Reduce manual efforts:

Process forms and documents faster using
AWS Machine Learning

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Agenda

- Document processing at scale
- Processing invoices and receipts – a demo
- How AWS can help in Intelligent Document Processing
- Get started and more resources

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Processing documents at scale

Billions of documents created globally everyday in physical and various digital formats with varying relevance to every reader

Experts trained to understand relevance read and extract information for people and processes to consume

Typically, automation applies rules-based or templates-based extraction that are narrowly focused on specific formats and use cases

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The scenario

As a developer, you are tasked with automating extraction of specific data from your company's documents.

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The scenario

These documents happen to be invoices and receipts and your goal is to flag any of these documents with a total due of $50 or more.

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What do you do?

1

Clarify input document format and accuracy requirements.

2

Determine if you can solve by writing code or is ML required?

3

Explore managed solutions and open source solutions for image-to-text conversion.

4

Does it require identifying semantic relationships?

5

If ML is required, explore ML managed solutions such as Amazon Textract.
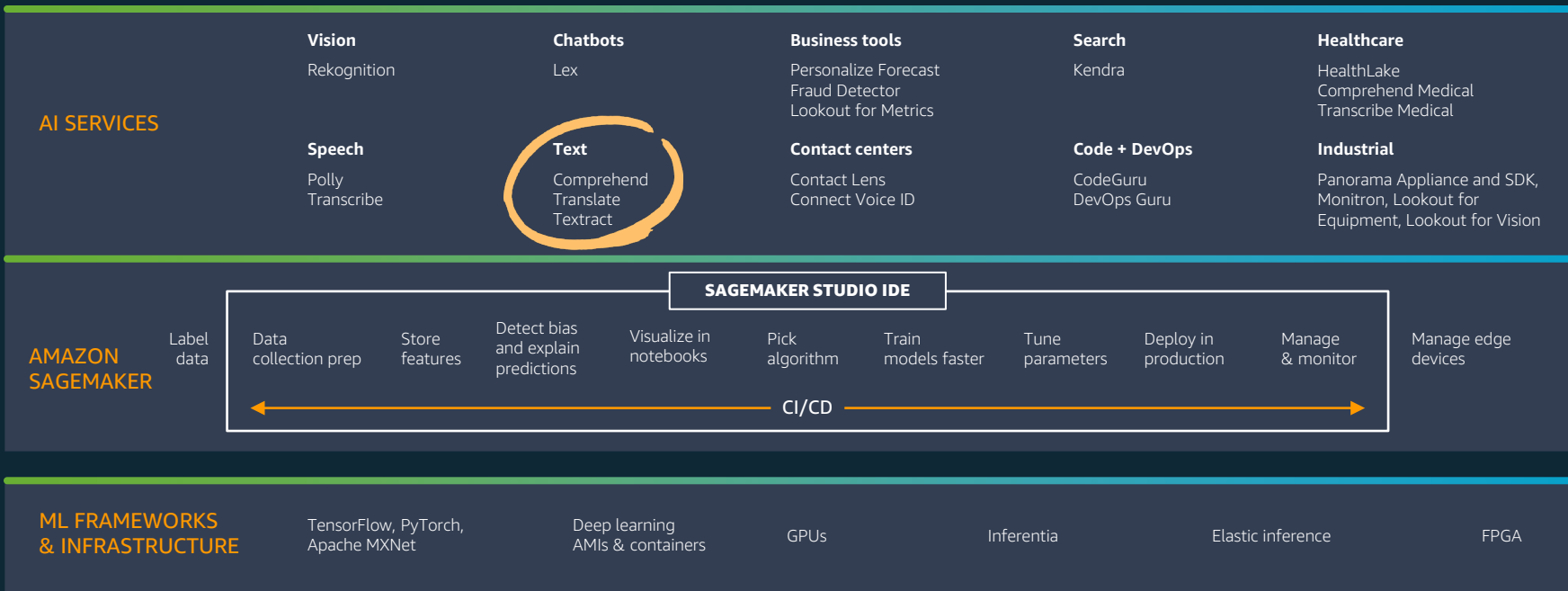
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Demo

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Our mission at AWS

Put machine learning (ML) in the
hands of every developer

The AWS ML stack

Broadest and most complete set of machine learning capabilities

AI SERVICES

Vision
Rekognition

Chatbots
Lex

Business tools
Personalize Forecast
Fraud Detector
Lookout for Metrics

Search
Kendra

Healthcare
HealthLake
Comprehend Medical
Transcribe Medical

Speech
Polly
Transcribe

Text
Comprehend
Translate
Textract

Contact centers
Contact Lens
Connect Voice ID

Code + DevOps
CodeGuru
DevOps Guru

Industrial
Panorama Appliance and SDK,
Monitron, Lookout for
Equipment, Lookout for Vision

AMAZON SAGEMAKER

SAGEMAKER STUDIO IDE

| Label data | Data collection prep | Store features | Detect bias and explain predictions | Visualize in notebooks | Pick algorithm | Train models faster | Tune parameters | Deploy in production | Manage & monitor | Manage edge devices |

CI/CD

ML FRAMEWORKS & INFRASTRUCTURE

TensorFlow, PyTorch, Apache MXNet

Deep learning AMIs & containers

GPUs

Inferentia

Elastic inference

FPGA

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Intelligent document processing with Amazon AI Services

Amazon Textract

Extract text and data from virtually any document

Amazon Comprehend

A fully-managed and continuously trained service that discovers insights and relationships in text

Amazon Augmented AI

Easily implement human review of machine learning predictions

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How we can help

Run a POC

- Run a quick POC with ready-to-deploy Document Understanding Solution
- https://aws.amazon.com/solutions/implementations/document-understanding-solution/

AWS Professional Services Team

- Identify key areas where machine learning could help you with an AWS AI expert
- Let AWS experts build POCs and custom solutions for your use case

Solution architects

- Engage with a solution architect dedicated to your account
- Brainstorm use cases and get support for solution implementation
- https://aws.amazon.com/contact-us/

AWS Sales & Account teams

- Contact sales if you have any queries about building intelligent document processing workflows with AWS

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Thank you!

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