

Machine learning

Amazon Rekognition:

Find objects, people, text, scenes in images & videos using ML.

Facial analysis and facial search to do user verification, people counting.

Create a DB of "familiar faces" or compare against celebrities.

Use cases:

Labeling

Content Moderation.

Text detection.

Face detection and analysis

Face search and verification

Celebrity recognition.

Pathing.

Amazon Transcribe:

Speech to Text

Deep learning process

Automatic Speech Recognition (ASR).

Use cases:

Transcribe customer service calls.

Automate closed captioning & subtitling

Generate metadata for media assets to create a fully searchable archive.

Amazon Polly:

Turn text into lifelike speech using deep learning.

Create applications that talk.

→ Amazon Translate:
Natural & accurate language translation
Localize content - websites, applications for international
users, easily translate large volumes of text efficiently.

1) → Amazon Lex & Connect

Amazon Lex: (same technology that powers
Alexa).

ASR to convert speech to text

Natural lang' understanding to recognize the
intent of text, callers

Help build chatbots, call center bots.

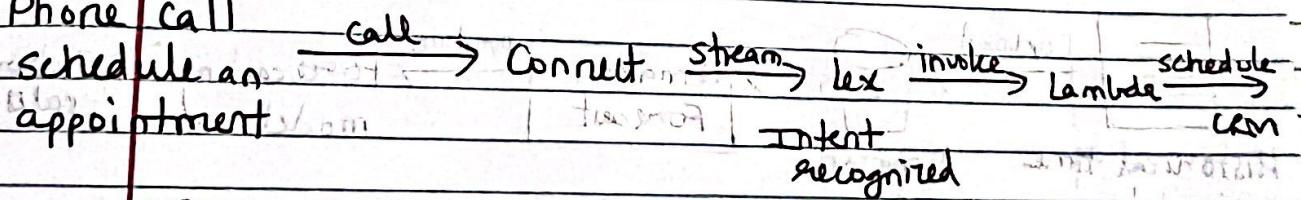
2) → Amazon Connect:

Receive calls, create contact flows, cloud-based
virtual contact center.

Can integrate with other CRM systems.

No upfront payments, 80% cheaper than traditional
contact center solutions.

Phone call



CRM = Customer Relationship Management

→ Amazon Comprehend.

For NLP

Serverless service

Uses ML to find insights and relationships in
text

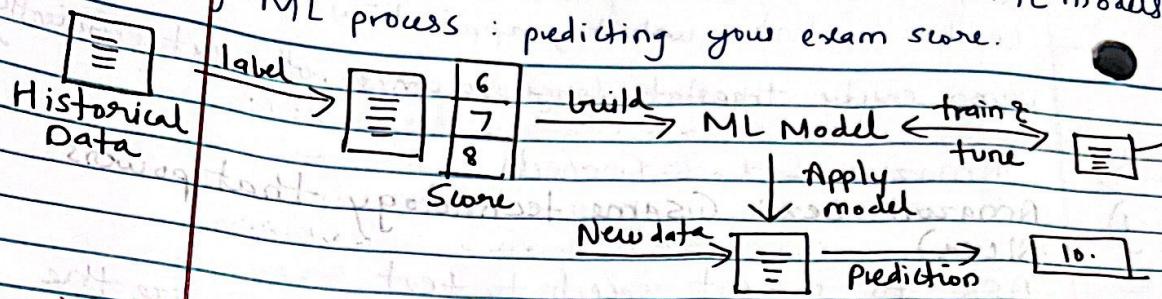
Sample use cases:

Analyze customer interactions (emails) to find
what leads to a +ve / -ve exp.

Create and groups articles by topics that
Comprehend will uncover.

Amazon SageMakers

For developers / data scientists to build ML models.
eg: ML process : predicting your exam score.

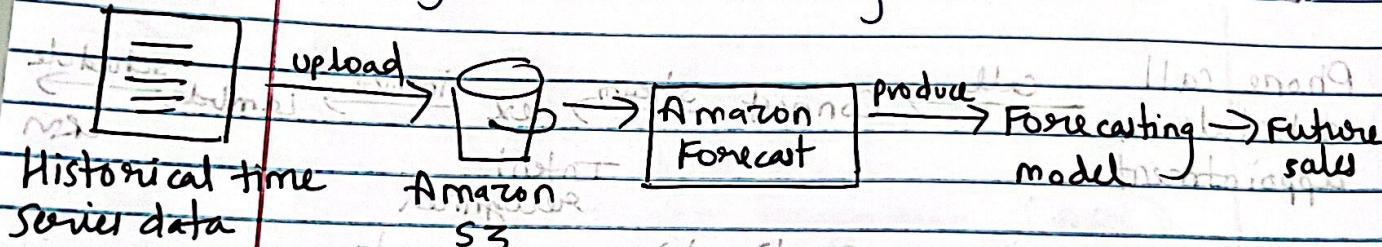


Amazon Forecast

ML to deliver highly accurate forecasts.

eg: Predict the future sales of a garment
50% more accurate than looking at the data itself.

Reduce forecasting time from months to hours
Use cases: Product Demand Planning, Financial Planning, Resource Planning.



Amazon Kendra

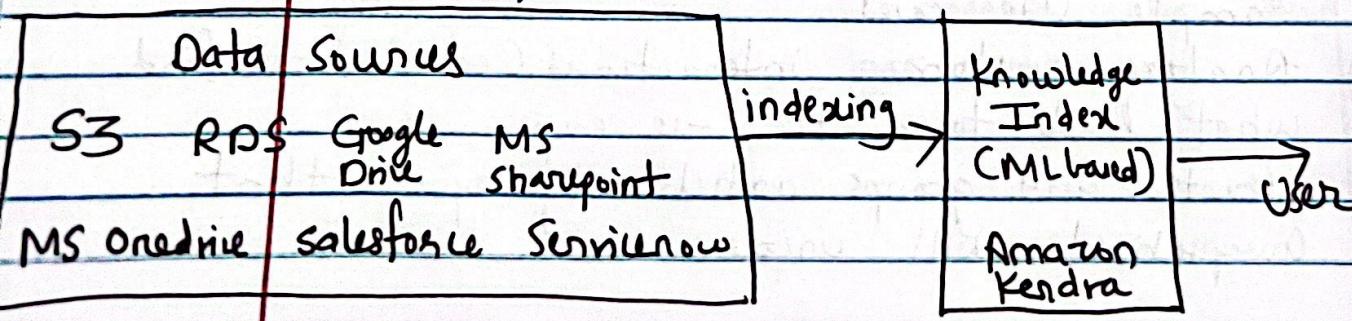
Document search service powered by ML

Extract ans from within a document

NL search capabilities

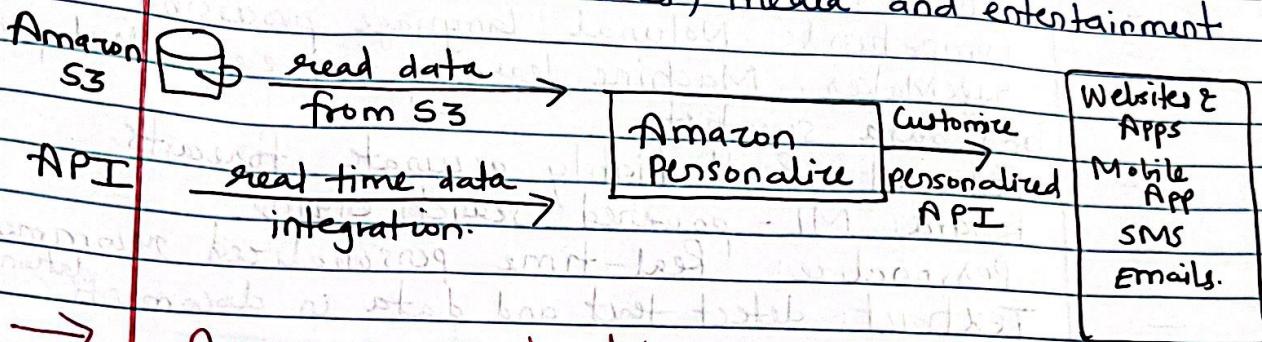
Incremental learning

Manually fine-tune search results.



models.

- Amazon Personalize:
 - ML service
 - Build apps with real-time personalized recommendations.
 - Same technology as Amazon.com
 - Integrates into existing websites, applications, SMS, email marketing systems.
 - Implement in days, not months.
 - Use cases: retail stores, media and entertainment

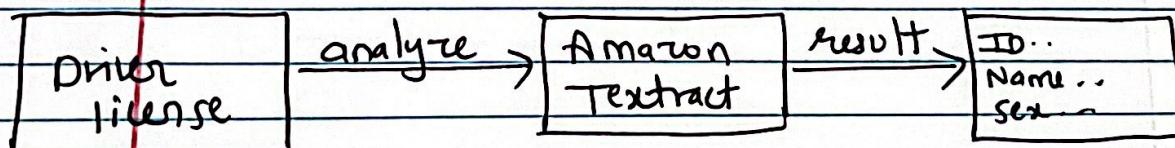


→ Amazon Extract:

Automatically extract text, handwriting and data from any scanned documents using AI/ML.
Extract data from forms and tables.

Read and process any type of document
Use cases:

- 1) Financial services (eg: invoices, reports)
- 2) Healthcare (eg: records, claims)
- 3) Public sector (eg: tax forms, ID, passports, docs).



AWS Machine learning Summary *

Rekognition: face detection, labeling, celebrity recognition

Transcribe: Audio to text (eg subtitles)

Polly: Text to audio.

Translate: Translations.

Lex: Build conversational bots - chatbots

Connect: Cloud contact center

Comprehend: Natural language processing

SageMaker: Machine learning for every developer and data scientist.

Forecast: Build highly accurate forecasts.

Kendra: AI-powered search engine

Personalize: Real-time personalized recommendations.

Extract: detect text and data in documents.

