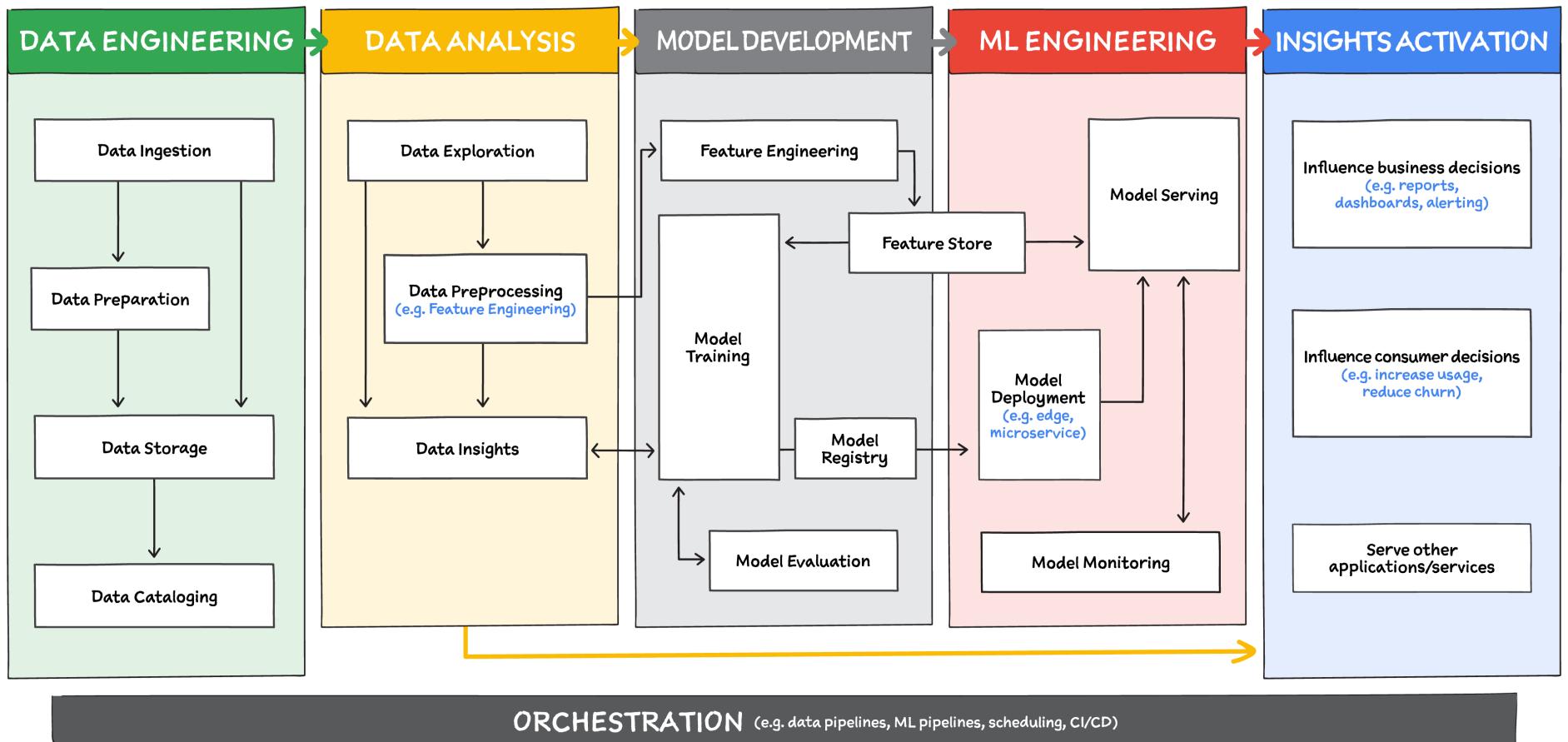




→ Introduction to [Data Science]

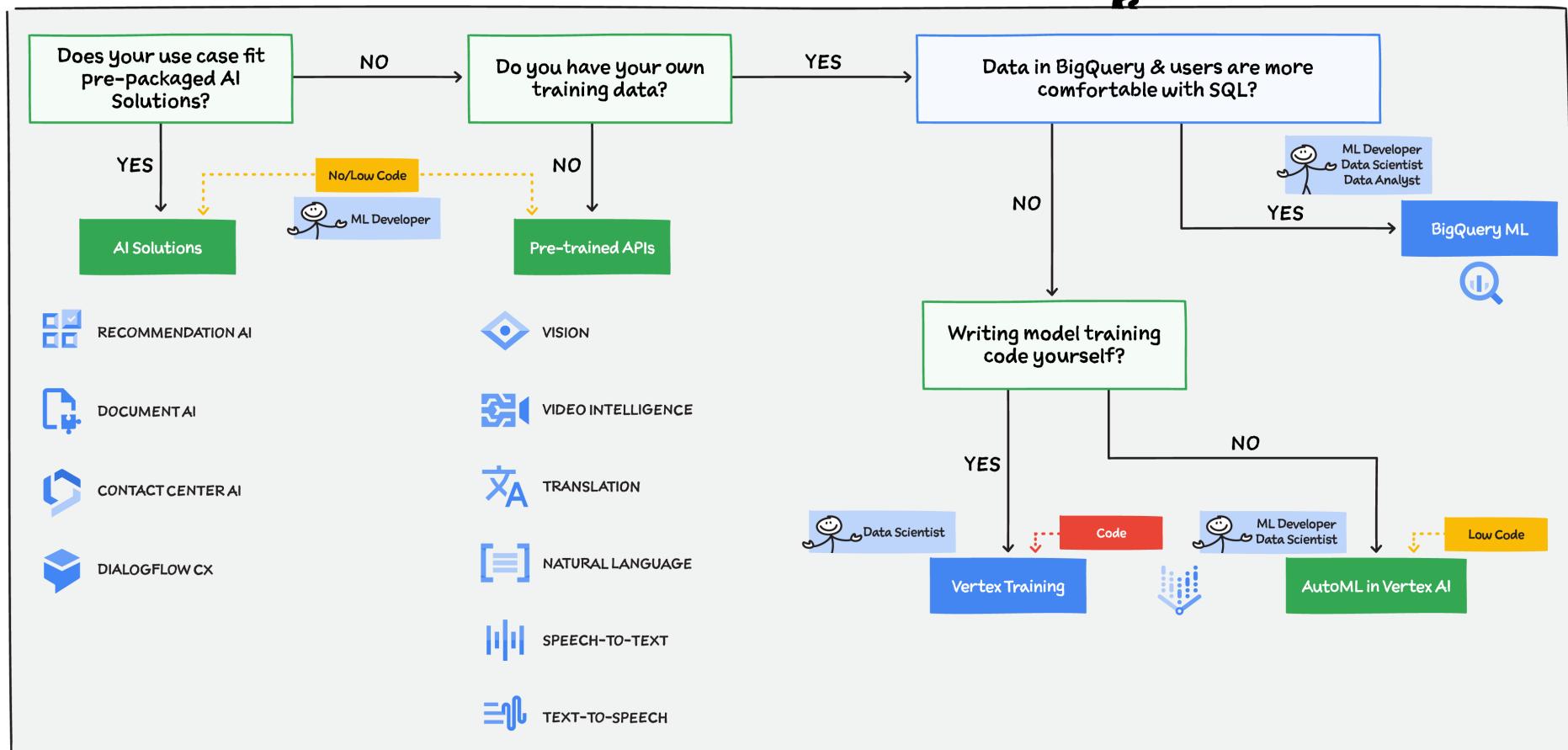
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Pick Your AI/ML Path

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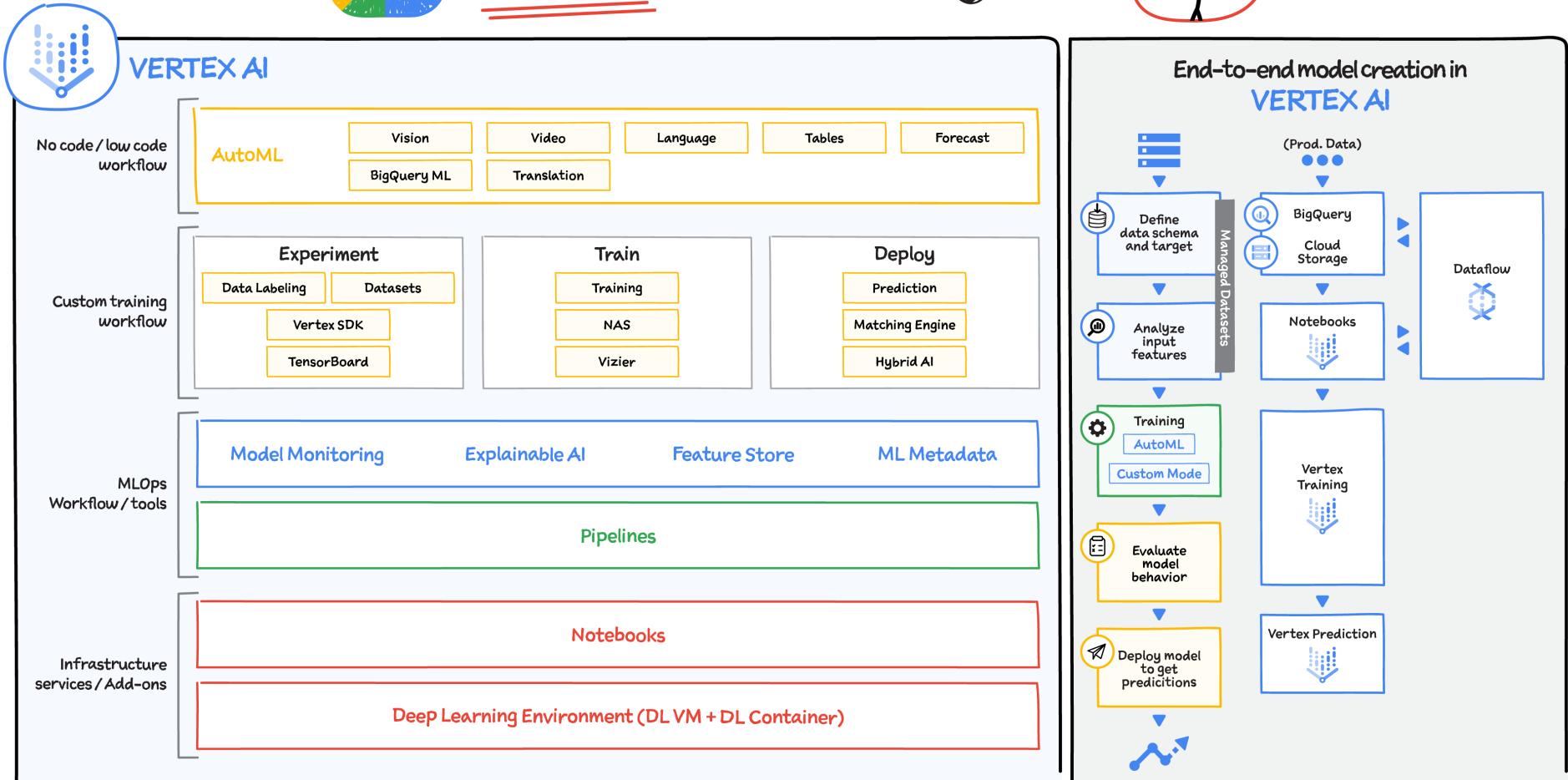




What is Vertex AI?



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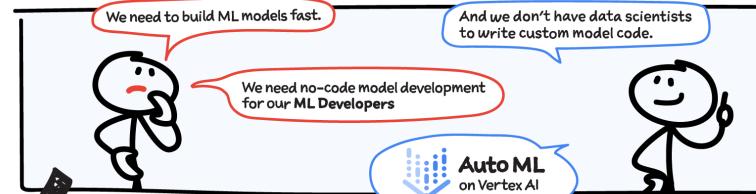




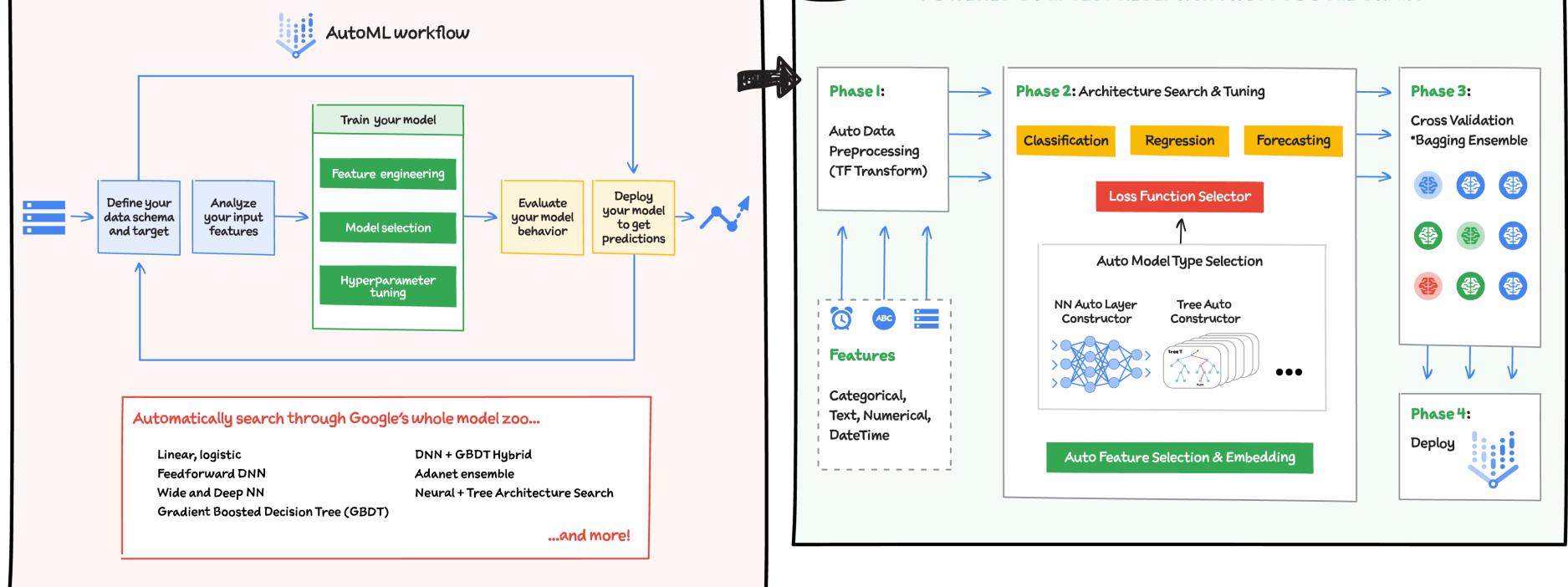
No-code AutoML models in Vertex AI



How does AutoML workflow in Vertex AI work?



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MLOps with Vertex AI Pipeline

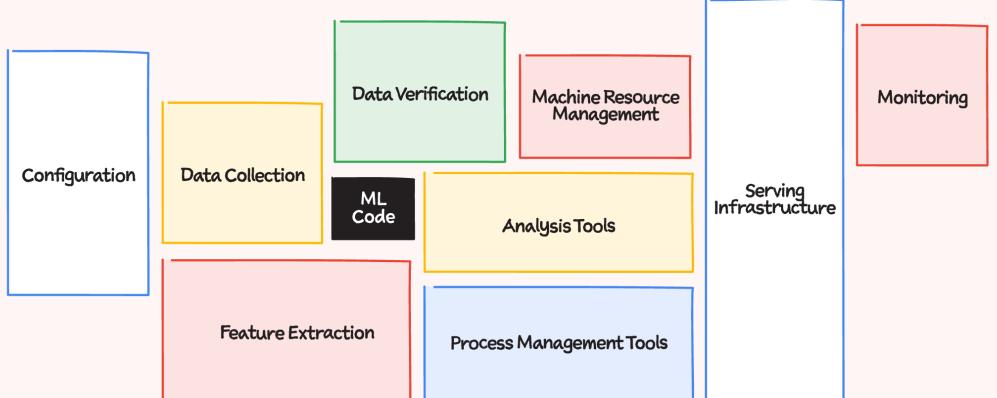
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ML PERCEPTION

ML
Code



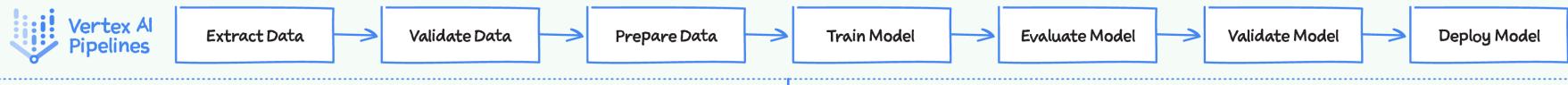
ML REALITY



WHAT IS MLOPS?



WHAT IS VERTEX AI PIPELINE?



SERVERLESS ML PIPELINES

SEAMLESS INTEGRATION WITH OTHER GOOGLE CLOUD SERVICES

Data warehouse
BigQuery

Model Training
Vertex Training

Processing
Cloud Dataflow

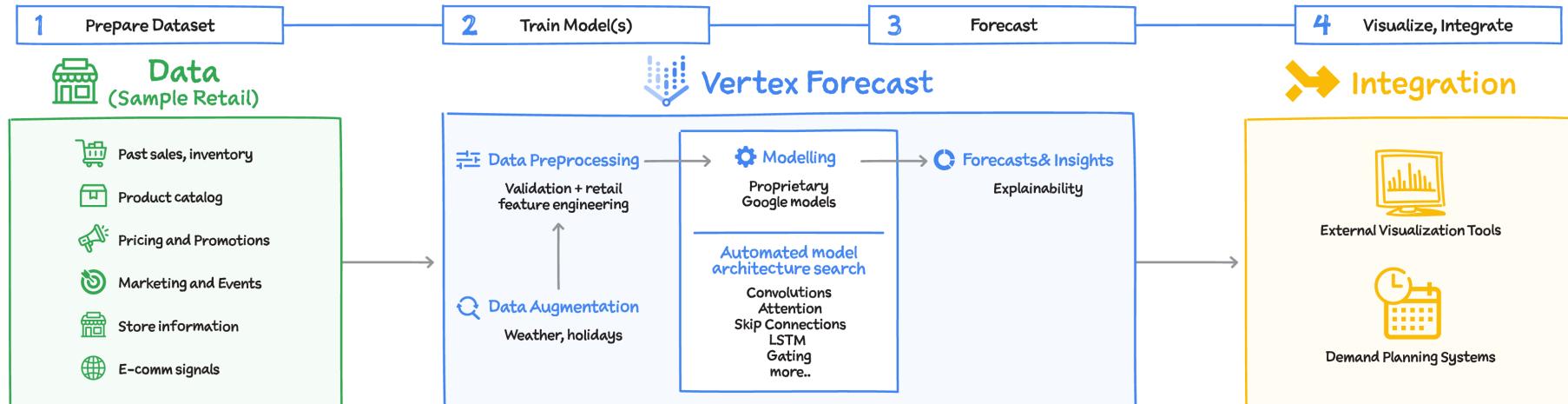
Inference
Vertex Prediction

Artifact Store
Cloud Storage

& more...

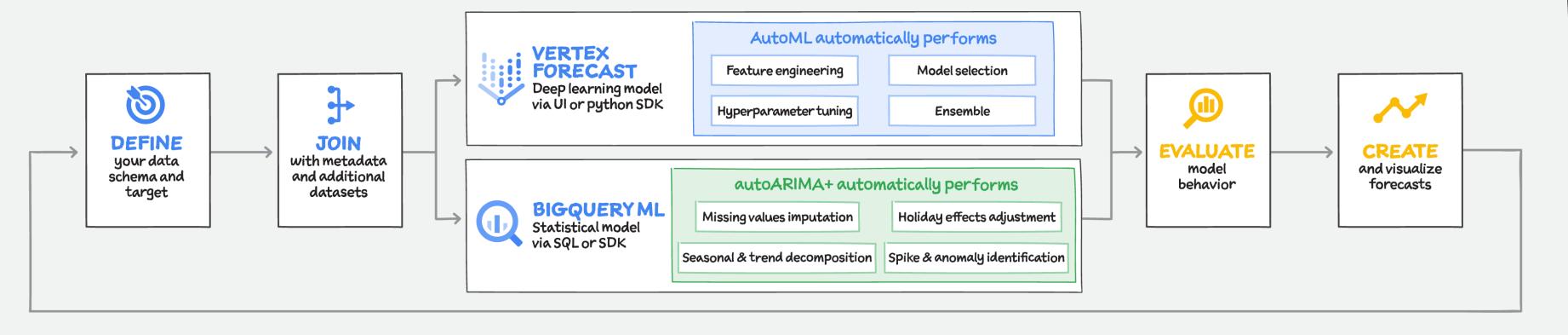
Vertex Forecasting

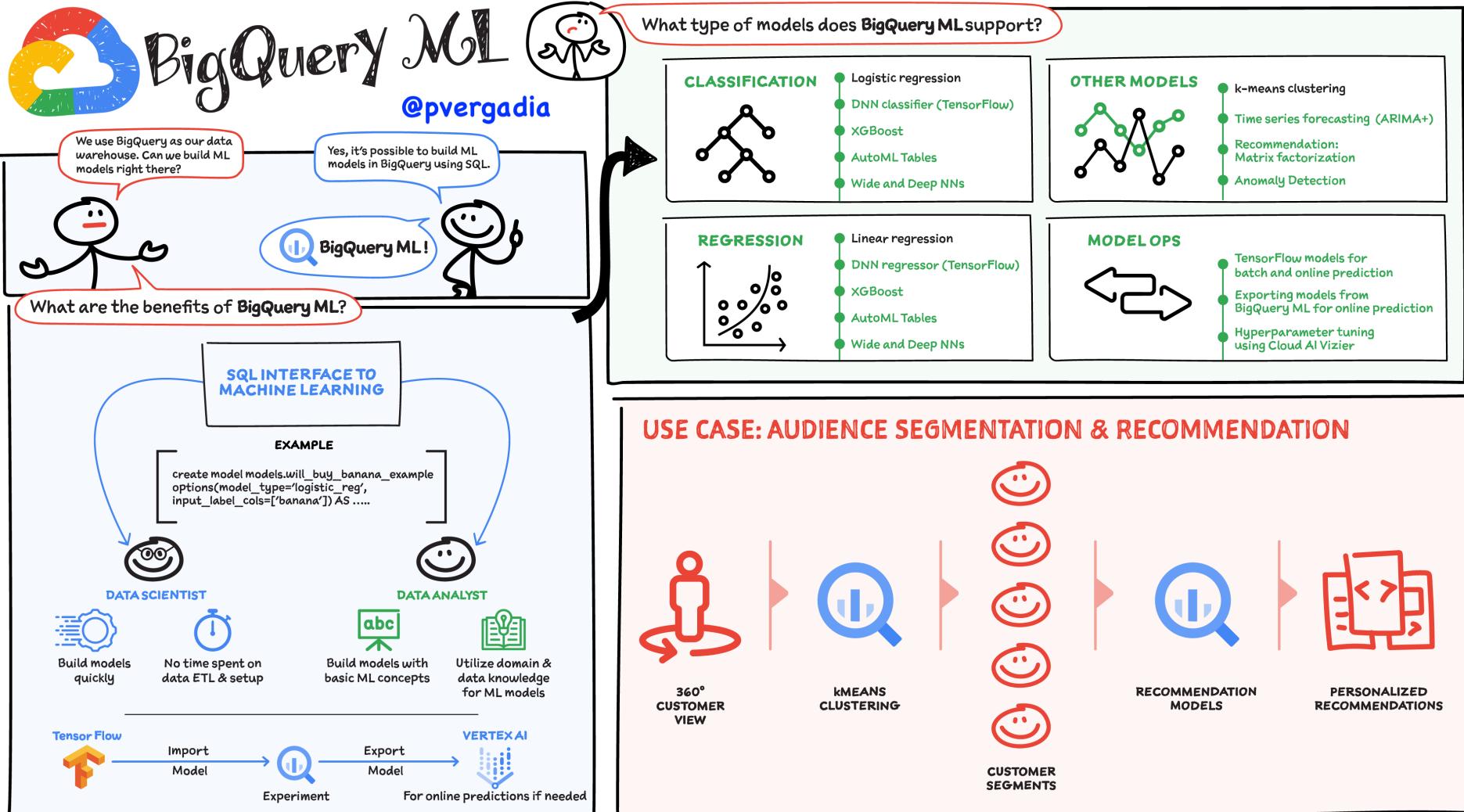
@pvergadia



FORECASTING WORKFLOWS ON GOOGLE

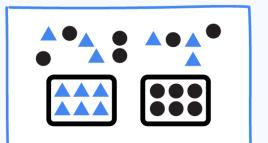
Build high quality, scalable forecasting solutions with deep learning and statistical models from Google.



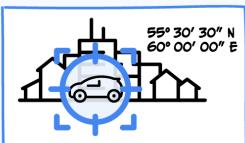




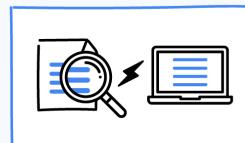
PRE-TRAINED ML MODELS FOR IMAGES



Classify content with predefined labels



Detect objects and retrieve coordinates



OCR support for 200+ languages



Detect brands and product logos



Detect faces and emotions



Detect popular places and landmarks



Find similar images on the web



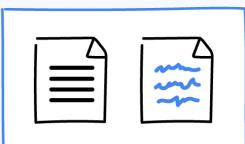
Moderate explicit content



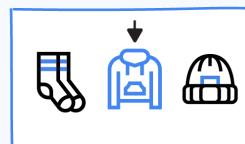
Identify image properties (colors, etc.)



Get hints for best image cropping



Extract printed and handwritten text



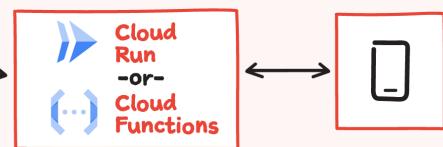
Identify items from your retail catalog

SAMPLE USE CASE

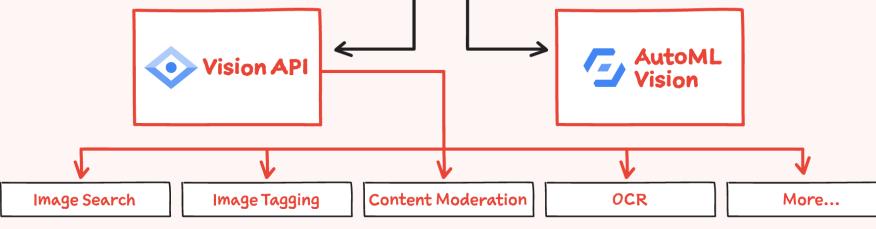
- ① User uploads images
- ② Images stored on Cloud Storage
- ③ New image notification sent via Pub/Sub to Cloud Run or Cloud Functions



- ④ Cloud Run or Cloud Function calls Vision API
- ⑥ User searches for images using keywords & faceted navigation

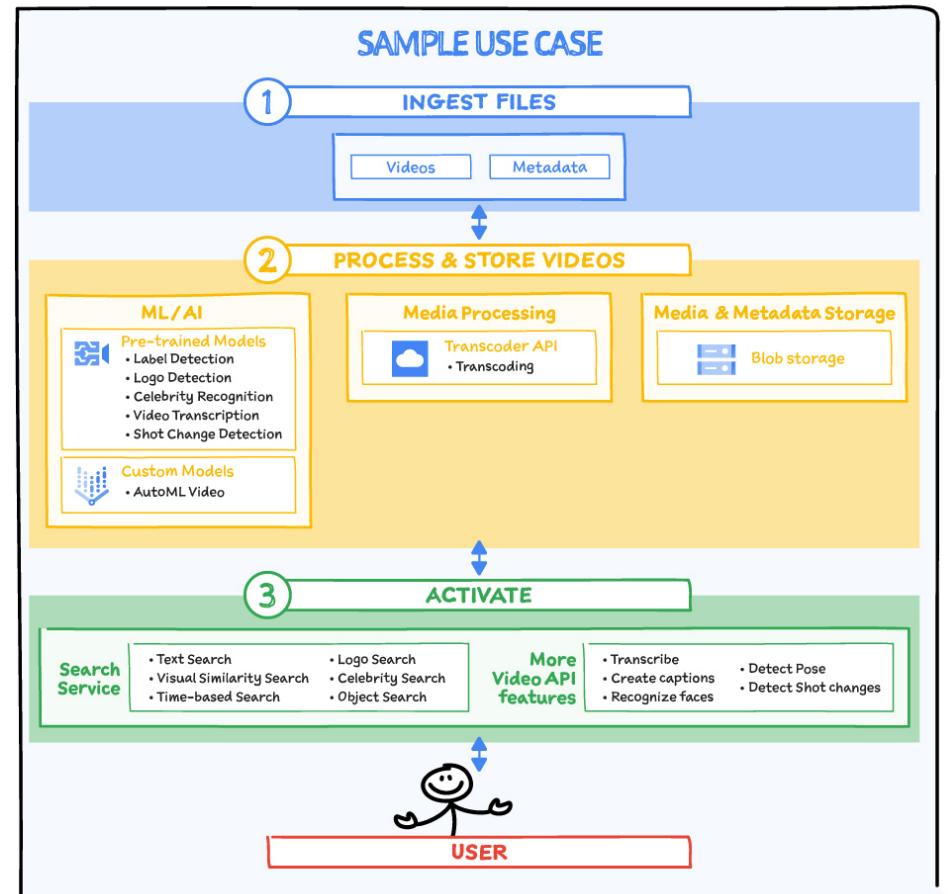
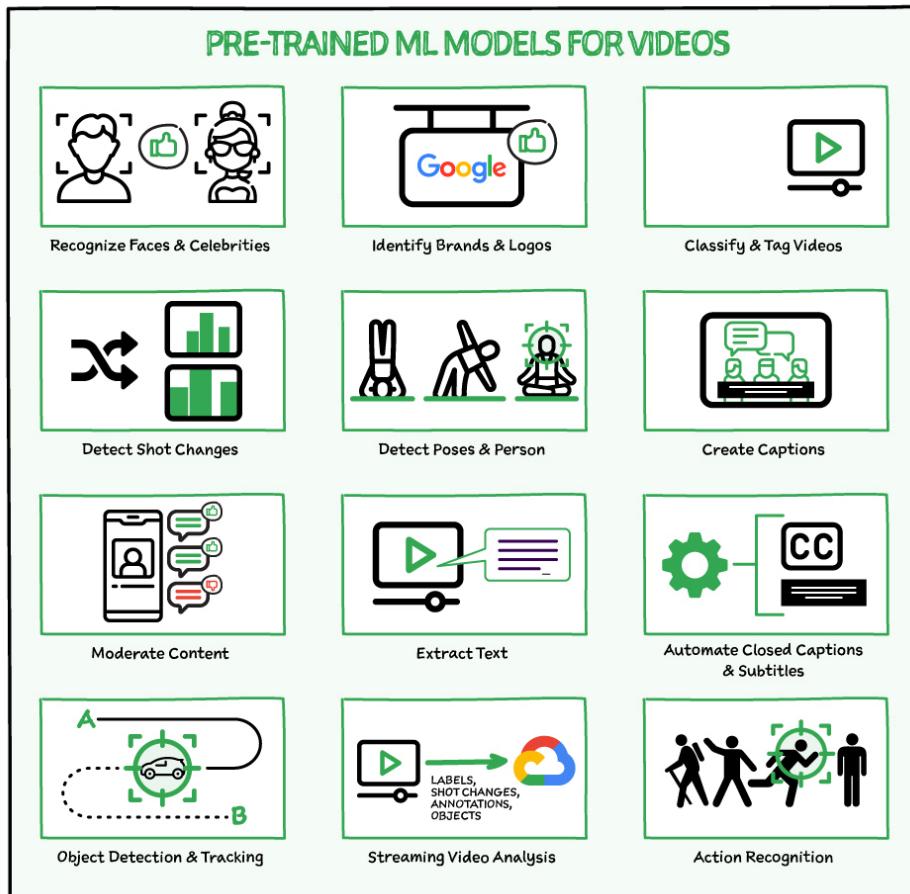


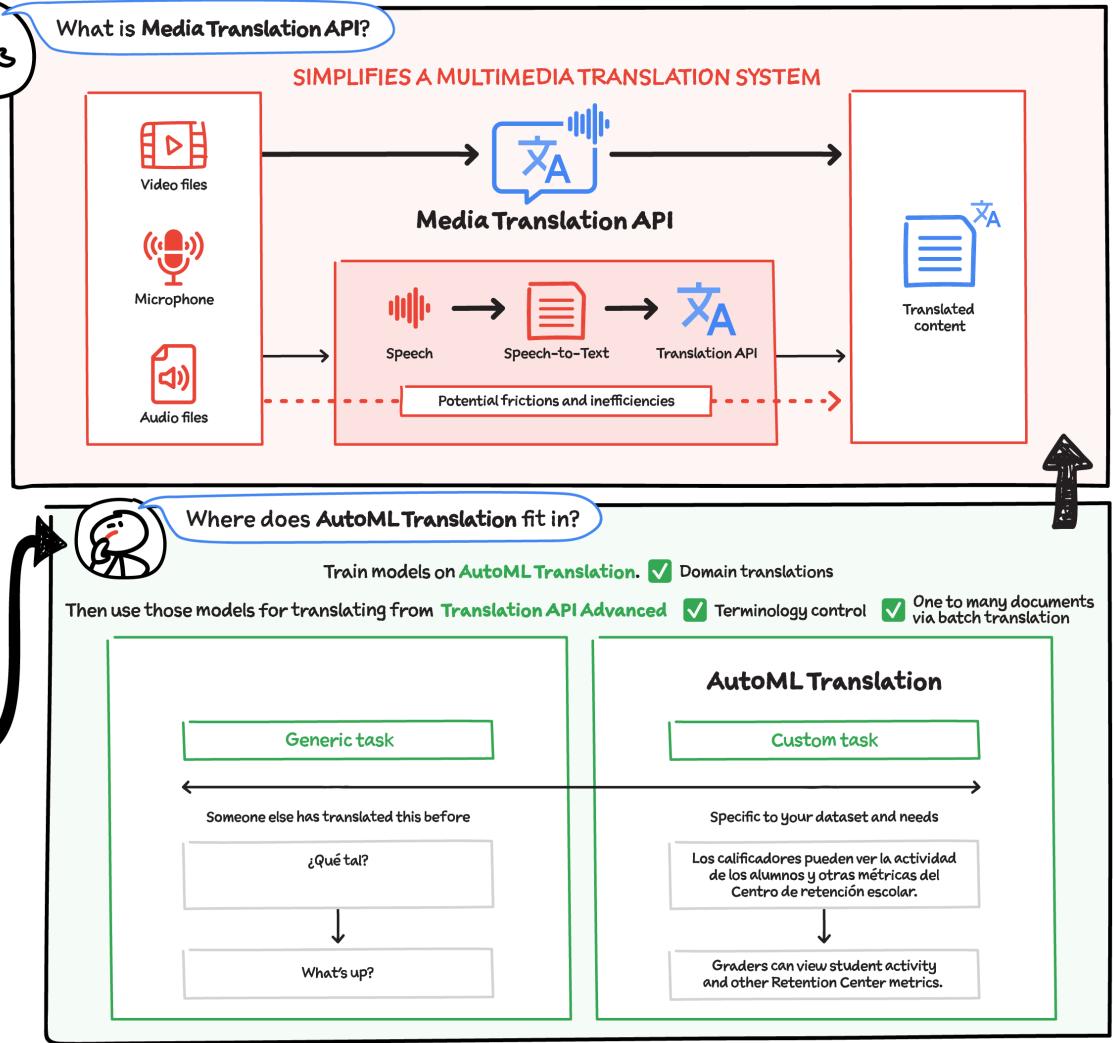
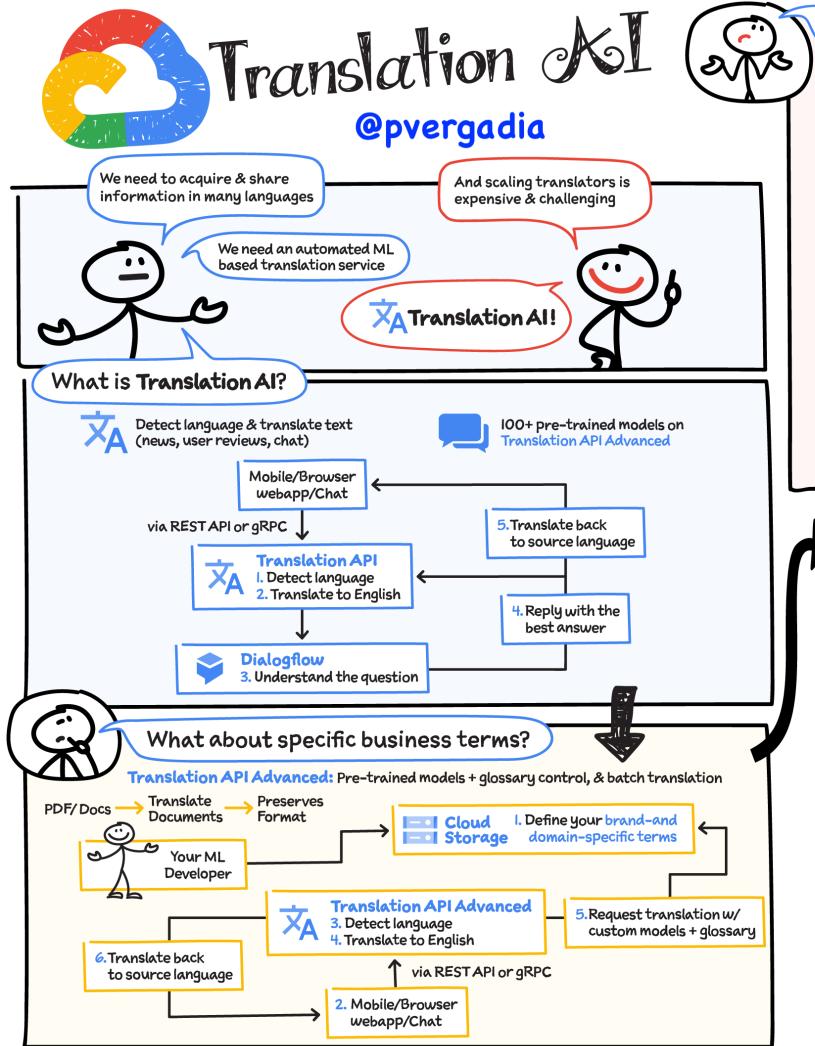
- ⑤A Vision API detects broad objects and scenes from images. Label detection makes images searchable across broad topics and scenes
- ⑤B AutoML Vision detects custom labels and categories from user-trained image models





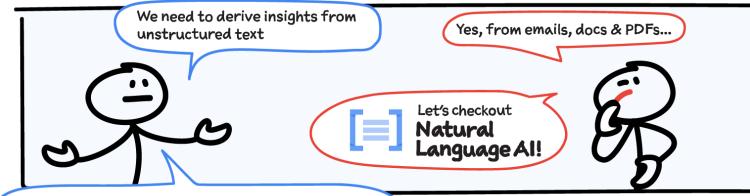
@pvergadia



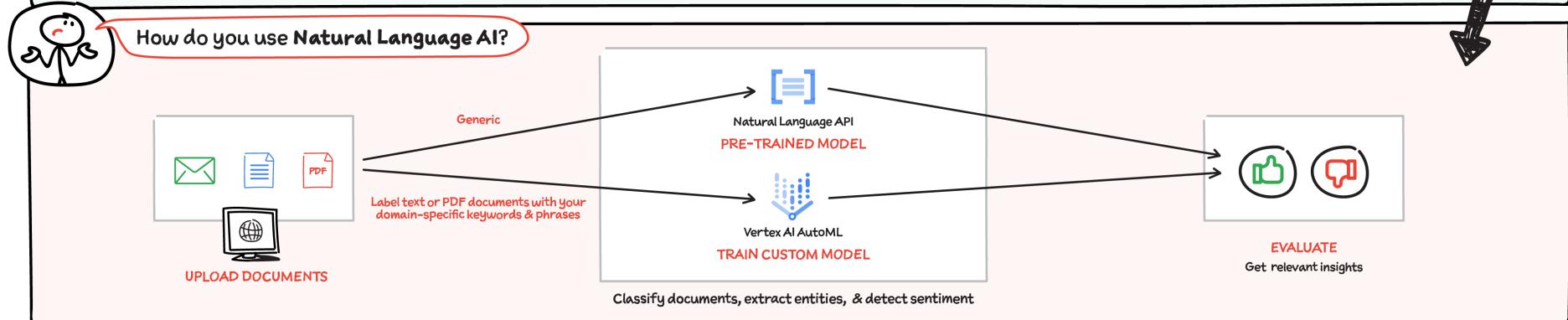
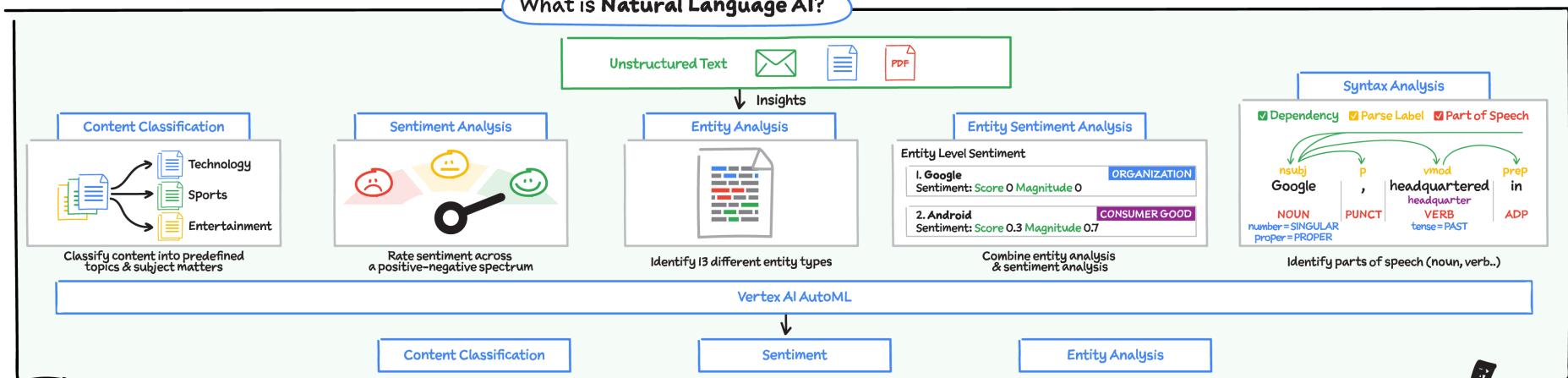




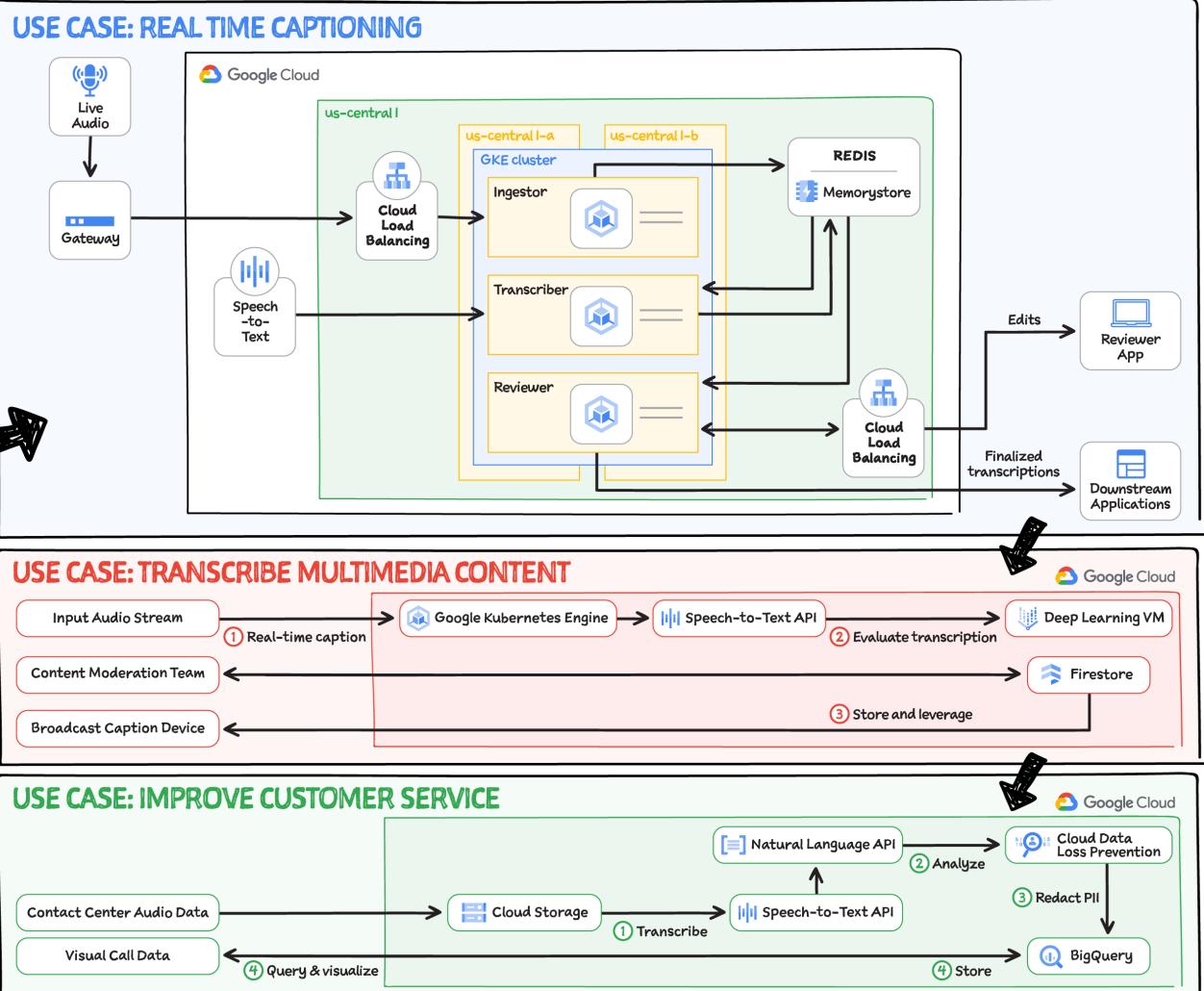
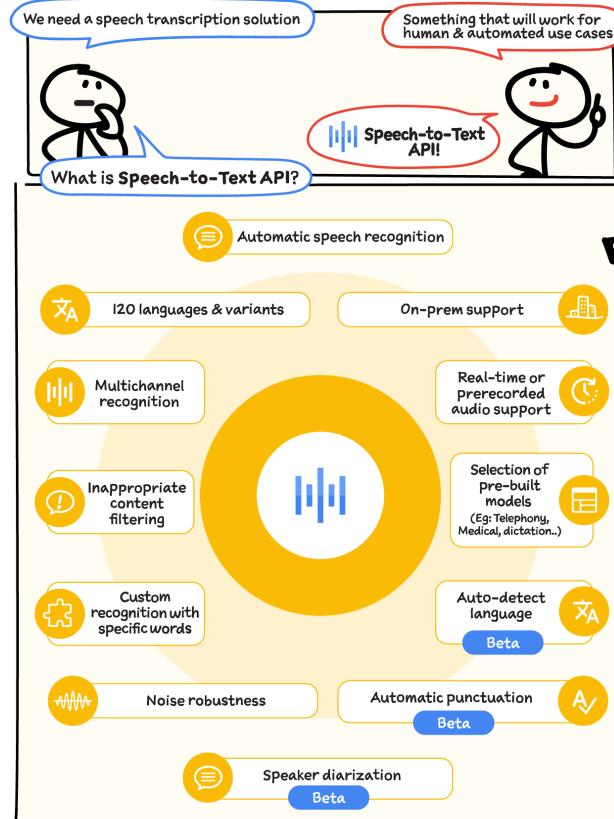
Natural Language AI



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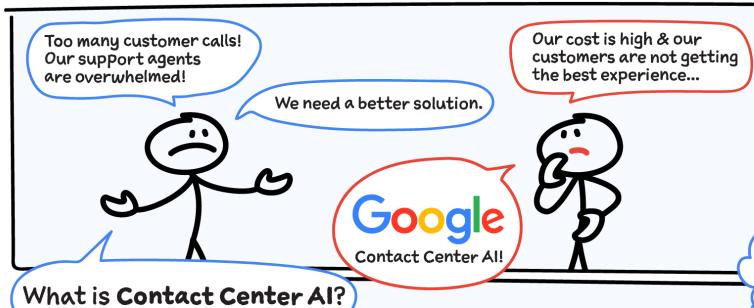


Speech-to-Text API @pvergadia

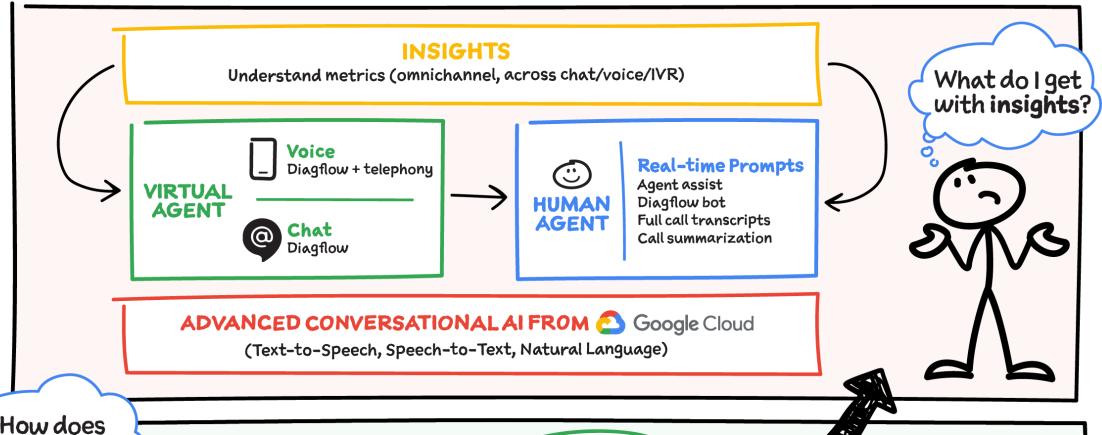
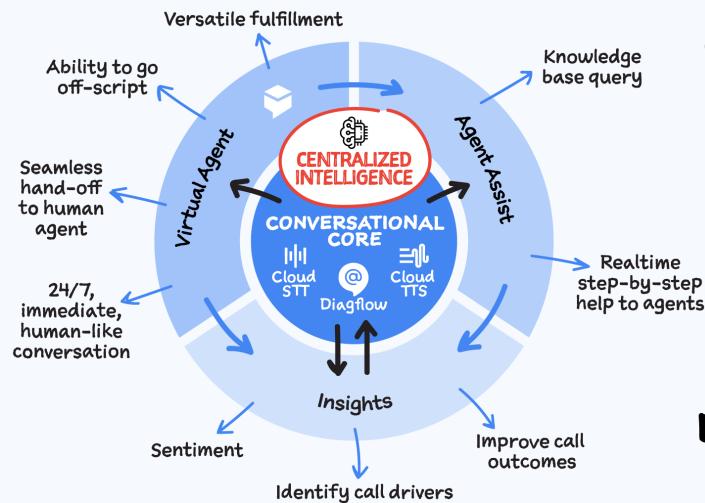



Contact Center AI

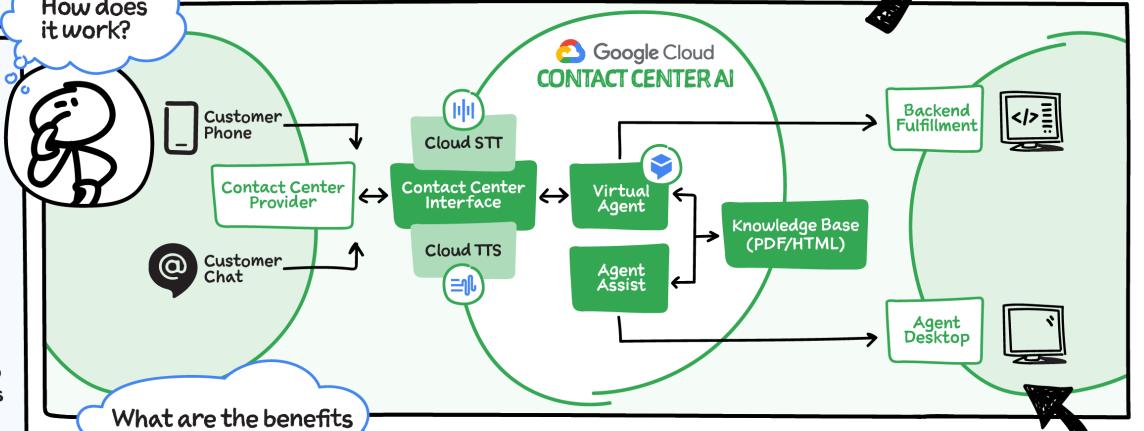
@pvergadia



What is Contact Center AI?



How does it work?

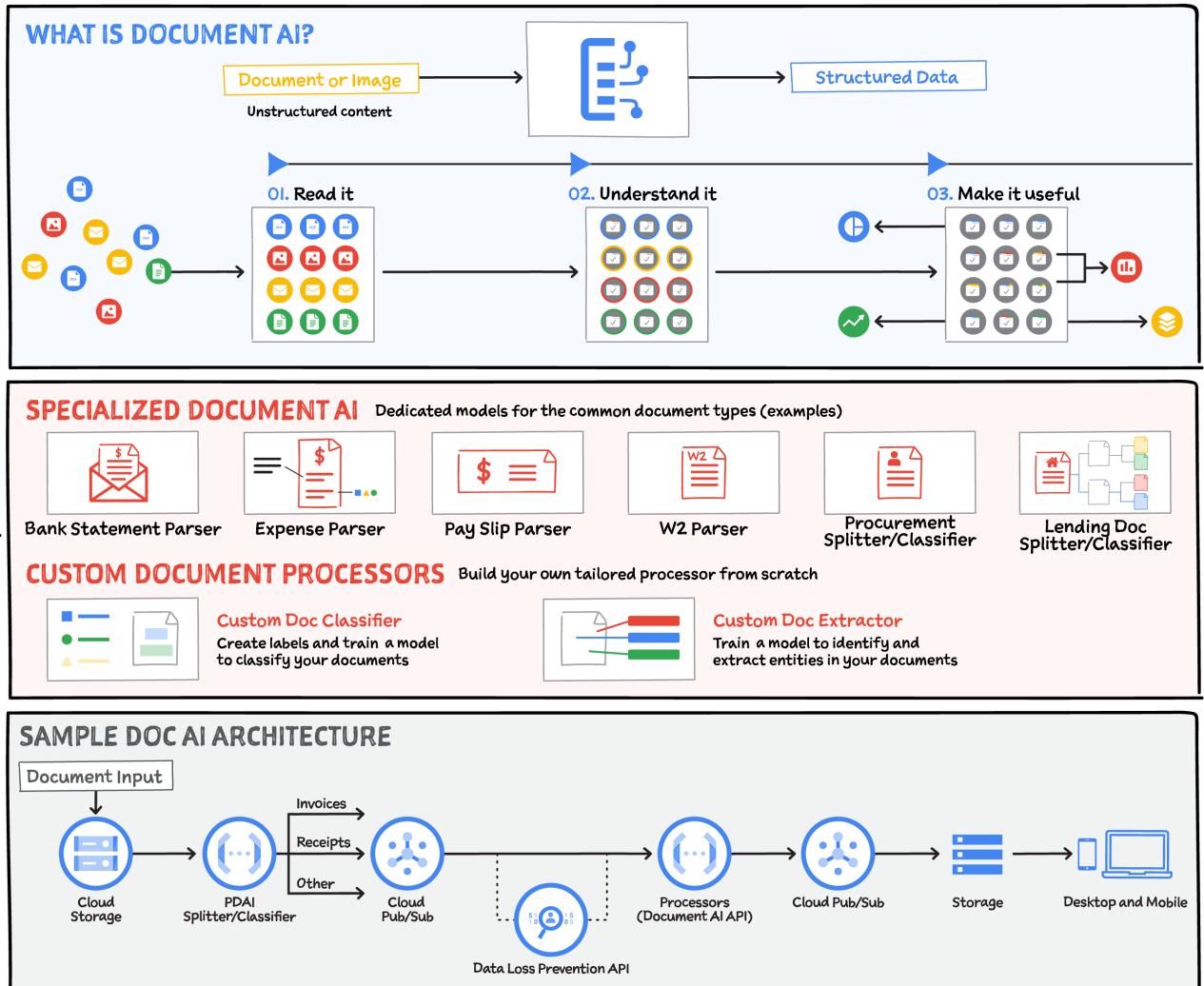
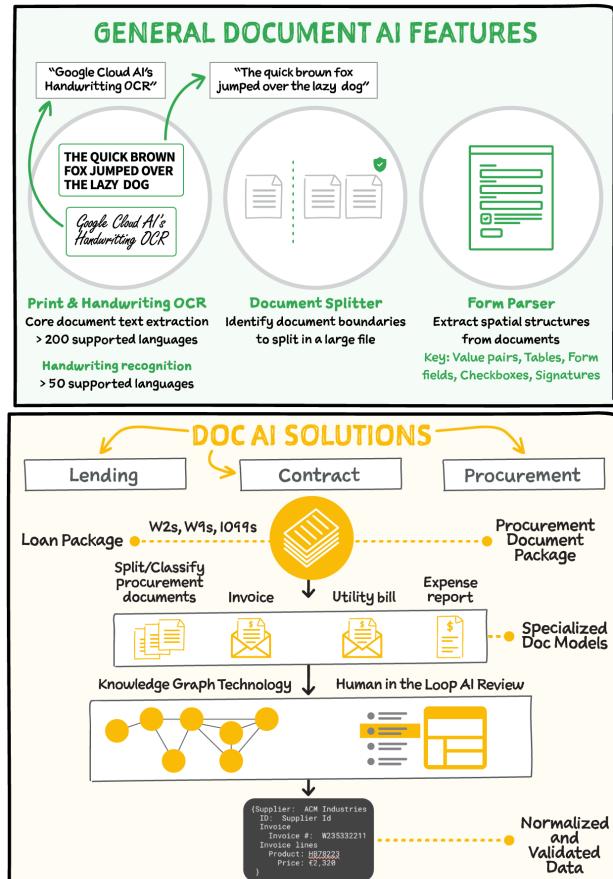


What are the benefits of using CCAI?

- Increase CSAT
- Automate repetitive calls
- Gain insights
- Reduce cost
- Free up human agents
- Turn every agent into a specialist

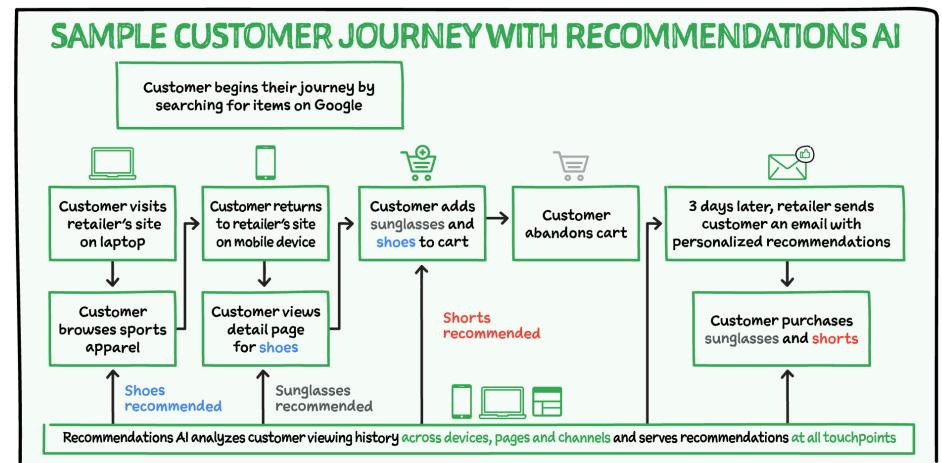
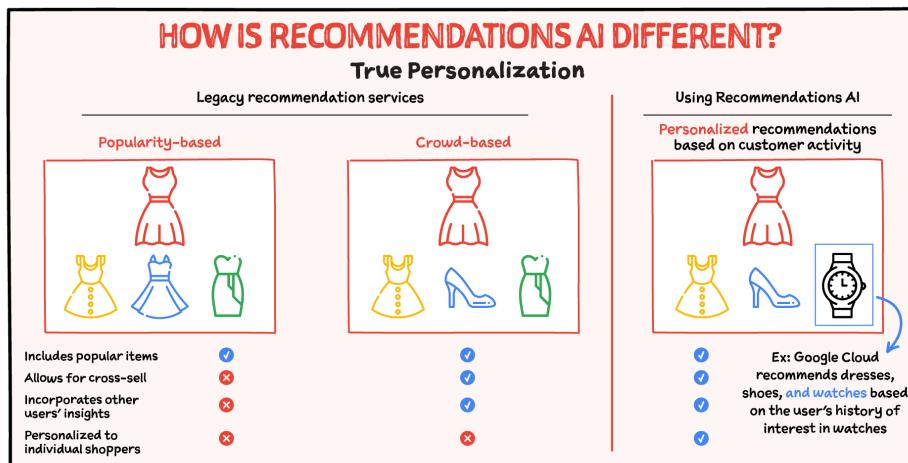
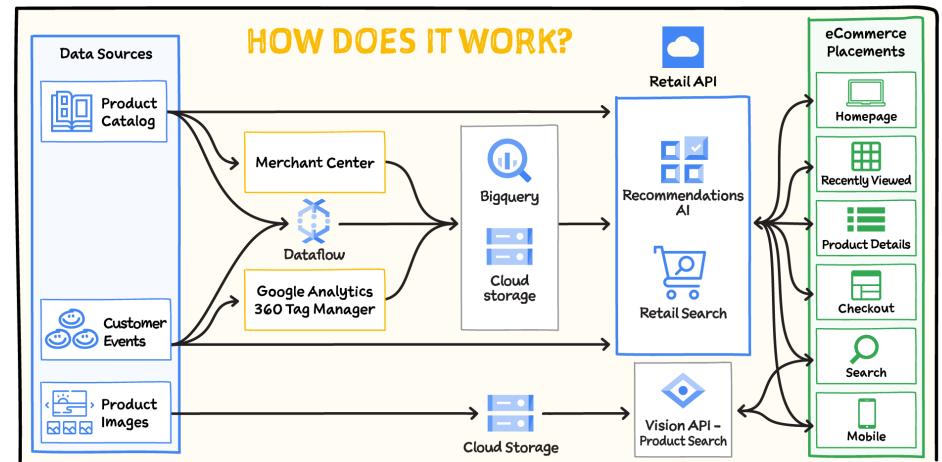
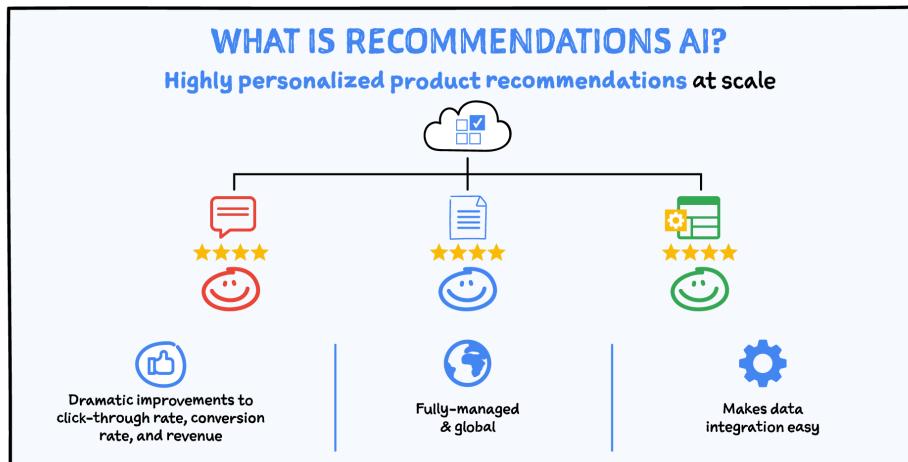
Document AI

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Recommendations AI

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Data Science ON GOOGLE CLOUD

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