BIG DATA USE CASE - NETFLIX

"See What's Next"

WHAT IS BIG DATA?

- Refers to large and complex sets of data that exceed the processing capacity of traditional data management tools.
- Can include a variety of data types, including structured, semi-structured, and unstructured data, and is generated at a high velocity from multiple sources.
- Requires specialized tools and techniques for storage, processing, and analysis to derive valuable insights and make informed decisions.

INTRODUCTION TO NETFLIX

- Netflix is an American multinational entertainment company founded on August 29, 1997
- It specializes in providing stream media and video on demand online
- Netflix has over 230 million subscribers worldwide
- Netflix is said to account for 33% of peak-time internet traffic in the United States

HOW “NETFLIX” USES BIG DATA

- How much of a series or movie you watch
- How often and where you pause, rewind or fast forward
- Where you watch things
- When you watch things
- Your searching and scrolling behavior
- Your demographic data & internet browsing behavior

PROJECT: OPTIMIZING CONTENT RECOMMENDATIONS ON NETFLIX

- Objective - To optimize content recommendations on Netflix to improve customer engagement and retention.
- Data Collection - Collects vast amounts of data on its users, including viewing history, ratings, searches, and user feedback
- Data Analytics - Uses big data technologies such as Apache Hadoop, Apache Spark, and machine learning algorithms to analyze the data collected by Netflix

PROJECT: OPTIMIZING CONTENT RECOMMENDATIONS ON NETFLIX

- Reports - Include data visualizations such as charts, graphs, and heat maps to help the management team understand the patterns and trends in user behavior and preferences.
- Results and Impact - Significant improvements in the accuracy and effectiveness of Netflix's content recommendation algorithms

PROJECT: OPTIMIZING CONTENT RECOMMENDATIONS ON NETFLIX

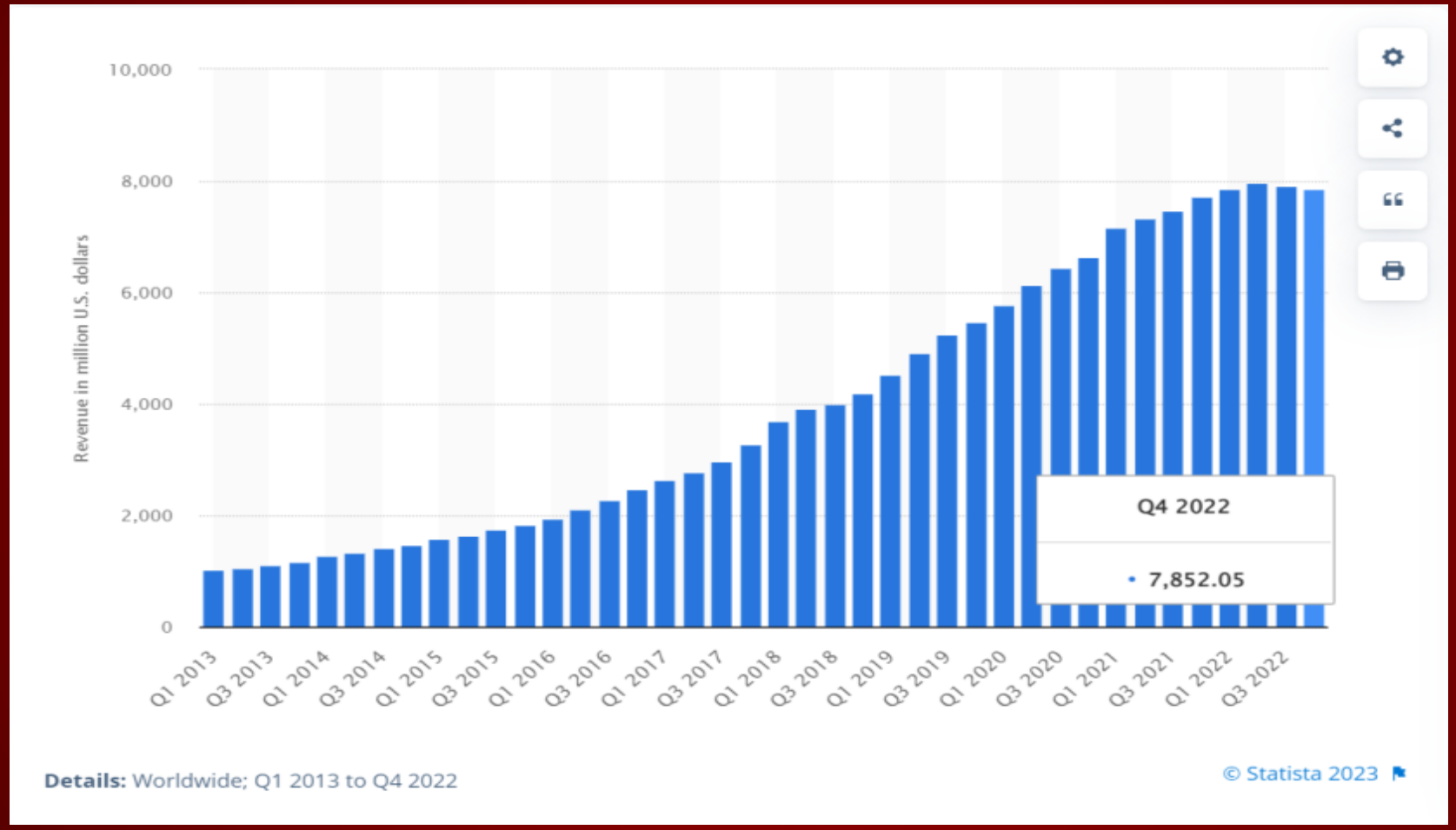
Recommender systems have two primary approaches-

- Content- based filtering – Content based filtering methods are useful in places where information is known about the item but not about the user.
- Collaborative filtering - Collaborative filtering relies on the concept that people who liked something in the past would also like the same experience in the future.

BIG DATA LESSONS FROM NETFLIX

- Data should be accessible, easy to discover, and easy to process for everyone
- Whether your dataset is large or small, being able to Visualize it makes it easier to explain
- The longer you take to find the data, the less valuable it becomes

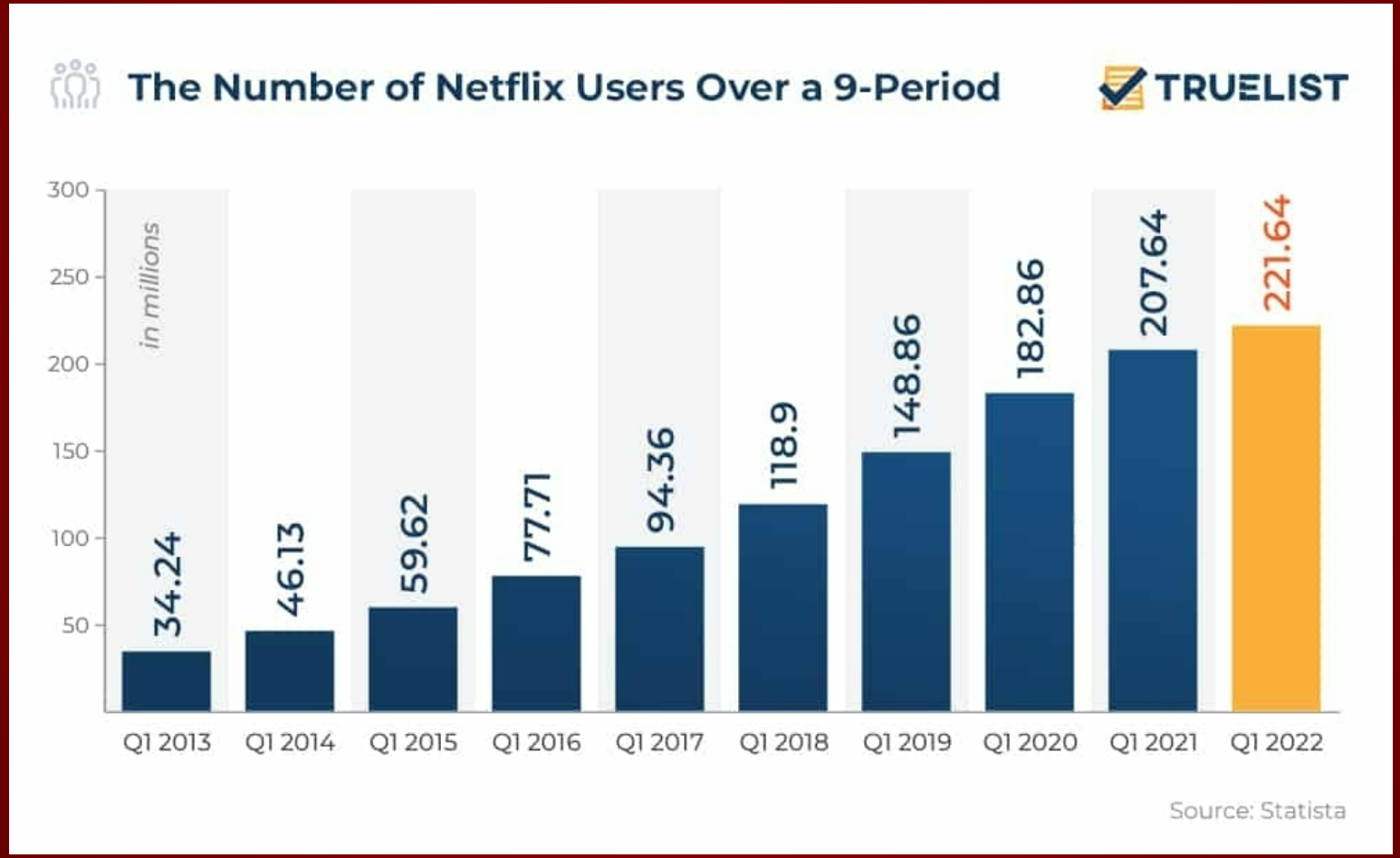
NETFLIX GROWTH CHART



Netflix. (January 19, 2023). Revenue generated by Netflix from 1st quarter 2013 to 4th quarter 2022 (in million U.S. dollars) [Graph]. In *Statista*. https://www.statista.com/statistics/273883/netflixs-quarterly-revenue/


Ratings
Searches
Watch History
Nature of Show
Re-watch Program
Device
Credit Calculation
Program Pause Time
NETFLIX
BIG DATA

SUBSCRIBERS GROWTH



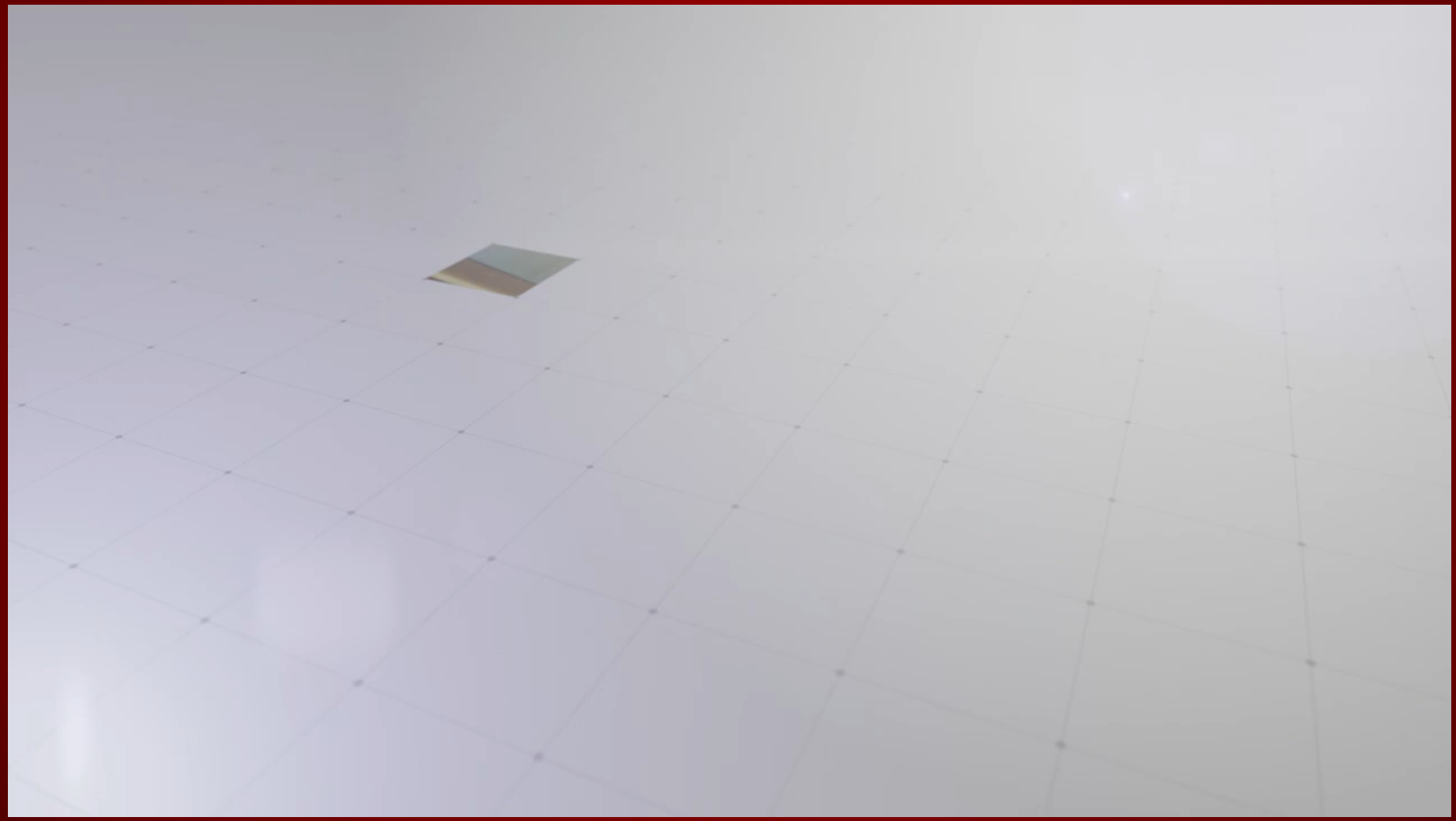
LEARNINGS

- Our Study focussed on the media landscape and indicated that big data is playing an important role in not only the distribution but also the production of media content
- These developments have given rise to extreme personalisation and customisation which has resulted in an accurate recommendation system for Netflix
- Thus, future success of Netflix can be based on two aspects: the new recommendation system based on user's enjoyment and the agenda-setting theory

FUN FACT ABOUT NETFLIX

- Netflix used big data to identify that there was a demand for original content, which led to the production of shows like House of Cards and Orange is the New Black
- Netflix used to pay $300 Million to Disney to stream its content. Disney used to play Netflix's content before the release of Disney+.

VIDEO



ANY QUESTIONS?

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