

# Customer Reviews Model

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# The pitch

- Inventory optimization
- Customer satisfaction
- Data management

# Methods



Drop duplicates  
(review.text)



Fill missing  
values



Sentiment  
analysis



Clustering



Summarizing

# Setiment analysis

- Rating -> sentiment
- Resample for balancing classes
  - Undersampling biggest class
  - Oversampling smallest class
- Random Forest Classifier

	precision	recall	f1-score	support
negative	0.94	0.75	0.83	20
neutral	0.48	0.73	0.58	15
positive	0.83	0.68	0.75	22
accuracy			0.72	57
macro avg	0.75	0.72	0.72	57
weighted avg	0.78	0.72	0.73	57

# Clustering

KMeans

Name + review.text

6 clusters

- Ebook
- Batteries
- Accessories
- Non electronics
- Cables and adapters
- Smart home devices

# Sumirize Reviews

Flan-t5-base

T5-b7

Mistral-7B-v0.3

Memory errors

Incomplete Sentences

“non-natural” output

- The Amazon Echo Show and Amazon Tap are two of the best Bluetooth speakers on the market. The Echo Show is a version of Alexa with ability to visualize things. The Amazon Tap is the only Bluetooth speaker that has a 7" screen and a built-in speaker. The Tap is also a great speaker and Echo substitute. If you're looking for a speaker that's a little less expensive than the Echo Show, this is the speaker for you. 'Amazon Tap - Alexa-Enabled Portable Bluetooth Speaker with 7" Screen'

# Take aways

- Organization when working alone
- Overconfidence
- Data management
- Get “finish” product sooner
- Use tools
  - Notion
  - Excel

