



Transforming Information to Innovation: Harnessing the power of Generative AI

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Generative AI is **transforming industries**



Generative AI

The tipping point for Generative AI



MASSIVE PROLIFERATION
OF DATA

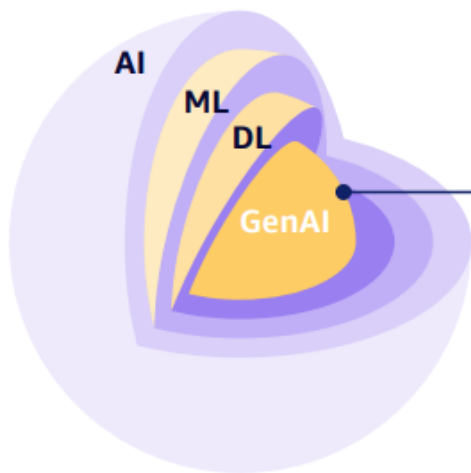
AVAILABILITY OF
SCALABLE COMPUTE
CAPACITY

MACHINE LEARNING
INNOVATION

Generative AI is uniquely able to create new content...

Generative AI is a part of artificial intelligence...

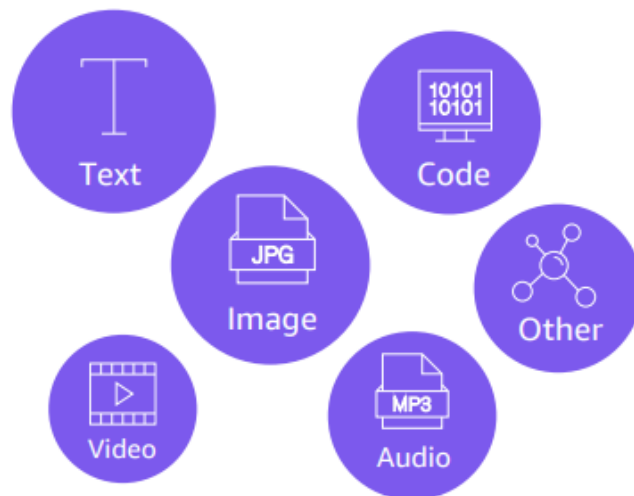
AI, ML and DL solve **specific tasks** by using one specific set of data to train and deploy one model



...with the unique ability to generate new content

Generative AI generates **new content** for a **variety of tasks** leveraging pretrained foundation models that can be customized with small fractions of data

Possible outputs



...making it the next enabler for corporate longevity

>\$100bn market expected for Generative AI by 2030

425% increase in VC investment in Generative AI since 2020

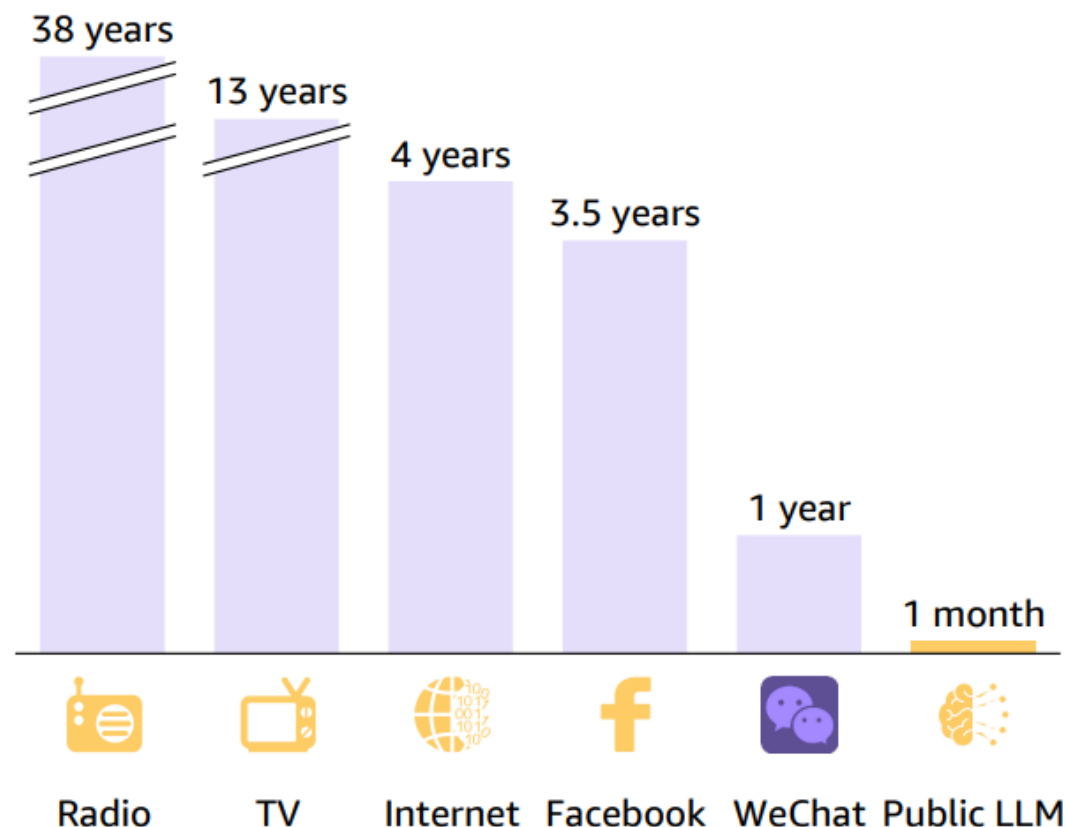
~80% of current AI research is focused on Generative AI

7% global GDP growth expected due to Generative AI

2/3 of all jobs in the US will be directly affected by Generative AI

Innovations are reaching scale faster than ever before...

Time to 50 million users



Source: CBS, Oberlo, Wall Street Journal, Innosight Holdings, McKinsey

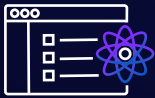
...while time to compete is decreasing

50% of the S&P 500 companies will drop from index in 10 years due to decreasingly competitive business models

63% of business leaders expect their investments in new-business building to increase

61% of executives consider new-business building a top 3 priority

Generative AI is transforming industries



Enhance customer experience

CHATBOTS

VIRTUAL ASSISTANTS

AI-POWERED CONTACT CENTER

PERSONALIZATION



Boost employee productivity

CONVERSATIONAL SEARCH

SUMMARIZATION CODE

GENERATION

DATA TO INSIGHTS



Creativity & content creation

WRITING

MEDIA DESIGN

MODELING



Improve business operations

DOCUMENT PROCESSING

PROCESS OPTIMIZATION

CYBERSECURITY

DATA AUGMENTATION

Key considerations for Generative AI



Data Privacy/Security



Choice



Value



Ease of Use



Responsible AI



Generative AI-powered solutions

The future is here, it's just not evenly distributed yet.

Legacy document processes do not meet today's needs



Legacy OCR and manual processes are time-consuming, error-prone, and expensive



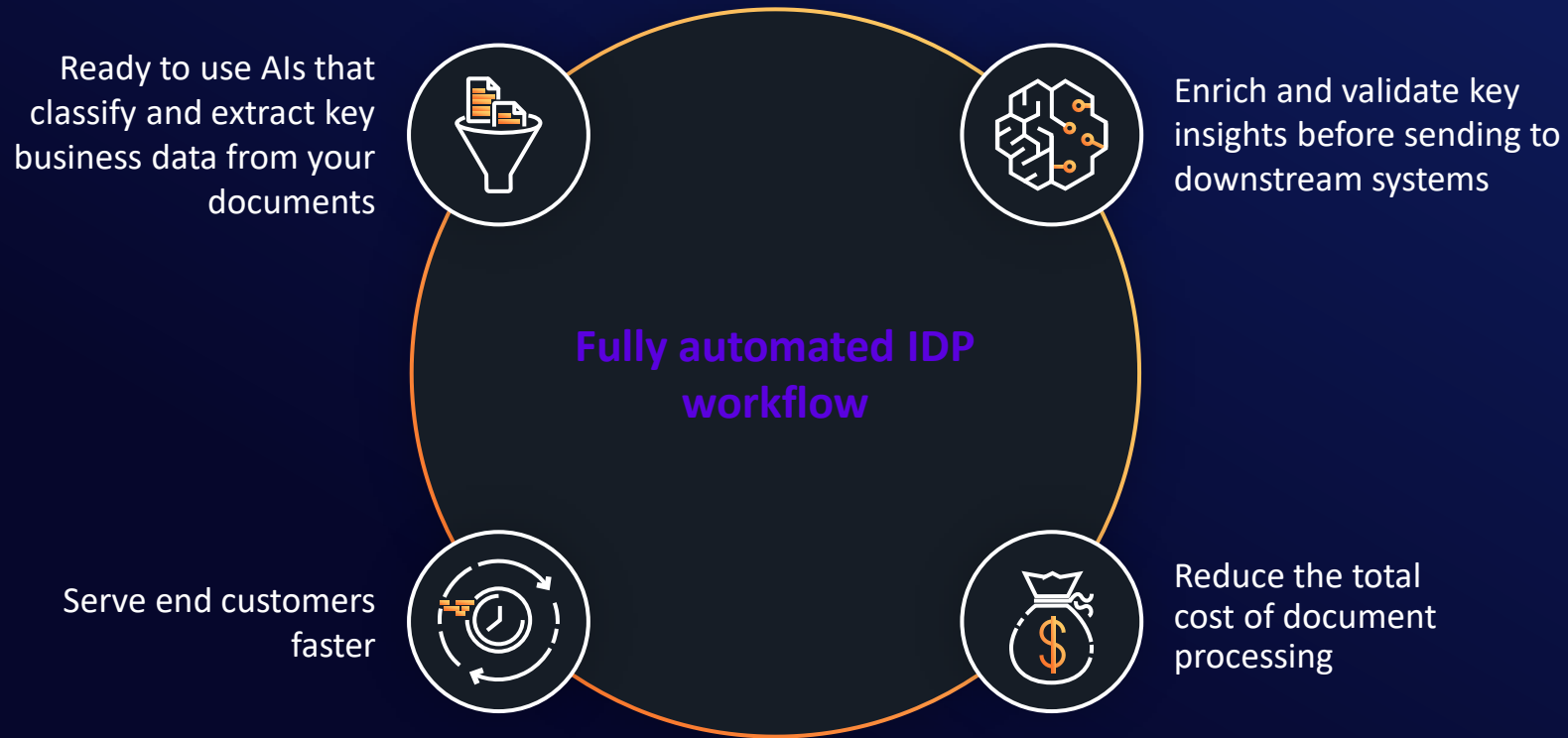
Manual processes do not scale easily with document volume

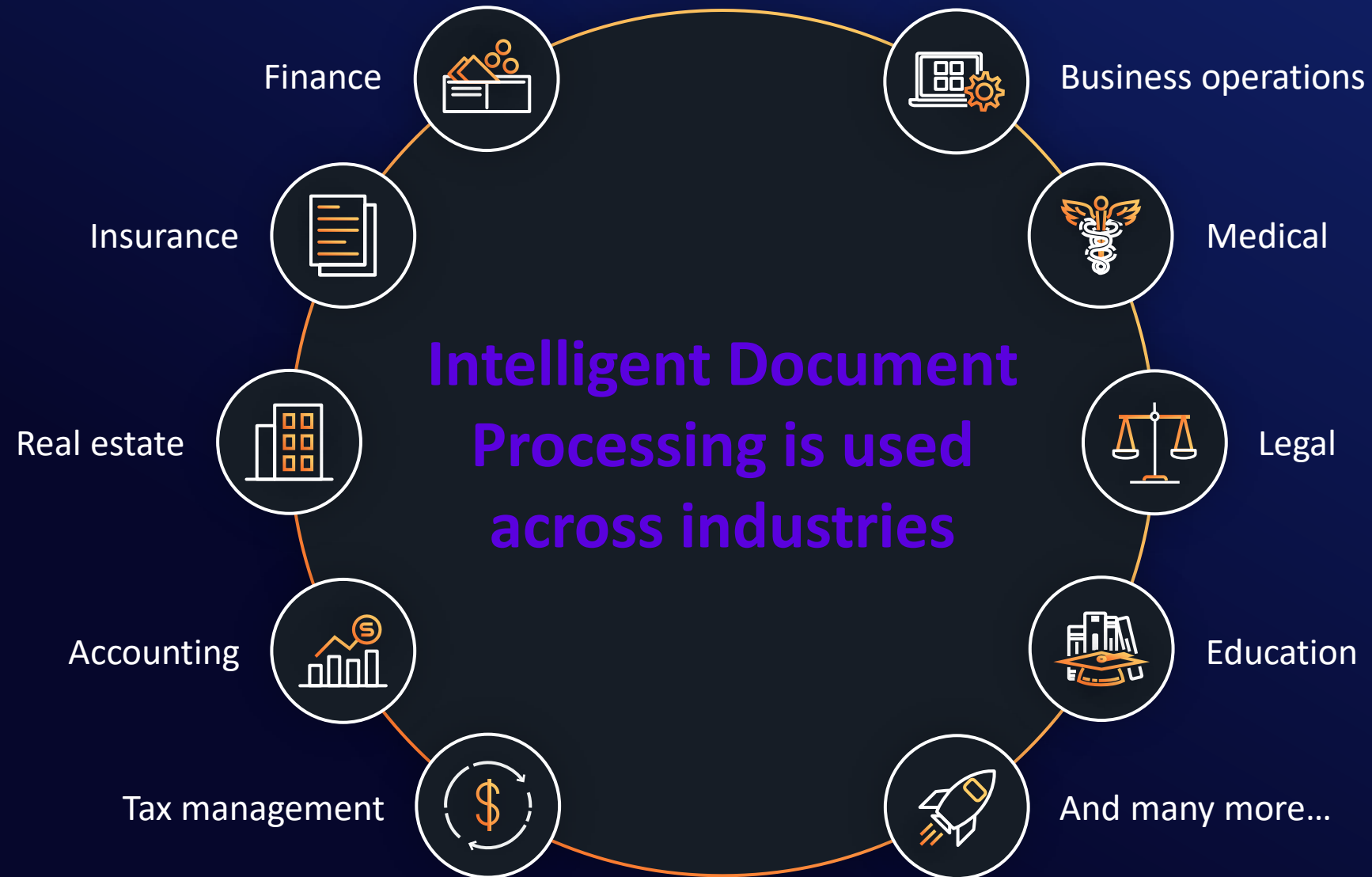


Difficult to find useful information needed for business decisions

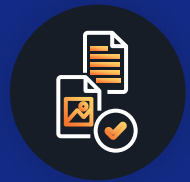
Faster document processing shortens decision cycles; this enables you to serve more customers and have people do higher value tasks

Intelligent Document Processing



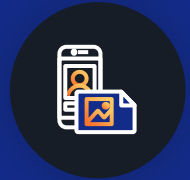


IDP Pipeline - Aggregating and storing documents



Scanned documents

PDF, JPEG, PNG,
and TIFF



Captured by

cell phone cameras or
digital scanners



Files in common
formats such as
Word or .TXT



Scans from
physical
mailrooms



Docs from
digital
mailrooms



**Storing documents in a
central location, for
each business use-case,
so they are ready for
processing**



Uploaded by
end user
using a
computer
or phone

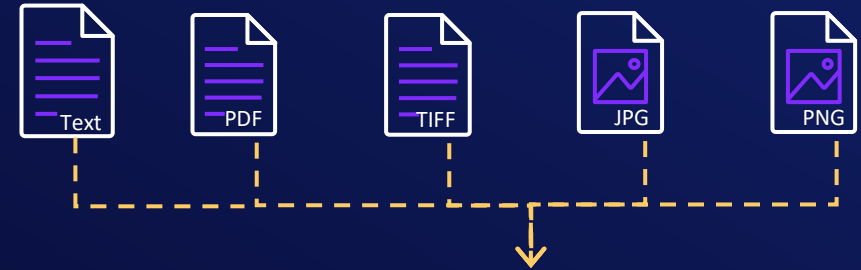


Email
attachments

IDP Pipeline - Document classification

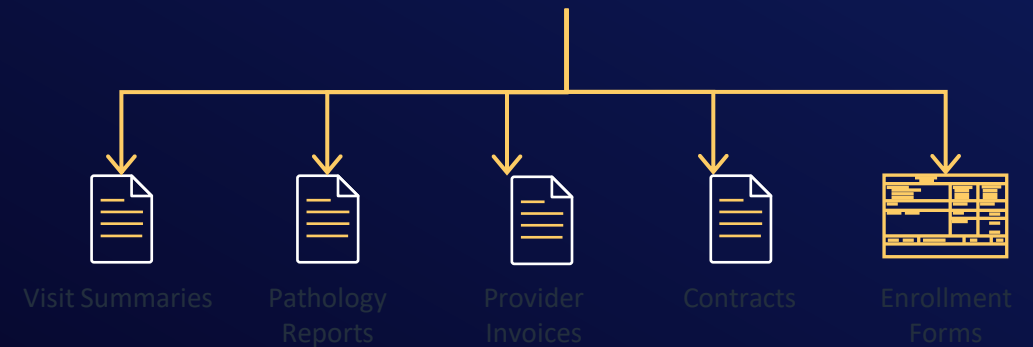
Identify document types

Sort different types of documents into the right category and send them to the correct document pipeline



Real-time or asynchronous processing

Perform real time document classification when needed or reduce costs using asynchronous processes



IDP Pipeline - Document Comprehension

Redaction of sensitive data

DOCUMENT TEXT

Hi, my name is John Doe. For verification, the last 4 digits of my social are 6789 and my DOB is 01/01.



Hi, my name is [NAME]. For verification, the last 4 digits of my social are [SSN] and my DOB is [DATE_TIME].

Recognize common entities

DOCUMENT TEXT

Budget Mutual insurance Company 9876
Infinity Ave
Springfield, MI 65541
Client Laura McDaniel and date of death
is 6/15/20202

OUTPUT

Organization: Budget Mutual
Insurance Company
Location: 9876 Infinity Ave
Springfield, MI 65541
Date: 6/15/20202

Recognize entities specific to your business

DOCUMENT TEXT

Hi my name is John. I am filing a claim
for a car accident, my insurance
number is 456-YQT.

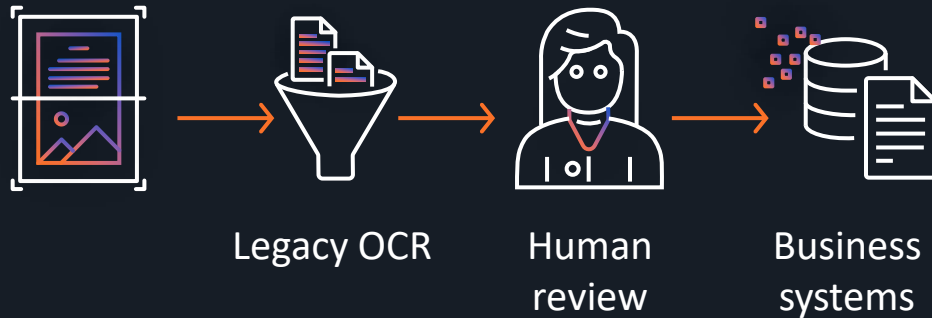
OUTPUT

Summary fields:

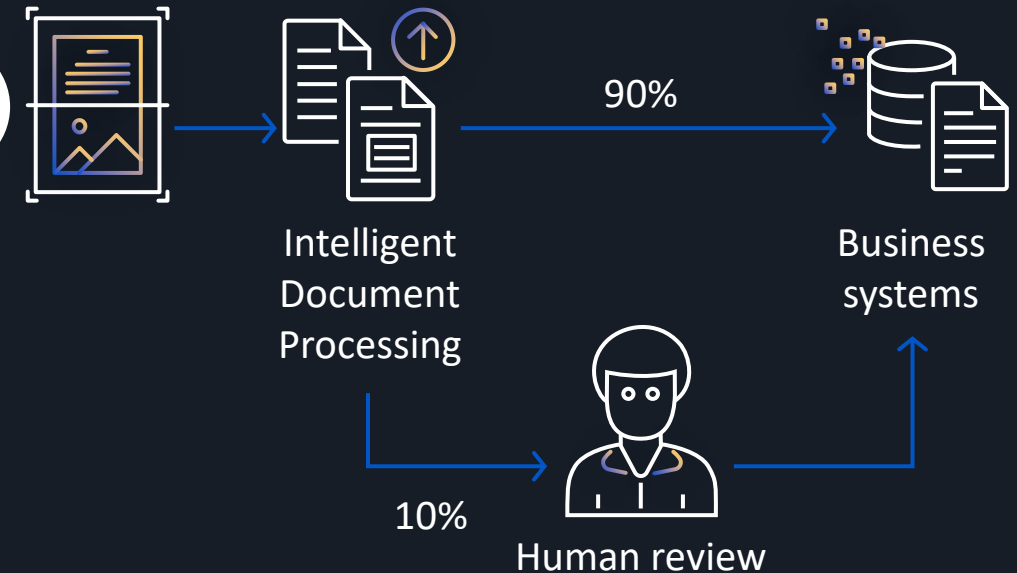
Category of entity: Policy_ID
Entity: 456-YQT
Confidence: 0.95

Reduce the total cost of your document processing

Common for people to review all documents prior to downstream usage



Limit people review to the documents with confidence scores < target



Combining IDP and Generative AI

Traditional IDP Amazon Textract + Comprehend

- ✓ Accurate and scalable OCR, forms, tables, signatures, invoices
- ✓ Easy to implement Q&A provides exact answers from the document
- ✓ Confidence scores for exact match vs. original content on the page
- ✓ Classify documents or find key business entities based on examples you provide
- ✓ Find & redact PII/PHI

Foundation Models

Normalize outputs based on your desired data format

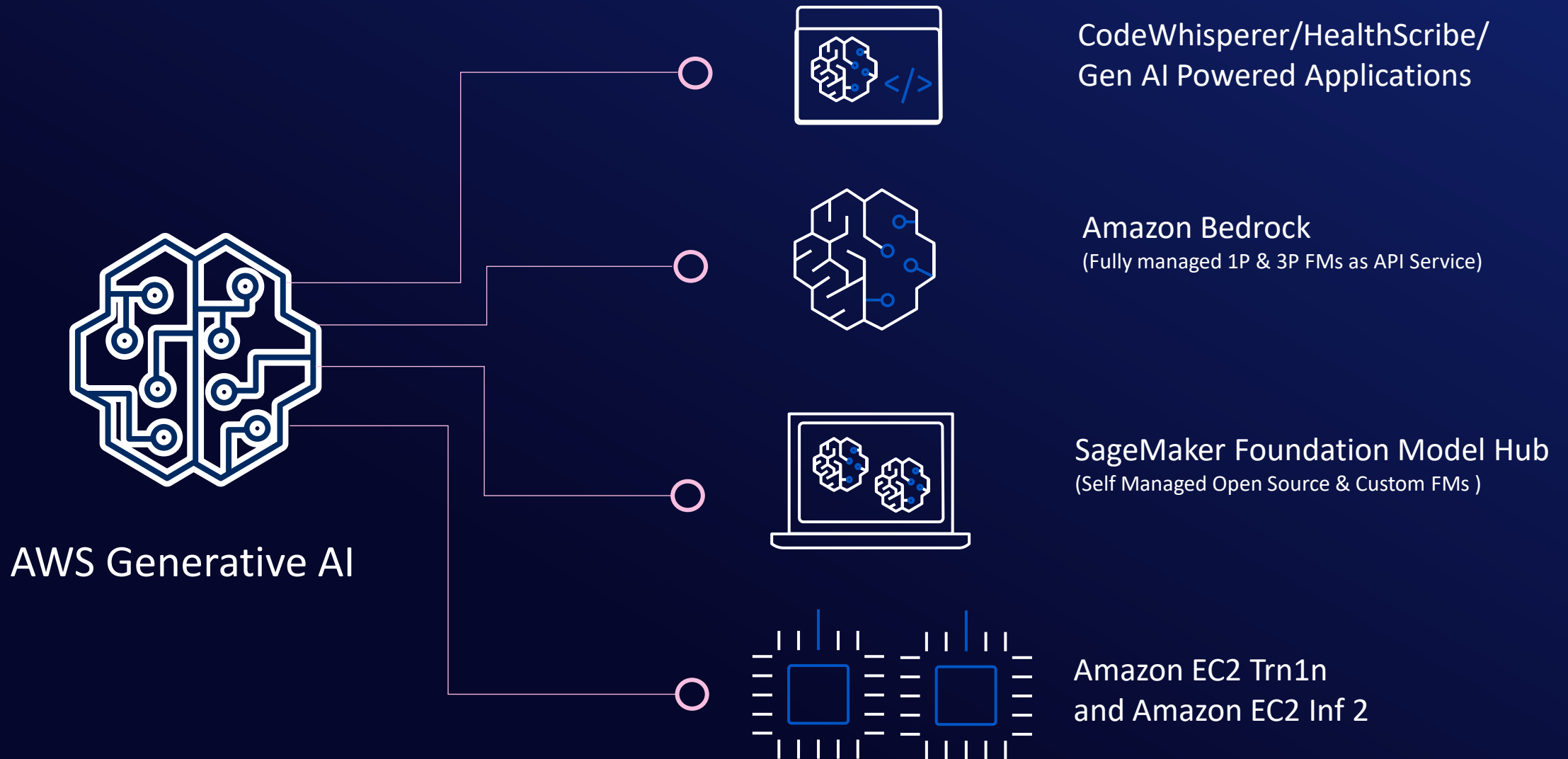
Q&A can summarize or use logic to provide answers

Checks for reasonable answers (a SSN with 8 digits is an error)

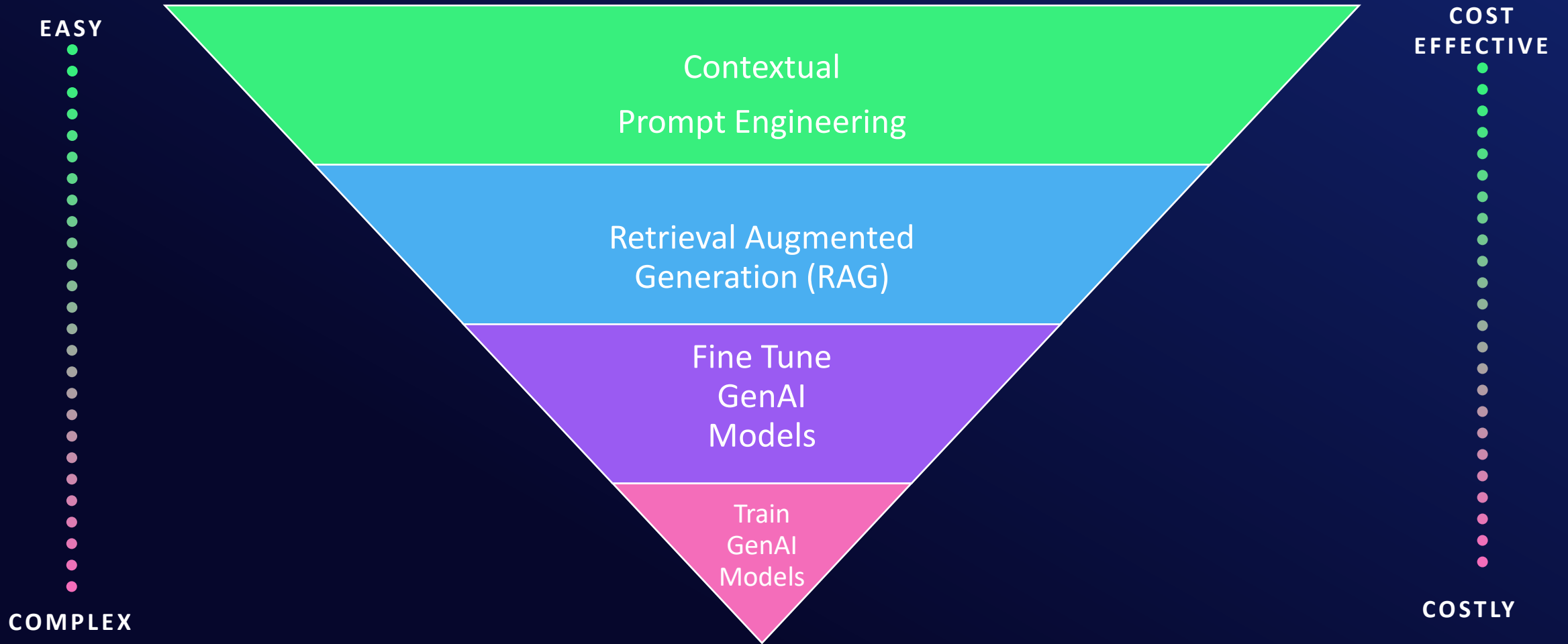
Classify or find business entities using built in or prompted categories (examples not required)

Summarize documents with option to use redaction

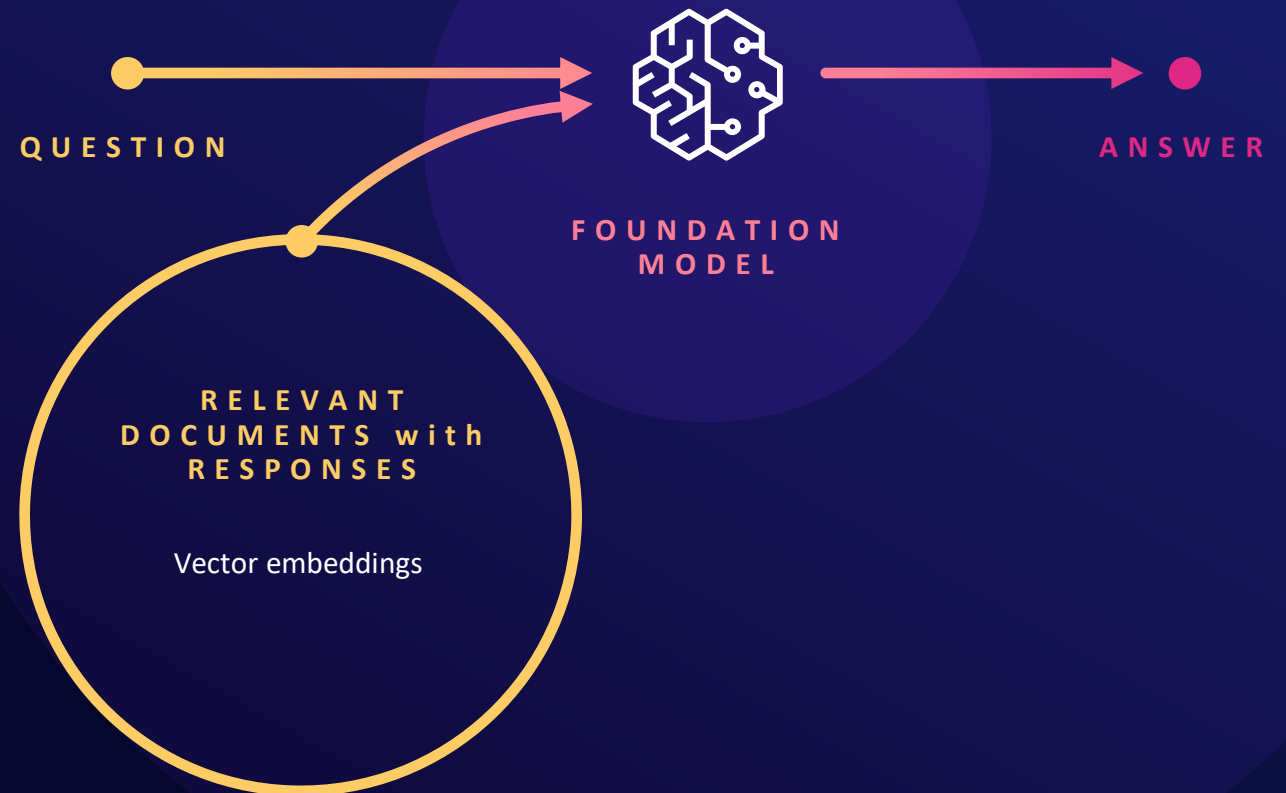
Building with generative AI on AWS



Emerging Generative AI data patterns & ease of adoption



Retrieval Augmented Generation





NEW

Agents for Amazon Bedrock

Enable Generative AI applications to
complete tasks in just a few clicks

IN PREVIEW NOW



Breaks down and orchestrates
tasks



Securely accesses and
retrieves company data



Takes action by executing API
calls on your behalf



Provides fully managed
infrastructure support

Conversation with Documents – Demo!



Reimagine and transform your applications
with Generative AI

Thank you!

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