

# Sentiment analysis

## opinion minig

«Высшая школа экономики»

2.12

# Sentiment analysis

Sentiment analysis is the automated process of analyzing text data and classifying opinions as negative, positive or neutral

# Sentiment analysis

Extensions:

- Polarity: if the speaker express a positive or negative opinion
- Subject: the thing that is being talked about
- Opinion holder: the person, or entity that expresses the opinion.

# Sentiment analysis

Levels:

- Document level.
- Sentence level .
- Sub-sentence level.

# Sentiment analysis

Fine-grained approach:

- Very positive
- Positive
- Neutral
- Negative
- Very negative

# Sentiment analysis

Technical approaches:

- Rule-based (lexicon based)
- Automatic
- Hybrid

# Sentiment analysis

Rule-based.

N-Negative N-Positive words

# ML

After feature extraction:

- Naïve Bayes
- Linear Regression
- SVM
- DL



# ML

## Challenges

- Tone
- Context and Polarity
- Comparisons
- Emojis
- Defining Neutral

«This product is second to none.»

«This is better than old tools.»

«This is better than nothing.»