

# Sentiment Analysis of Amazon reviews

Edo Spigel Emmerich  
Capstone Sprint 1



# Subject area overview

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Q: How can we know which products to buy?

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Q: How can we know which products to buy?

A: Reviews

# Why do reviews matter?

## Drive sales

A product with just one review is **65% more likely** to be purchased than one without.



## Build trust

Genuine reviews establish **trust between platforms sellers and buyers.**



## Provide insights

Reviews can provide sellers with **insights into product strengths** and areas for improvement.



**How can we use machine learning to determine the reliability of reviews?**



# Leveraging Data Science to Identify Reliable Reviews

Utilise **Natural Language Processing** to analyse the **sentiment** of reviews.

Compare sentiment analysis results with star ratings to **find discrepancies**.

Ensure **transparency** and **trustworthiness** in the review system.

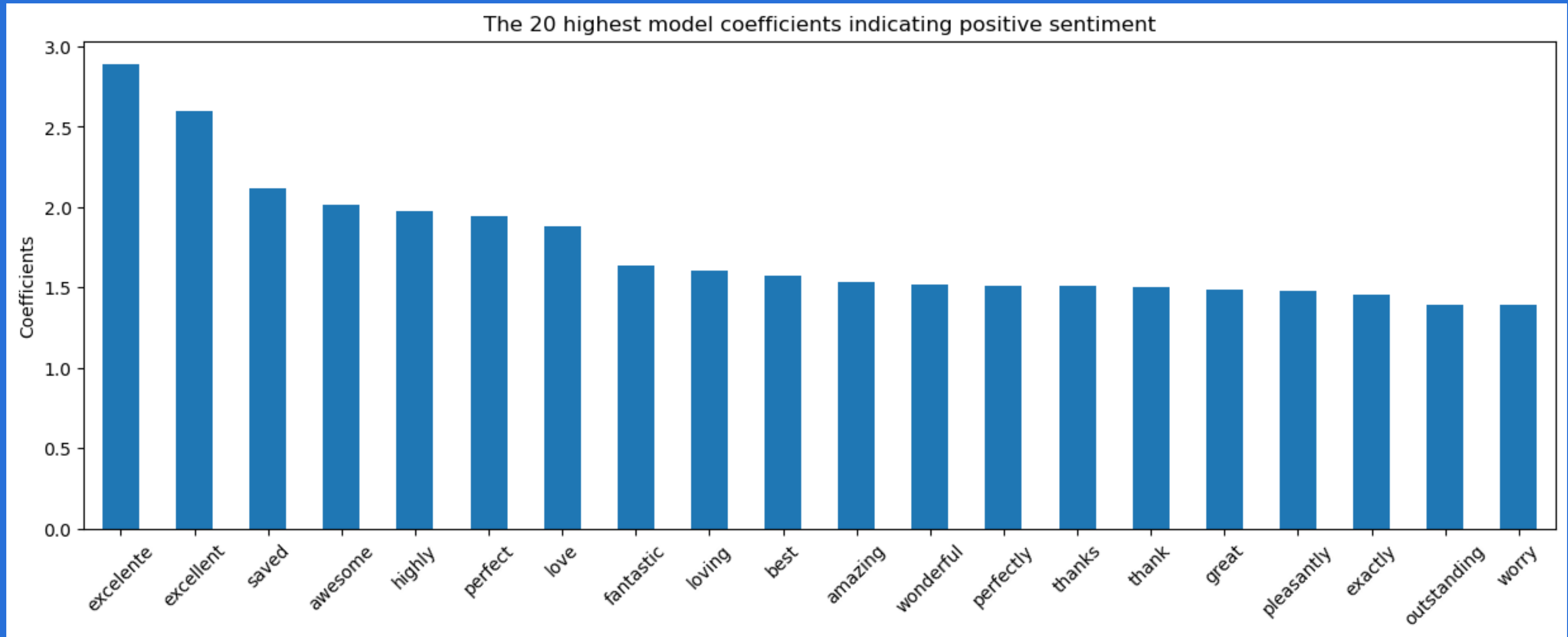


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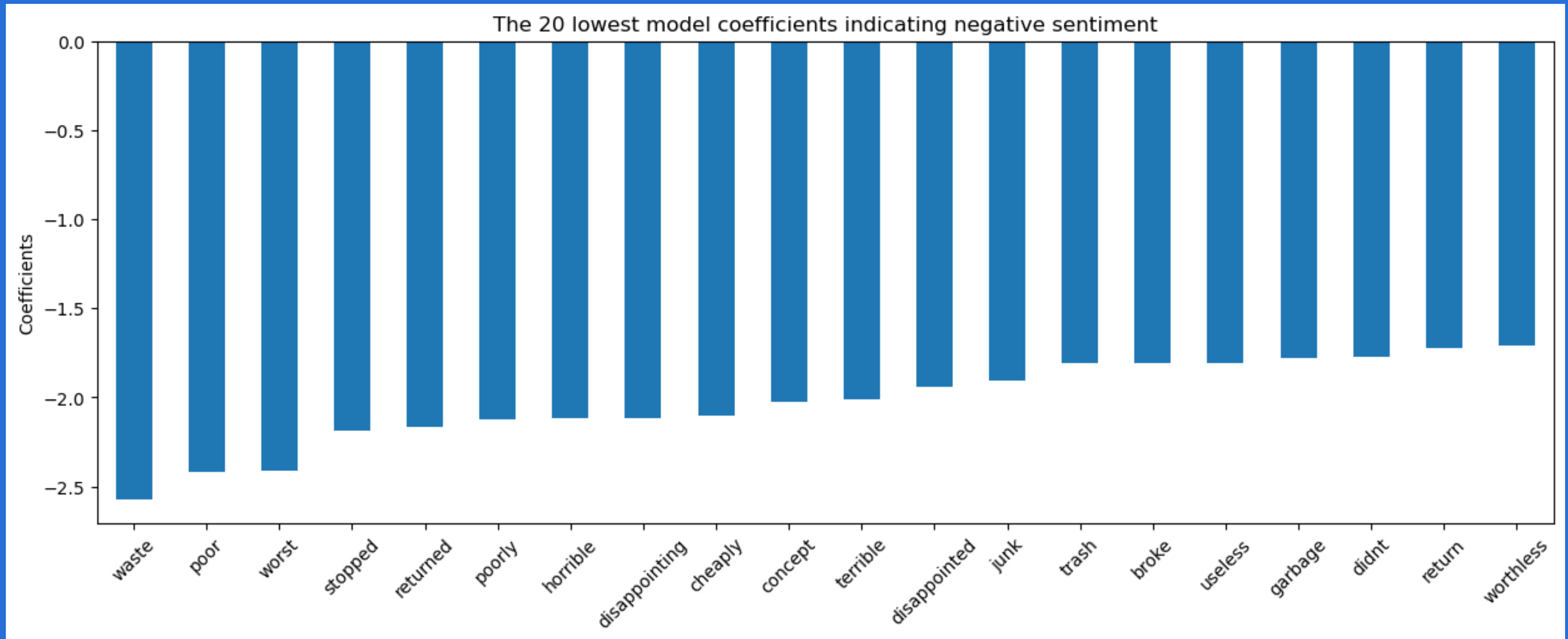
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# Top 20 words with positive sentiment





# Top 20 words with negative sentiment



## Top Positive Words

**excellent**

**saved**

**perfect**

**best**

**thanks**

**worry**

## Top Negative Words

**waste**

**poor**

**worst**

**stopped**

**returned**

**concept**

# Next steps: Pre-processing

TF-IDF to weigh **importance** of words

spaCy for better text processing

Text embeddings

