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# Keeping Netflix on Top:

*Analyzing User Reviews to Promote Customer Retention & Acquisition*



By Mohammad Abou-Ghazala

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# Roadmap

1. Business Problem
2. Data Summary and Preparation
3. Modeling and Analysis
4. Summary and Recommendations



# Business Understanding

- Need insight to inform:
  - a. Customer Retention Strategy
  - b. Marketing & Promotion Strategy
- Positive & Negative sentiments matter equally
- Course of Action:
  - a. Binary Classifier
  - b. Analyze Themes

## Questions for us:

- a. **How successful are we at differentiating between Positive and Negative reviews?**
  - What can we learn from these reviews?

# Data Understanding

- Dataset (updated as of March, 2025)
  - a. 127,000 reviews total — Foreign languages present
  - b. 4 Columns (Content, Score, Thumbs Up, Date)
- **TARGET:** Positive vs. Negative
  - a. Data Imbalance:
    - Positive - 39%, Negative - 61%
- False Positives and False Negatives matter equally

**Metrics: F1 Score**

High F1 Score =

Low False Positive/Negative  
Rate

# Data Preparation

- Consolidated the Data
  - a. Turned target column into binary, disregarding Neutral reviews
    - 0 = Negative, 1 = Positive
- Narrowed dataset to the last two years (2023-2025)
  - a. 47,000 reviews total
- Factoring in Thumbs Up Count
- Model Experimentation
  - a. Testing different models to see **which has the highest F1 score**

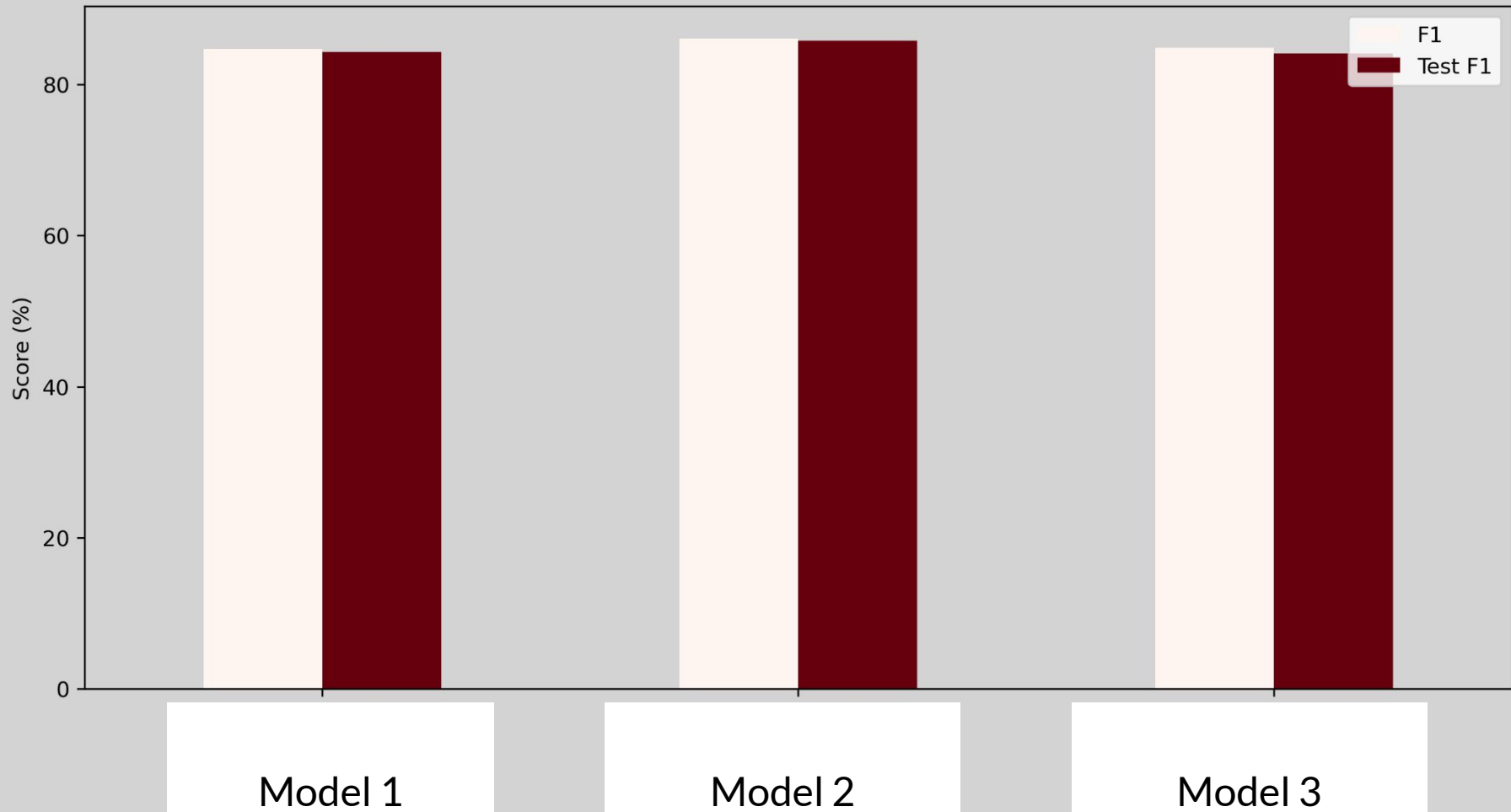
# Data Modeling & Analysis

# How successful were our models?

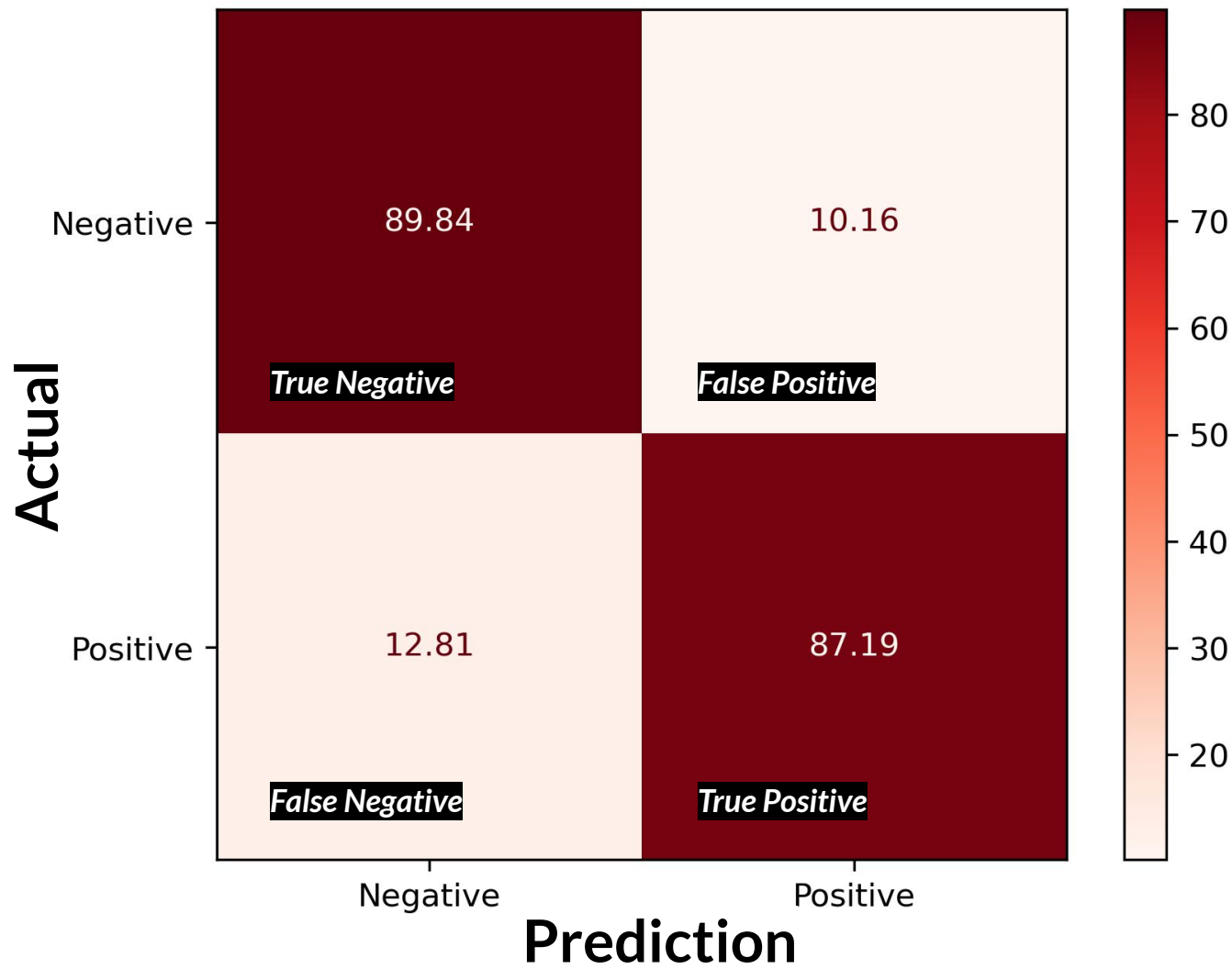
## F1 Score

How many Positives did we mistakenly identify as Negatives? And vice versa.

Model Performance Comparison (F1 Score)







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**What can the classified reviews tell us about maintaining and gaining subscribers?**

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# Positive Themes

- **Content Quality & Variety/Diversity**
- **User Experience**
- **Favorite Features**

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# Negative Themes

- **Pricing & Subscription Complaints**
- **App Performance Issues**
- **Regional Content Gaps**

# Conclusion

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1. Successfully built a model that can differentiate between Positive and Negative reviews
2. Surmised themes and trends across both Positive and Negative reviews

# Conclusion

## Limitations:

- Foreign language reviews
- Neutral reviews

# Recommendations

*Customer Retention & Acquisition*



# Recommendations

# Customer Retention

**Improving  
Pricing &  
Subscription  
Flexibility**

**Improving  
Communication**

**Enhancing  
Performance &  
Stability of the App**

# Recommendations

## Customer Acquisition

### Expanding Regional Content

### Promotional Campaign

- 1) Variety, quality, and diversity of content
- 2) Usability & technical superiority

Partner with  
regional and  
foreign  
language  
streaming  
platforms

# Next Steps

**Factor in  
Neutral  
reviews**

**Analyze  
foreign  
language  
reviews**

# Questions?

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# Modeling

## Sentiment Analysis

- a. Analyzing reviews
- b. Identifying relationship between terms/words and sentiment
- c. Factoring in # of Thumbs Ups