Uncovering the Gaming Industry's Hidden Gems: A Comprehensive Analysis of Video Game Sales

1. Introduction

1.1 Overview

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. It was generated by a scrape of vgchartz.com. 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. It was generated by a scrape of vgchartz.com.

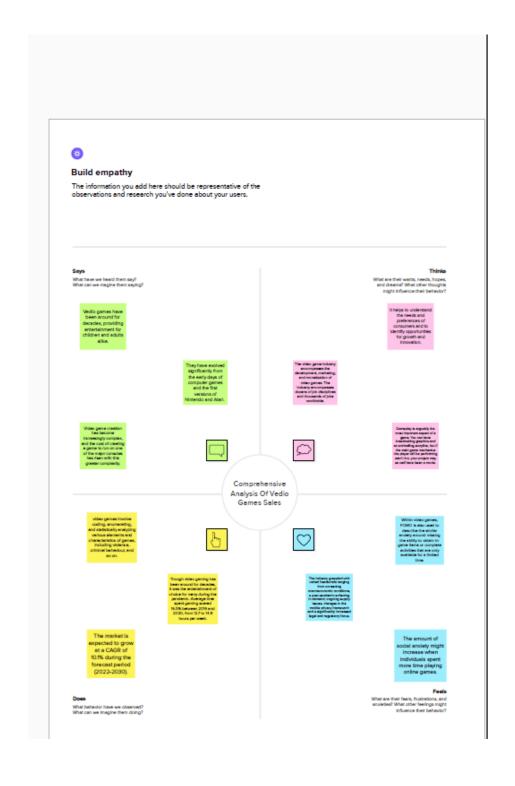
1.2 Purpose

The goal of this project is to find what are the most significant predictors for a video games success, measured as the number of sales around the world. I analyzed a total of 4195 video game software releases across the world by 50 different developers. I built a hierarchical linear model on a logarithmic transformation of the global sales, with random slopes by developer, using a manual stepwise selection process using AIC and conditional R-squared as selection criteria.

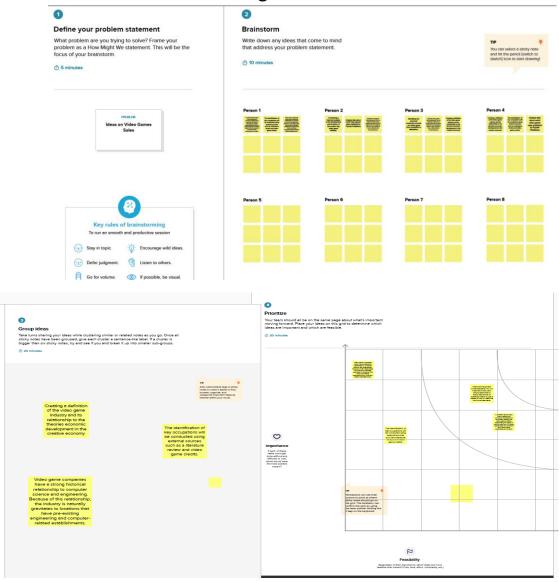
Considering that the developing studio plays a major role on a customer's decision to buy a new game, and due to the fact that accounting for every single studio included in the dataset (444 total) would make the interpretation too complicated, I used a random sample of 50 developers and built an appropriate hierarchical model with random intercepts effects for each one of them. The variables in the final model were found to be significant in predicting the global sales for a video game.

2. Problem Definition & Design Thinking

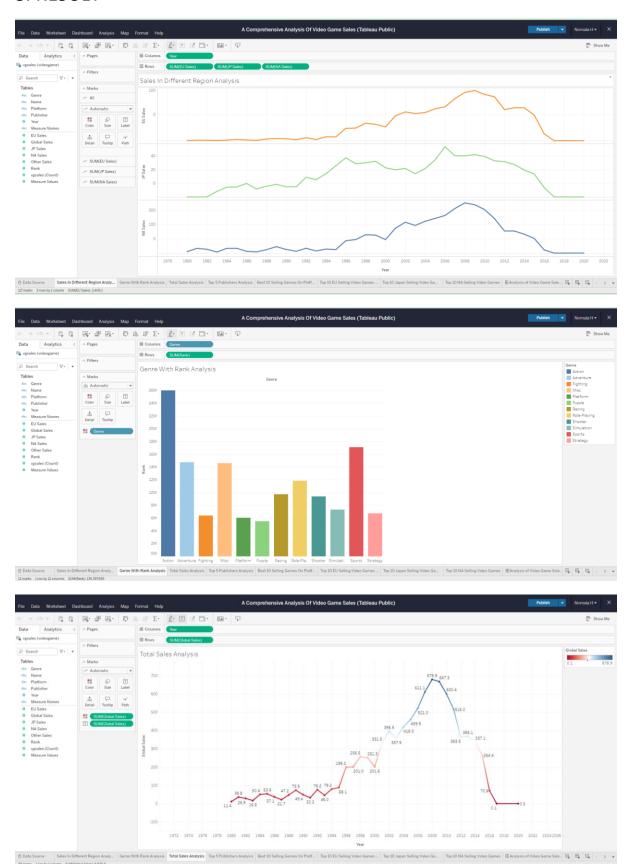
2.1 Empathy mapping

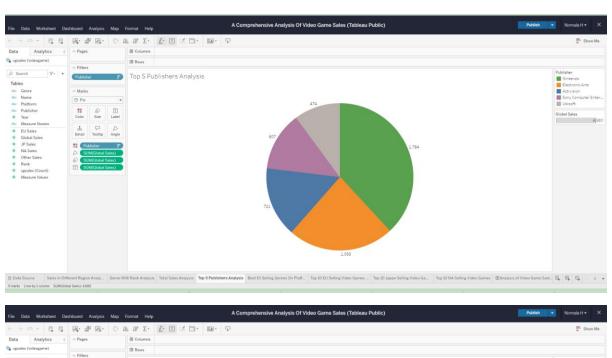


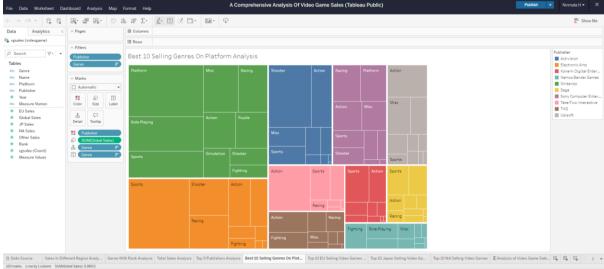
2.2 Ideation and Brainstorming

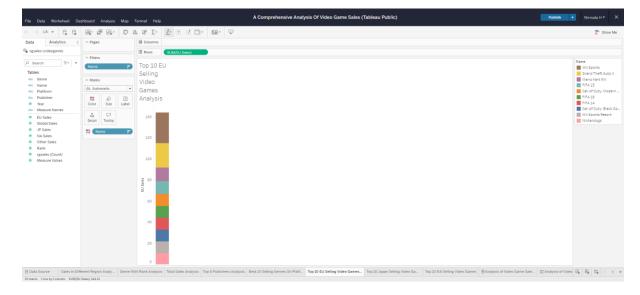


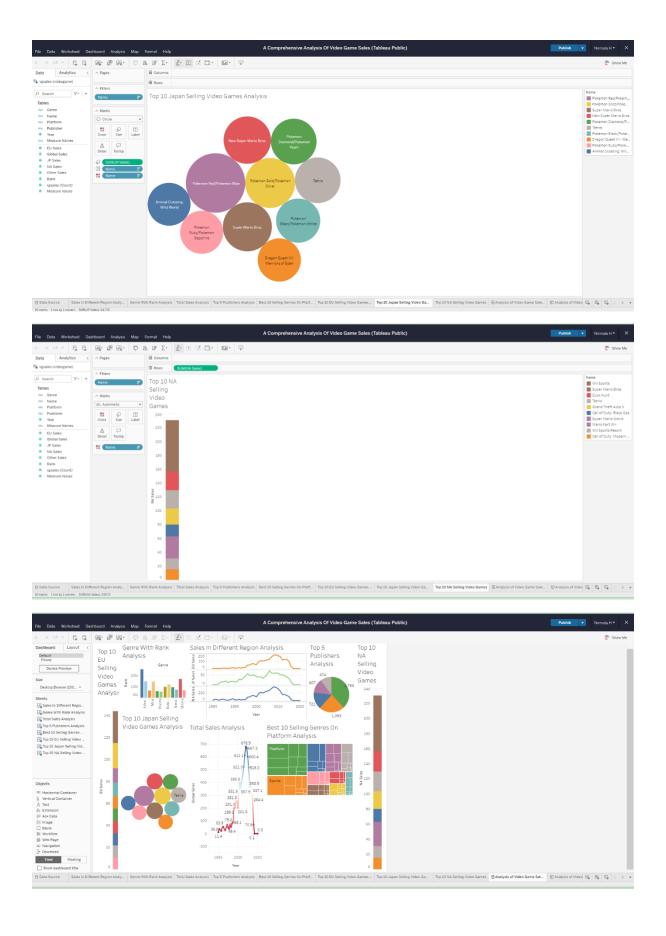
3. RESULT

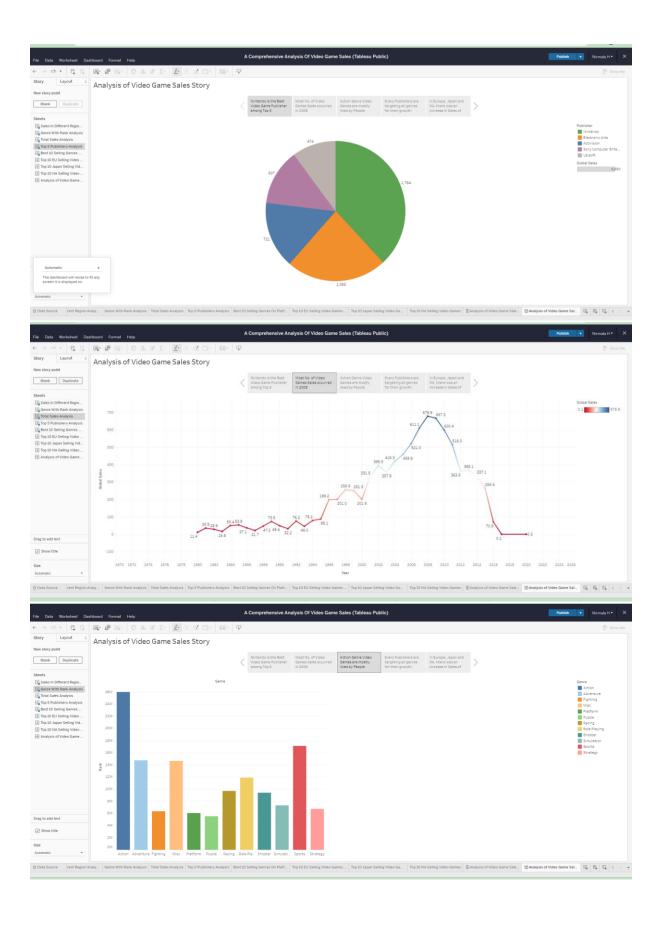


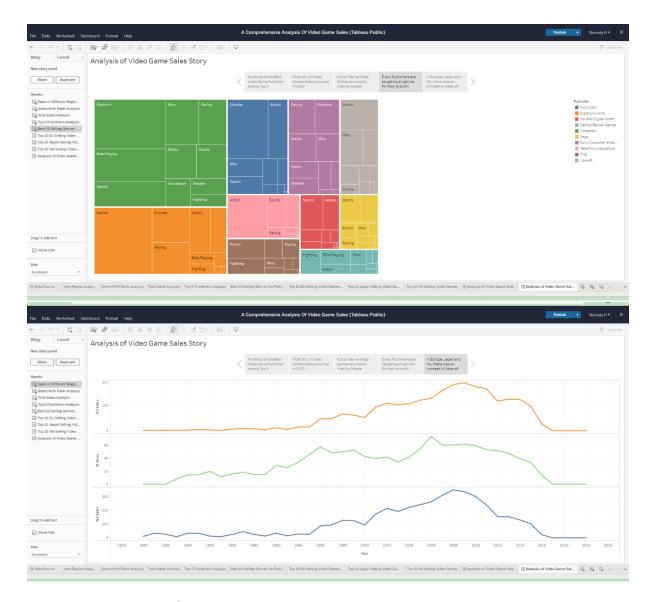












4. ADVANTAGES & DISADVANTAGES

ADVANTAGES

Video games hold a great potential and advantage in various aspect despite of its entertainment value. There are several advantage of video games that beneficial for university students such as its help in the aspect of learning, promote healthy life style and enhance student's social life.

DISADVANTAGES

Addiction has numerous forms, gaming is not the only one. Addiction can also be of facebook, youtube, etc. You cannot tell them to not play video games, but you can enforce some house rules. You can make gaming a reward for them. In exchange for completing the

homework, you can give them an hour of gaming. Make sure your child is not just playing games and not going out to play outdoor games. For an overall personality development, it is imperative that your child is learning new skills, and become better. Their needs to be a right balance between fun and work/development. The disadvantages of video games can easily be eliminated if we teach them how much is enough, and the importance of other things in life.

5. APPLICATIONS:

The videogame industry lost its innocence a long time ago. These days, it's a mature sector, admired for its technological muscle, innovative capacity and its well-developed entrepreneurial vision. The figures don't lie: **the sector will end 2019 with global income of more than \$150 billion and year-on-year growth of 9.6%**, according to market intelligence company Newzoo.

With numbers like this, it's no surprise that videogames dominate the audiovisual sector, far ahead of music and cinema. **Not even Hollywood can compete with a sector that boasts 2.5 billion players in the world,** particularly with hits like Fortnite, which has 139 million active players. The fever for this videogame has crossed borders and is already rattling giants like Netflix more than Disney and HBO, its direct competitors in the battle to dominate the audio-visual content streaming field.

6. CONCLUSION

Video games have measurable effects—physically and cognitively. Video games produce cognitive improvements, e.g. visual attention processes, as well as physical changes, such as the brain areas responsible for processing and learning. However, video games also produce impairments that cause psychological deficits, e.g. inhibition and decision-making skills, from physical effects, i.e. prolonged stress mechanisms. As long as we approach video games in a holistic sense, we can design them to make us smarter and stronger while minimizing negative effects. There are no limits to the cognitive training and learning opportunities created by video games, and they can be developed to improve cognitive resources, such as memory,

language, and problem-solving skills. If we can better understand the psychological and physiological effects video games have on humans, then we can design video games that assess players, educate students, and increase the overall quality of our lives.

7. FUTURE SCOPE:

We can design and create video games that serve a number of purposes. They can be designed to prevent the onset of neurological disorders, impairments, and behaviors as well as to treat physical problems brought about by accidents and illnesses. Depending on the condition, video games can be designed for a specific circumstance or individual. They serve as useful tools to educate and train professionals. Whether medical, military, or anywhere in between, individuals can benefit from video game simulator training on various levels. For example, video game simulations can provide da Vinci surgeons with operational skills and no medical content, medical content with no kinesthetic training, or both skills and content. As well, future video games can serve as powerful pedagogical tools to teach a process, phenomenon, or any particular interest, e.g. an immune response and the immune system. Whether they're teaching an elementary or college student about history, these video games can be scaled in content, difficulty, and components. These differences could address a range of characteristics, such as age or IQ, and hone in on individual experiences and problems, such as changing a game's resistance to focus less on competition and more on teamwork. Ultimately, we can study the effects of these games and modulate them to produce the most desirable results.