



# NLP for Digital Videogame Reviews

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Metis

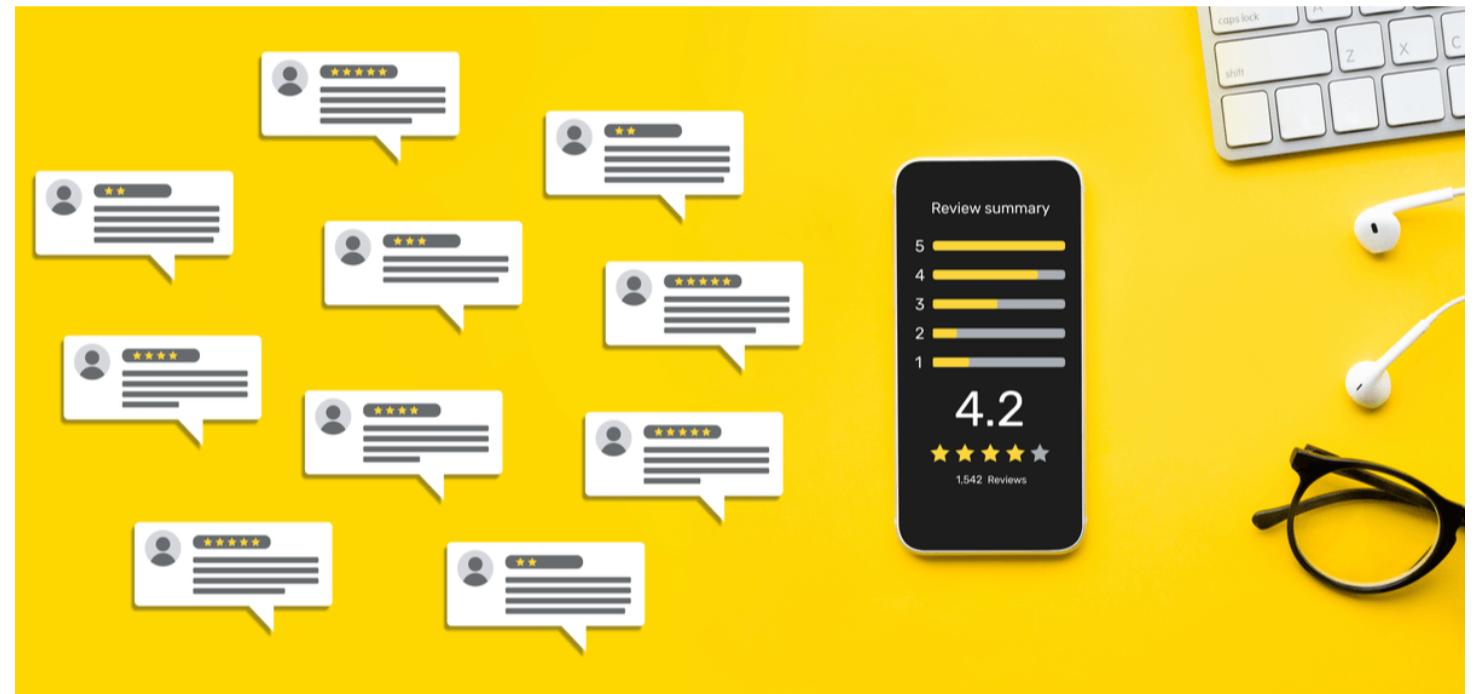
# Background

- Videogame Industry: over \$200 billion within 2020-2025 (marketwatch)
- Amazon: 150 million prime subscribers in 2021 + other customers
- Billions of people who play videogames, worldwide

# Goal

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- Explore language of Amazon videogame reviews to understand the most important qualities for videogame products



# Process



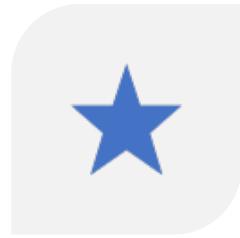
DATA: 144,724 REVIEWS



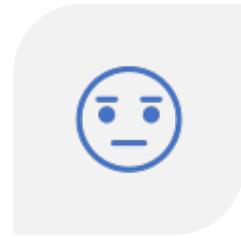
PREPROCESSING:  
REMOVING NON-ENGLISH  
WORDS, STOP WORDS, ETC.



TOPIC MODELING: FINDING  
TOPICS BASED ON REVIEW  
WORDS



SENTIMENT ANALYSIS:  
BASED ON STAR RATING



FINDING TOPICS  
ASSOCIATED WITH  
POSITIVE/NEGATIVE  
SENTIMENT

# Topics

Ease/Speed of Transaction

Good Price

Game Challenge

Product Delivery

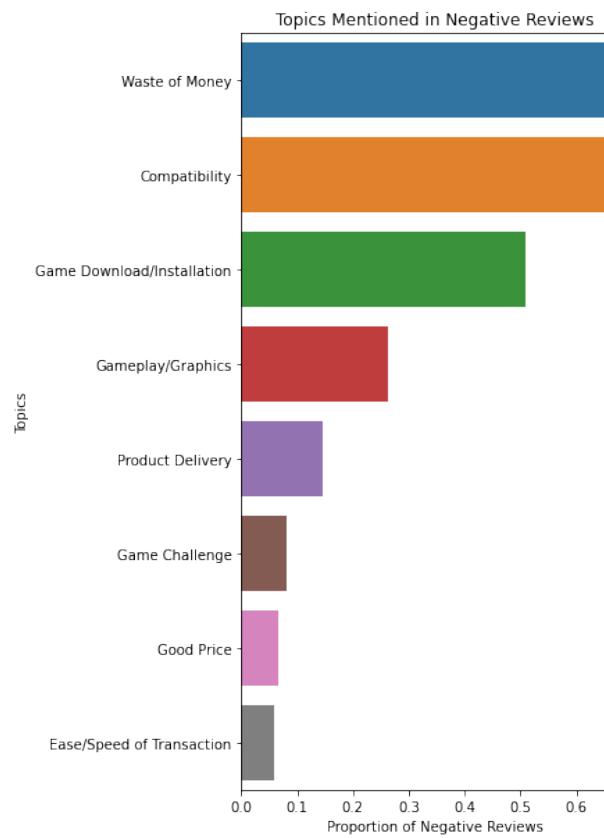
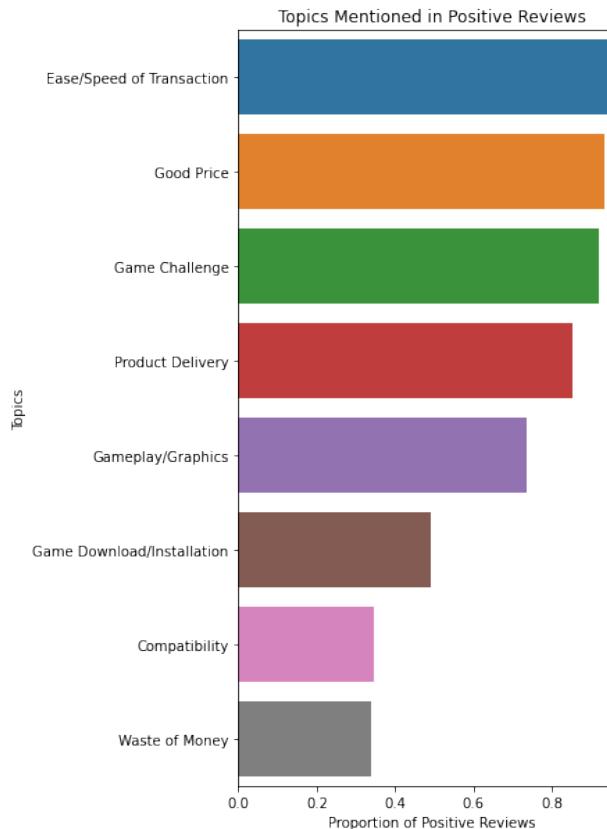
Gameplay/Graphics

Download/Installation

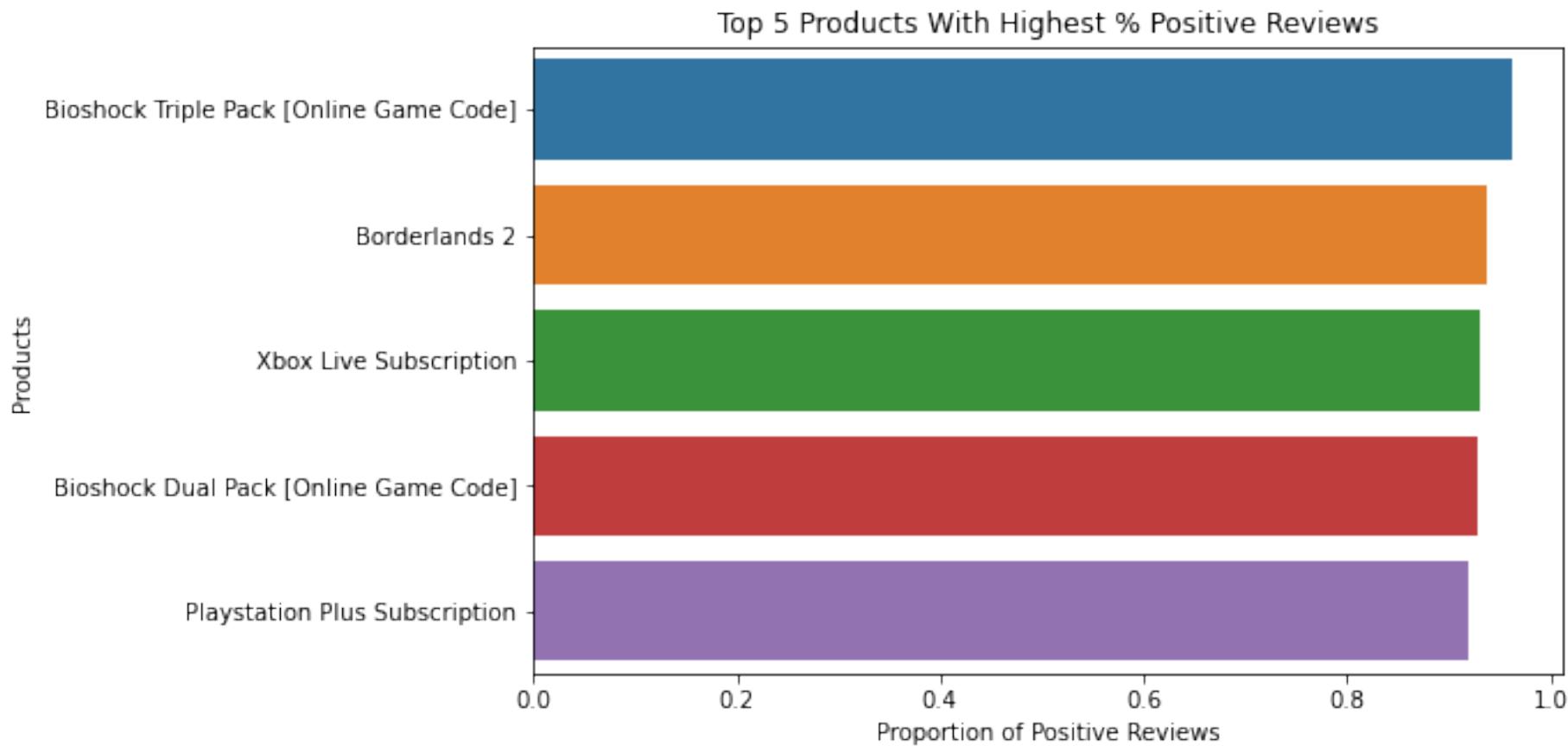
Compatibility

Waste of Money

# Topics by Sentiment



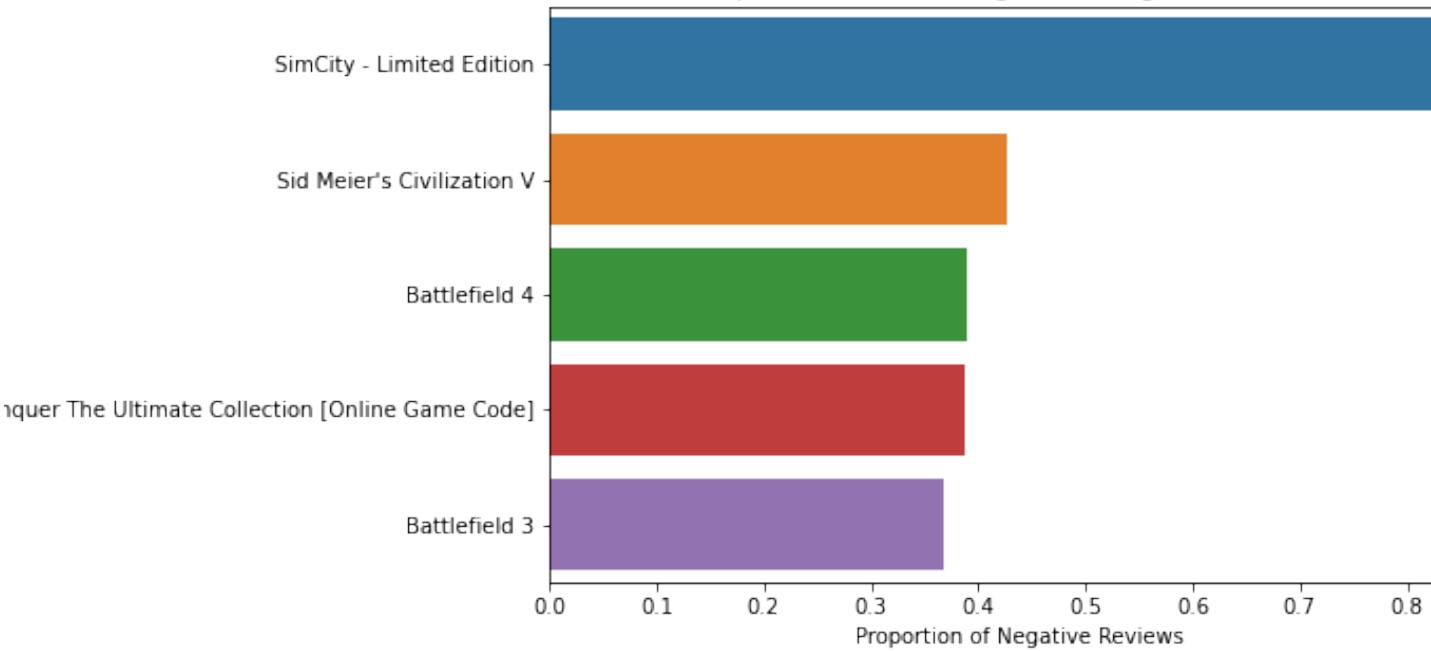
# Positively Reviewed Products



# Negatively Reviewed Products



Top 5 Products With Highest % Negative Reviews



# A Closer Look at Bioshock Triple Pack (Positive)

story series anyone triple deal  
three price must bundle  
pack purchase value fun download  
**steam** made bought codes worth



# A Closer Look at SimCity (Negative)



server servers  
work work save  
actually launch drm issues  
connection connection bought  
single problems  
people maxis every fun  
internet day wait origins  
server server online money  
player build

# Future Work

- Larger Dataset
- Better preprocessing:
  - Lemmatization
  - SpaCy
- More Advanced Sentiment Analysis

