



# Prebuilt ML Model APIs for Unstructured Data

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01

Unstructured data is hard

02

ML APIs for enriching data



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# How do you extract anything useful out of this?



or



# Examples of real-world use cases of unstructured data



Custom image model to price cars



Build off NLP API to route customer emails



Use Vision API as-is to find text in memes



Use Dialogflow to create a new shopping experience

# Clouds or snow-capped mountains?



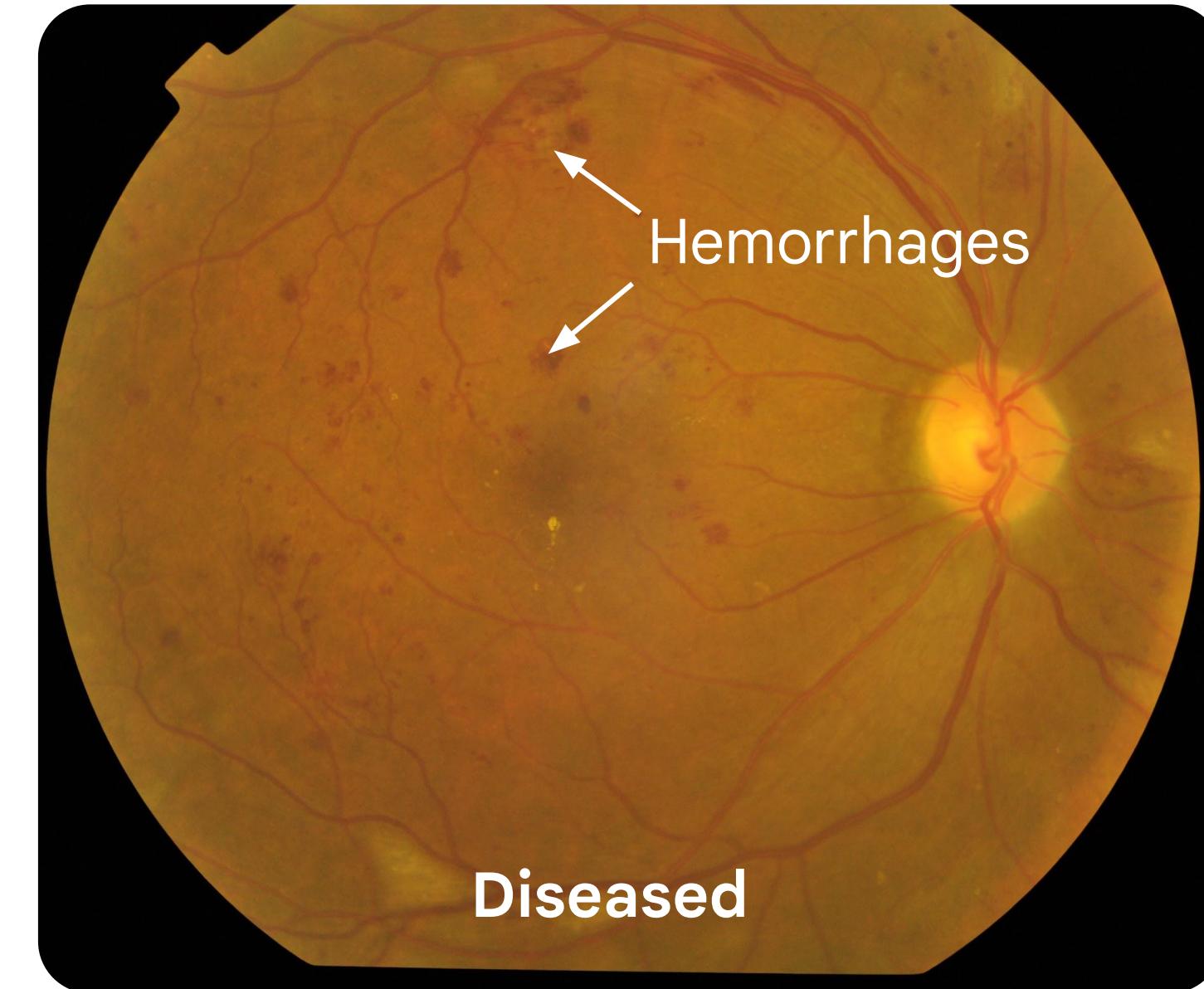
# Empty or full?



# Diagnosing Diabetic Retinopathy

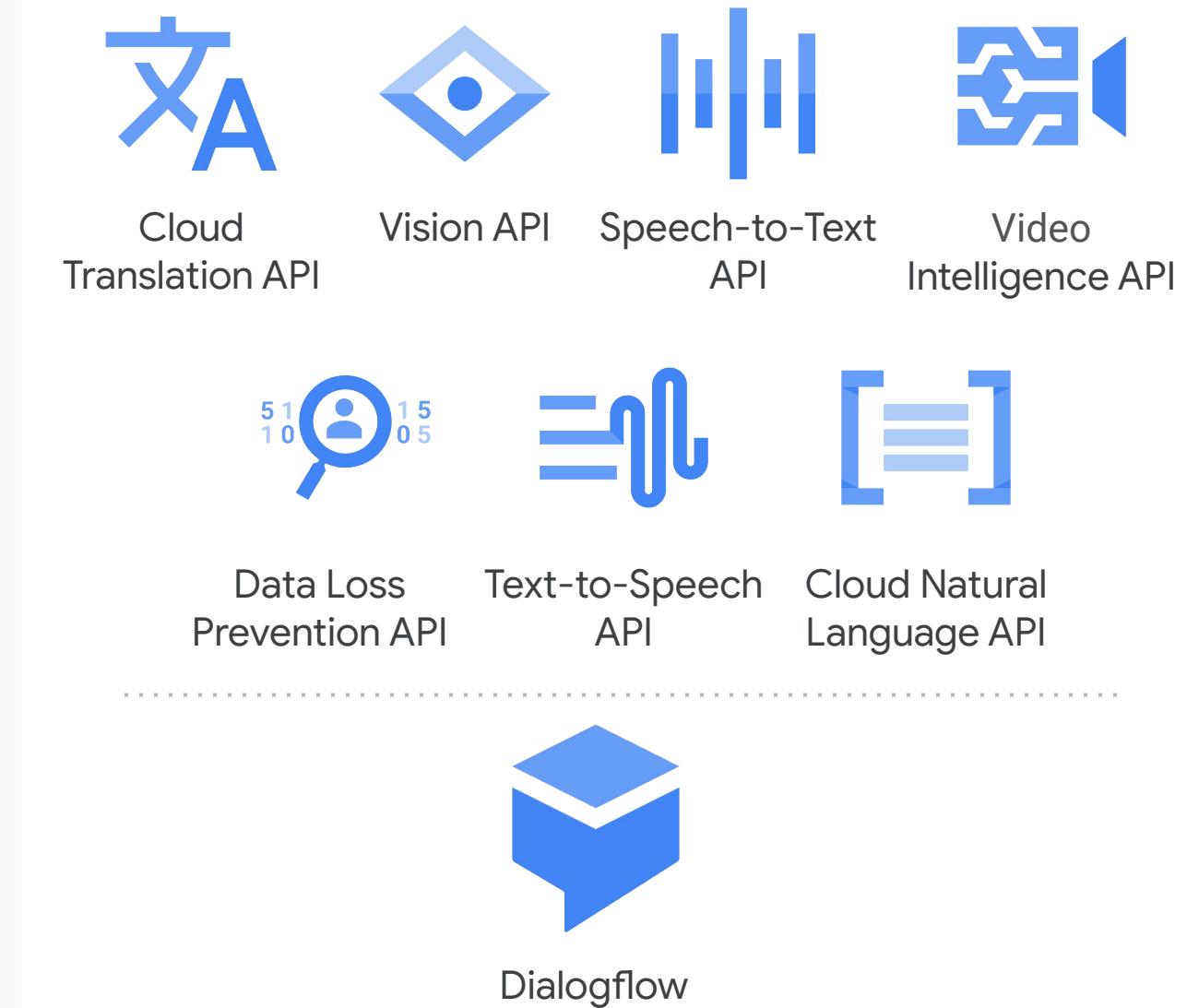
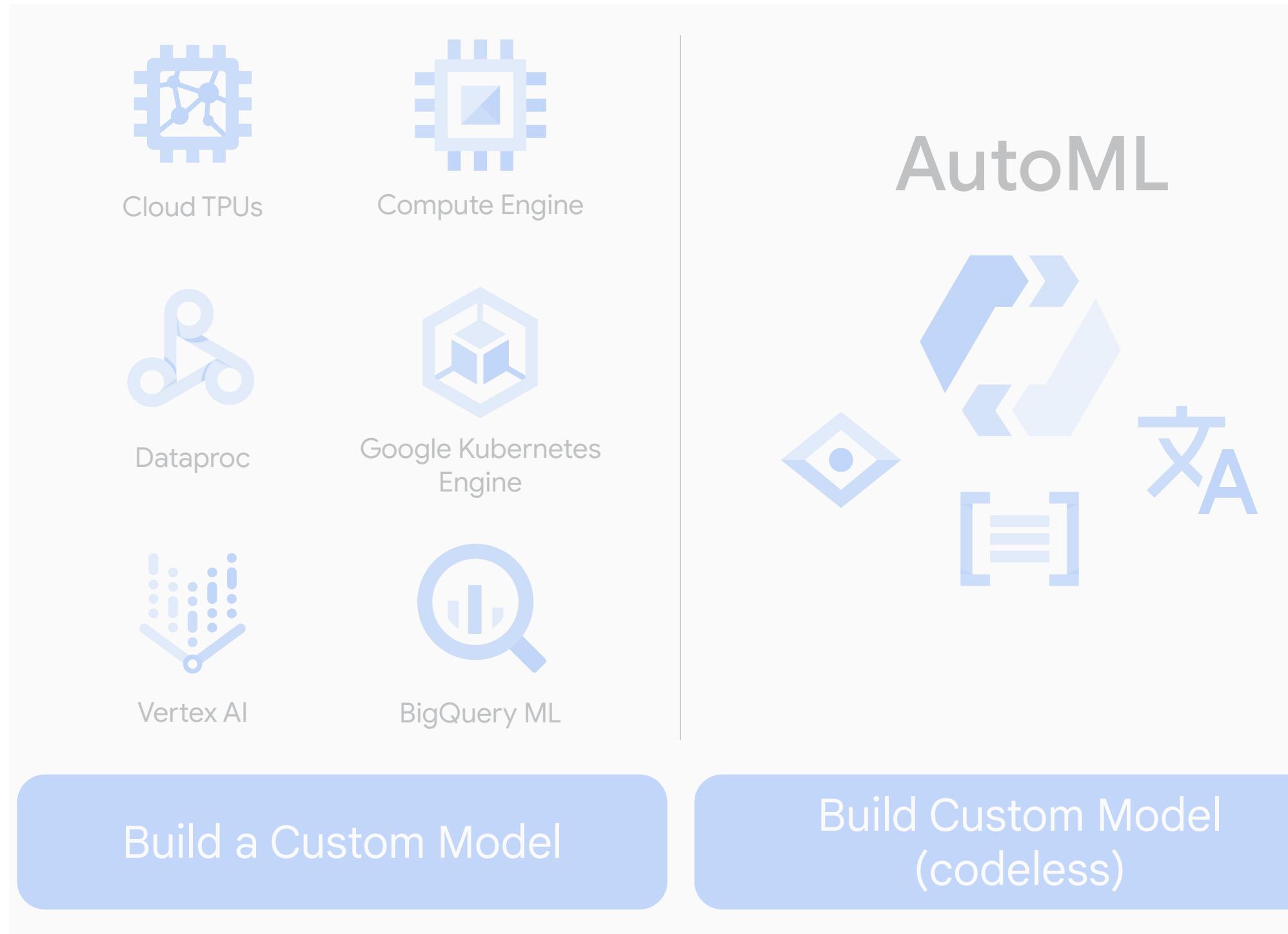


Healthy



Diseased

# For common ML tasks, consider pretrained APIs



# Prebuilt ML Model APIs for Unstructured Data

01

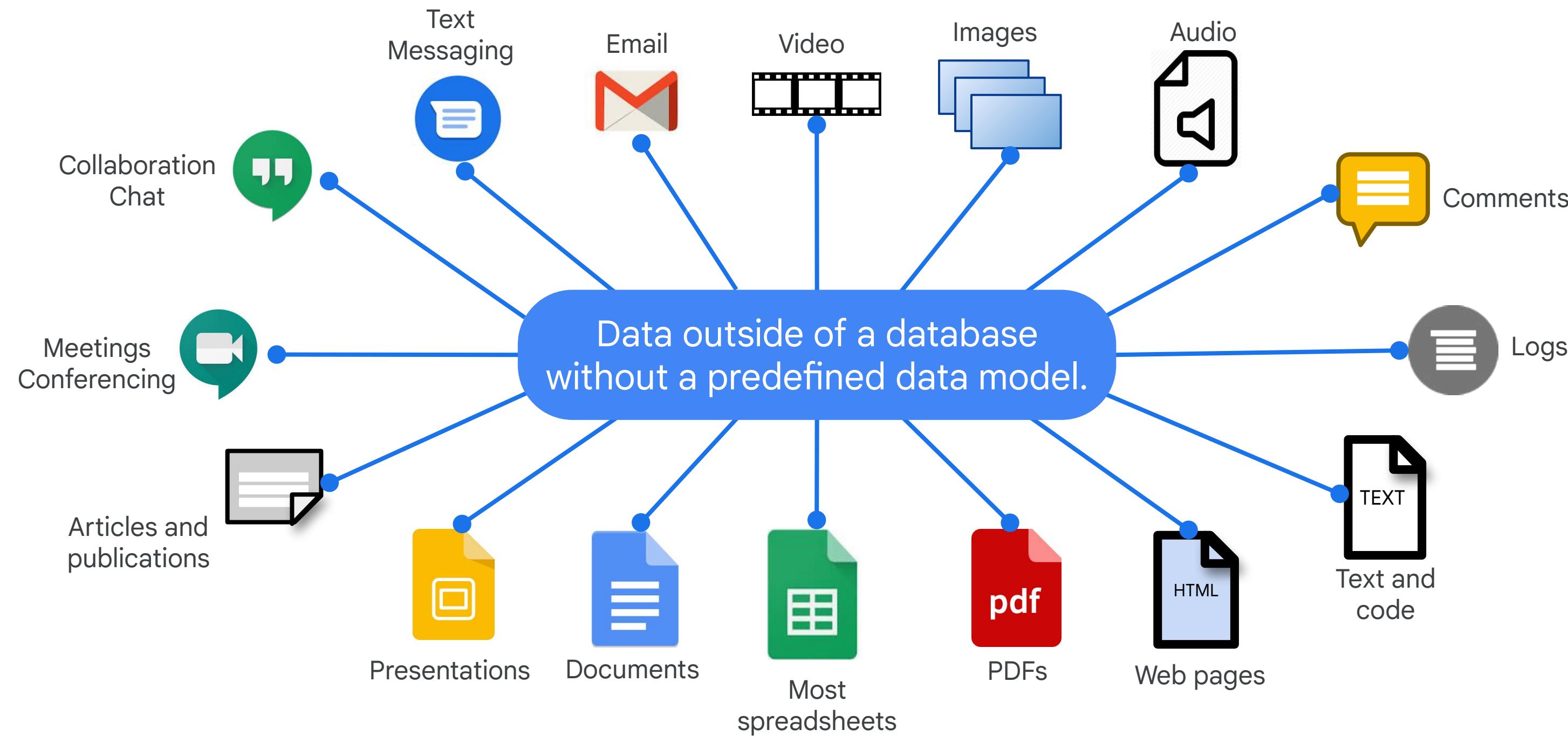
Unstructured data is hard

02

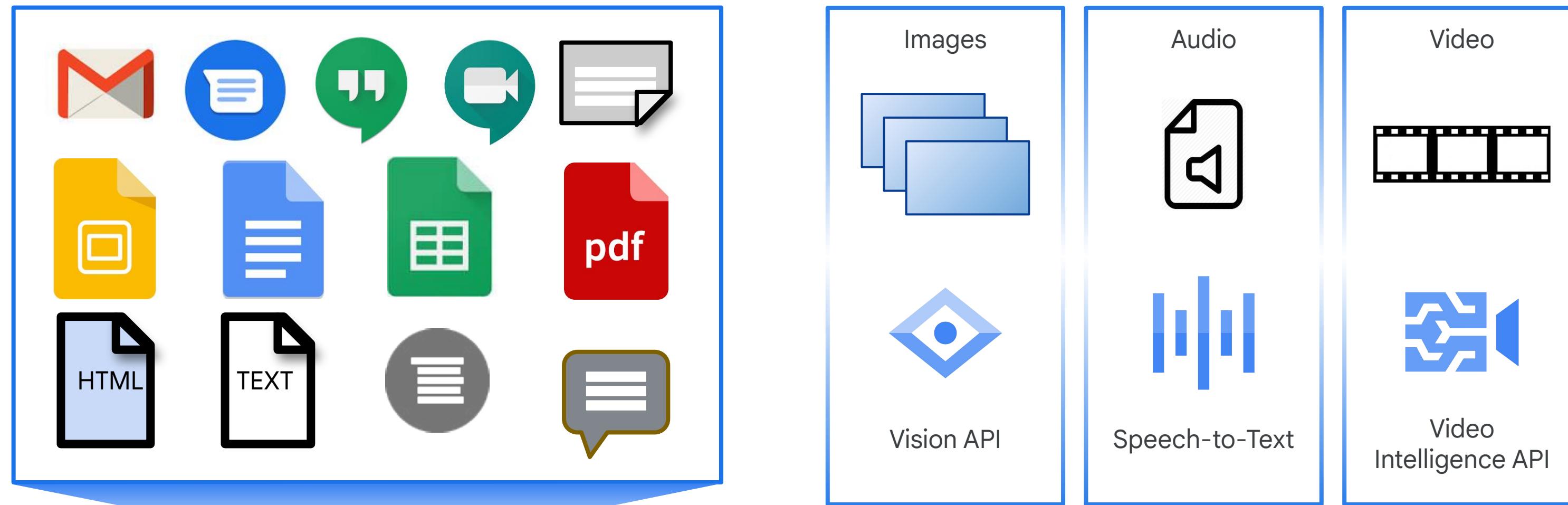
ML APIs for enriching data



# Most business data is unstructured data, and mainly text

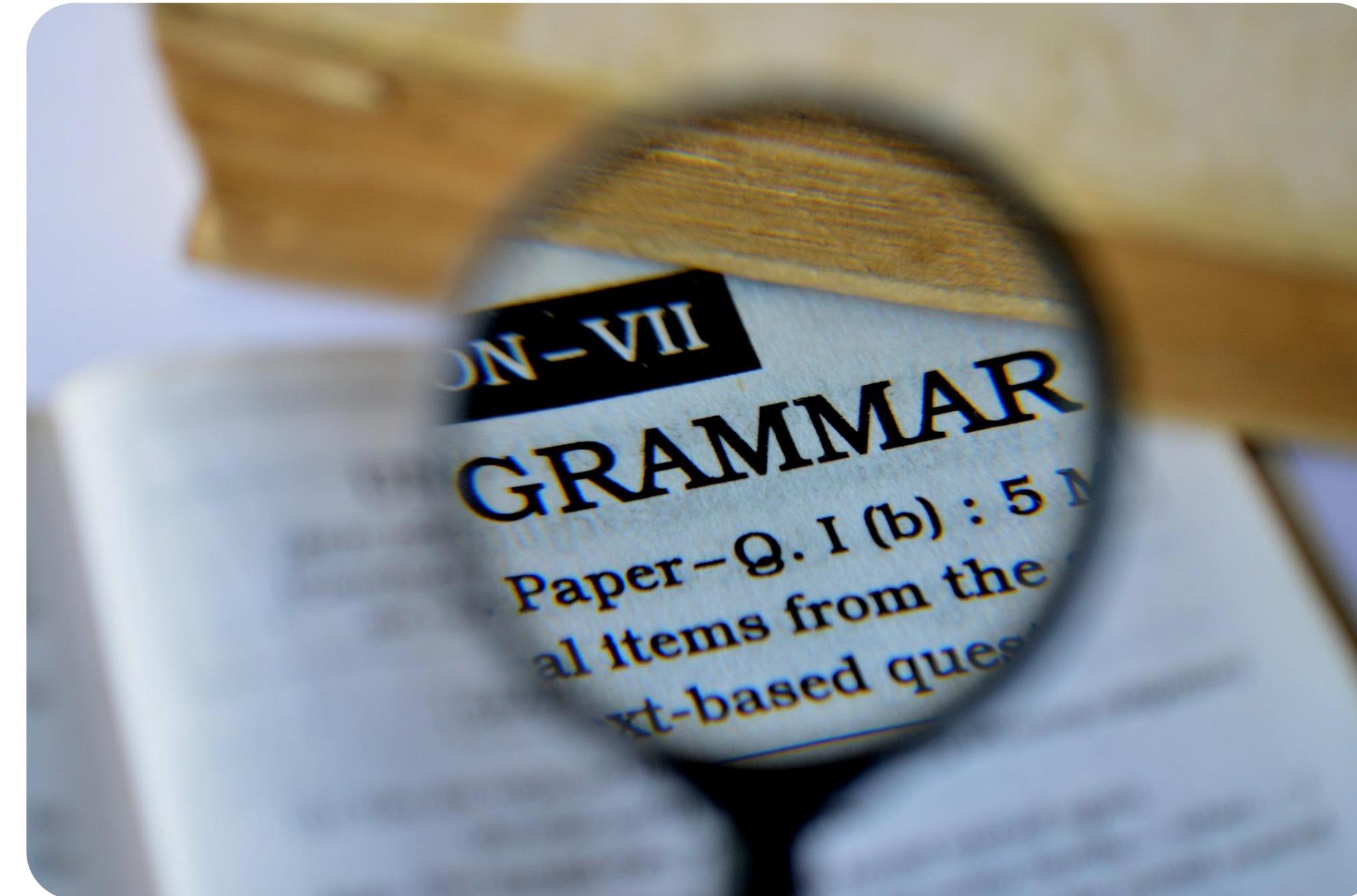


# You process unstructured data by labeling it with AI

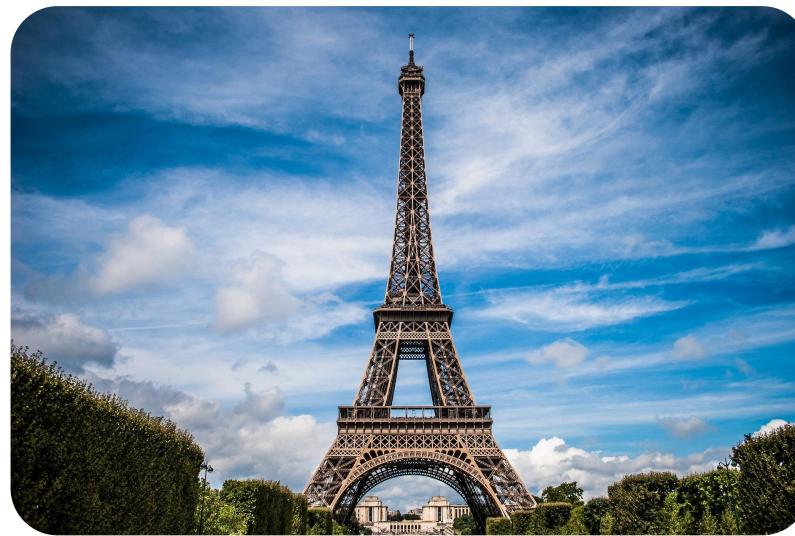


Cloud Natural  
Language API

# Syntactic analysis provides linguistic information



# Entity analysis recognizes many useful items



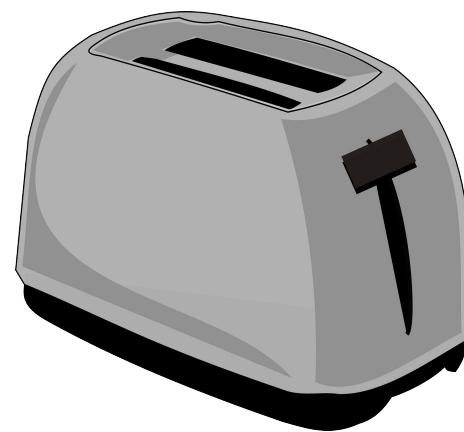
Locations and landmarks



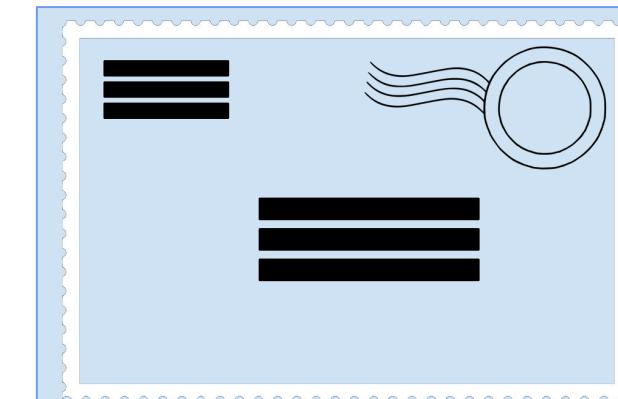
People



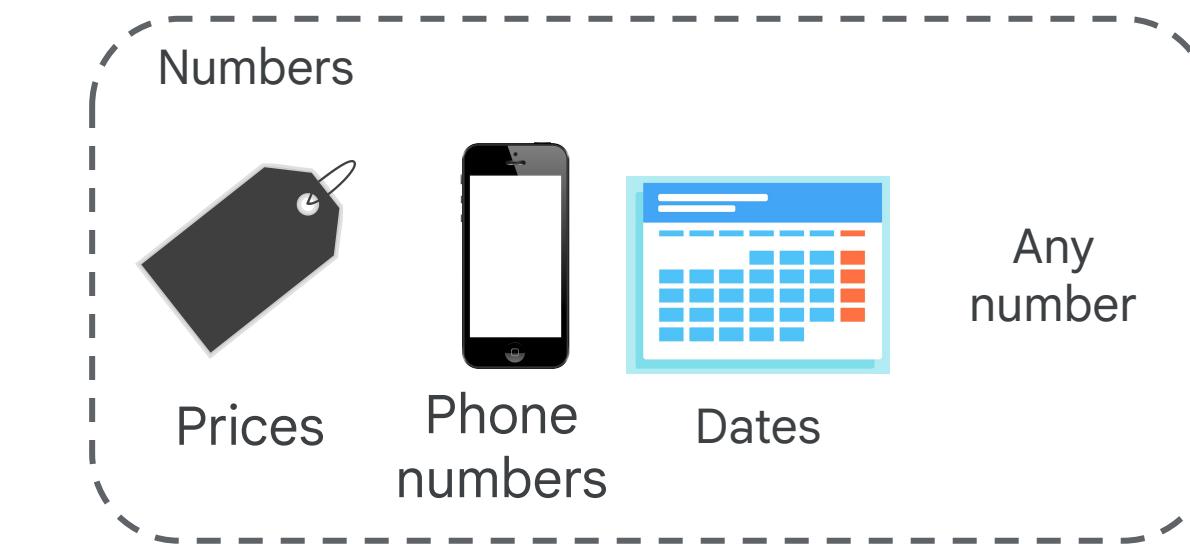
Artwork and works of art



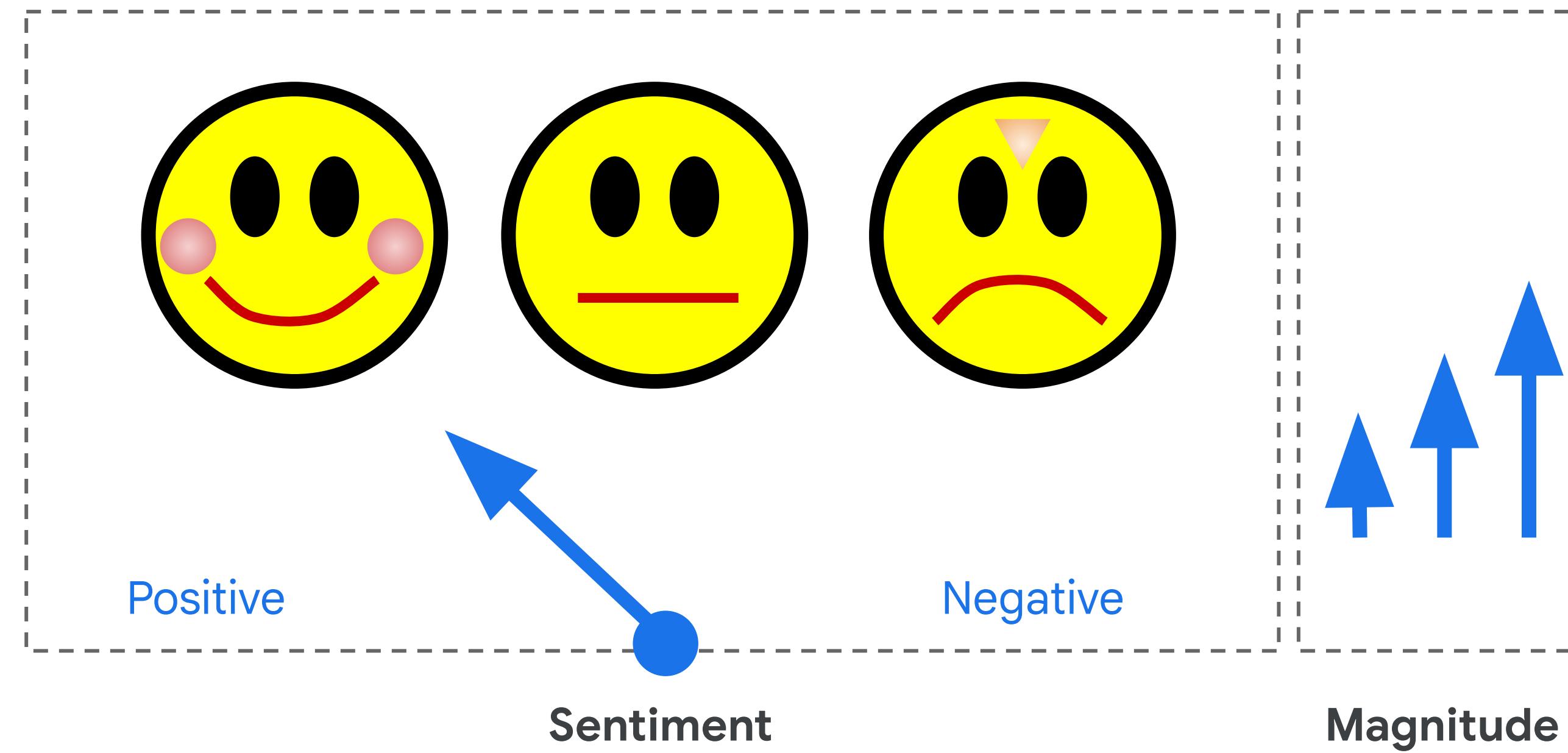
Consumer products



Addresses



# Sentiment analysis labels feelings in text



# Combined entity and sentiment analysis

Sentiment	Sample Values
Clearly Positive*	<b>“score”</b> : 0.8, <b>“magnitude”</b> : 3.0
Clearly Negative*	<b>“score”</b> : -0.6, <b>“magnitude”</b> : 4.0
Neutral	<b>“score”</b> : 0.1, <b>“magnitude”</b> : 0.0
Mixed	<b>“score”</b> : 0.0, <b>“magnitude”</b> : 4.0

# Content classification



Sports



Foods

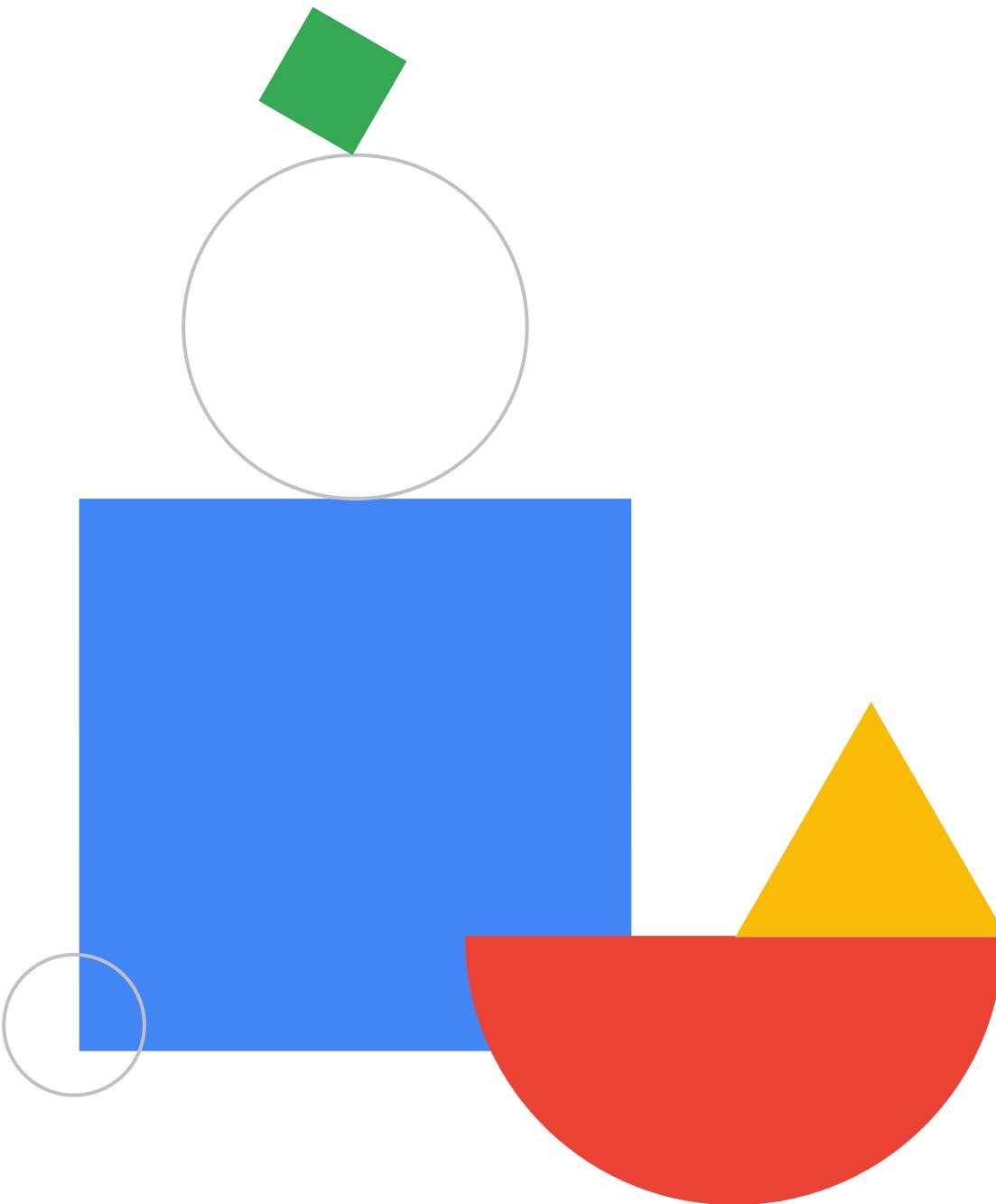


Literature

600+ Categories

# Lab Intro

Using the Natural Language API  
to Classify Unstructured Text



# Lab objectives

- 01 Create a Natural Language API request
- 02 Call the API with curl
- 03 Use the NL API's text classification feature
- 04 Use text classification to understand a dataset of news articles



