics, risk analytics, Web analytics, and game analytics

In order to give our audiences better understanding of the relationship between video game sales and other featuers, we've tranformed the data into different well-organized charts. It helps to simplify the figures in a simple manner and also increase the readability.

The first-level coding includes game development analytics, game player analytics, game publishing analytics, distribution channel analytics, game prediction analytics, and data visualization. For the second-level coding, based on the preliminary classification of game analyticswe introduced the sub-codes, including gameplay, performance, process, interface, system analytics, in-game behaviors, player segmentation, acquisition, retention, revenue analytics, churn prediction, and revenue prediction for further coding

Problem Definition & Design Thinking

Empathy map

   The empathy map canvas template **provides an easy way for teams to visualize and better understand their target users**. Mural's customizable template provides features that allow you to maximize the map's effectiveness by tailoring it to your user base.
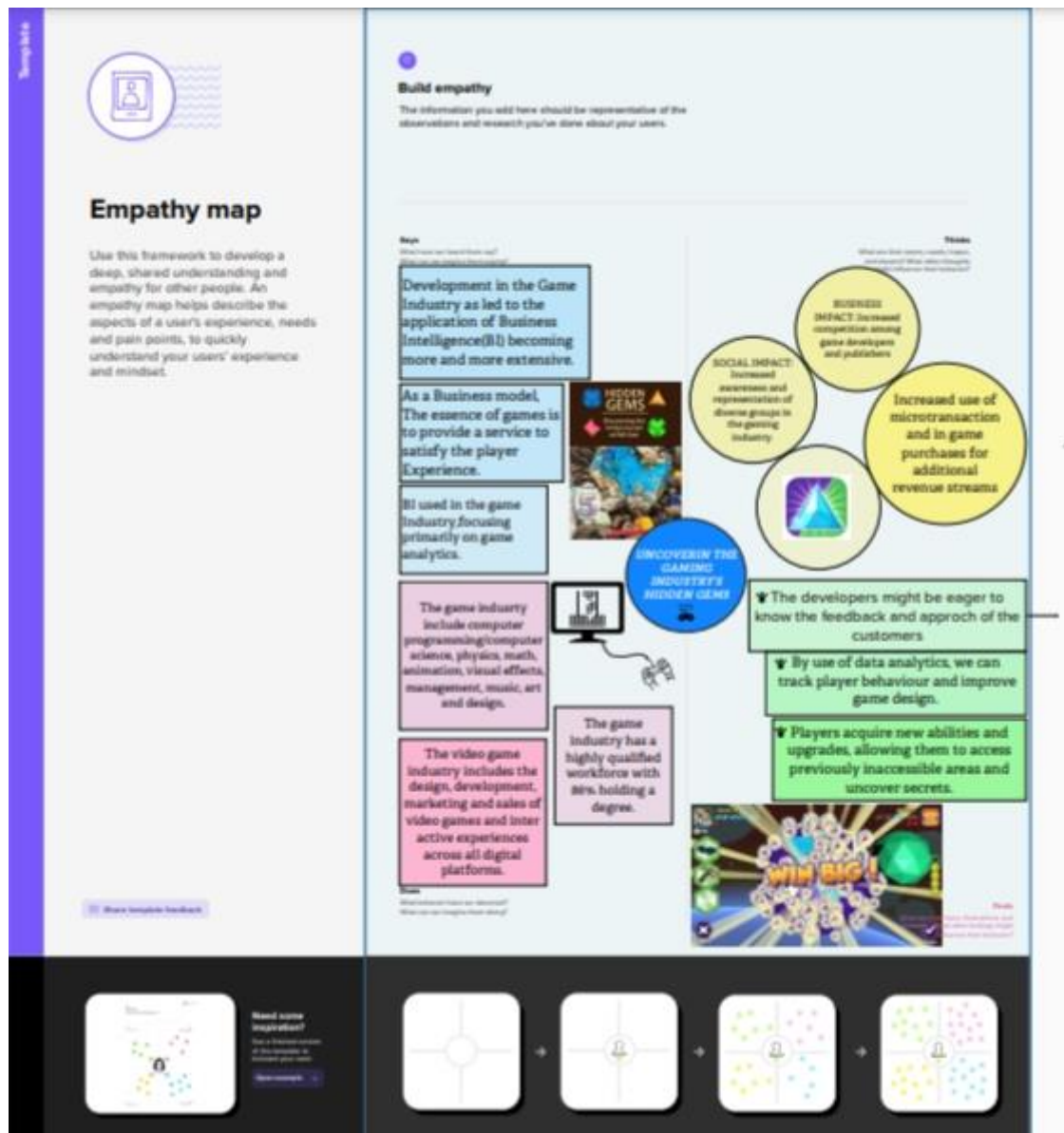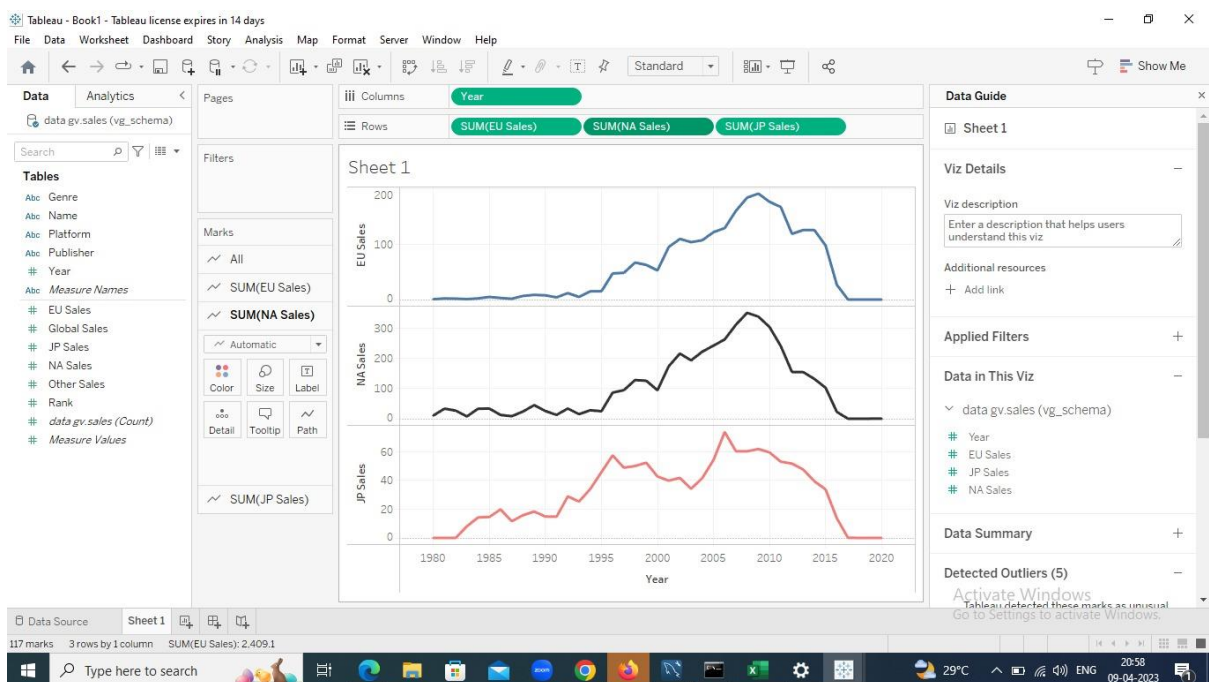
Ideation and Brainstorming

Brainstorming refers to a problem-solving technique used by teams or individuals. In this process, **participants generate various ideas or solutions, then begin discussing and narrowing them down to the best options**.
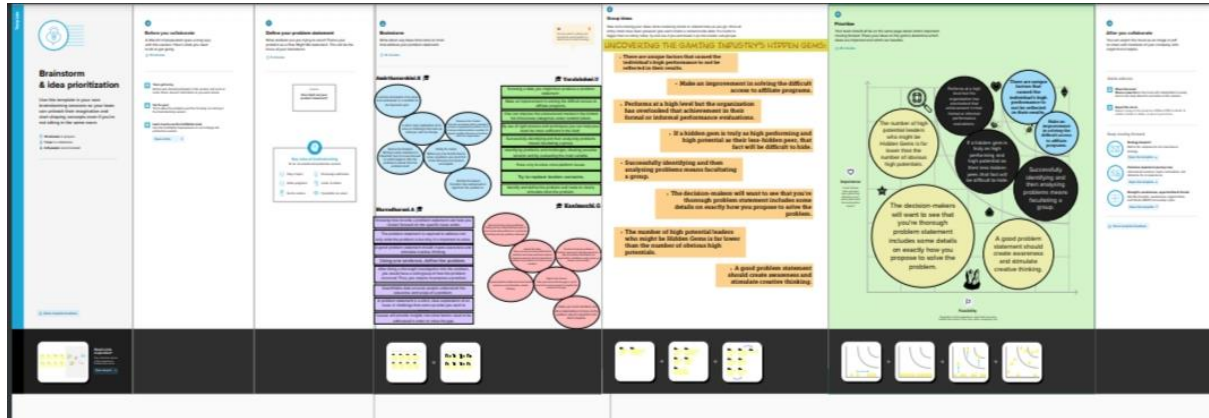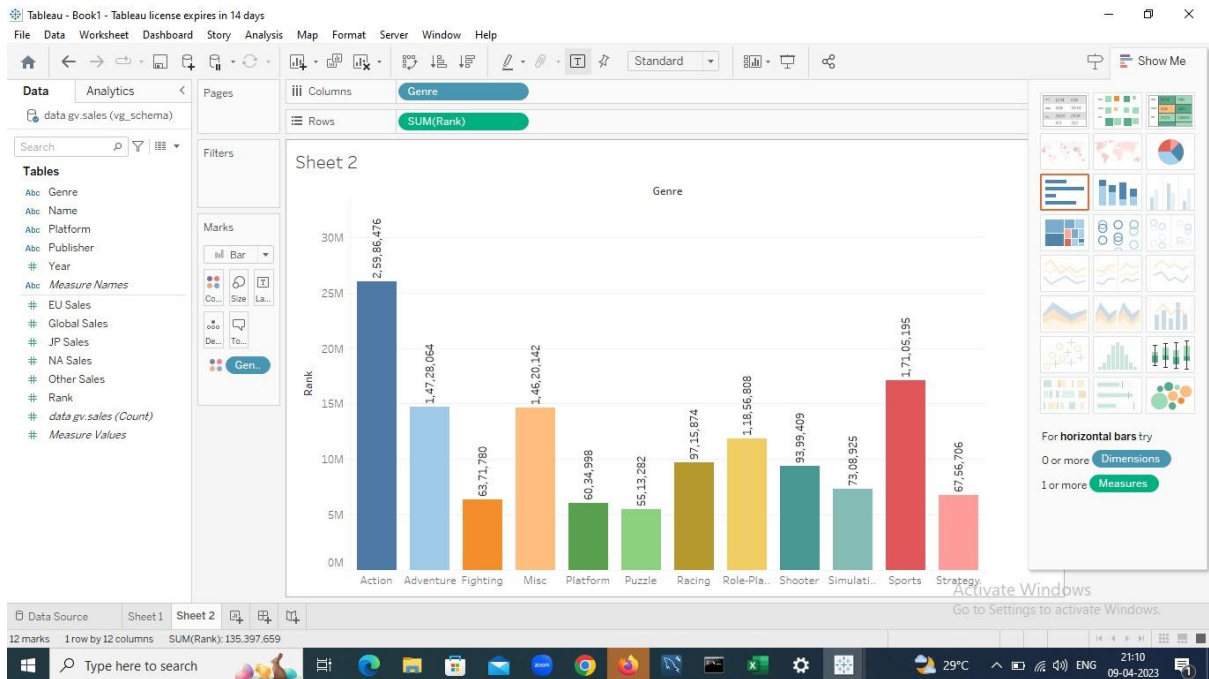

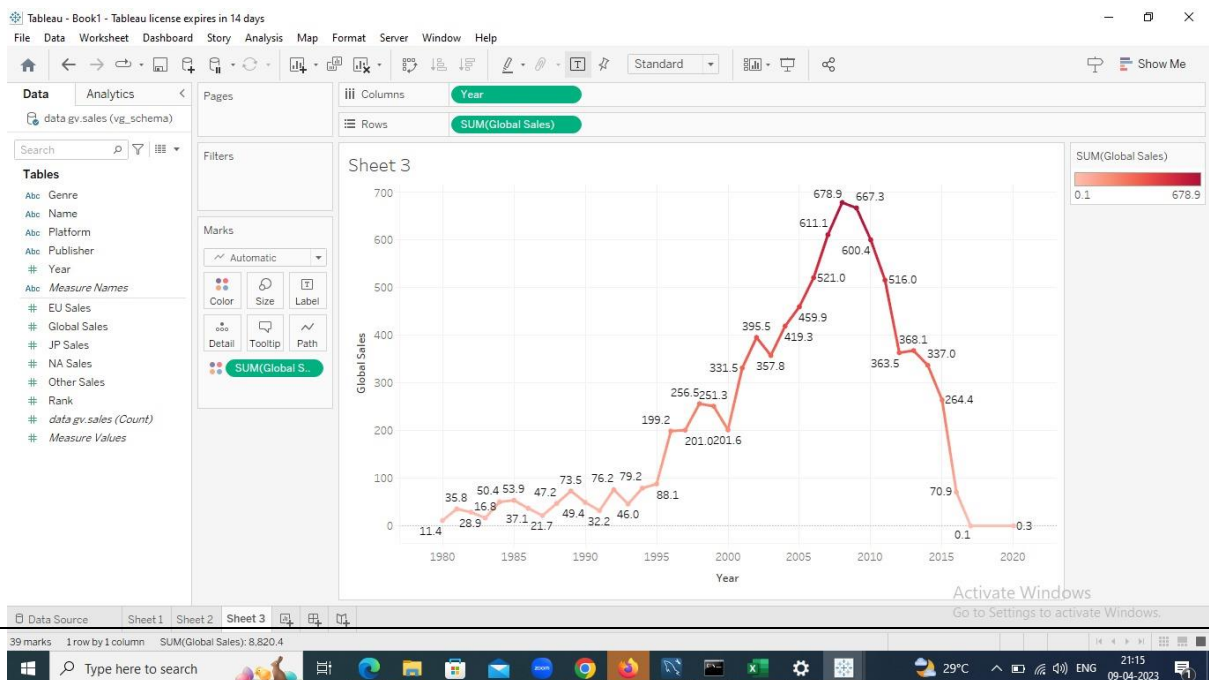## Result

Activity 1: No of Unique Visualizations

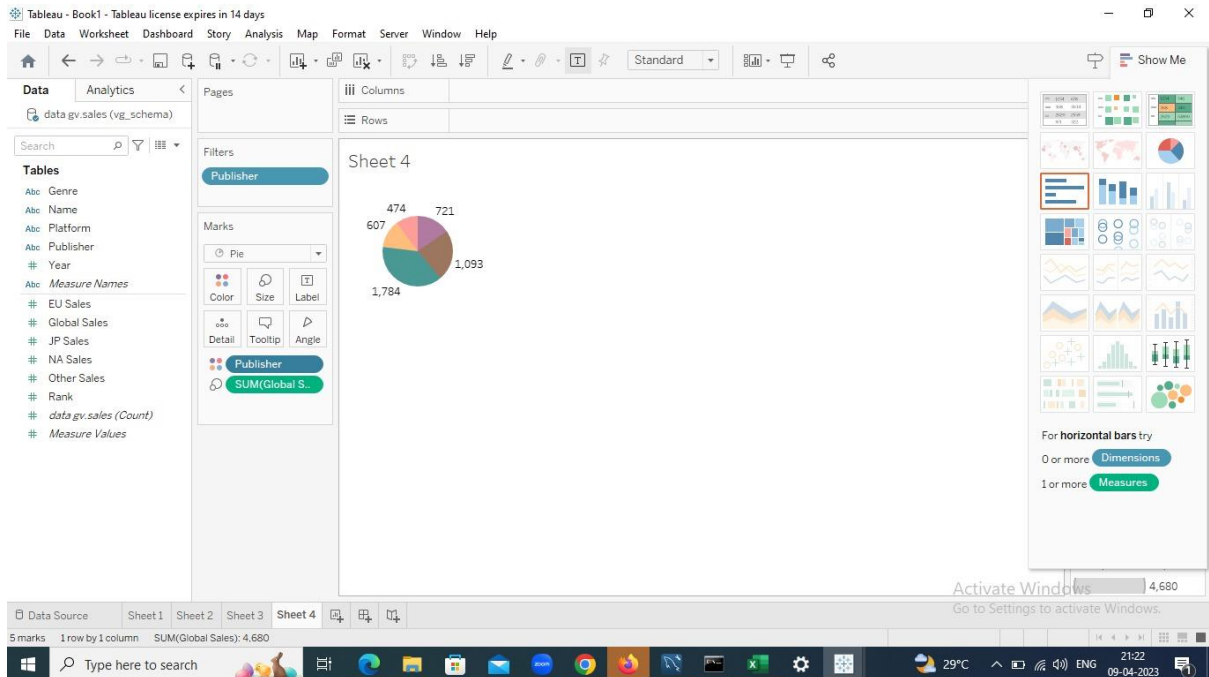## 1.1.Sales in different region Analysis

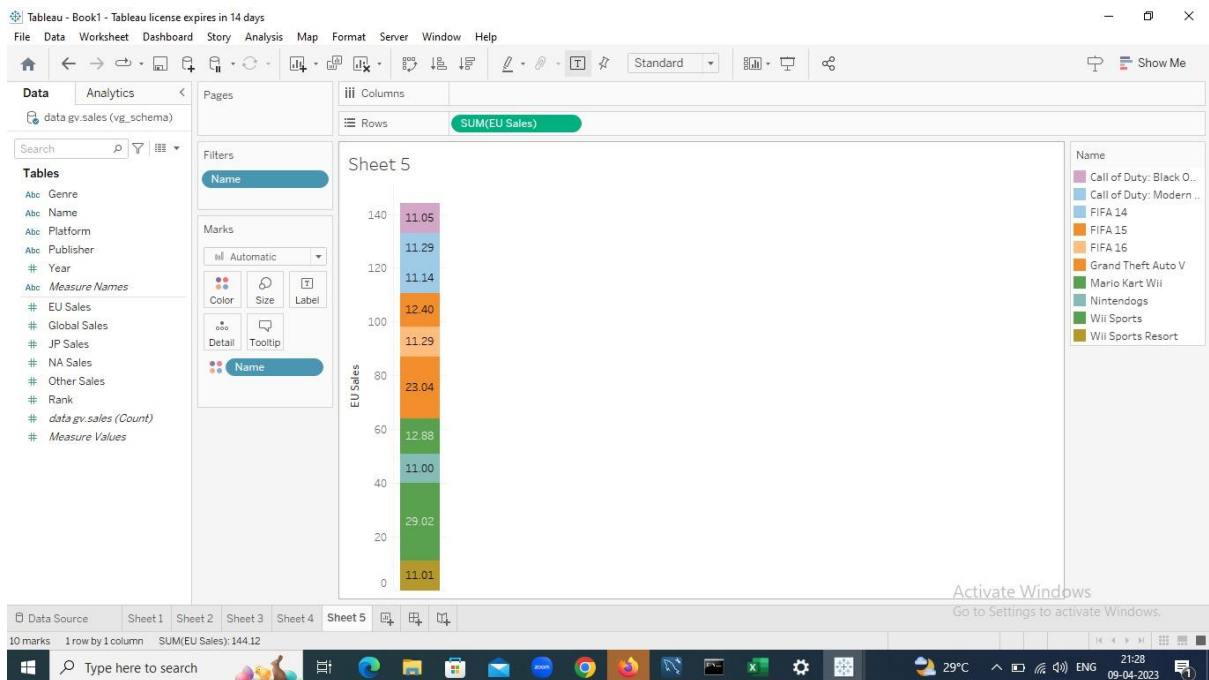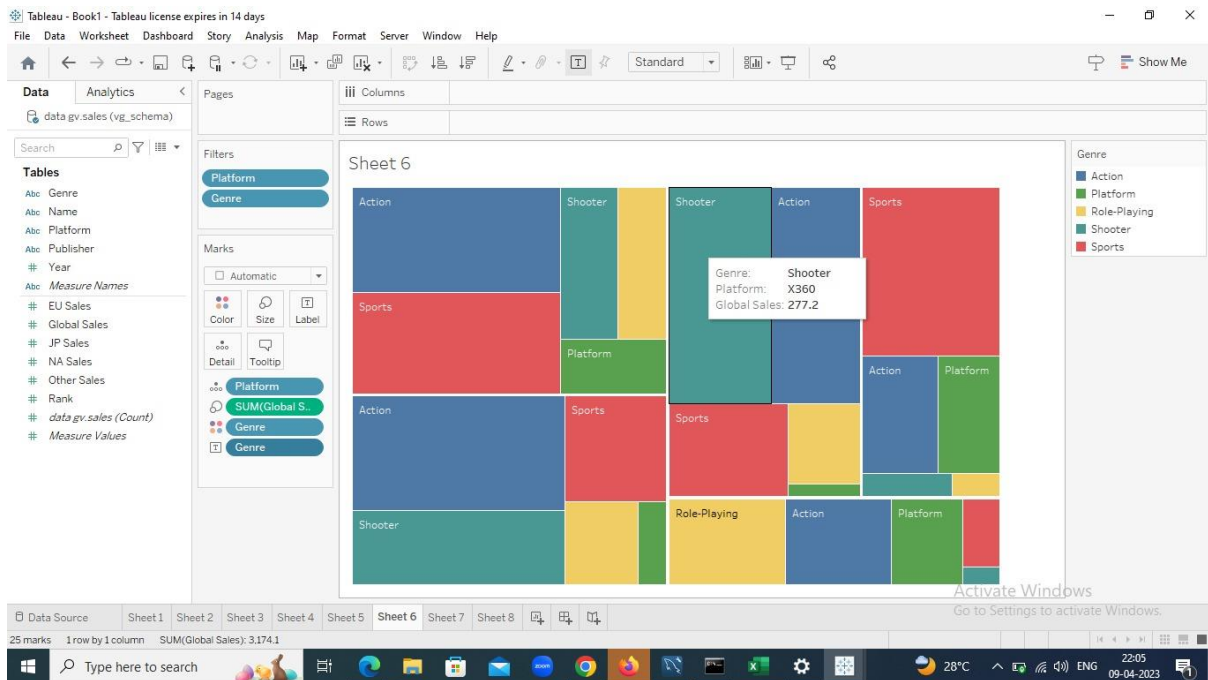## 1.2.Genre with rank Analysis

1.3. Total Sales Analysis

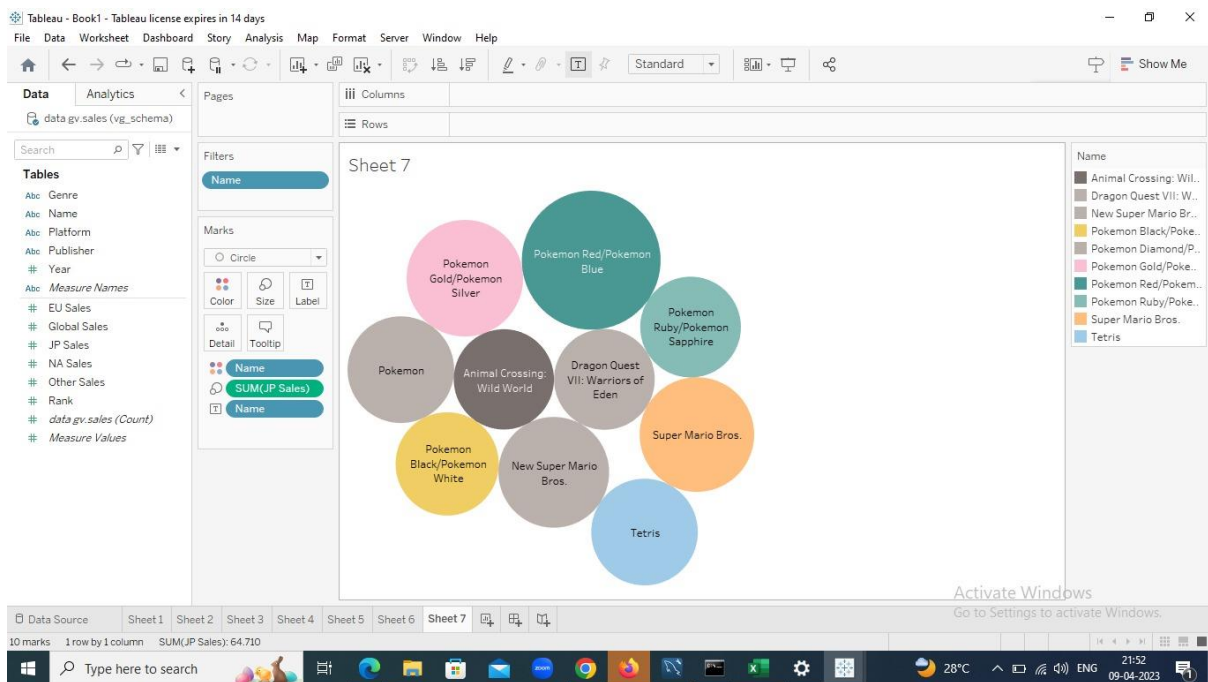# 1.4. Top 5 publishers Analysis

1.5 . Best 10 selling genres on platform Analysis
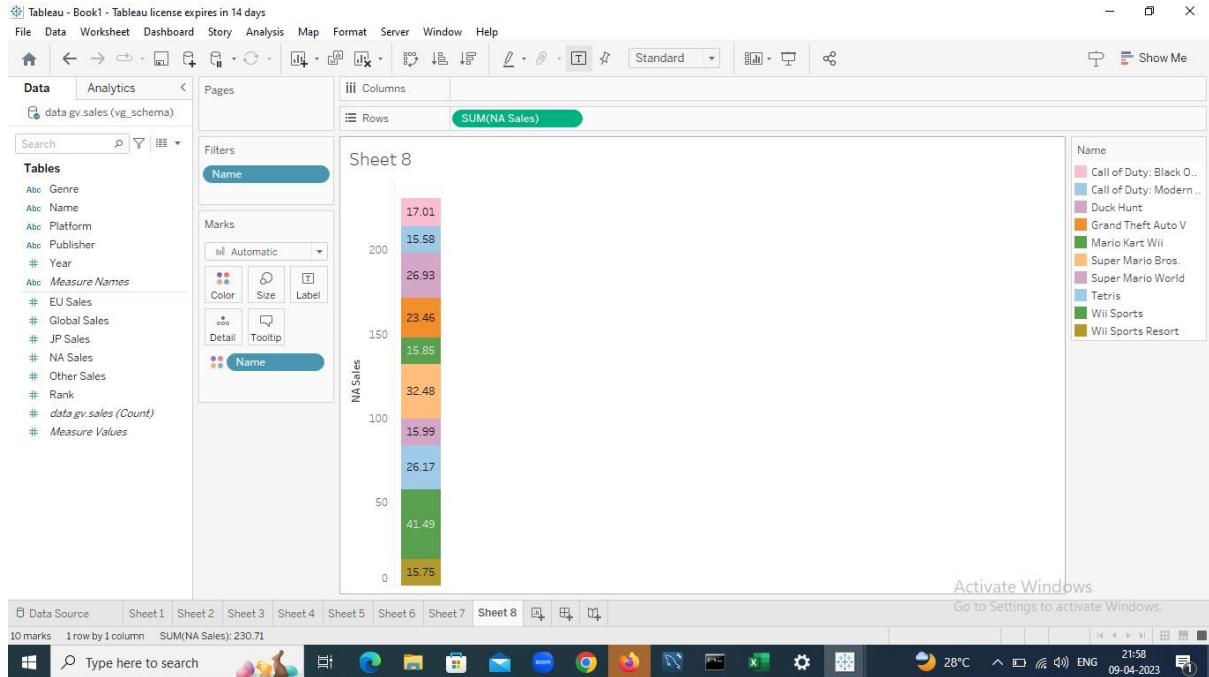
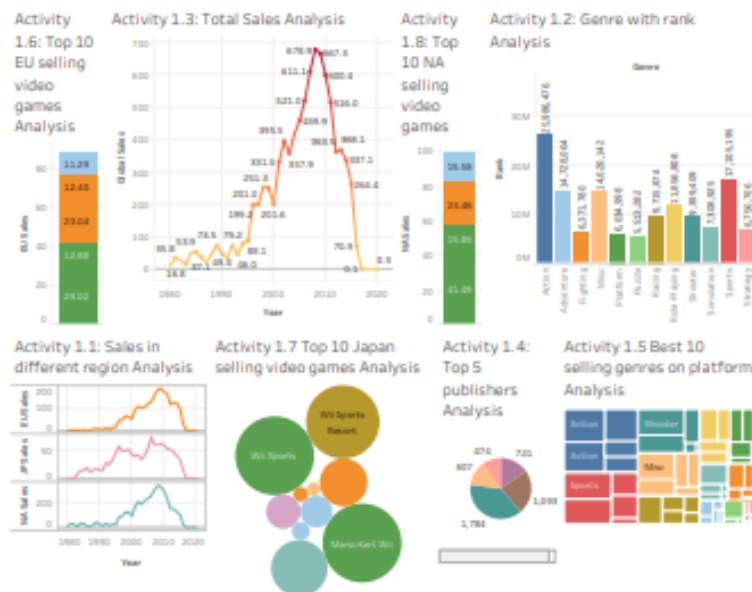# 1.6.Top 10 EU selling video games Analysis

1.7.Top 10 Japan selling video games Analysis

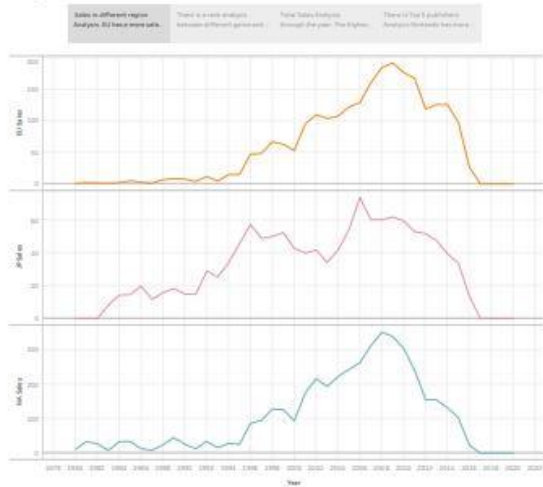# 1.8. Best 10 selling genres on platform Analysis

Activity 2: Dashboard

Activity3: Story
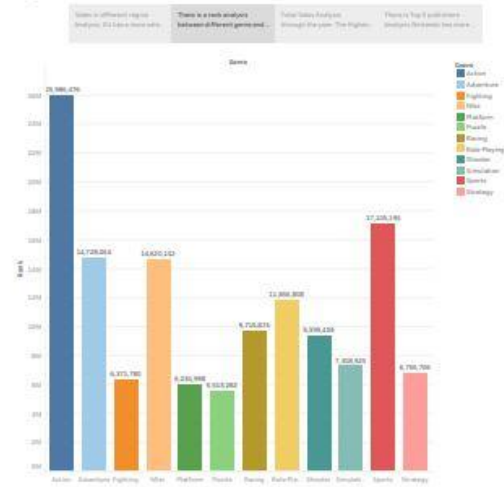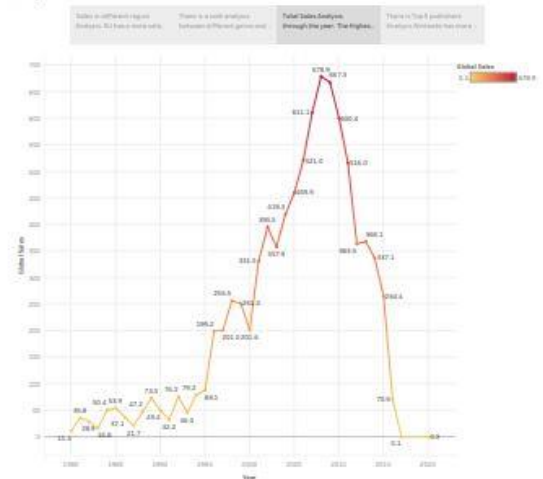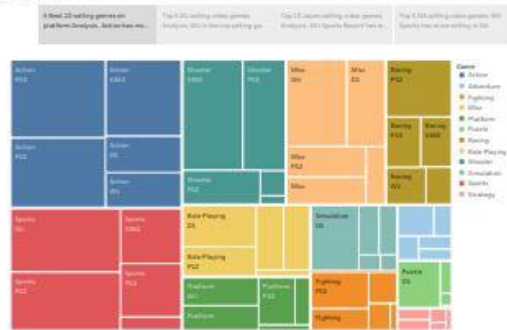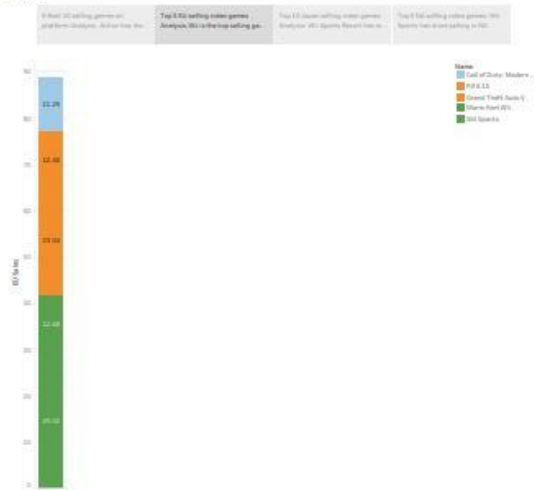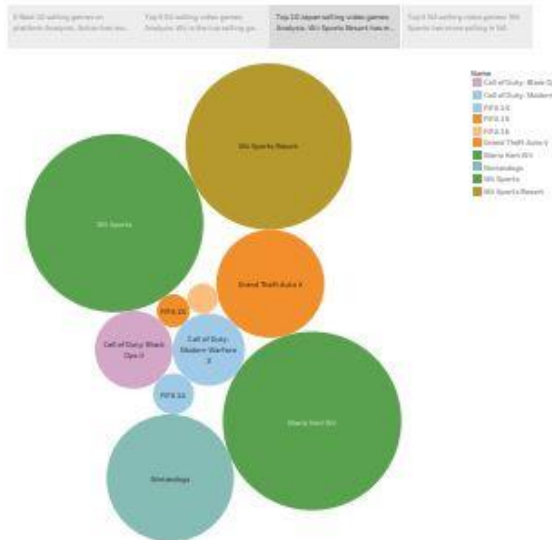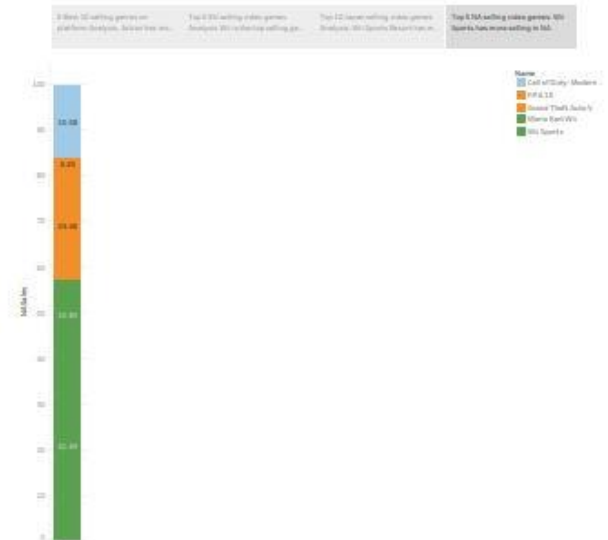
Advantages of Video Games

Brain Booster

Playing video games directly impacts regions of the brain responsible for memory, spatial orientation, information organizations, and fine motor skills. As people age, the importance of playing games tends to increase.

It could improve decision-making skills; compared to non-players, gamers who spend time daily with fast-paced games can react to questions or situations up to 25% faster.

May Ease Anxiety and Depression

It has been found that people are more confident, energetic and emotionally positive when they play video games, which is exactly the opposite of what depression brings about.

People who feel depressed lack physical energy, find it difficult to carry out daily tasks and are generally pessimistic. Thus, playing can reduce the risks for depression, help with arthritis, and even be a therapeutic option for aphasia.

Painkiller

According to a study from the American Pain Society, video games, and more specifically 3D ones, could help reduce the brain's response to physical pain.

Playing an attention-grabbing video game may distract one away from a painful activity and help them with chronic pain conditions, especially children.

<u>Obesity</u>

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.

<u>Could Limit Academic Process</u>

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. Most gamers have been seen to procrastinate on their studying, or they simply ignore a deadline just to play their favorite game.

<u>Violence</u>

Often, 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.

North America, Europe and Japan are the three biggest video game markets. Therefore, it would be interesting if we visualize the the sales between these three markets in a ternary chart.

In the chart, it is clear that a huge volume of sales are heavily skewed to the North American market and EU has more salesin the range 20 - 40 millions. One thing that is interesting, the sales in Japan are distributed more evenly than other regions.

Application

The fact that Grand Theft Auto was first released in 1997, NBA 2K in 1999, and Counter Strike in 2000 really explains the spikes in Action, Sport and shooter genre since a time point around 1997 - 2000. These are all classic games that the sequels are still very popular nowadays.

There are games which have 100% sales in North American or Japanese markets. However, mush less cases are found in the Europe market. I personally think that's because the games from Europe game developement companies are less than the other two major markets. Besides, one fun fact that no matter is in NA/EU/JP markets, the top 5 games are all published by Nintendo, one of the global largest game developement companies from Japan.

- Data Blending in Tableau provides the best in class solutions for multiple data granularity issues.

- The Data Collocation problems are resolved by using Data Blending in Tableau.

In the date parameters, you will find out the sales according to the dates. It could be in terms of a year, quarter, month, week, or day. The "Parameter options" will be available in the parameter. Dynamic Measures are completely similar to Dynamic Dimensions, with only one difference. Instead of Dimension values, we use Measure values.

The Tableau Dashboard that you will now learn to create will include the COVID-19 data related to India. It will need multiple worksheets, and the visualizations generated, will be combined to create a Tableau Dashboard to present the viewers with detailed insights on one screen.

 Tableau Dashboard will help you represent your data in a competitive and readily understandable way.

FUTURE SCOPE

Benefits of Tableau

- · Data visualization

- · Quickly Create Interactive visualizations

- · Ease of Implementation

- · Tableau can handle large amounts of data

- · Use of other scripting languages in Tableau

- · Mobile Support and Responsive Dashboard

- · Tableau Company Strategy

Tableau can handle large amounts of data

Millions of rows of data may be managed effortlessly using Tableau. Large volumes of data can be seen in a variety of ways while maintaining the performance of the dashboards. Additionally, Tableau provides a feature that enables users to establish "live" connections to a variety of different data sources, including SQL and other ones.

Tableau Company Strategy

Tableau has done a terrific job of dominating the market for data visualization solutions. However, given the growing popularity of data science, AI, and machine learning, Tableau ran the risk of slipping behind if it didn't innovate quickly.

Data visualization

Tableau's primary function is data visualization. Its technology facilitates complicated calculations, data combining, and dashboarding in order to produce stunning visualizations that provide insights that are difficult to obtain by quickly skimming a spreadsheet.

Quickly Create Interactive visualizations

Tableau's drag-and-drop features make it simple for users to build highly interactive displays.

Conclusion

From game as a service side, it is also meant to use BI in the game industry. It can provide a service-oriented decision system through data analysis to guide the whole game industry, especially for the game publishing analytics, which can help acquire players, maintain players, and maximize game revenue effectively.

Appendix

Dashboard:

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