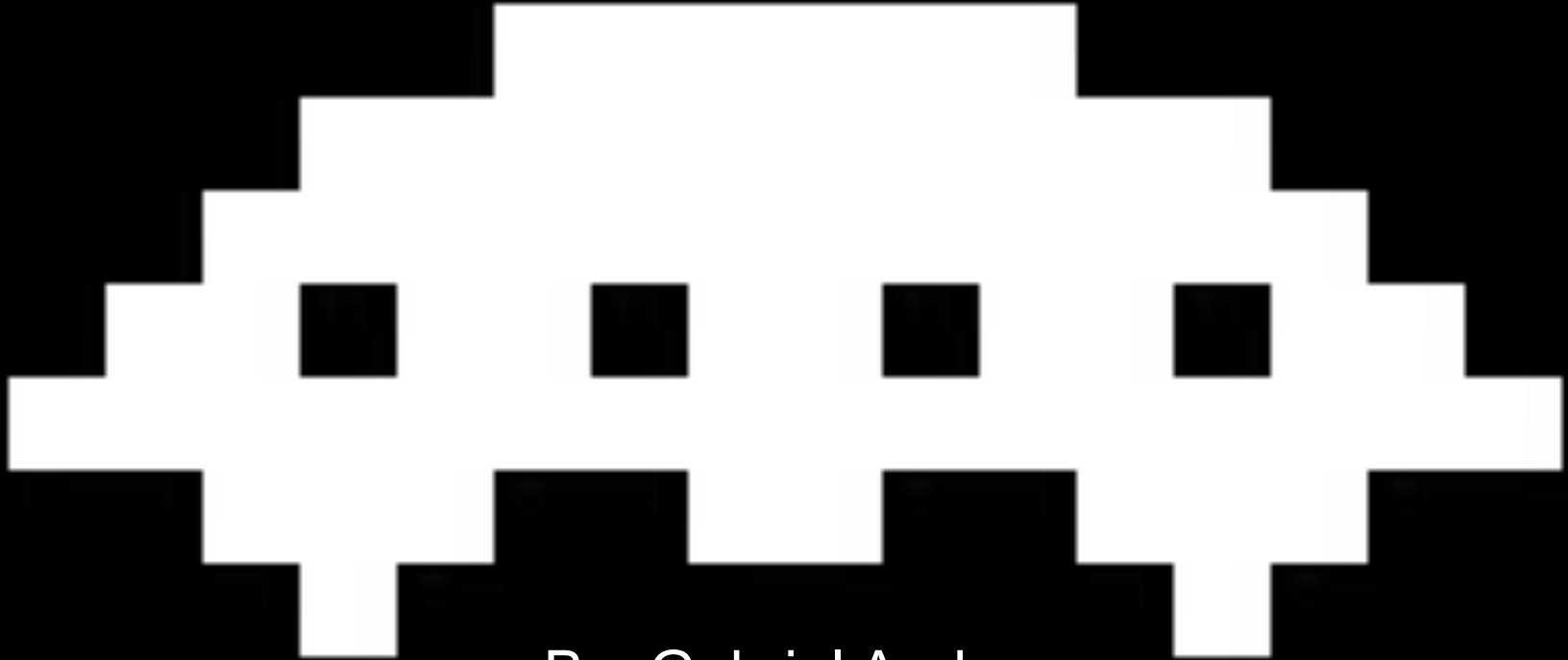


The Invasion of Unemployment and Video Games



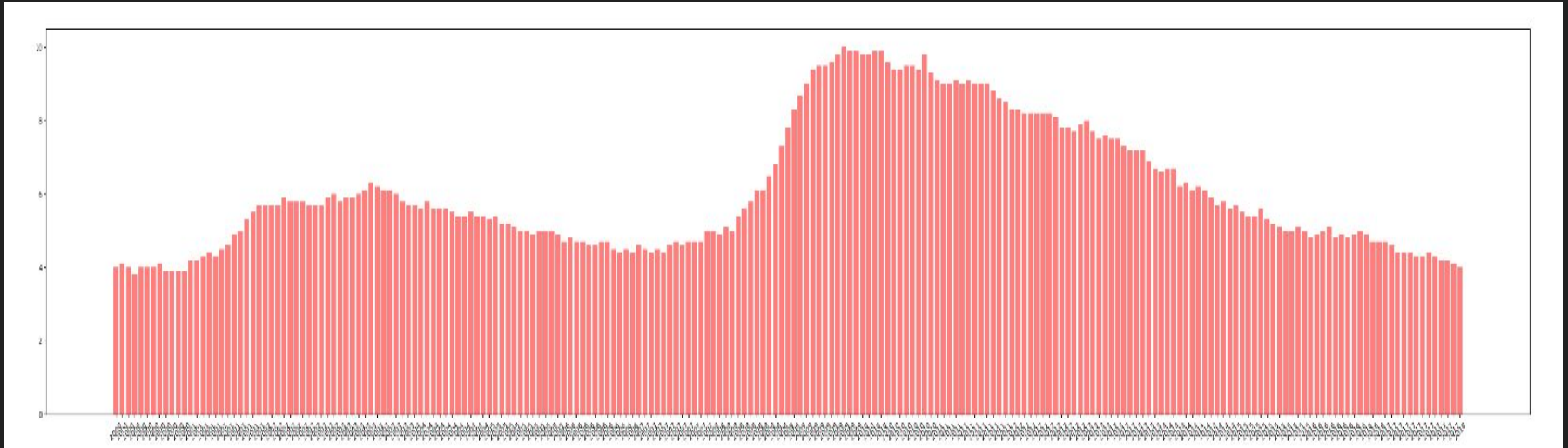
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Introduction

- Our goal is to find any correlation between Unemployment Rate in the United States and the sales of video games in the North American region from 2000-2017.
 - Our research will define high unemployment in the US as any year or month above 5%
 - Anything below 5% as low unemployment rate
 - Video games will be analyzed by their platform popularity and at what years were sales highest inside the US
 - Platforms include: Xbox360, Wii, 3DS, Xbox, PS2, PS3, etc.
 - A correlation will be presented between unemployment rate by year with the sales of video games in North America by year

Unemployment Rate

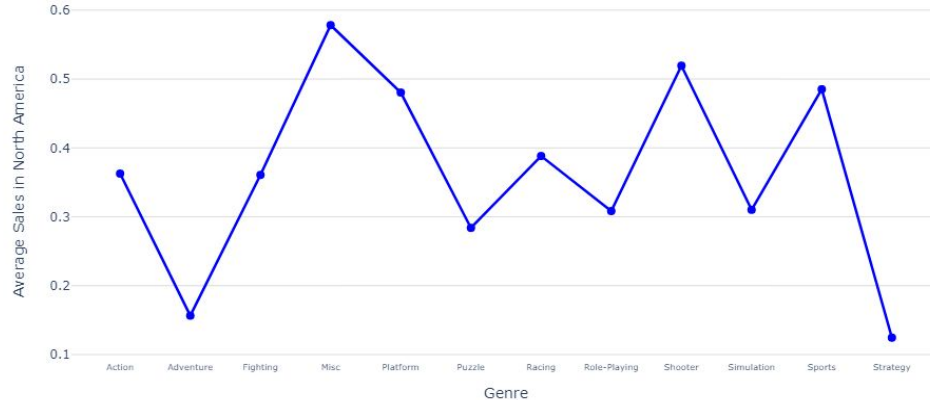
- There have been 149 months of high unemployment, and 68 months of low unemployment from 2000-2017.
 - The highest unemployment rate period being at 9.8% in September, 2009
 - The lowest unemployment rate period being at 3.8% in April, 2000



Video Game Sales NA

- In North America, consumers prefer platform and shooter type of video games.
 - Platform games include the games such as Super Mario Bros.
 - Shooter style include games such as Call of Duty and Grand Theft Auto

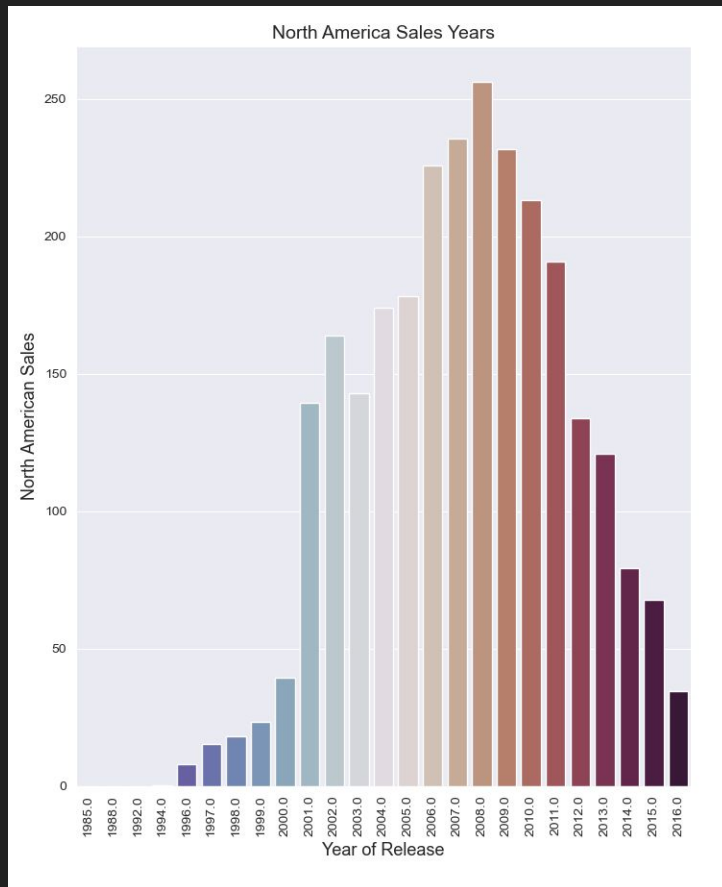
Average Sales of Different Genre Games



**SUPER
MARIO BROS.**

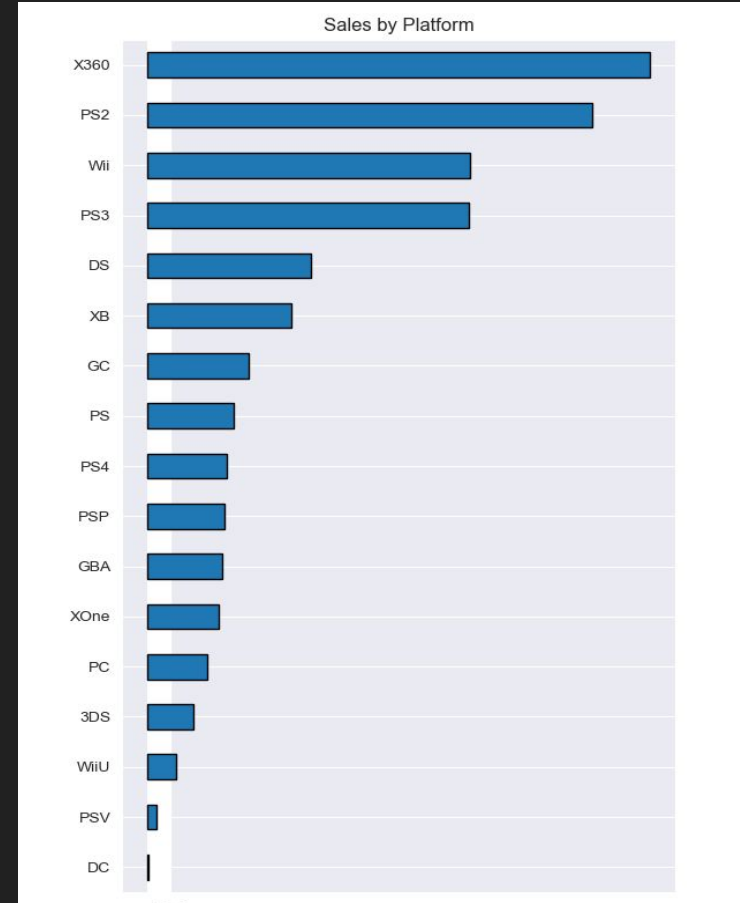
Annual Sales

- The year 2008 had the most sales in North America with 256.25 million sales, and with 2007 coming second with 235.61 million sales in the region.
- The year 2016 recorded the least amount of annual video game sales in the North American region with 34.52 million sales



Platform Sales

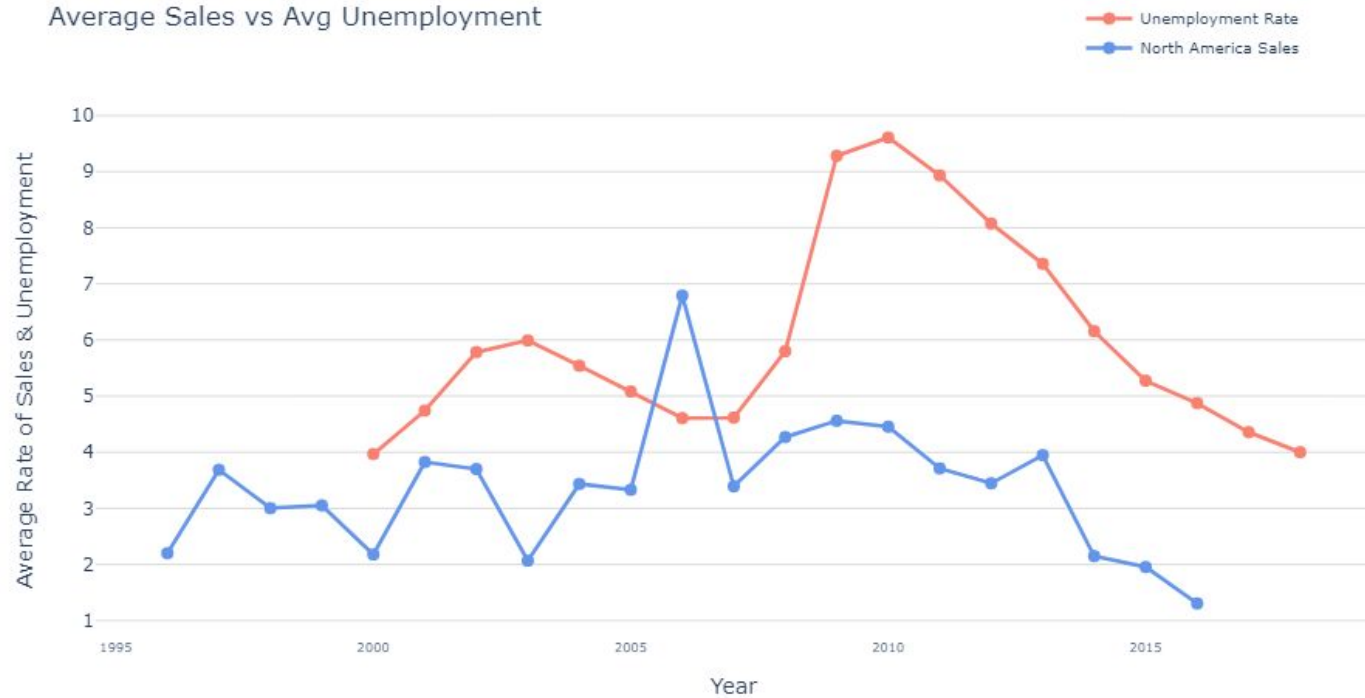
- Xbox 360 video games were the most popular in the North America region with 533 million sales from 2000-2017.
 - Publisher: Microsoft (USA)
- 2006 saw the highest sold video game with Wii Sports reporting 41.36 million sales in North America.
 - Publisher: Nintendo (Japan)
- Five most popular consoles in NA from 2000-2017: Xbox 360, PS2, Wii, PS3, & DS



Correlation

- There may be a correlation between the unemployment rate and video game sales. Evidence that helps support this:
 - The decrease in video game sales as the job economy improved.
 - The impact of the 2008 recession where we saw the largest sales volume two years prior (in 2007 and 2008) which was also the start of the greatest job loss in recent history
 - In 2001 was the dot.com burst where many tech businesses were shuttered and jobs were loss (a mini recession), we can see a decline in video game sales after this period of time.

Average Sales vs Avg Unemployment



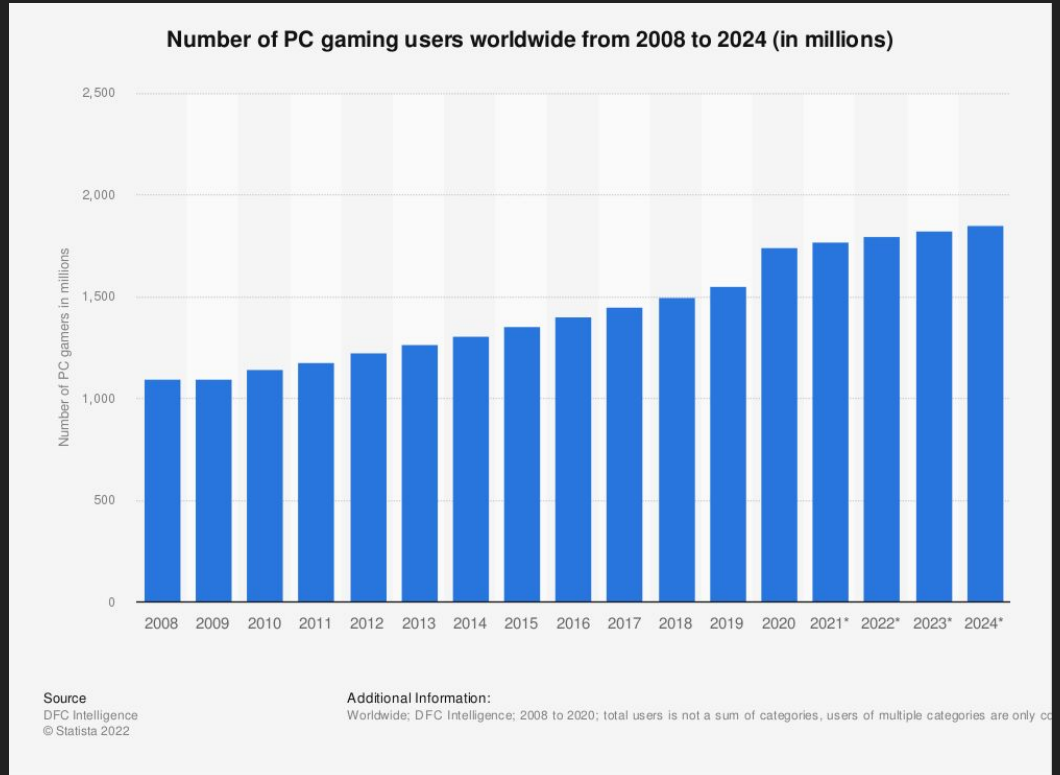
Conclusion

- Although we see a correlation between these two datasets, there may be other contributing factors which may influence video game sales. Some of these are:
 - The change in consumer behavior after 2010 from console gaming to mobile or PC gaming as they became more readily available
 - The growing popularity in casual gaming produced by independent studios which were not captured by these datasets
 - The advent of cloud video game streaming services and digital purchases

Conclusion

This bar chart shows the growth rate of PC gamers annually from 2008-2024

The information can shed some light onto why console gaming has decreased amongst gamers in our original dataset



References

FRED: <https://fred.stlouisfed.org/series/UNRATE>

Kaggle: <https://www.kaggle.com/datasets/gregorut/videogamesales>

GitHub: <https://github.com/Andaya334/Project-1.git>

Statista: <https://www.statista.com/statistics/420621/number-of-pc-gamers/>