

Atelier Azure Cognitive Search pour les partenaires

Jeudi 9 janvier 2020



Vos interlocuteurs

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1) Accès wifi
visiteur



Accès au Wifi visiteurs

1. Nom du réseau Wifi : **MSFTGUEST**



2. Bouton « **Visiting Guest** »

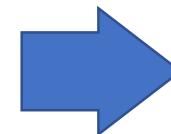
Visiting Guest

3. Ensuite « **Create a Guest Account** »

4. Mentionner ensuite l'email du parrain, votre nom ainsi que votre adresse email.

Email du parrain : franck.gaillard@microsoft.com

Vous aurez ensuite accès au réseau Wifi Microsoft après validation (prévoir quelques minutes d'attente)



Please complete the form to gain access to the network:

* **Email du parrain :**

Email de la personne qui parraine ce compte.

* **Votre nom :**

Veuillez saisir votre nom complet.

* **Adresse email :**

Veuillez saisir votre adresse email.
Ce sera votre nom d'utilisateur pour vous connecter au réseau.

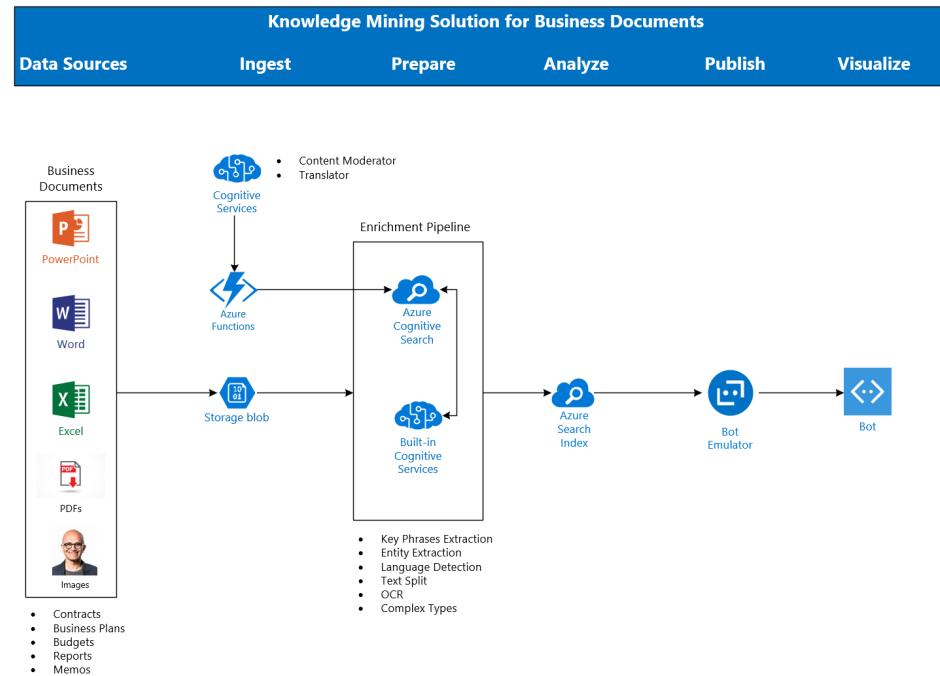
* **Confirmer :**

J'accepte les [conditions d'utilisation](#)

S'inscrire

2) Contenu du workshop

Contenu du workshop Azure Cognitive Search



<https://aka.ms/WorkshopACS>

Diapositives

<https://aka.ms/PresentationsACS>

Agenda

-
1. PRÉSENTATION DES SERVICES COGNITIFS AZURE
 2. DÉMONSTRATION DES SERVICES COGNITIFS AZURE
 3. PRÉSENTATION AZURE COGNITIVE SEARCH
 4. DÉMONSTRATION AZURE COGNITIVE SEARCH
 5. ATELIER AZURE COGNITIVE SEARCH
-

Azure Cognitive Services





54+
Azure regions
worldwide

>90
Compliance
certifications

Azure Cognitive Services

Deploy and run as a cloud service or anywhere as a container

5B

transactions a
month



Vision



Speech



Web Search



Language



Decision

Sophisticated pretrained models

Infuse apps with powerful, pre-trained AI models

Customize easily and tailor to your needs



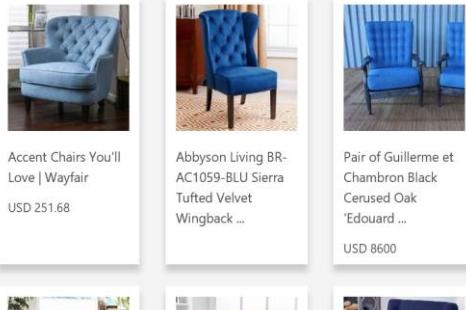
Vision



[Computer Vision](#) | [Video Indexer](#) | [Face](#) | [Content Moderator](#)



Bing
Search



Accent Chairs You'll
Love | Wayfair
USD 251.68

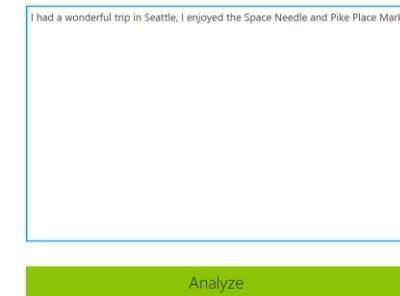
Abbyson Living BR-
AC1059-BLU Sierra
Tufted Velvet
Wingback ...

Pair of Guillerme et
Chambron Black
Cerused Oak
'Edouard ...
USD 8600

[Big Web Search](#) | [Video Search](#) | [Image Search](#) | [Visual Search](#) | [Entity Search](#) |
[News Search](#) | [Autosuggest](#)



Language



[Text Analytics](#) | [Spell Check](#) | [Language Understanding](#) | [Text Translation](#) | [QnA Maker](#)

Analyzed text

JSON

Languages:

English (confidence: 100 %)

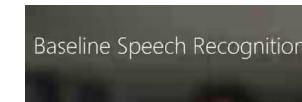
Key Phrases:

Sentiment:

73 %

Linked Entities (Preview):

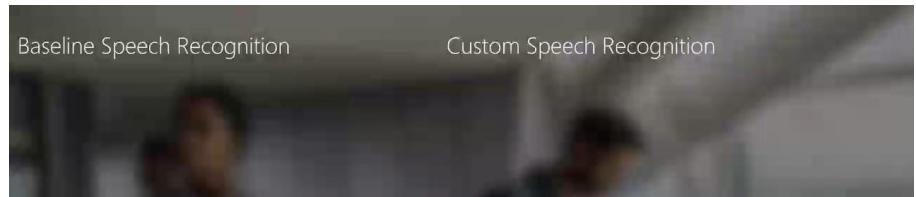
a



Custom Speech Recognition



Speech



[Speech to Text](#) | [Text to Speech](#) | [Speech Translation](#) | [Speaker Recognition](#)



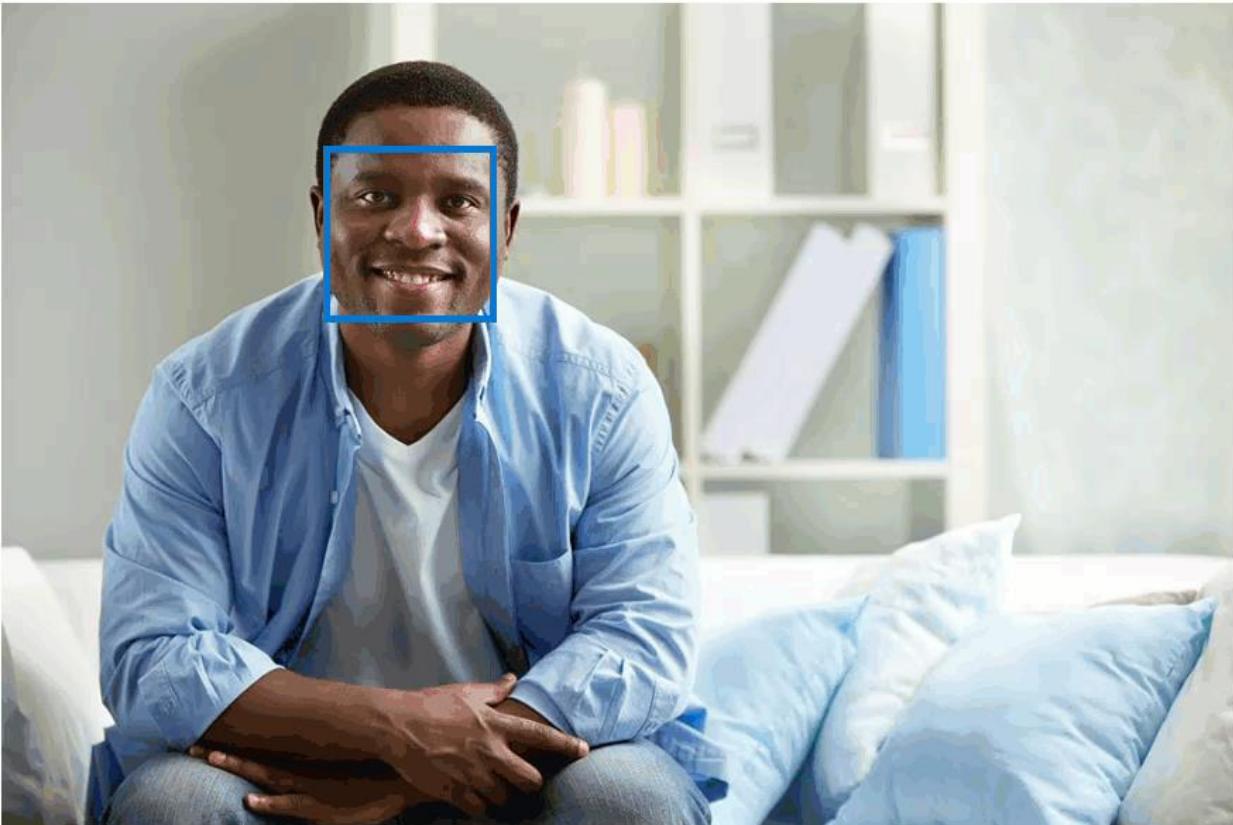
Vision

From faces to feelings, allow your apps to understand images and video

Computer Vision | Video Indexer | Custom Vision |
Face | Content Moderator



Face



```
},
"smile": 1.0,
"headPose": {
  "pitch": 0.0,
  "roll": 3.2,
  "yaw": 11.4
},
"gender": "male",
"age": 30.0,
"facialHair": {
  "moustache": 0.4,
  "beard": 0.4,
  "sideburns": 0.4
},
"glasses": "NoGlasses",
"makeup": {
  "eyeMakeup": false,
  "lipMakeup": false
},
"emotion": {
  "anger": 0.0,
  "contempt": 0.0,
  "disgust": 0.0,
  "fear": 0.0
}
```

Face



Face detection

Detect faces and their attributes within an image

Face verification

Check if two faces belong to the same person

Similar face searching

Find similar faces within a set of images

Face grouping

Organize many faces into groups

Face identification

Search which person a face belongs to



Face

{"categories": [{"name": "people_group", "score": 0.640625, "detail": {"celebrities": [{"name": "**Sylvester Stallone**", "confidence": 0.9281664490699768, "faceRectangle": {"left": 414, "top": 182, "width": 181, "height": 181}}, {"name": "**Talia Shire**", "confidence": 0.9841282963752747, "faceRectangle": {"left": 326, "top": 321, "width": 170, "height": 170}}]}]}, "color": {"dominantColorForeground": "Yellow", "dominantColorBackground": "Grey", "dominantColors": ["Grey", "Yellow", "Black"], "accentColor": "B6151E", "isBwImg": false, "isBWImg": false}, "description": {"tags": ["person", "yellow", "wearing", "woman", "holding", "man", "red", "teddy", "posing", "young", "stuffed", "dressed", "bear", "standing", "shirt", "outfit", "neck", "phone"], "captions": [{"text": "**Talia Shire, Sylvester Stallone are posing for a picture"}]}, "confidence": 0.5874752976897964}], "requestId": "c92e3c6e-3db8-45ad-b1d7-434e8e2a3c6a", "metadata": {"width": 867, "height": 920, "format": "Jpeg"}}}**

Identification

Talia Shire, Sylvester Stallone



Emotion

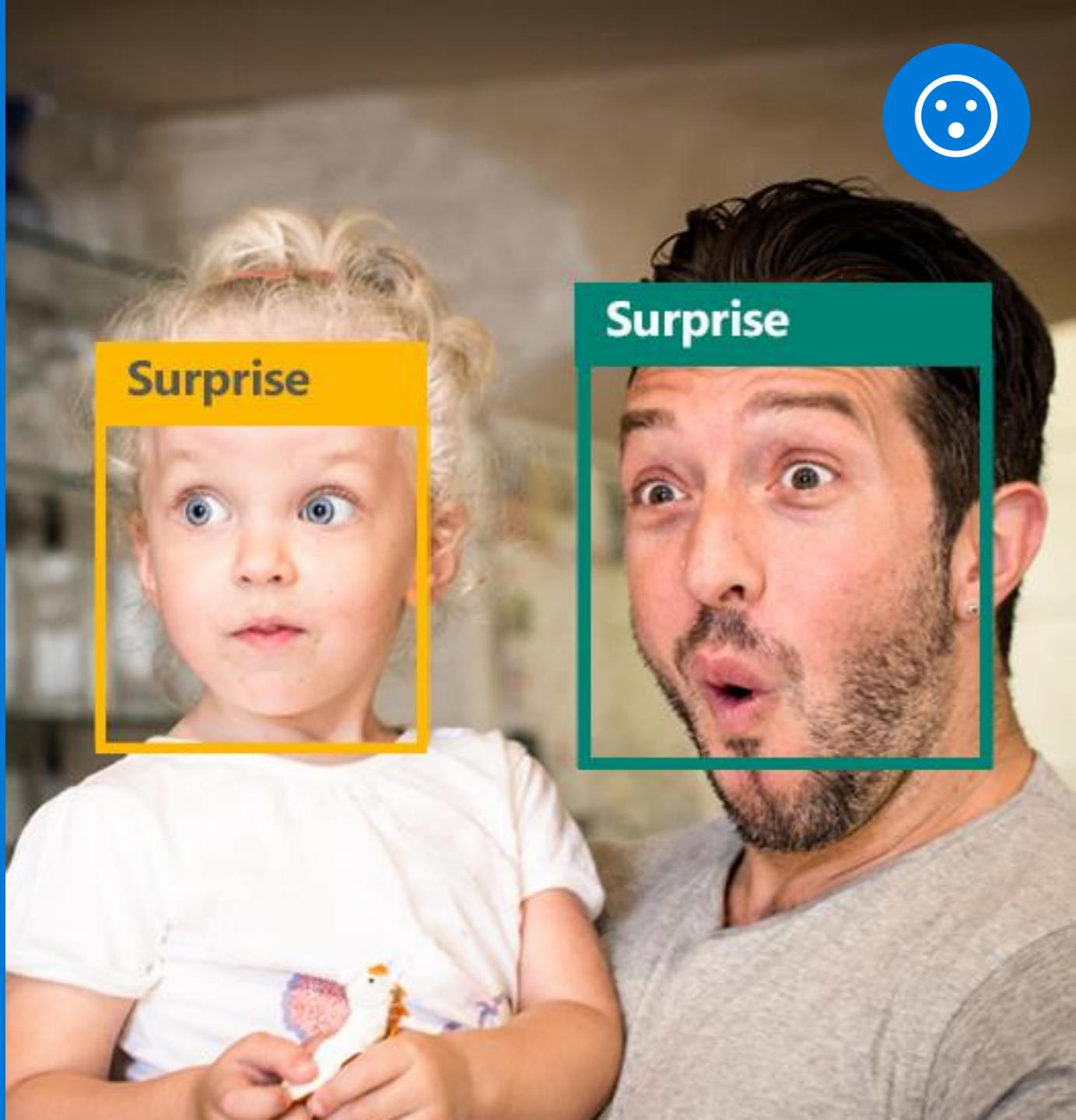


Face detection

```
"faceRectangle": {"width": 193,  
                 "height": 193,  
                 "left": 326,  
                 "top": 204} ...
```

Emotion scores

```
"scores": { "anger": 5.182241e-8,  
            "contempt": 0.0000242813,  
            "disgust": 5.621025e-7,  
            "fear": 0.00115027453,  
            "happiness": 1.06114619e-8,  
            "neutral": 0.003540177,  
            "sadness": 9.30888746e-7,  
            "surprise": 0.9952837}
```



Computer Vision



| FEATURE | VALUE |
|--------------|--|
| NAME: | |
| Description | { "tags": ["train", "platform", "station", "building", "indoor", "subway", "track", "walking", "waiting", "pulling", "board", "people", "man", "luggage", "standing", "holding", "large", "woman", "yellow", "suitcase"], "captions": [{ "text": "people waiting at a train station", "confidence": 0.833099365 }] } |
| Tags | [{ "name": "train", "confidence": 0.9975446 }, { "name": "platform", "confidence": 0.995543063 }, { "name": "station", "confidence": 0.9798007 }, { "name": "indoor", "confidence": 0.927719653 }, { "name": "subway", "confidence": 0.838939846 }, { "name": "pulling", "confidence": 0.431715637 }] |
| Image format | "Jpeg" |

Computer Vision

Analyze an image

Understand content within an image

OCR

Detect and recognize words within an image

Generate thumbnail

Scale and crop images, while retaining key content

Recognize celebrities

Thanks to domain-specific models, ability to recognize 200K celebrities from business, politics, sports, and entertainment around the world



Analyze image



Type of image

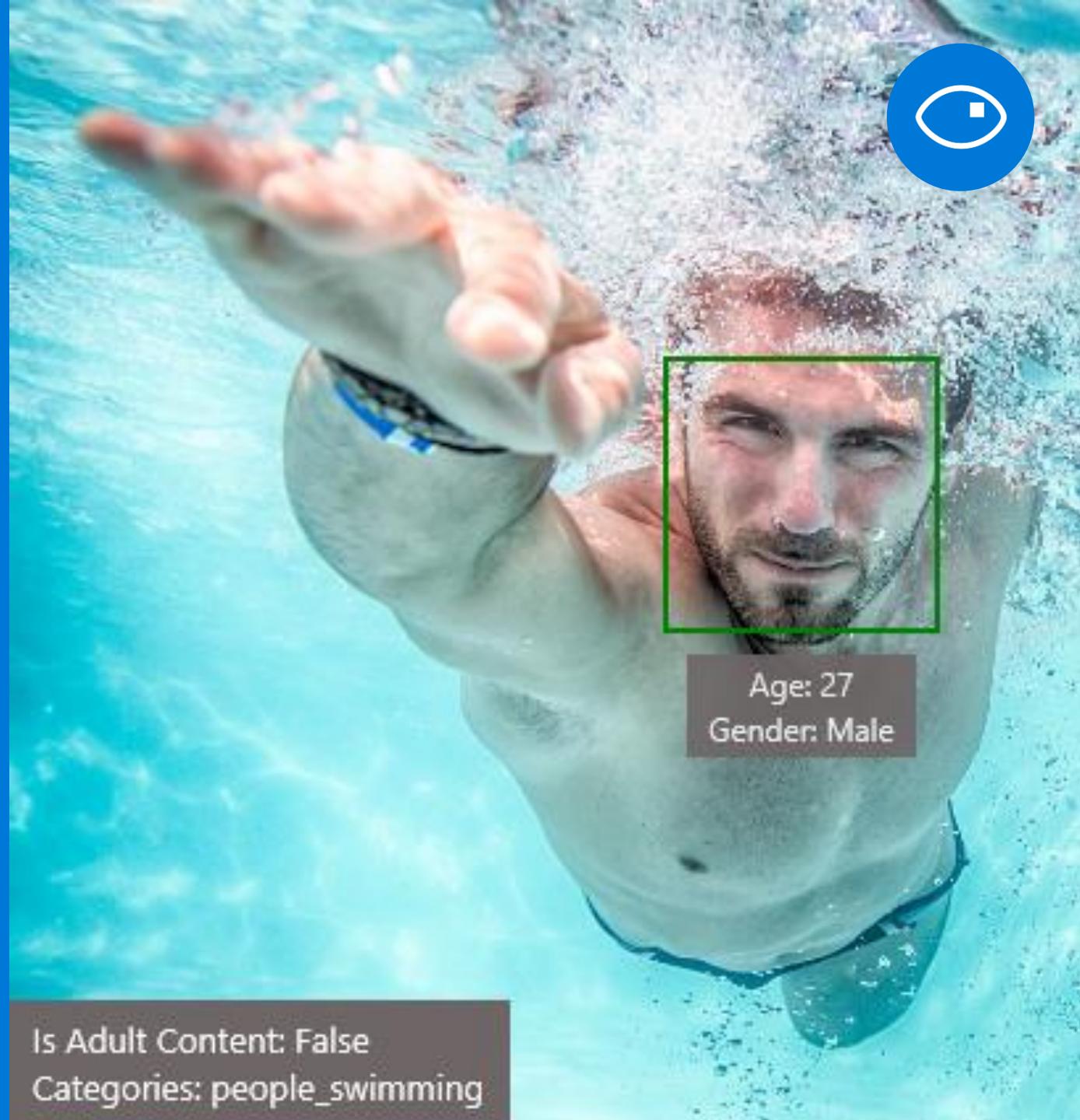
| | |
|---------------------|--------------------|
| Clip Art Type | 0 Non-clipart |
| Line Drawing Type | 0 Non-Line Drawing |
| Black & White Image | False |

Content of image

| | |
|---------------|--|
| Categories | [{"name": "people_swimming", "score": 0.099609375}] |
| Adult Content | False |
| Adult Score | 0.18533889949321747 |
| Faces | [{"age": 27, "gender": "Male", "faceRectangle": {"left": 472, "top": 258, "width": 199, "height": 199}}] |

Image colors

| | |
|---------------------------|-------|
| Dominant Color Background | White |
| Dominant Color Foreground | Grey |
| Dominant Colors | White |
| Accent Color | |



OCR

JSON:

```
{  
  "language": "en",  
  "orientation": "Up",  
  "regions": [  
    {  
      "boundingBox": "41,77,918,440",  
      "lines": [  
        {  
          "boundingBox": "41,77,723,89",  
          "words": [  
            {  
              "boundingBox": "41,102,225,64",  
              "text": "LIFE"  
            },  
            {  
              "boundingBox": "356,89,94,62",  
              "text": "IS"  
            },  
            {  
              "boundingBox": "539,77,225,64",  
              "text": "LIKE"  
            }  
          ...  
        ]  
      ]  
    }  
  ]  
}
```



Smart thumbnail

Smart cropping **off**



Ink Recognizer

Ink Recognizer provides applications with the ability to recognize digital handwriting, common shapes, and the layout of inked documents.

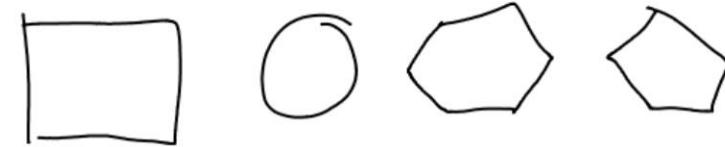
Through an API call, you can leverage Ink Recognizer to create experiences that combine the benefits of physical pen and paper with the best of the digital.

Preview status.



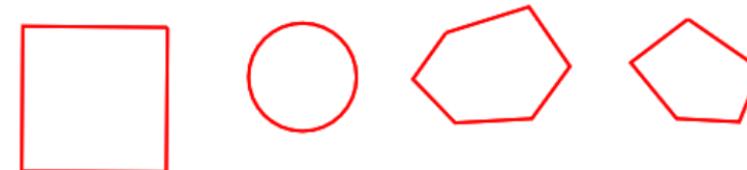
Ink Recognizer Cognitive Service Supports

- Written text
- Simple shapes
- Mixed contents



Ink Recognizer Cognitive Service Supports

- Written text
- Simple shapes
- Mixed contents



Form Recognizer

Form Recognizer uses advanced machine learning technology to quickly and more accurately extract text and data from business's forms and documents.

With container support, this service can run on-premises and in the cloud.

Automate information extraction quickly and tailor to specific content, with only 5 samples, and no manual labeling.

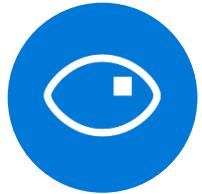
The screenshot shows a mobile application interface for 'BlueInvoice'. At the top, it displays the title 'BlueInvoice' and the page number '1 / 1'. Below the header, there is a section for 'Contoso' with contact details: Bill To: Contoso, Ltd; Phone: 432-555-0189; Fax: 432-555-0123; Invoice #: 3-456-2; Invoice Date: 4/14/2019; Email: contoso@example.com. A note below states 'Invoice For: Project 2'. To the right of the contact info are four circular buttons with icons: a left arrow, a right arrow, a plus sign, and a minus sign. Below this section is a table with 9 rows of data, each representing an invoice item. The columns are Item #, Description, Qty, Unit Price, Discount, and Price. The data is as follows:

| Item # | Description | Qty | Unit Price | Discount | Price |
|--------|------------------------|-----|------------|----------|-----------|
| 24567 | Invoice 3-456-2 Data 1 | 39 | \$ 5.00 | \$ - | \$ 195.00 |
| 24568 | Invoice 3-456-2 Data 2 | 40 | \$ 4.00 | \$ 0.00 | \$ 160.00 |
| 24569 | Invoice 3-456-2 Data 3 | 30 | \$ 6.00 | \$ 7.00 | \$ 170.00 |
| 24570 | Invoice 3-456-2 Data 4 | 40 | \$ 7.00 | \$ - | \$ 280.00 |
| 24571 | Invoice 3-456-2 Data 5 | 10 | \$ 4.00 | \$ - | \$ 40.00 |
| 24572 | Invoice 3-456-2 Data 6 | 5 | \$ 8.00 | \$ - | \$ 40.00 |
| 24573 | Invoice 3-456-2 Data 7 | 70 | \$ 6.00 | \$ - | \$ 420.00 |
| 24574 | Invoice 3-456-2 Data 8 | 25 | \$ 4.00 | \$ - | \$ 100.00 |
| 24575 | Invoice 3-456-2 Data 9 | 5 | \$ 7.00 | \$ 3.00 | \$ 32.00 |

The screenshot shows the Azure portal interface with a preview of the JSON output from the Form Recognizer. At the top, there are two tabs: 'Preview' (which is selected) and 'JSON'. Below the tabs, the JSON data is displayed in a scrollable list:

```
Bill To: Contoso, Ltd
Phone: 432-555-0189
Invoice #: 3-456-2
Fax: 432-555-0123
Invoice Date: 4/14/2019
Email: contoso@example.com
Invoice For: Project 2
Invoice Subtotal: 2,014.00
Tax Rate: 8.75%
Sales Tax: 176.23
Other: 0
```

<https://azure.microsoft.com/en-us/services/cognitive-services/form-recognizer/>



Content Moderator

Machine-assisted moderation of text and images, augmented with human review tools

Image moderation

Machine-learning based classifiers, custom blacklists, and Optical Character Recognition (OCR)

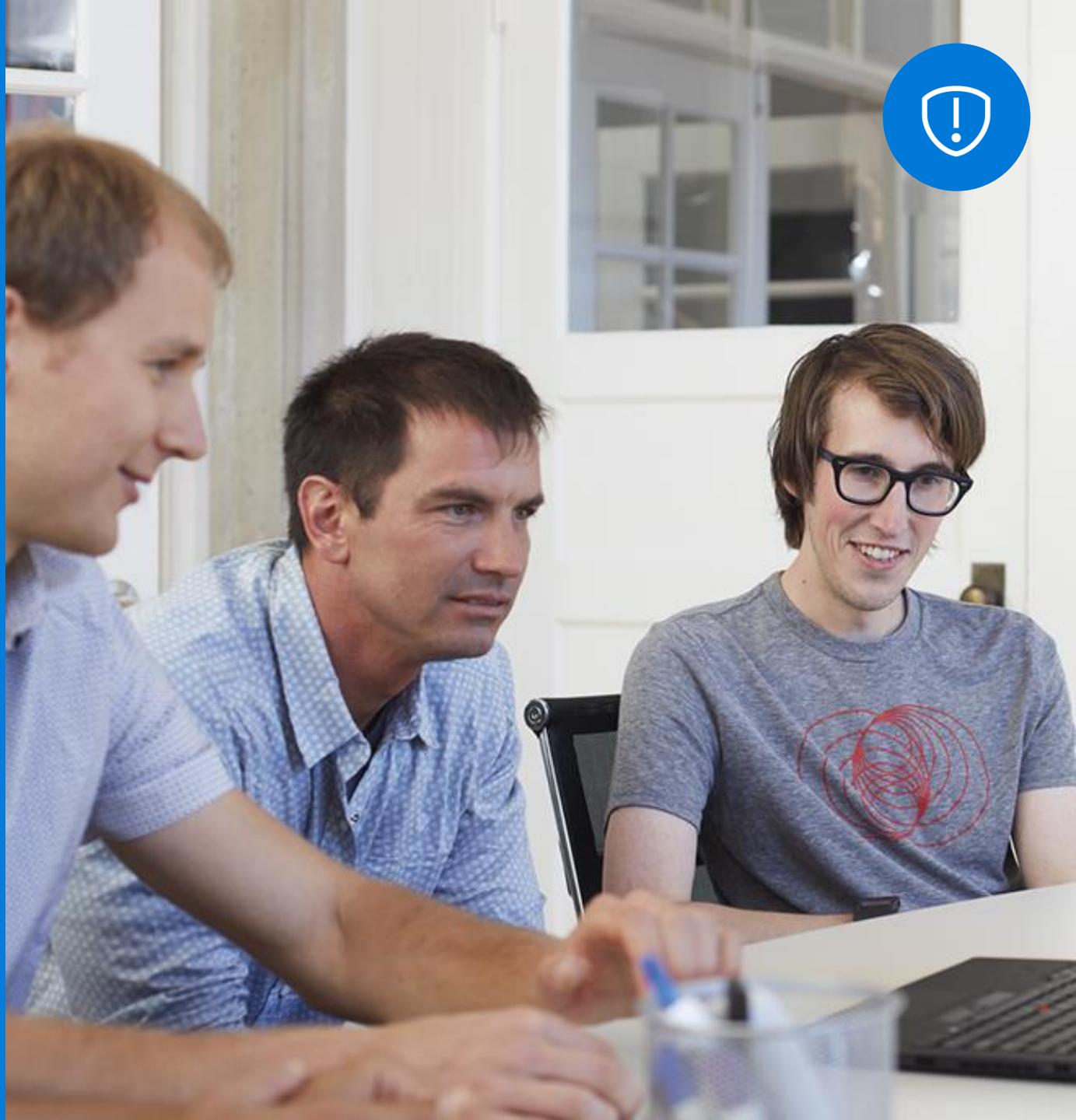
Text moderation

Helps you detect potential profanity in more than 100 languages and match text against your custom lists automatically.

Identification of possible Personally Identifiable Information (PII)

Video moderation (in Azure Media Services)

Scoring of possible adult content in videos.
Video moderation is currently deployed in preview on Azure Media Services



Custom Vision

A customizable web service that learns to recognize specific content in imagery

Upload images

Upload your own labeled images, or use Custom Vision Service to quickly tag any unlabeled images

Train

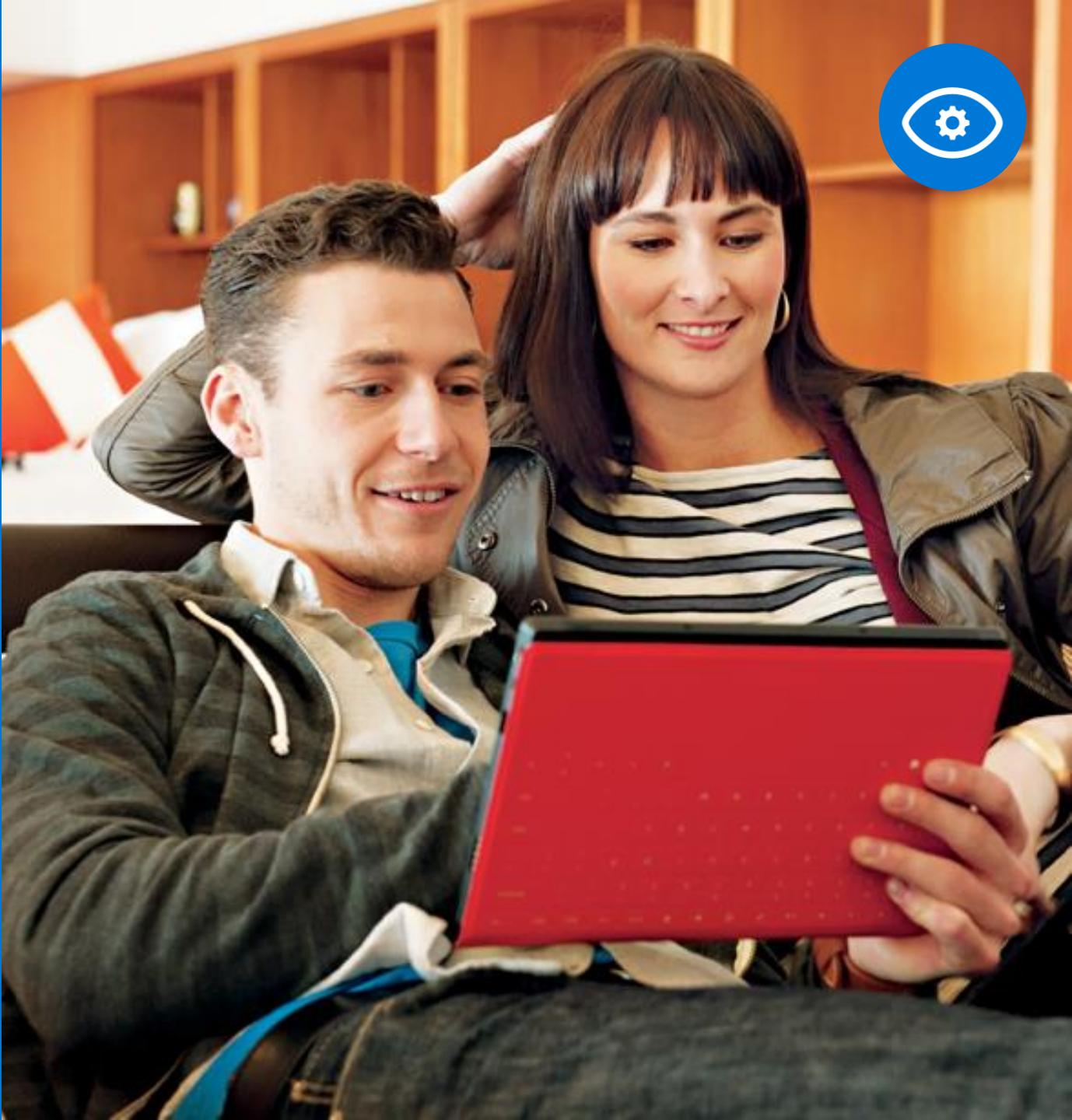
Use your labeled images to teach Custom Vision Service the concepts you want it to learn

Evaluate

Use simple REST API calls to quickly tag images with your new custom computer vision model

Active learning

Images evaluated through your custom vision model become part of a feedback loop you can use to keep improving your classifier



Custom Vision

Customize

Design your own state-of-the-art models for unique use cases

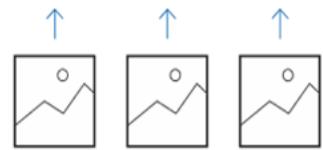
Upload

Use labeled images to quickly train and update your models

Export

Run models on a device or as a Docker container with just one click

www.customvision.ai



Upload Images

Bring your own labeled images, or use Custom Vision to quickly add tags to any unlabeled images.



Train

Use your labeled images to teach Custom Vision the concepts you care about.



Evaluate

Use simple REST API calls to quickly tag images with your new custom computer vision model.

Custom Vision for categorisation

Screenshot of the Microsoft Custom Vision Studio interface showing a car categorisation task.

Top Bar: Voitures, Training Images (selected), Performance, Predictions, Train, Quick Test, Help, User Profile.

Left Sidebar: Filter, Iteration (Workspace), Tags (Tagged selected, Untagged), Showing: all tagged images, Search For Tags: (empty), Tags list: BMW 20, Ferrari 20, Mercedes 20, Peugeot 20, Renault 20, Rolls 20, Tesla 20.

Center Content: Training Images grid showing nine car images for categorisation. The first image is a blue BMW sedan.

Right Sidebar: Enter Image URL, or, Browse local files, File formats accepted: jpg, png, bmp, File size should not exceed: 4mb, Using model trained in, Iteration (Iteration 4 selected).

Predictions Panel (highlighted with a red box):

| Tag | Probability |
|---------|-------------|
| Renault | 99.8% |
| BMW | 22.4% |
| Peugeot | 4.4% |
| Tesla | 1.7% |

Custom Vision for Object Detection



Car Driver

Training Images Performance

Filter Add images Delete Select all

Iteration Workspace

Tags Tagged Untagged

Showing: all tagged images

Search For Tags:

- Attention issue 20 ...
- Calling 20 ...
- Drinking 20 ...
- Not viewing the... 20 ...
- OK 20 ...
- Phone manipulation 20 ...

Regions Shown Undo Changes

My Objects Phone manipulat... X

Predicted Object Filter Probability Threshold: 15% ⓘ

Predictions
Predictions are shown in red

| Tag | Probability |
|--------------------|-------------|
| Phone manipulation | 83.4% |
| Attention issue | 64.6% |
| Phone manipulation | 16.8% |

<https://www.kaggle.com/c/state-farm-distracted-driver-detection>

Video Indexer

Unlock video insights

Upload your video and go

Start turning your video into insights right away.

Make your content more discoverable

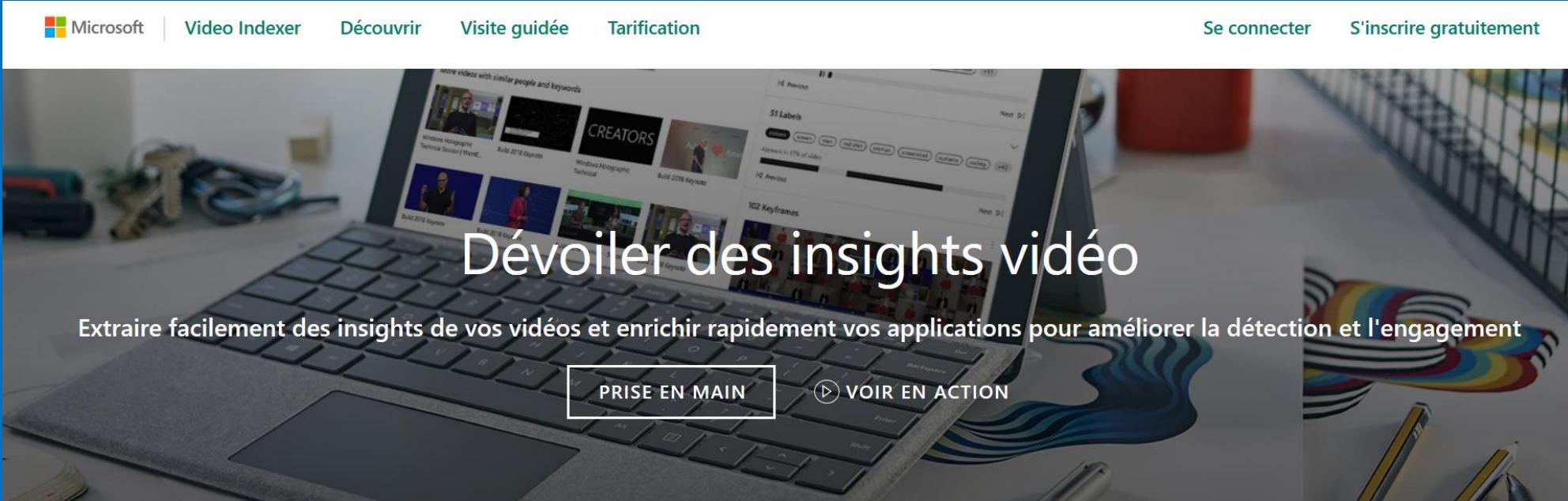
Enhance content discovery experiences such as search results by detecting spoken words, faces, characters, and emotions

Improve engagement with your video

Metadata extracted by Video Indexer can be used to build powerful engagement experiences with recommendations, highlight clips, and interactive videos



Video Indexer – www.videoindexer.ai



Microsoft | [Video Indexer](#) | [Découvrir](#) | [Visite guidée](#) | [Tarification](#) | [Se connecter](#) | [S'inscrire gratuitement](#)

Dévoiler des insights vidéo

Extraire facilement des insights de vos vidéos et enrichir rapidement vos applications pour améliorer la détection et l'engagement

[PRISE EN MAIN](#) | [VOIR EN ACTION](#)

2019 PRODUCT of the YEAR NABSHOW

[2019 NAB Show Product of the Year Award winner](#)

PETER WAYNE GOLDEN BaM AWARDS WINNER 2018

[2018 IABM Peter Wayne Golden BaM Award® for Design and Innovation winner](#)

BaM AWARDS 2018 WINNER

[2018 BaM AWARD® winner in the Manage category](#)

Video Indexer s'appuie sur des technologies d'intelligence artificielle multimédias pour faciliter l'extraction d'insights à partir de vidéos. Propulsez de nouvelles formes de détection de contenu telles que la recherche de mots énoncés, de visages, de personnages et d'émotions. Enrichissez vos applications avec des insights vidéo incorporés pour stimuler l'engagement utilisateur.

Hear and speak to your users by filtering noise, identifying speakers, and understanding intent



Speech

Unified Speech service |
Speech to Text | Text to Speech | Speech Translation
Speaker Recognition

Baseline Speech Recognition

"Show me all flights from Pittsburgh to Boston **is directly** connecting that **Martin pitch burgh** after 7."

Custom Speech Recognition

"Show me all flights from Pittsburgh to Boston **both directed** connecting that **depart Pittsburgh** after 7 PM."

Unified Speech



Combine speech recognition, text-to-speech, customized voice models, and translation service

Speech to text

Convert continuous human speech to text that can be used as inputs

Text to speech

Convert text to audio files of natural-sounding speech

Speech translation

Use text or speech to provide translations of speech to other languages



Speaker Recognition

Speaker verification

Check if two voices are the same

Speaker identification

Identify who is speaking



Bing Speech

Voice recognition (speech to text)

Converts spoken audio to text

Voice output (text to speech)

Synthesize audio from text

Speech intent recognition

Convert spoken audio to intent



Custom Speech

Customize both language and acoustic models

Tailor speech recognition to your app and environment



Translator Speech



Facilitate end-to-end, real-time speech translations in over 60 languages

Transcribe and translate

Optimize translations for real-life conversations

Customize

Personalize speech recognition, translations, and speech-to-text to your specific domain or scenario



Mc Donald's usecase

Speech to Text to POS

Fast food giant McDonald's is using cognitive technology to convert drive-through orders to text that can be fed directly into the outlet's point-of-sale system.

<https://www.youtube.com/watch?v=KxvU5I2w210>



The screenshot shows a Microsoft Cognitive Services application window titled "Future of Order Taking". The input file is "drivethru.wav". A blue button labeled "Start Recognition" is visible. The text input field contains the order: "yes I would like 2 happy meals 01 cheeseburger and one chicken mcnuggets both with fries and apples one with a chocolate milk in one with a small orange juice". To the right, the recognized text is displayed under the heading "Order:" followed by two entries: "happy meal [n=1] [main=chburger] [side=fries,apples] [drink=choc milk]" and "happy meal [n=1] [main=mcnuggets] [side=fries,apples]".

Presentation Translator for PowerPoint

<https://translator.microsoft.com/help/presentation-translator/>



A screenshot of the Microsoft Translator for Education website. The top navigation bar includes links for Conversation, Apps, For business, Help (which is bolded), and Microsoft Translator for Education. Below the navigation is a blurred background image of two people in an office setting. A dark overlay box in the center contains the text "Presentation Translator for PowerPoint" and a green "DOWNLOAD NOW" button.

Translator



<https://translatormicrosoft.com>

The screenshot shows the Microsoft Translator website. At the top, there's a navigation bar with the Microsoft logo and links for "Translator", "Texte", "Conversation", "Apps", "Pour les entreprises", and "Aide". Below the navigation, there's a blurred background image of a person in a library setting. In the center, there are two white user icons with sound waves above them. Below these icons, the text "Brisez la barrière de la langue" is displayed. Underneath this, a description reads: "Conversations traduites entre différents appareils, pour des discussions en tête-à-tête et pour des interactions en plus grands groupes." To the right, there's a sidebar with buttons for "Rejoindre conversation" and "Démarrer conversation", and social media integration links for Windows, Facebook, and Google+. At the bottom right, there are links for "Confidentialité et cookies" and "Accord sur les services".

Microsoft

Translator Texte Conversation Apps Pour les entreprises Aide

Rejoindre conversation Démarrer conversation

Connectez-vous avec l'un des services suivants pour commencer ?

Windows f G+

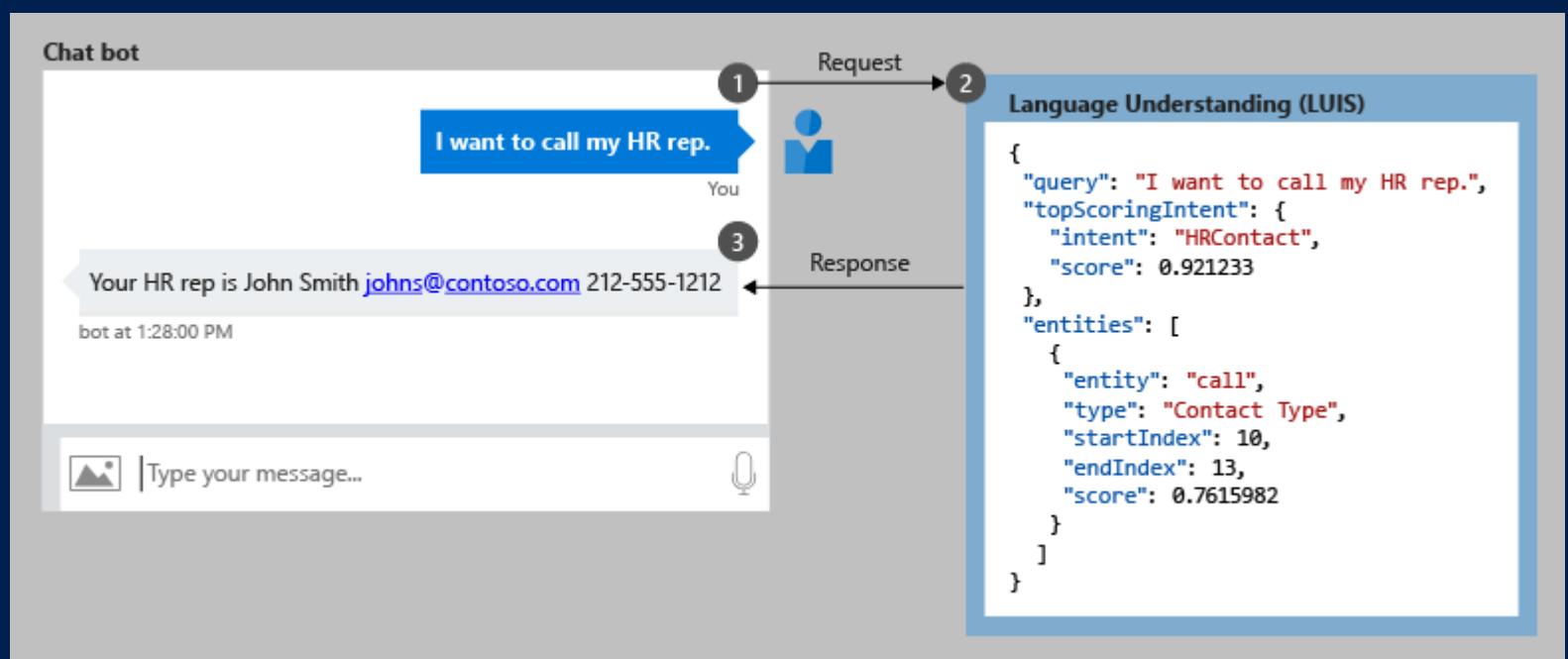
Confidentialité et cookies | Accord sur les services

99

Language

Process text and learn how to recognize what users want

Text Analytics | Bing Spell Check | Language Understanding | Translator Text | Q&A Maker



Text Analytics



Sentiment analysis

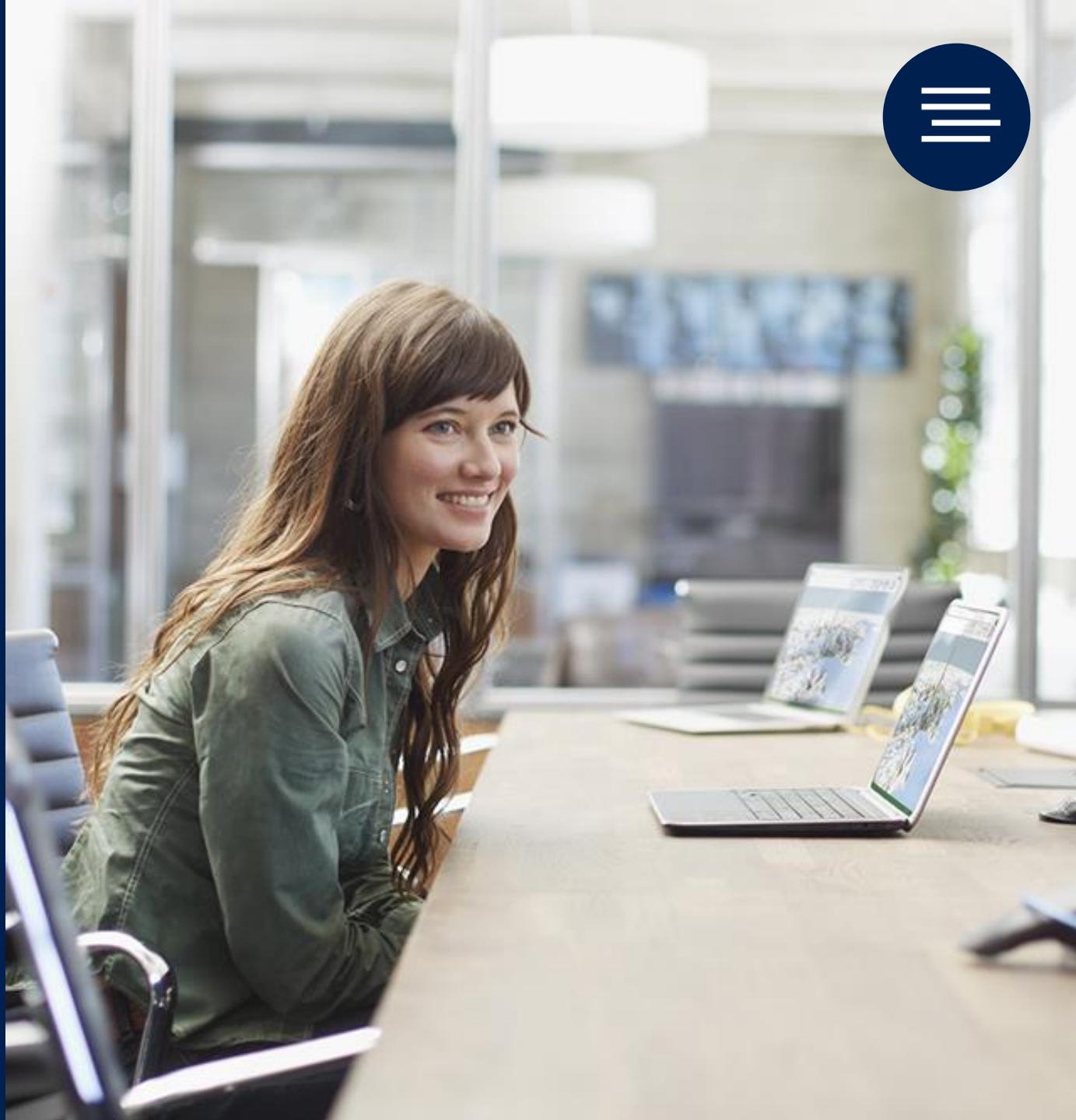
Understand if a record has positive or negative sentiment

Key phrase extraction

Extract key phrases from a piece of text, and retrieve topics

Language detection

Identify the language, 120 supported languages



Text Analytics

Analyze

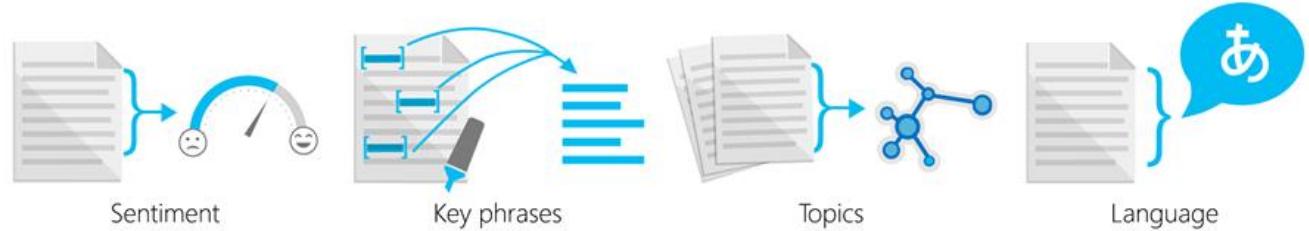
Generate a sentiment score using unique classification techniques

Detect

Return detected language and numeric scores to indicate certainty

Extract

Use Natural Language Processing to denote key talking points



I had a wonderful trip to Seattle and enjoyed seeing the Space Needle!

Analyzed text JSON

LANGUAGES: English (confidence: 100 %)

KEY PHRASES: Seattle, wonderful trip, Space Needle

SENTIMENT: 98 %

ENTITIES: Seattle [Location]
Space Needle [Location]

NAMED ENTITY RECOGNITION: I had a wonderful trip to [Seattle](#) and enjoyed seeing the [Space Needle](#)!

Analyze

Bing Spell Check

State-of-the-art cloud-based spelling algorithms

Recognizes a wide variety of spelling errors

Recognize name errors and homonyms in context

Difficult-to-spot errors that use the context of the words around them

Updates over time

Support for new brands and coined expressions as they emerge



Translator Text

Conduct real-time translation
with a REST API call

Automatic detection

Accurately detect specific languages
on any text string

Transliterate

Translate and display text
in different language alphabets

Speech translation

Build custom NTM models that better
handle writing styles and expressions



Language Understanding Intelligent Service

**Understand what
your users are saying**

Use pre-built Bing and Cortana
models or create your own



Language Understanding Models

“News about
flight delays”



```
{  
  "entities": [  
    {  
      "entity": "flight_delays",  
      "type": "Topic"  
    }  
  ],  
  "intents": [  
    {  
      "intent": "FindNews",  
      "score": 0.99853384  
    },  
    {  
      "intent": "None",  
      "score": 0.07289317  
    },  
    {  
      "intent": "ReadNews",  
      "score": 0.0167122427  
    },  
    {  
      "intent": "ShareNews",  
      "score": 1.0919299E-06  
    }  
  ]  
}
```

A large blue circle in the top right corner contains the text "{ }".

My apps

My keys

Docs

Pricing

Support

About



Pizza Bot

Version: 0.1

Settings

Dashboard

Intents

Entities

Prebuilt domains PREVIEW

Features

Train & Test

Publish App

[← Back to App list](#)

Test your application

Use this tool to test the current and published versions of your application, to check if you are progressing on the right track ... [Learn more](#)

Train Application

Last train: Jan 18, 2017 2:41:01 PM | Last publish: Jan 18, 2017 2:41:25 PM

[Interactive Testing](#) [Batch Testing](#) Enable published model

Type a test utterance & press Enter

i'd like a [\$Size] pie with [\$Toppings]

i need a [\$Size] pizza with [\$Toppings] and tomatoes

i need a [\$Size] pizza

Labels view (Ctrl+E) Entities

Current version results

Top scoring intent
Order-Pizza (0.88)

Other intents
None (0.06) Cancel (0)

QnA Maker

Build, train, and publish simple question and answer bots

QnA extraction

Use existing content to respond to users naturally

Expanded response

Integrate with other APIs to expand question interpretations

Train and improve

Add and remove QnA pairs to improve your bot's knowledge



QnA Maker

Update

Manage knowledge base content and settings

Analyze

Monitor analytics and feedback

Publish

Deploy endpoint in a bot

Test

Verify query matching ranking

Who should use QnAMaker?



Answer:

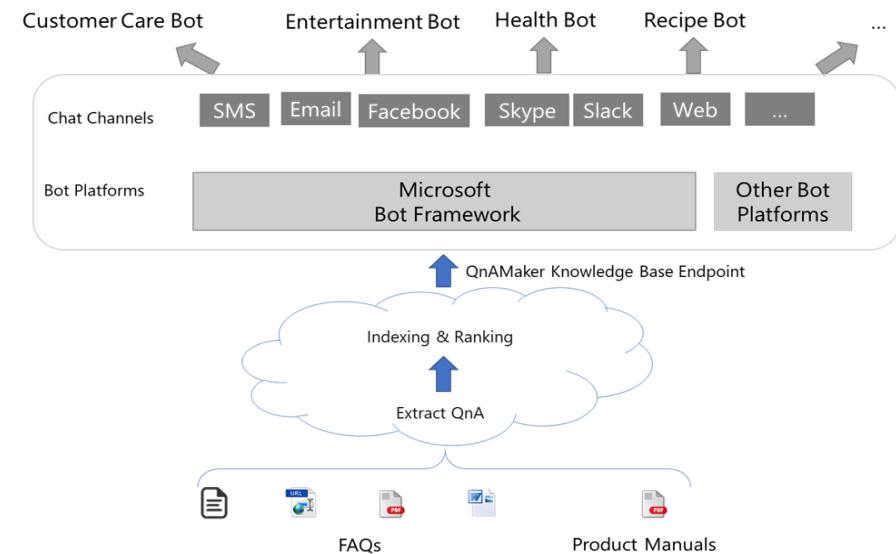
QnA Maker provides an FAQ data source that you can query from your bot or application. Although developers will find this useful, content owners will especially benefit from this tool. QnA Maker is a completely no-code way of managing the content that powers your bot or application.

Score:

100

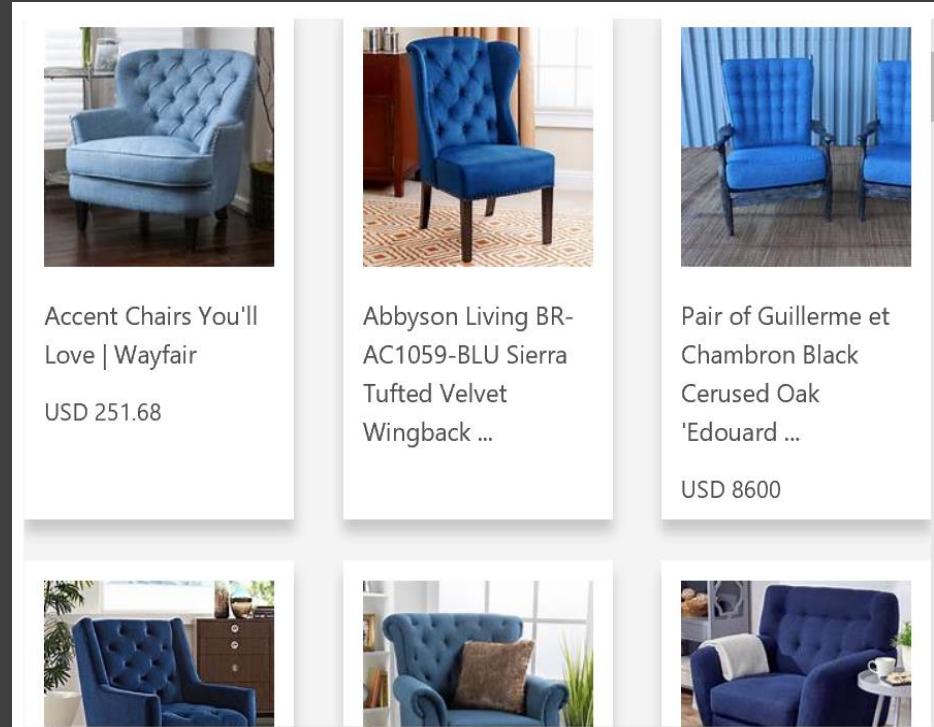
Matched questions:

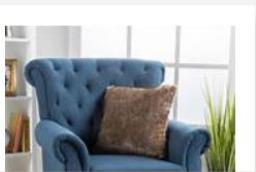
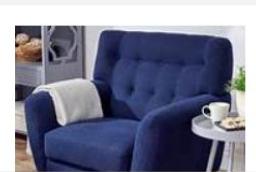
- who is the target audience for the qna maker tool
- who should use qnamaker



Access billions of web pages, images, videos, and news with the power of Bing APIs

Bing Web Search | Bing Custom Search | Bing Video Search |
Bing Image Search | Bing Visual Search | Bing Entity Search |
Bing News Search | Bing Autosuggest | Bing Statistics add-in

A grid of six images showing different styles of blue upholstered chairs, likely results from a search query.

| | | |
|--|---|---|
|  Accent Chairs You'll Love Wayfair USD 251.68 |  Abbyson Living BR-AC1059-BLU Sierra Tufted Velvet Wingback ... |  Pair of Guillerme et Chambron Black Cerused Oak 'Edouard ... USD 8600 |
|  |  |  |

Bing Web Search

Quickly narrow your search results by market, freshness, result type, search category, and more

Submit a customized query to return the most accurate results for your location

SDOT Bike Web Map - Transportation | seattle.gov
www.seattle.gov/transportation/projects-and-programs/programs/bike...
From in-street Sharrows to fully separated Protected Bike Lanes and Multi-Use Trails, ... Seattle Department of Transportation PO Box 34996 Seattle, WA 98124-4996

Name "Online Bicycle Map",

URL "<http://www.seattle.gov/transportation/projects-and-programs/programs/bike-program/online-bike-map>"

Date Accessed: "2018-05-19T07:32:00Z",

About "Transportation in Seattle"

seattle bike trails



Market

en-us (English-United States)

SafeSearch

Strict

Freshness

(unspecified)

SDOT Bike Web Map - Transportation | seattle.gov

www.seattle.gov/transportation/projects-and-programs/programs/bike...

From in-street Sharrows to fully separated Protected Bike Lanes and Multi-Use Trails, ... Seattle Department of Transportation PO Box 34996 Seattle, WA 98124-4996

Seattle Bike Trails - Seattle Outdoors Information ...

www.seattleoutdoorsinfo.com/.../seattle-biking/seattle-bike-trails

Current information about hiking, camping, biking, winter sports, and just about anything that involves exploring the Pacific Northwest, with special focus on Seattle.

Seattle Trails & Detailed Trail Maps | TrailLink.com

<https://www.traillink.com/city/seattle-wa-trails>

Looking for the best trails around Seattle? Find the top rated trails in Seattle, whether you're looking an easy walking path or a long bike trail, you'll find what you're looking for. Click on a trail below to find trail descriptions, trail maps, photos, and reviews ...

Seattle , WA Bike Trails - Maps of Bike Routes in Seattle , WA

www.mapmyride.com/us/seattle-wa

Find over 26366 bike trails in Seattle . Cycling routes, maps, events, races, & club rides in Seattle , WA. Track & analyze your rides with MapMyRIDE!

WSDOT - Maps of Local Bicycle Paths and Accessible Trails

<https://www.wsdot.wa.gov/bike/localmaps.htm>

Bing Custom Search

Identify

Utilize past search history to pinpoint on-topic or relevant sites and images

Provide

Expand the scope of search domains to define automatic query and search suggestions

Apply

Use Bing rankings to help users achieve the best automated results

Deliver

Add intelligent query suggestions and adjust search parameters to deliver relevant results and access unique usage insights

Custom Config

All

new movies



New Movies in Theaters | Moviefone

<https://www.moviefone.com/new-movie-releases>

Movie, TV, and pop culture fun for the whole family.

New Movies, Movie Trailers, TV, Digital, Blu-ray & Video ...

www.comingsoon.net

Check out the latest new movies coming soon to theaters & video games to come to market. Read latest buzz & watch exclusive trailers!

Snagfilms on the App Store - itunes.apple.com

<https://itunes.apple.com/us/app/snagfilms/id404906625>

Watch FREE FULL-LENGTH Movies and TV Shows streamed to your iPhone or iPad ! Over 5,000 independent movies, TV shows and documentaries. Over a dozen categories from adrenaline-filled action-adventure films to hilarious comedy and critically acclaimed documentaries.

Free Movies - Apps on Google Play

<https://play.google.com/store/apps/details?id=freemoviesapp.com>

Free Movies application connects you do a database of over 5,000 movies you can watch on your Android smartphone / tablet computer for free ... New ...

Get Movies & TV - Microsoft Store

<https://www.microsoft.com/en-us/store/p/movies-tv/9wzdncrfj3p2>

Download this app from Microsoft Store for Windows 10, Windows 8.1, Windows 10 Mobile, Windows Phone 8.1, Windows Phone 8, HoloLens, Xbox One. See screenshots, read the latest customer reviews, and compare ratings for Movies & TV.

Market

en-us (English-United States)

SafeSearch

Strict

Bing Video Search

Search results provide useful metadata including creator, encoding format, video length, view count, video description, and simplified paging

Video



Publish Date
"2016-09-20T20:09:26",

Description
"Cats are awesome, and super funny too! Who doesn't like cats and kittens? They make us laugh and happy!"

Content Creator
"Tiger Productions"

Publisher
"YouTube"

Market

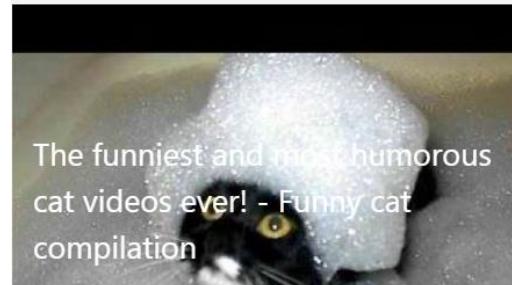
en-us (English-United States)

SafeSearch

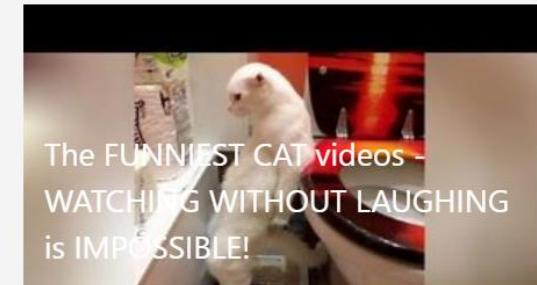
Strict

Freshness

(unspecified)



The funniest and most humorous
cat videos ever! - Funny cat
compilation



The FUNNIEST CAT videos -
WATCHING WITHOUT LAUGHING
is IMPOSSIBLE!



NINJA CATS! There's absolutely
NOTHING MORE FUNNY! -
Impossible TRY NOT TO LAUGH
compilation



CRAZY CATS vs PAPER, get ready
for SUPER LAUGHING! - Funny
CAT VIDEOS



Are ORANGE CATS the FUNNIEST
CATS? - Super FUNNY
COMPILATION that will make you
DIE LAUGHING

Bing Image Search

Discover new sorting and filtering options that simplify specific results and include thumbnails, full image URLs, publishing info, and image metadata

**Name**

"Desktop HD Wallpapers: 3D Nature Wallpapers",

Date Published

"2012-12-03T12:00:00",

Content Size

"595588 B",

Width 1600,

Height 914,

nature wallpapers

**Market**

en-us (English-United States)

SafeSearch

Strict

Freshness

(unspecified)

Bing Visual Search

Enhance

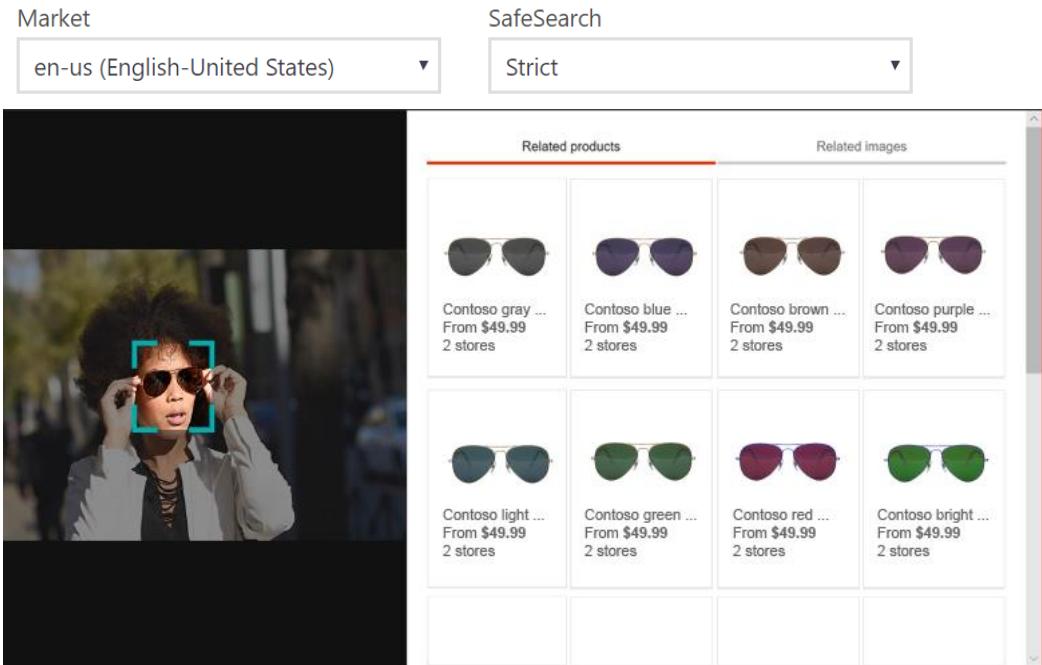
Create compelling recommendations using visually similar images

Add

Integrate any image source to get intelligent search annotations and information

Augment

Extract textual information and read text in images for improved search results

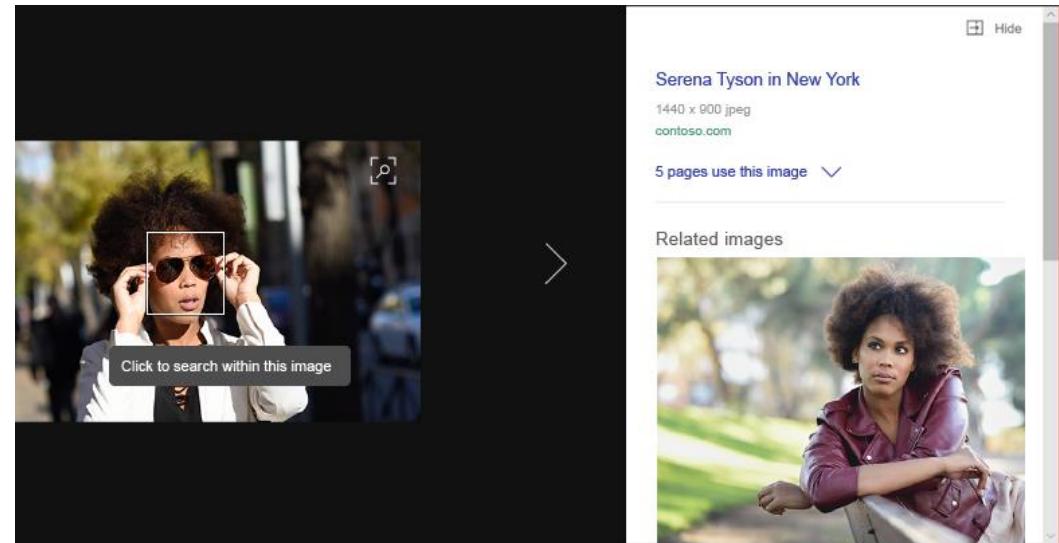


The screenshot shows the Bing Visual Search interface. At the top, there are dropdown menus for 'Market' set to 'en-us (English-United States)' and 'SafeSearch' set to 'Strict'. Below the interface is a large image of a person wearing sunglasses. A blue bounding box highlights the sunglasses area. To the right of the image, there are two tabs: 'Related products' (which is selected) and 'Related images'. Under 'Related products', there are four items listed:

| Product Name | Price Range | Stores |
|--------------------|--------------|----------|
| Contoso gray ... | From \$49.99 | 2 stores |
| Contoso blue ... | From \$49.99 | 2 stores |
| Contoso brown ... | From \$49.99 | 2 stores |
| Contoso purple ... | From \$49.99 | 2 stores |

Below these are four more items under 'Related images':

| Image Type | Product Name | Price Range | Stores |
|------------|--------------------|--------------|----------|
| Sunglasses | Contoso light ... | From \$49.99 | 2 stores |
| Sunglasses | Contoso green ... | From \$49.99 | 2 stores |
| Sunglasses | Contoso red ... | From \$49.99 | 2 stores |
| Sunglasses | Contoso bright ... | From \$49.99 | 2 stores |



The screenshot shows the Bing Visual Search interface with a large image of a person wearing sunglasses. A white bounding box highlights the sunglasses area. Below the image, there is a button labeled 'Click to search within this image'. To the right of the image, there is a sidebar with the following information:

- Image details:
 - Image ID: Serena Tyson in New York
 - Size: 1440 x 900 jpeg
 - Source: contoso.com
- Usage: 5 pages use this image
- Related images: A smaller image of the same person in a different pose.

Bing Entity Search

Identify

Detect the most relevant entity based on searched terms

Augment

Improve the user experience and provide primary details about searched entities

Showcase

Present local or relevant businesses and locations for a more engaging experience

Query
Coffee 98004
Search Type
Restaurant
Address Locality
Bellevue
Address Region
WA
Postal Code
98004

The screenshot shows a search bar at the top with the query "Coffee 98004". Below the search bar, there are three search results listed:

- Third Culture Coffee**
<https://thirdculturecoffee.com/>
Bellevue, WA, 98004;
(425) 230-3660
Categories: Place, LocalBusiness, Restaurant
[See more on Bing >](#)
- Honor Coffee**
<http://www.honorcoffee.com/>
Bellevue, WA, 98004;
(425) 598-2185
Categories: Place, LocalBusiness, Restaurant
[See more on Bing >](#)
- Starbucks**
<http://www.starbucks.com/>
Bellevue, WA, 98004;
(425) 637-6513
Categories: Place, LocalBusiness, Restaurant
[See more on Bing >](#)

On the right side of the interface, there are several optional parameters set:

- Market: en-us (English-United States)
- Optional parameters: (empty)
- Latitude: 37.77
- Longitude: -122.4194
- Radius (meters): 5000

Bing News Search

Results include rich detail like authoritative image of articles, provider info, article URL, and date published

Return results can be customized to the location or market of the user

Simplify findings with sorting and filtering options for trending news and other topics

science updates 

Market: en-us (English-United States) ▾

SafeSearch: Strict ▾

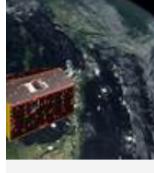
Freshness: (unspecified) ▾



[CHSE Odisha +2 Science result declared; 76.98% students pass the exam](#)
School and mass education minister Badri Narayan Patra releasing plus two science results at council of higher secondary education here on Saturday. Live updates 96,185 students have enrolled for the Plus Two examination 95096 studetns have appeared and ...



[Elon Musk updates the public on Boring Company and it's amazing](#)
Los Angeles - The hottest ticket in Los Angeles Thursday night was not a movie premiere - It was a seat in a synagogue to hear a tech CEO update people on a venture literally called the Boring Company. About 750 people were lucky enough to get a seat at ...



[Update: Launch coverage of Earth-observing satellites](#)
Briefing participants will be: David Jarrett, GRACE-FO program executive in the Earth Science Division at NASA Headquarters Frank Webb, GRACE-FO project scientist at NASA's Jet Propulsion Laboratory Frank Flechtner, GRACE-FO project manager at GFZ Phil ...



[NASA program to track greenhouse gas is canceled \(Update\)](#)
The end of the program—called the Carbon Monitoring System (CMS)—which tracked sources and sinks for carbon and made high-resolution models of the planet's flows of carbon —was first reported by the journal Science. "Now, President Donald Trump's ...



[APS Celebrates Science of Light with Art](#)
In honor of the role of light in science, culture, and life itself, the United Nations Education, Scientific and Cultural Organization (UNESCO) has declared 2015 the International Year of Light and Light-based Technologies.

Bing Autosuggest

Populate

Use drop-down lists to suggest queries based on past search history

Narrow

Return detailed contextual suggestions to quickly find preferred search items

Discover

Find, troubleshoot, and diagnose problems quickly

A screenshot of a search interface. In the top left is a search bar containing the partial query "seatt". To the right of the search bar is a magnifying glass icon. Below the search bar is a list of suggested completions for the query:

- seattle
- seattle mariners
- seattle times
- seattle seahawks
- seattle weather
- seattle airport
- seattlepi
- seattle craigslist



Leverage these services that enable informed and efficient decision-making

Content Moderator | Anomaly Detector | Personalizer



Decision

Content Moderator

Machine-assisted moderation of text and images, augmented with human review tools

Image moderation

Machine-learning based classifiers, custom blacklists, and Optical Character Recognition (OCR)

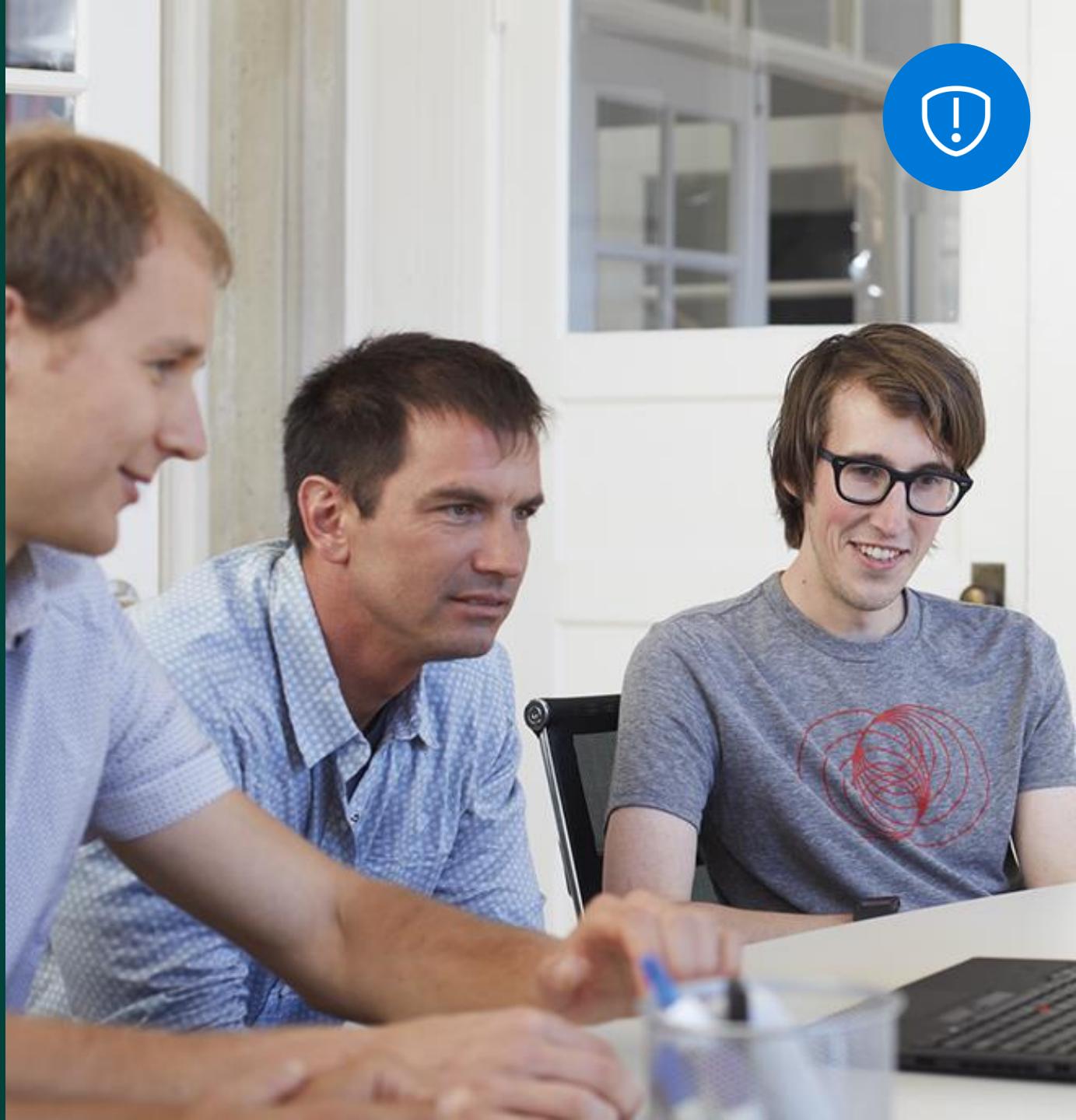
Text moderation

Helps you detect potential profanity in more than 100 languages and match text against your custom lists automatically.

Identification of possible Personally Identifiable Information (PII)

Video moderation (in Azure Media Services)

Scoring of possible adult content in videos.
Video moderation is currently deployed in preview on Azure Media Services



Anomaly Detector

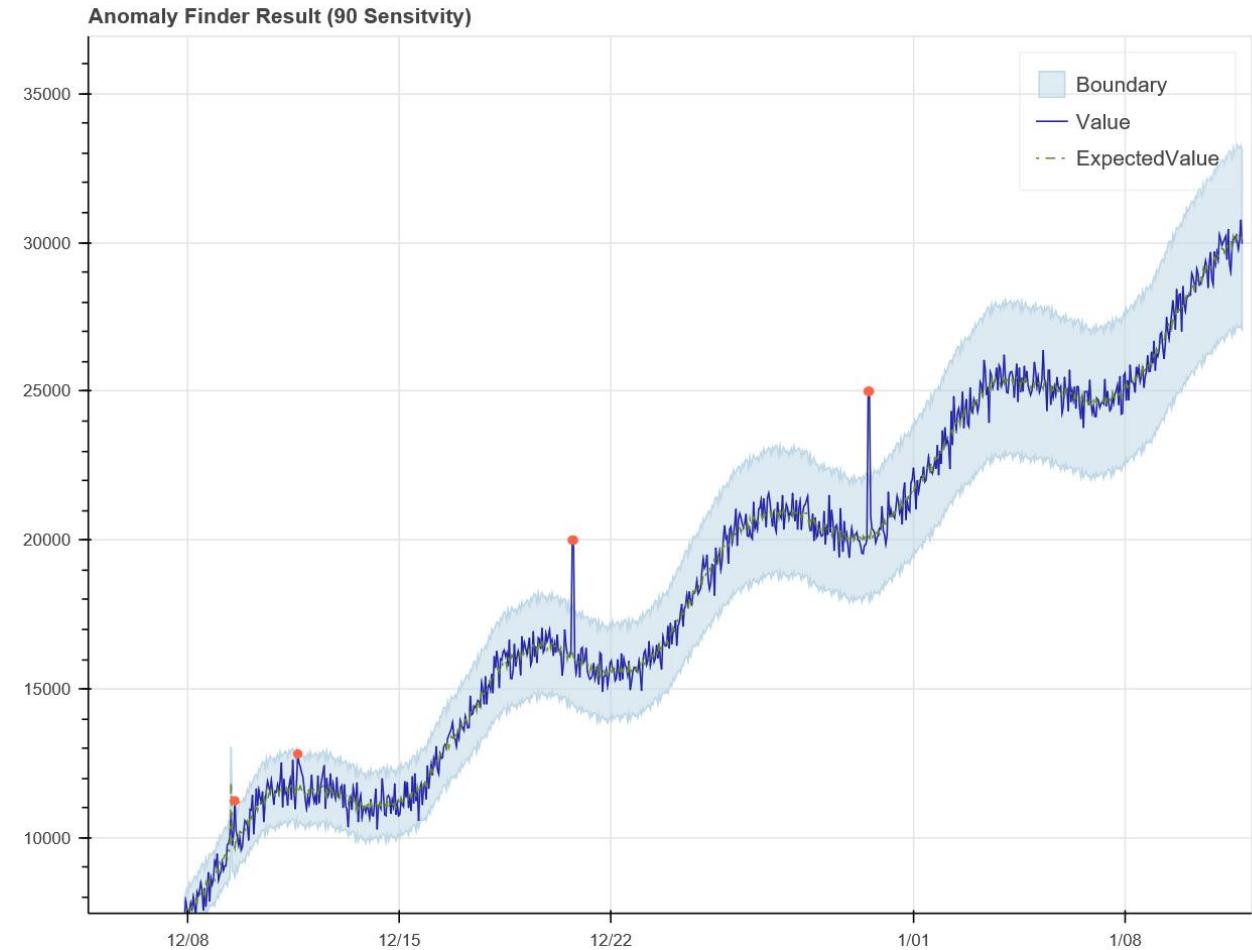
An AI service that helps you foresee problems before they occur ([preview](#)):

Powerful inference engine looks at your time-series data set and automatically selects the right algorithm to maximize accuracy for your scenario.

Automatic detection eliminates the need for labeled training data. Save time and stay focused on fixing problems as soon as they surface.

Customizable settings let you fine-tune sensitivity to potential anomalies based on your business's risk profile.

<https://azure.microsoft.com/en-us/services/cognitive-services/anomaly-detector/>



Personalizer

An AI service that delivers a personalized user experience (**preview**):

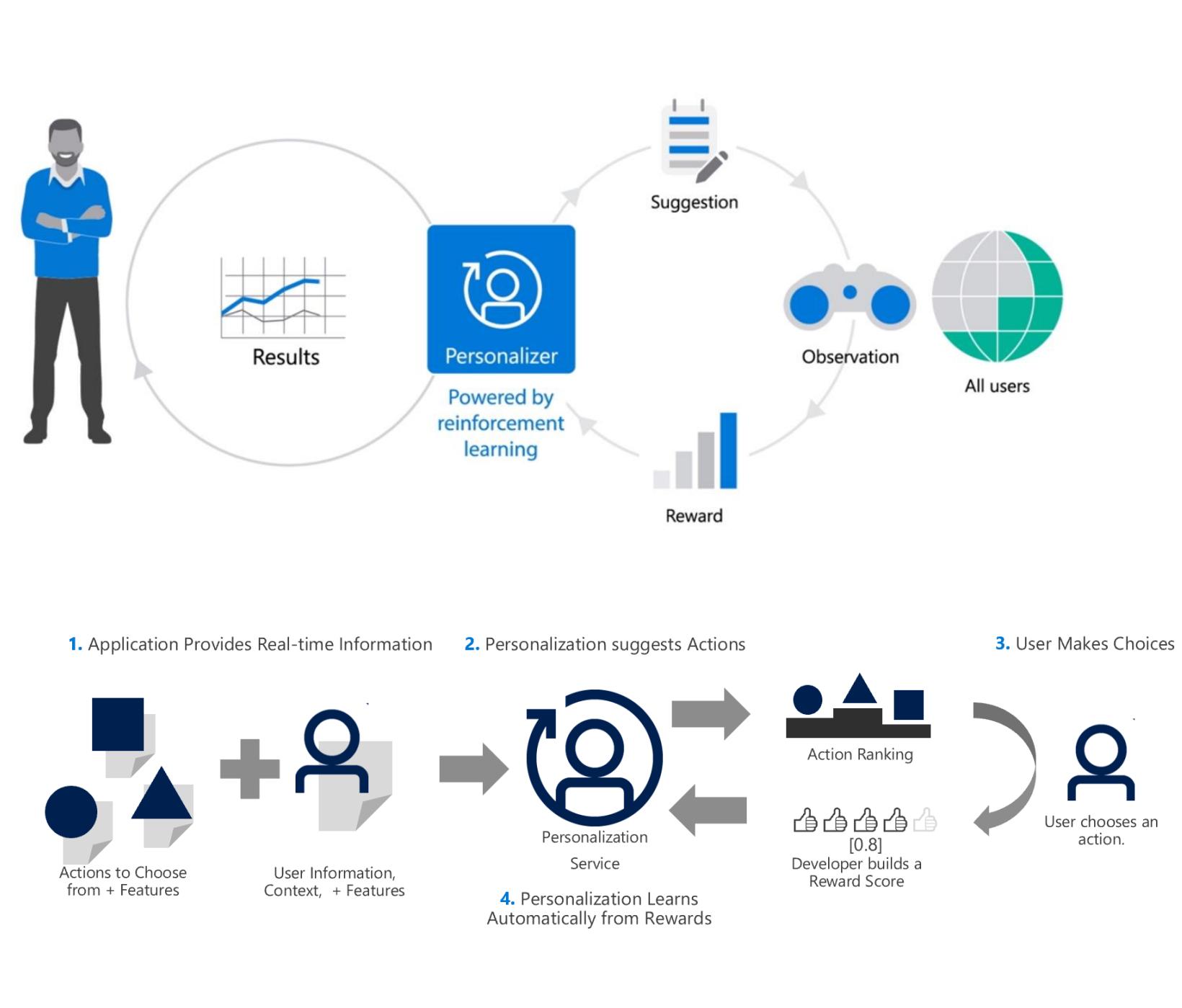
Personalized experiences in your apps

No machine-learning expertise required

Available on-premises or in Azure

User-friendly interface to easily manage the reinforcement-learning loop

<https://azure.microsoft.com/en-gb/services/cognitive-services/personalizer/>



Seeing AI – Application iOS

<https://www.microsoft.com/en-us/ai/seeing-ai>



Introducing Seeing AI

Hear a brief overview of the Seeing AI app.

[▷ Play video about Seeing AI app](#)



Short Text Demo

Learn how to instantly hear short snippets of text.

[▷ Play video about Short Text](#)



Document Demo

A guide on how to make the most of the Document channel.

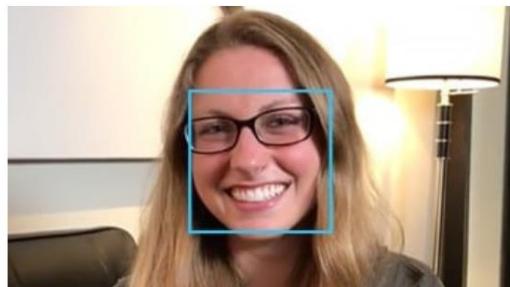
[▷ Play Document channel video](#)



Product Recognition Demo

Listen to audio cues to locate barcodes and identify products.

[▷ Play Product channel video](#)



Person Demo

Learn how to use Seeing AI to engage with people around you.



Scene Demo

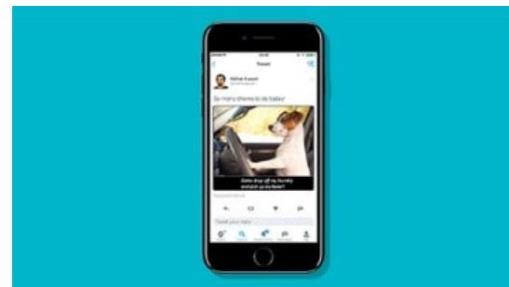
Learn more about this experimental channel that describes what's in front of you.



Currency Demo

A guide for using the app to read currency bills.

[▷ Play Currency channel video](#)



Recognize Images In Other Apps

Describe images in your photo gallery and other apps including Mail, Twitter, WhatsApp and more.



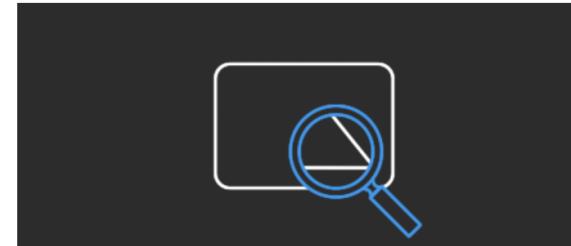
Language Understanding

Microsoft Cognitive Services Language Understanding interprets human language and understands the intent. Type in a custom intent or try one of the predefined ones to affect the house.

[Try it out >](#)

Text Analytics

Microsoft Cognitive Services Text Analytics API determines the sentiment of your message, typed or spoken. Try it out and see if the message is positive, negative, or neutral.

[Try it out >](#)[Learn to code](#)

Computer Vision

Computer Vision can extract rich information from images to categorize and process visual data and perform machine-assisted moderation of images to help curate your services.

[Try it out >](#)

Video Indexer



AI Route Planner



Machine Teaching

AI Demos
<https://aidemos.microsoft.com>

Démonstration

<https://azure.microsoft.com/fr-fr/services/cognitive-services/>

Azure Cognitive Search

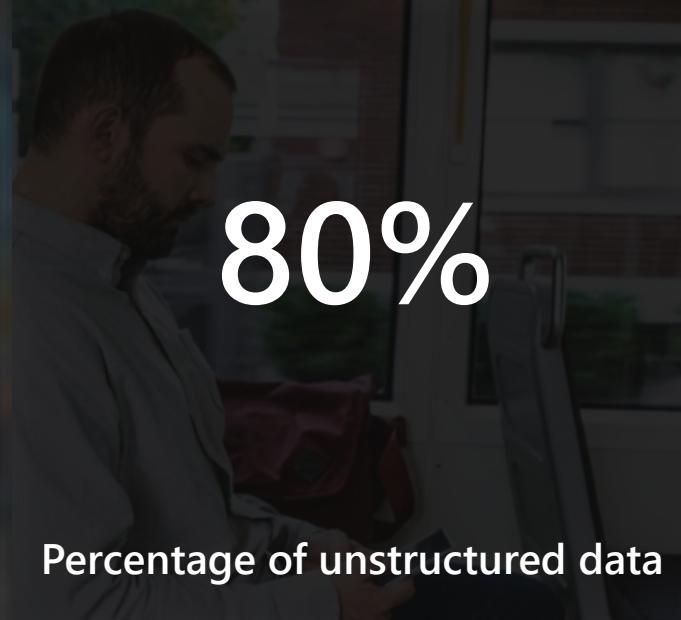




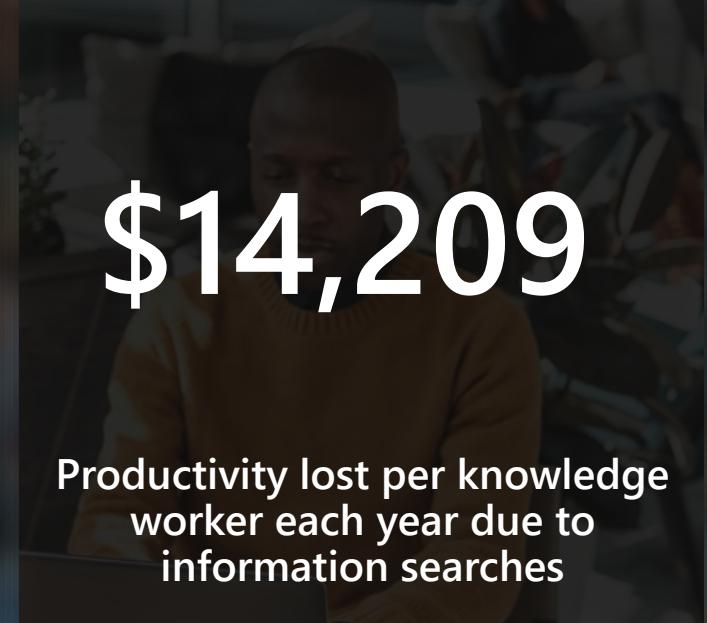


2.5
quintillion
bytes

Data created in the world per day



Percentage of unstructured data

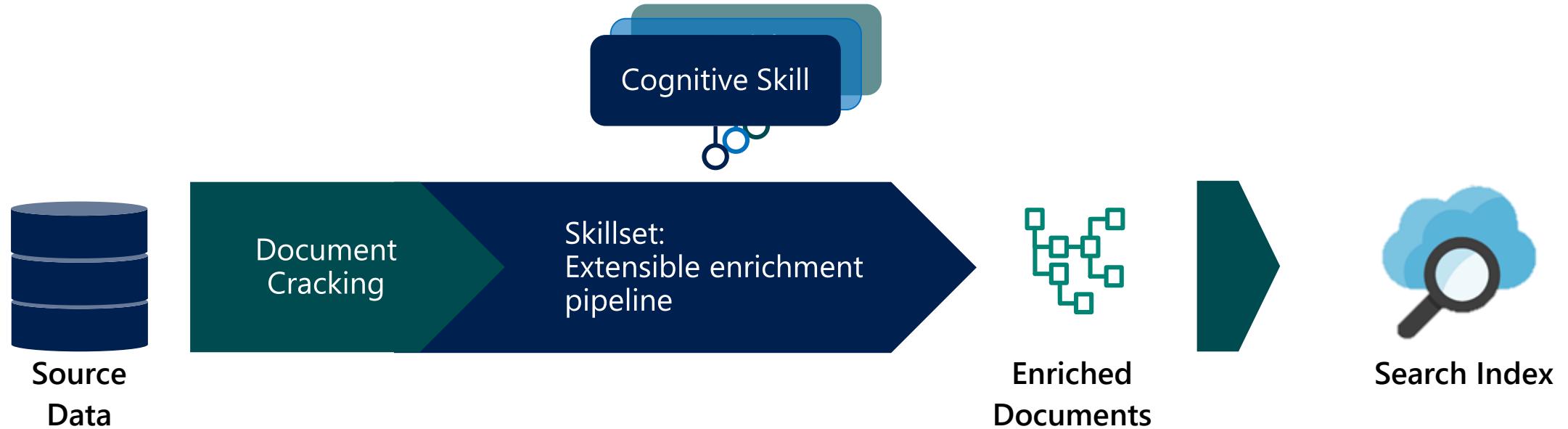


\$14,209

Productivity lost per knowledge worker each year due to information searches

Cognitive Search

A new capability of Azure Search



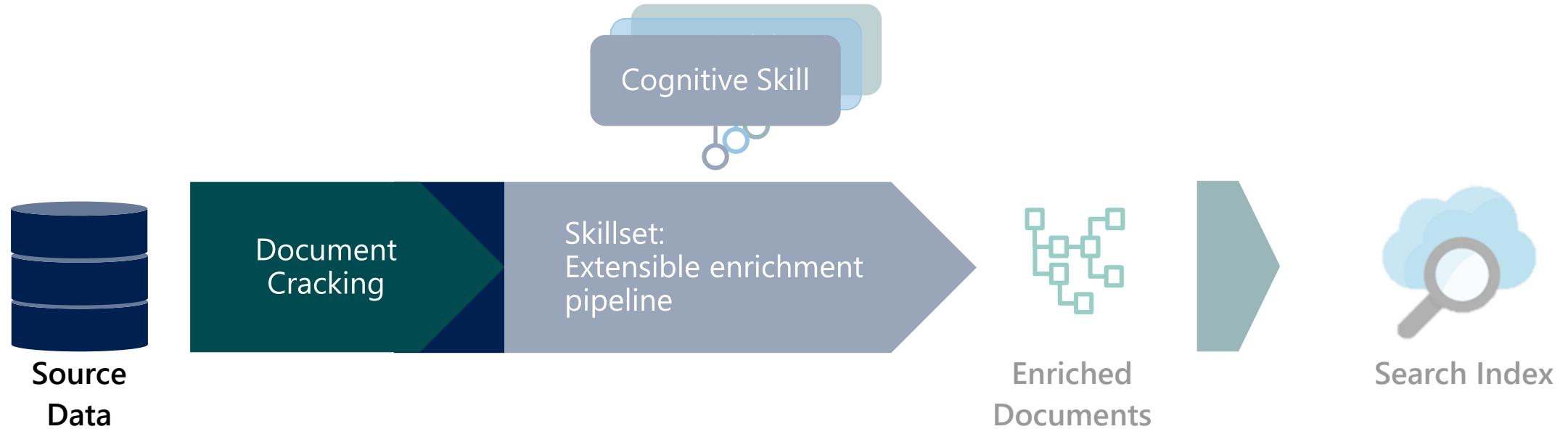
INGEST

ENRICH

EXPLORE

Cognitive Search

A new capability of Azure Search



INGEST

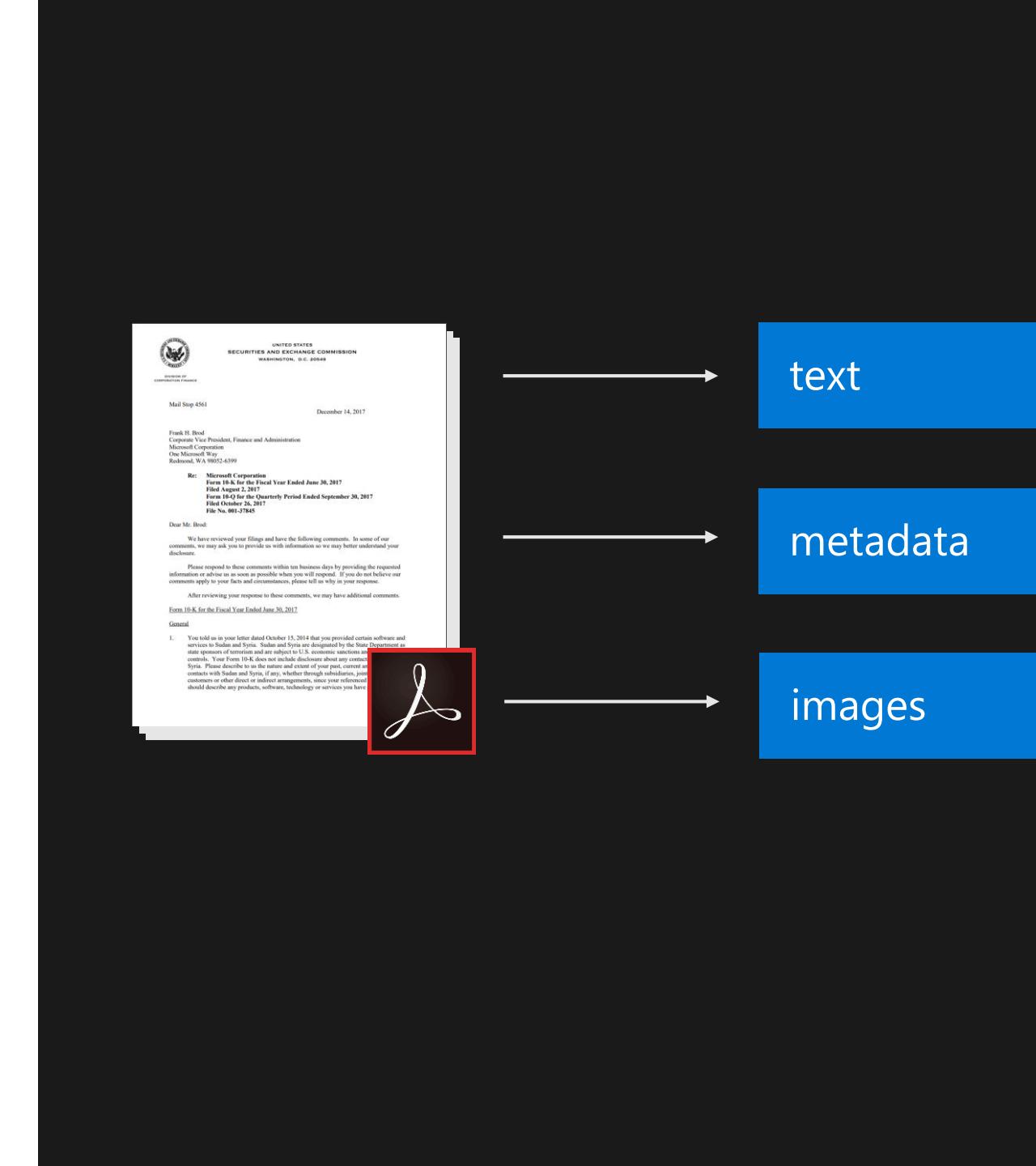
ENRICH

EXPLORE

Document Cracking

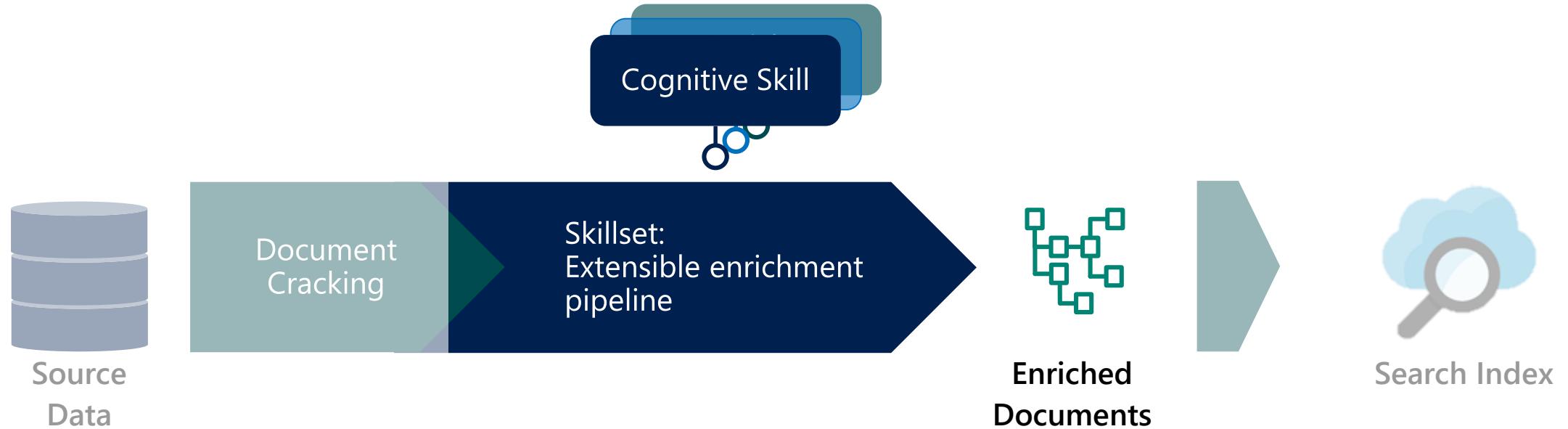
- Built-in connectors
 - Blob Storage
 - Azure SQL
 - Cosmos DB
 - Azure Tables
 - ADLS Gen2
- File formats supported in blob storage

- | | | | |
|-------|--------|-------|--------|
| • pdf | • rtf | • doc | • jpg |
| • xml | • json | • ppt | • tiff |
| • png | • html | • xls | • bmp |



Cognitive Search

A new capability of Azure Search



INGEST

ENRICH

EXPLORE

Built-in Skills in Multiple Languages



Natural Language Processing

Key Phrase Extraction
Sentiment Analysis
Organization Entity Extraction
Location Entity Extraction
Persons Entity Extraction
Language Detection
Text Translation



Image Processing

Face Detection
Tag Extraction
Celebrity Recognition
Landmark Detection
Handwriting Recognition
Printed Text Recognition



Utilities

Complex Type Shaping
Text Merging
Text Splitting
Conditional Skill

Effortlessly Implemented

Start, Maintain and Scale with limited investment.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE

The screenshot shows the 'Import data' step in the Azure Search 'Import data' wizard. It displays a list of available data sources from various Azure services like Blob storage, Data Lake Storage, and Azure SQL Database. A specific blob storage account named 'myblob' is selected. The interface includes fields for 'File name' (set to 'index.html') and 'File type' (set to 'HTML'). Below these, there are sections for 'Content' and 'Indexing' settings, such as 'Index all content' and 'Indexer priority'.



Ingest structured and unstructured data + easily pull from Azure Data stores

The screenshot shows the 'Add field' step in the Azure Search 'Import data' wizard. It lists various fields from the 'index.html' file, such as 'content', 'last_modified', 'meta_type', and 'people'. For each field, there are dropdown menus for 'Type', 'Analyzer', 'Indexing', and 'Scoring'. The 'content' field is set to 'Text' type and 'Standard' analyzer. Other fields like 'last_modified' and 'people' are set to 'Edm.String' type and 'Standard' analyzer.



Quickly configure, no coding required

The screenshot shows the 'AVAILABLE JOBS' search results page. It features a map of New York City with job locations marked. Below the map, a table lists 2508 available jobs. Each job entry includes a thumbnail, title ('Business Analyst'), location ('New York, NY'), and a brief description. The interface includes a search bar at the top and filters for 'BUSINESS TITLE' and 'LOCATION' on the left.



Rich search features, out-of-the-box

The screenshot shows the 'Indexes' tab for the 'azblob-index' index in the Azure portal. It displays basic information like 'Location: West US 2', 'Subscription ID: Pay-As-You-Go', and 'Tags: a98dfc86-277a-4bed-93fe-b07419a9ddae'. The 'Scale' section is highlighted with a blue background. Other tabs include 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Usage', 'Monitoring', 'Indexes', 'Indexers', 'Data sources', and 'Skillsets'. The 'Indexes' tab shows a table with one row for 'azblob-index'.



Easily scale and maintain

Easily Integrated

With just one-click enable cognitive skills and extract more knowledge from your data.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED

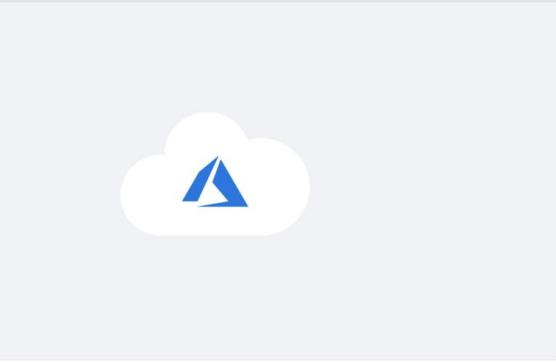


READILY
CUSTOMIZABLE



Vision

OCR, Image analysis, Tag extraction



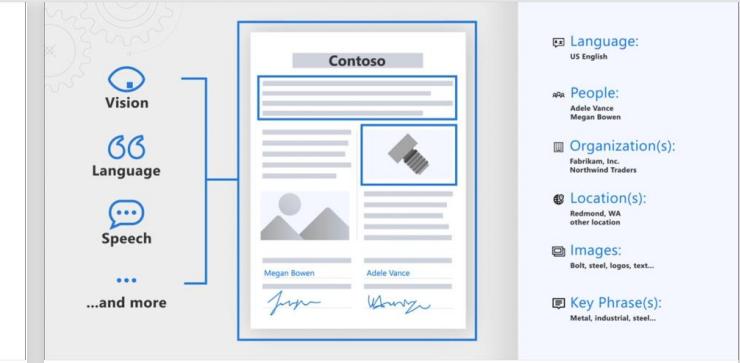
Language

Key phrase extraction, Language detection, Sentiment analysis, Entity recognition



Orchestration

Text manipulation, Custom skills, Knowledge store



Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.



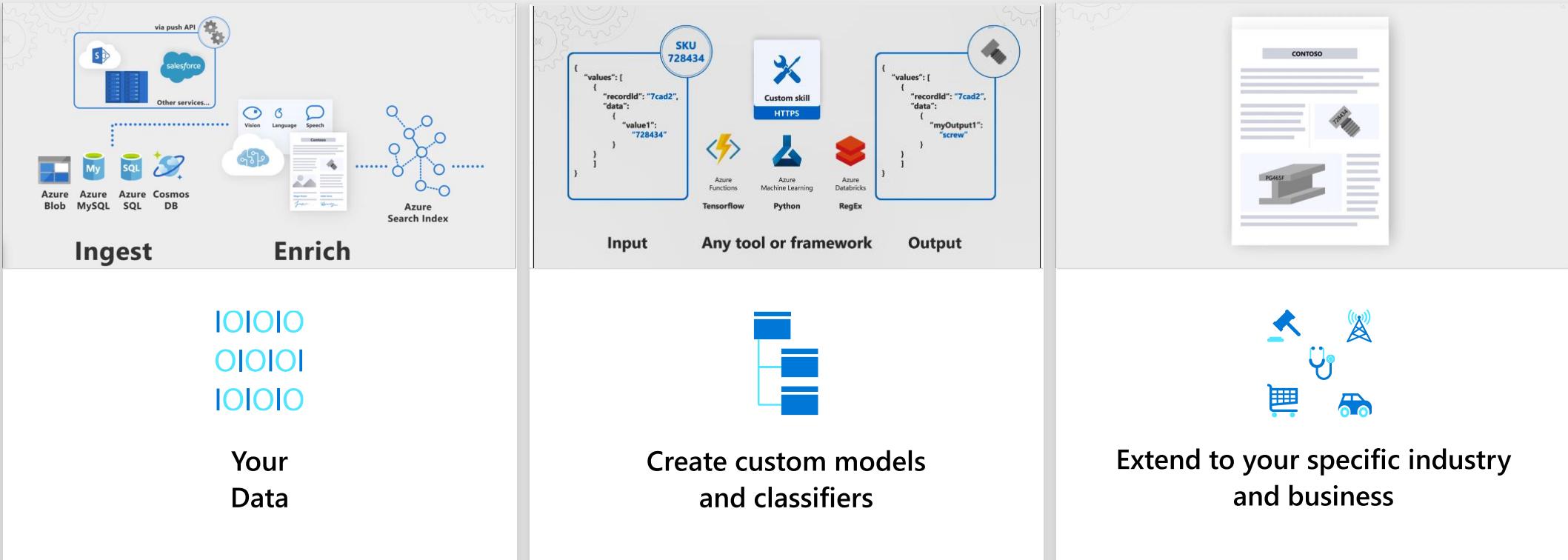
EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE



Effortlessly Implemented

Start, Maintain and Scale with minimal investment.



EFFORTLESSLY
IMPLEMENTED



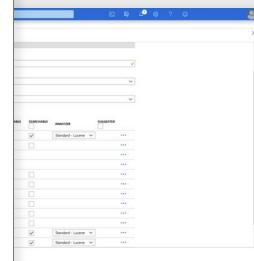
EASILY INTEGRATED



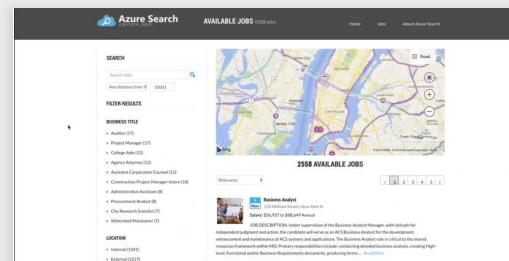
READILY
CUSTOMIZABLE



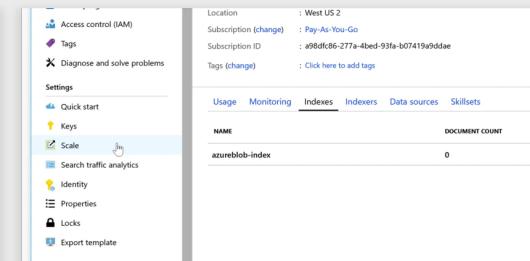
Ingest structured and
unstructured data + easily pull
from Azure Data stores



Configure, no
code required



Rich search features,
out-of-the-box



Easily scale and
maintain

Effortlessly Implemented

Start, Maintain and Scale with minimal investment.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE

The screenshot shows the 'Import data' step in the Azure portal. A table lists fields such as 'content', 'metadata_storage_content_type', and 'people', each with its type (Edm.String, Edm.Int64, Collection<Edm.String>), and checkboxes for 'RETRIEVABLE', 'FETCHABLE', 'SORTABLE', 'INDEXABLE', 'SEARCHABLE', 'ANALYZER', and 'SUGGESTER'. The 'ANALYZER' column shows 'Standard - Lucene' for most fields except 'content' which is 'Standard - NLS'.

Ingest structured + unstructured data + everything else from Azure Data Services

Quickly configure, no coding required



The screenshot shows the 'AVAILABLE JOBS' page in the Azure portal. It features a map of New York City with job locations marked. Below the map is a table with columns 'BROWSE', 'TITLE', 'LOCATION', and 'DESCRIPTION'. One job listing is visible: 'Business Analyst' at 'Intertech (1)' in 'New York, NY'.

Rich search features, out-of-the-box

The screenshot shows the 'Indexes' tab for the 'azblob-index' in the Azure portal. It includes sections for 'Access control (IAM)', 'Tags', 'Diagnose and solve problems', 'Settings' (with 'Scale' highlighted), 'Usage', 'Monitoring', 'Indexes', 'Indexers', 'Data sources', and 'Skillsets'. The 'Scale' section shows a current value of 0 and a maximum of 1000.

Easily scale and maintain

Effortlessly Implemented

Start, Maintain and Scale with minimal investment.



**EFFORTLESSLY
IMPLEMENTED**



The screenshot shows the Microsoft Azure portal's 'Import Data' blade. At the top, there are tabs for 'Import data', 'Microsoft Power BI', 'Dashboard', 'Search results', and 'Import data'. Below the tabs, the title 'Import data' is displayed. The main area contains a 'Connect to your data' section with options to 'Add regular search (optional)', 'Customize request rules', and 'Create a dataset'. A note below says 'Create and load a fact table using data from an existing Azure data source in your current subscription. Azure Search finds the data structure you provide, applies which schema to each column, and uses regular search to find the data in real-time. Learn more...'. Under 'Data Source', there is a dropdown menu set to 'Azure' and a 'Search' input field. A 'Results' section follows, showing a table with one row: 'No results'. At the bottom, there is a 'Next Step: Configure search (optional)' button.



Ingest structured and unstructured data + easily pull from Azure Data stores

The screenshot shows the Microsoft Azure portal with the search bar at the top containing the query 'Import data'. The results page has a left sidebar with navigation links like Home, All services, and Resource groups. The main content area displays a table titled 'Import data' with the following columns: ID, NAME, DESCRIPTION, EXTRACTOR_TYPE, INDEXER_TYPE, SCOPES, and STATUS. The table lists several entries:

| ID | NAME | DESCRIPTION | EXTRACTOR_TYPE | INDEXER_TYPE | SCOPES | STATUS |
|----|------------------------------|------------------------|----------------|--------------|--------|---------|
| 1 | metadatasource_type | Edm.String | Check | Check | Check | Success |
| 2 | metadatasource_name | Edm.String | Check | Check | Check | Success |
| 3 | metadatasource_path | Edm.String | Check | Check | Check | Success |
| 4 | metadatasource_type_modified | Edm.String | Check | Check | Check | Success |
| 5 | metadatasource_name_modified | Edm.String | Check | Check | Check | Success |
| 6 | metadatasource_path_modified | Edm.String | Check | Check | Check | Success |
| 7 | metadatasource_type_new | Edm.String | Check | Check | Check | Success |
| 8 | metadatasource_name_new | Edm.String | Check | Check | Check | Success |
| 9 | metadatasource_path_new | Edm.String | Check | Check | Check | Success |
| 10 | people | Collection<Edm.String> | Check | Check | Check | Success |
| 11 | organizations | Collection<Edm.String> | Check | Check | Check | Success |

At the bottom of the table, there are two buttons: 'Review and continue' and 'Cancel or close'.



Quickly configure, no coding required

Azure Search

SEARCH

Search Jobs

Any distance from 100001

FILTER RESULTS

BUSINESS TITLE

- Auditor (17)
- Project Manager (17)
- College Adile (13)
- Agency Attorney (12)
- Assistant Corporation Counsel (12)
- Construction Project Manager Intern (10)
- Administrative Assistant (8)
- Procurement Analyst (8)
- City Research Scientist (7)
- Watershed Maintainer (7)

LOCATION

- Internal (1341)
- External (1217)

AVAILABLE JOBS (2558 jobs)

Home Jobs About Azure Search

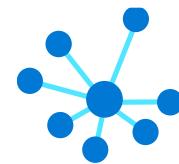
Roads, highways, and water bodies are visible. A legend on the right includes icons for 'Road', 'Latte', 'Bing', and 'Fresh Prince of Bel-Air'.

2558 AVAILABLE JOBS

Reference

Business Analyst
Nov 150 William Street, New York N.Y.
Salary: \$50,937 to \$80,649 Annual

JOB DESCRIPTION: Under supervision of the Business Analysis Manager, with latitude for independent judgment and action, the candidate will serve as an ACS Business Analyst for the development, enhancement and maintenance of ACS systems and applications. The Business Analyst role is critical to the shared resources framework within MHS. Primary responsibilities include: conducting detailed business analysis, creating High-level Functional and/or Business Requirements documents, producing forms... [Read More](#)



Rich search features, out-of-the-box

| Items | Location | : West US 2 |
|-------|-----------------------|--|
| | Subscription (change) | : Pay-As-You-Go |
| | Subscription ID | : a98dfc86-277a-4bed-93fa-b07419a9ddae |
| | Tags (change) | : Click here to add tags |
| | Usage | Monitoring |
| | Indexes | Indexers |
| | Data sources | Skillsets |
| | NAME | DOCUMENT COUNT |
| | azureblob-index | 0 |



Easily scale and maintain

Effortlessly Implemented

Start, Maintain and Scale with minimal investment.



EFFORTLESSLY
IMPLEMENTED



EASILY INTEGRATED



READILY
CUSTOMIZABLE

The screenshot shows the 'Import data' step in the Azure portal. It displays a list of available data sources, including 'Azure Blob Storage', 'Azure Data Lake Storage', 'Azure Event Grid', 'Azure Functions', 'Azure IoT Hub', 'Azure Key Vault', 'Azure Log Analytics', 'Azure Monitor Metrics', 'Azure Storage Queue', 'Azure Stream Analytics', 'Azure Table Storage', 'Azure Time Series Insights', 'Azure Web Apps', and 'Azure WebJobs'. A search bar at the top allows filtering by name.



Ingest structured and unstructured data + easily pull from Azure Data stores

The screenshot shows the 'Configure fields' step in the Azure portal. It displays a table with columns for 'Field name', 'Type', 'Format', 'Indexing', and 'Analyzer'. Fields listed include 'content', 'imagedata', 'imagedata_content_type', 'imagedata_date_modified', 'imagedata_date_uploaded', 'imagedata_file_size', 'imagedata_file_type', 'imagedata_location', 'imagedata_name', 'imagedata_page', and 'imagedata_tags'. Each field has a dropdown menu for configuration.



Quickly configure, no coding required

The screenshot shows the Azure Search interface. It includes a search bar at the top, a map-based visualization, and a table of search results. The results table has columns for 'NAME' and 'DOCUMENT COUNT'. One result, 'azureblob-index', is highlighted with a blue border.



Rich search out-of-the-box

The screenshot shows the 'Scale' settings in the Azure portal for the 'azureblob-index'. It lists various metrics and their current values, such as 'Search traffic analytics' (0.0000), 'Identity' (0), and 'Properties' (0). The 'Scale' tab is highlighted in blue. On the right, there's a summary card with details like 'Location: West US 2', 'Subscription: Pay-As-You-Go', and 'Tags: Click here to add tags'.



Easily scale and maintain

Easily Integrated

With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE



Vision

OCR, Image analysis, Tag extraction

A screenshot of the Azure Cognitive Services Vision API interface. It shows a document titled "Master Service Agreement" with several horizontal lines of text. A progress bar at the bottom indicates "Processing..." with a value of 100%. The interface includes a "Cancel" button and a "Save" button.

A screenshot of the Azure Cognitive Services Language API interface. It shows a document with the text "Language: US English Translated from French". Below the document, there's a "Text" section with the text "Microsoft Translator Team AGREE TO THESE TERMS". The interface includes a "Cancel" button and a "Save" button.

A screenshot of the Azure Cognitive Services Orchestration API interface. It shows a document with the text "Contoso". To the left, there's a gear icon and a list of cognitive skills: "Vision", "Language", "Speech", "...and more". To the right, there's a detailed view of the document with names like "Megan Bowen" and "Adele Vance" and their signatures. The interface includes a "Cancel" button and a "Save" button.

A screenshot of the Azure Cognitive Services Language API interface. It shows a document with the text "Language" and "Language extraction, Language translation, Sentiment analysis, Entity recognition". The interface includes a "Cancel" button and a "Save" button.



Orchestration

Text manipulation, Custom skills, Knowledge store

Easily Integrated

With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED

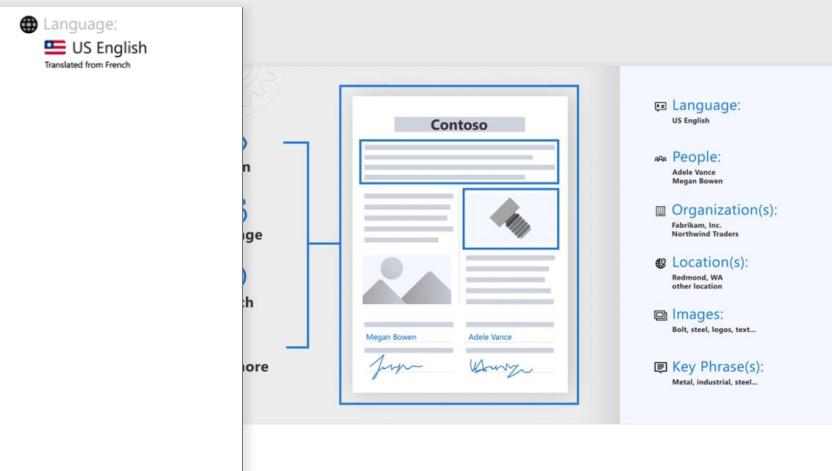
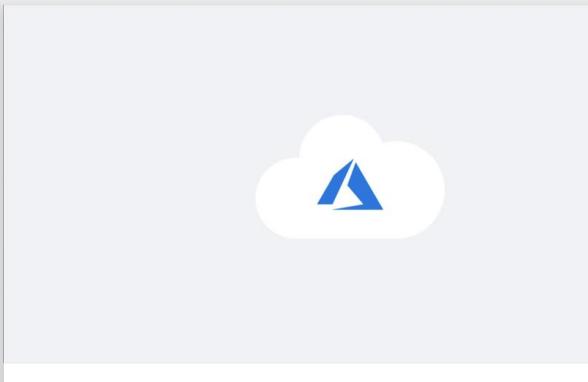


READILY
CUSTOMIZABLE



Vision

OCR, Image analysis, Tag extraction



Language

Key phrase extraction, Language detection, Sentiment analysis, Entity recognition



Orchestration

Text manipulation, Custom skills, Knowledge store

Easily Integrated

With just one-click enable pre-built cognitive skills and extract more knowledge from your data.



EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE

Vision
OCR, Image analysis, Tag extraction

Language
Key phrase extraction, Language detection, Sentiment analysis, Recognition

Orchestration
Text manipulation, Custom skills, Knowledge store

Language:
US English

People:
Adele Vance, Megan Bowen

Organization(s):
Fabrikam, Inc., Northwind Traders

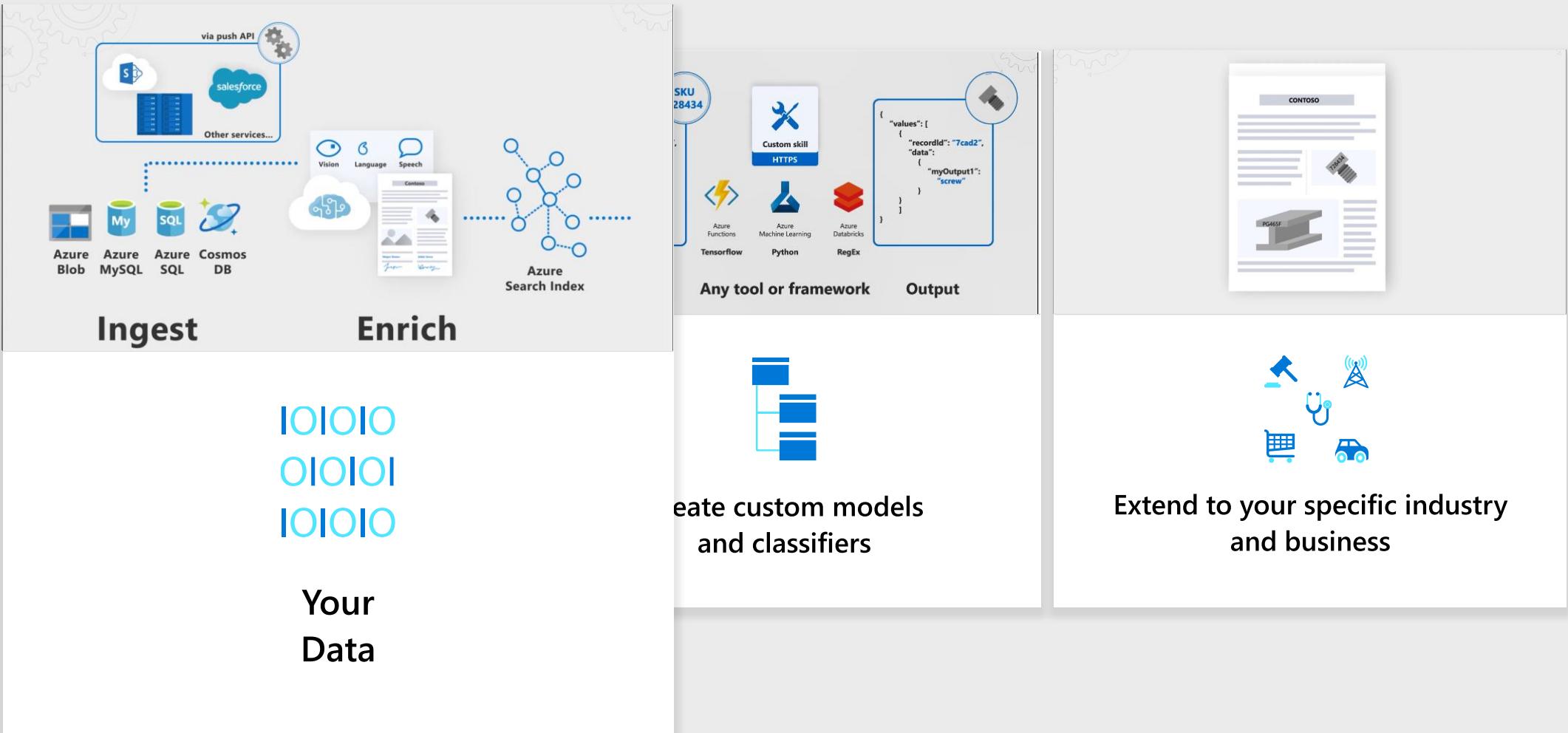
Location(s):
Redmond, WA, other location

Images:
Bolt, steel, logos, text...

Key Phrase(s):
Metal, industrial, steel...

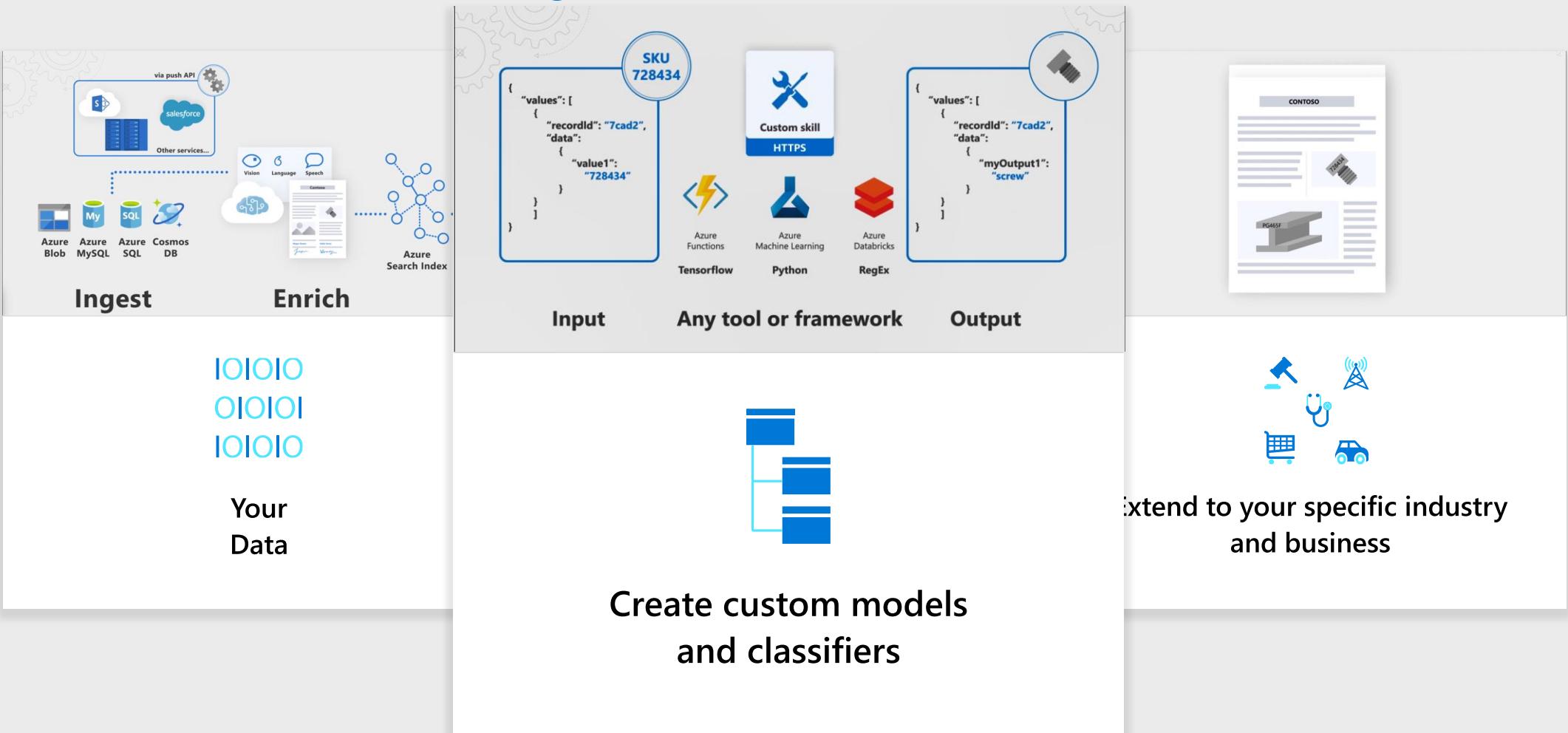
Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.



Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.



Readily Customizable

Optimize your search experience by integrating your own data to create custom models and classifiers that feed into Cognitive Search.



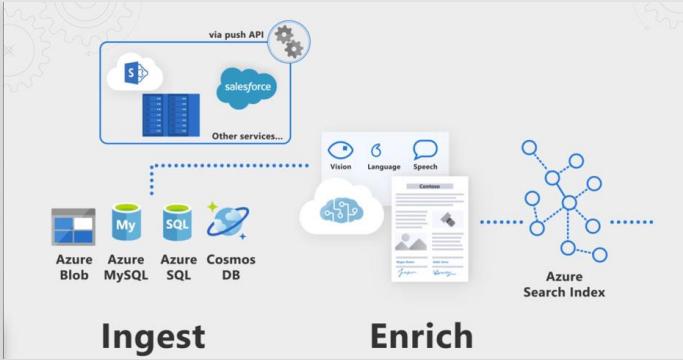
EFFORTLESSLY
IMPLEMENTED



EASILY
INTEGRATED



READILY
CUSTOMIZABLE

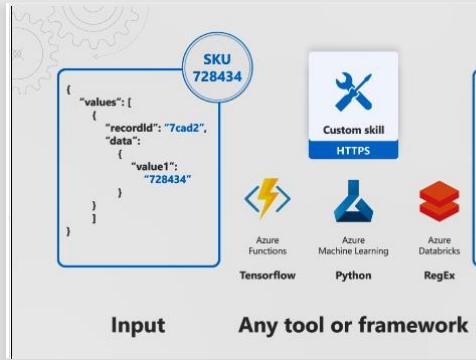


Ingest

Enrich

IOIOIO
OIOIOI
IOIOIO

Your
Data



Input

Any tool or framework

```
{ "values": [ { "recordid": "7cad2", "data": { "value1": "728434" } } ] }
```

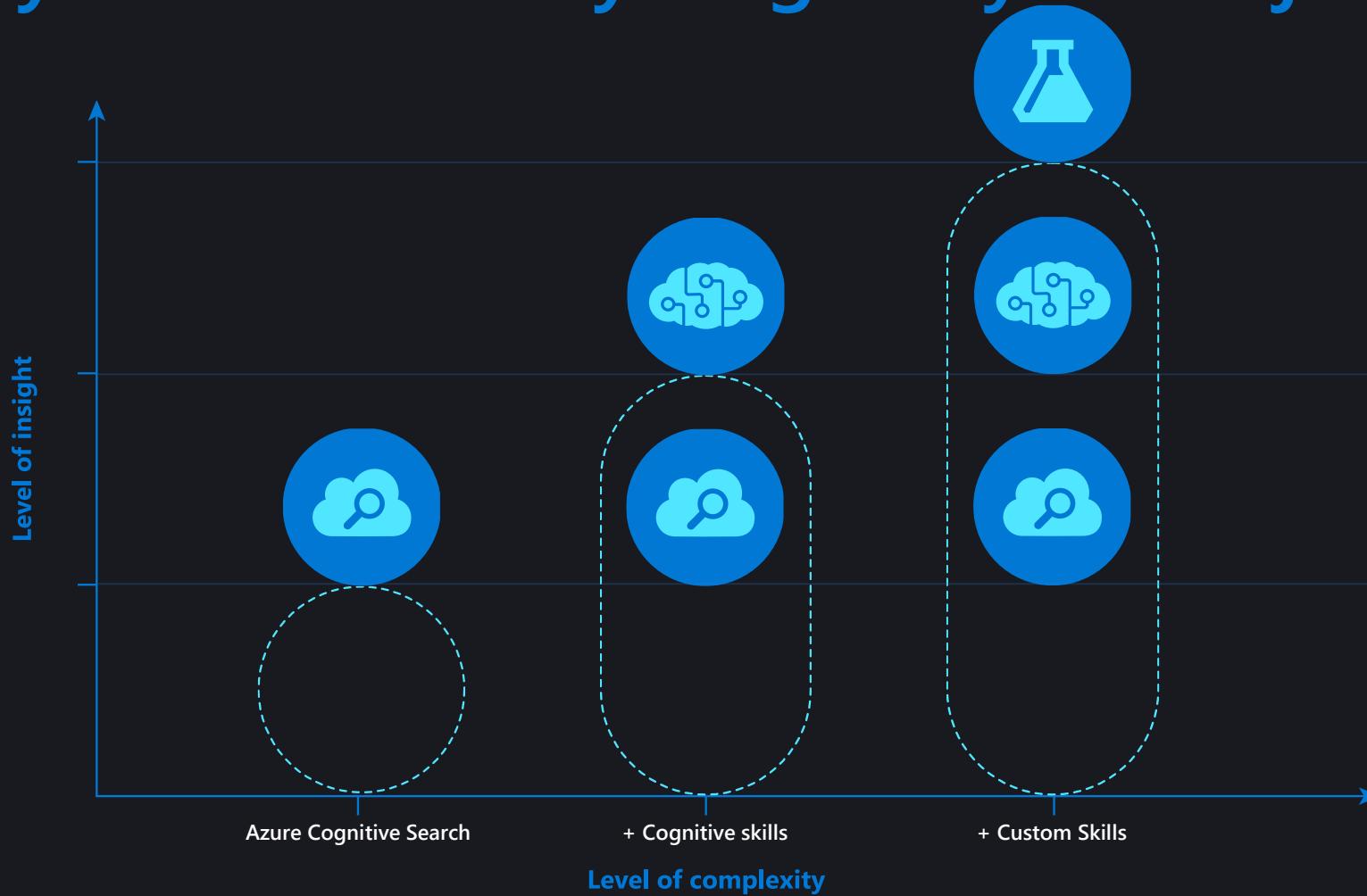


Create custom
models and
classifiers



Extend to your specific industry
and business

Ready to serve at any stage of your AI journey



Knowledge Mining Scenarios



Core Search

- Catalog search -
- In-app search -



Content Understanding

- Digital asset management-
- Customer support and feedback analytics-
- Technical content research-
- Auditing, risk, and compliance management-

Core Search

Catalogue Search



Autotrader

Driving seamless search for
millions of customers



Creating new ways to connect users with
the most relevant content

In-App Search



Delivering faster, deeper, more
cost-effective data insights



Van Oord

Marine ingenuity

Eliminating manual processes to
reduce time, error, and risk

Content Understanding

Explore, group, and uncover insights across
structured and unstructured content



Improves customer service by enabling service engineers to find answers for their customers faster



Enables online visitors to develop a deeper and more personally relevant connection to art



Enables knowledge management for accurate bidding and surfaces manufacturing risks obligations



Delivers a leading enterprise contract management platform that reduces cost of compliance by 60%



Microsoft Azure



Knowledge Mining

With Form Recognizer

Uncover insights from all your forms

|  | John Doe 128 First Avenue Sydney, New South Wales 2251 Australia | Payment Details | |
|---|---|--|----------|
| Company | | | |
| Henry Higgins 1 Main St. Melbourn, Victoria 3035 Australia | | Invoice no. #001 Date 17/09/2023 Other Details | |
| Item | Quantity | Unit Price | Amount |
| Silk Scarf with Blue Pattern | 2 | \$24.00 | \$48.00 |
| Cotton Jeans with Embroidery | 1 | \$18.00 | \$18.00 |
| Leather Boots | 1 | \$240.00 | \$240.00 |
| | | Subtotal | \$306.00 |
| | | Discount (15%) | \$45.90 |
| | | Total | \$260.10 |

| | | | |
|--|-------------------------------|---------------|-----------|
| CREDIT APPLICATION | | | |
| APPLICANT INFORMATION | | | |
| Name: | | | |
| Date of birth: | SSN: | Phone: | |
| Current Address: | | | |
| City: | State: | ZIP Code: | |
| <input checked="" type="checkbox"/> Own <input type="checkbox"/> Rented (Please circle) | Monthly payment or rent: | | How long? |
| Previous Address: | | | |
| City: | State: | ZIP Code: | |
| <input checked="" type="checkbox"/> Own <input type="checkbox"/> Rented (Please circle) | Monthly payment or rent: | | How long? |
| EMPLOYMENT INFORMATION | | | |
| Current Employer: | | | |
| Employer Address: | | | |
| Phone: | E-mail: | How long? | |
| City: | State: | Fax: | |
| Position: | Hourly Salary (Please circle) | ZIP Code: | |
| Annual income: | | | |
| Previous Employer: | | | |
| Address: | | | |
| Phone: | E-mail: | How long? | |
| City: | State: | Fax: | |
| Position: | Hourly Salary (Please circle) | ZIP Code: | |
| Annual income: | | | |
| Name of a relative not residing with you: | | | |
| Address: | | | |
| Phone: | E-mail: | Relationship: | |
| Fax: | | | |
| CO-APPLICANT INFORMATION, IF FOR A JOINT ACCOUNT | | | |
| Name: | | | |
| Date of birth: | SSN: | Phone: | |
| Current Address: | | | |

| | | | | | | | | | |
|--|--|------------------------|-----------------|---------------|-----------------|--------------------|-----------------|-------|-----------------|
| STANDARD FORM 2 FEBRUARY 1965 EDITION GENERAL PROVISIONS FOR LEASES (FAR) CFR 1.18-601 | U.S. GOVERNMENT LEASE FOR REAL PROPERTY | | | | | | | | |
| DATE OF LEASE <i>4/16/10</i> | LEASE NO. GS-10B-07170 | | | | | | | | |
| <p>THIS LEASE, made and entered into this date by and between YESLER INVESTMENT COMPANY, LLC Whose address is 1000 SECOND AVENUE, SUITE 1800 SEATTLE, WA 98104-1046 and whose interest in the property hereinafter described is that of OWNER</p> <p>hereinafter called the Lessor, and the UNITED STATES OF AMERICA, hereinafter called the Government:</p> <p>WITNESSETH: The parties hereto for the considerations hereinafter mentioned, covenant and agree as follows</p> <ol style="list-style-type: none"> 1. The Lessor hereby leases to the Government the following described premises: A total of 172,332 rentable square feet (RSF) of office and related space, which yields 152,288 ANSI/SDOA Office Area square feet (ASF) of space at Fifth and Yesler Building, 300 First Avenue, Seattle, WA 98101, to be used by the Government for General Office Administration. The space is divided into the main floor and on floors 4 through 12. Included in the rent at no additional cost to the Government are 27 inside parking spaces and 40 bicycle spaces for exclusive use of Government employees and patrons. 2. TO HAVE AND TO HOLD the said premises with their appurtenances beginning approximately September 1, 2010 for the term of 10 years. The lease will take effect upon acceptance of space of the first agency by the government and continuing for 10 years, subject to termination and renewal as may be hereinafter set forth. The rent start date will be recognized via Supplemental Lease Agreement (SLA). 3. The Government shall pay the Lessor annual rent of \$ 6,031,270.00 as the rate of \$502,605.83 per month in arrears. The first six (6) months are rent free. Rent consists of the following: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Shell space (included)</td> <td style="width: 10%;">\$ 3,706,646.22</td> </tr> <tr> <td>Operated rent</td> <td>\$ 1,215,625.78</td> </tr> <tr> <td>Tenant improvement</td> <td>\$ 1,071,942.44</td> </tr> <tr> <td>Total</td> <td>\$ 6,031,270.00</td> </tr> </table> | | Shell space (included) | \$ 3,706,646.22 | Operated rent | \$ 1,215,625.78 | Tenant improvement | \$ 1,071,942.44 | Total | \$ 6,031,270.00 |
| Shell space (included) | \$ 3,706,646.22 | | | | | | | | |
| Operated rent | \$ 1,215,625.78 | | | | | | | | |
| Tenant improvement | \$ 1,071,942.44 | | | | | | | | |
| Total | \$ 6,031,270.00 | | | | | | | | |

| | | | |
|--|----------------------------------|-------------------------------|----------------------------|
| Name of insured _____ | | Relationship to patient _____ | |
| Birthdate _____ | Social Security Number _____ | Date employed _____ | Work phone _____ |
| Name of employer _____ | City _____ Zip _____ | | |
| Address of employer _____ | State _____ | | |
| Insurance company _____ | Group # _____ | Union or local # _____ | |
| Insurance co. address _____ | City _____ State _____ Zip _____ | | |
| How much is your deductible? _____ | How much have you spent? _____ | | Max. annual benefit? _____ |
| Do you have any additional insurance? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, complete the following: | | | |
| Name of insured _____ | | Relationship to patient _____ | |
| Birthdate _____ | Social Security Number _____ | Date employed _____ | |
| Name of employer _____ | City _____ Zip _____ | | |

| | | | | |
|---|--|------------------------------|----------------------|-------------------------------------|
| 3 Chapter indicator: Enter 3 or 4 | 4a Exemption code | 4b Tax rate | 13b Recipient's GIIN | 13c Recipient's name, if applicable |
| Withholding allowance | | | | |
| Net income | | | | |
| 5 Federal tax withheld | | | | |
| <p><input checked="" type="checkbox"/> Check if federal tax withheld was not deposited with the IRS because income procedures were applied (see instructions)</p> | | | | |
| <p><input type="checkbox"/> Check if tax reported to recipient pursuant to adjustment procedures (see instructions)</p> | | | | |
| () | | | | |
| <p>Total withholding credit (combine boxes 7a, 8, and 9)</p> | | | | |
| <p>Tax paid by withholding agent (amounts not withheld) (see instructions)</p> | | | | |
| 7a Withholding agent's EIN | 12b Ch. 5 status code | 12c Ch. 4 status code | | |
| <p>7d Withholding agent's name</p> | | | | |
| <p>7e Withholding agent's Global Intermediary Identification Number (GIIN)</p> | | | | |
| 7f Country code | 12g Foreign taxpayer identification number, if any | | | |
| <p>7h Address (number and street)</p> | | | | |
| <p>7i City or town, state or province, country, ZIP or foreign postal code</p> | | | | |
| 7k Recipient's name | | 13b Recipient's country code | | |
| <p>7l Address (number and street)</p> | | | | |
| <p>13c Recipient's account number</p> | | | | |
| <p>13d Recipient's date of birth (YYYY/MM/DD)</p> | | | | |
| <p>14a Primary Withholding Agent's Name (if applicable)</p> | | | | |
| <p>14b Primary Withholding Agent's EIN</p> | | | | |
| <p>15a Intermediary or flow-through entity's ENI, if applicable</p> | | | | |
| <p>15d Intermediary or flow-through entity's name</p> | | | | |
| <p>15e Intermediary or flow through entity's GIIN</p> | | | | |
| <p>15f Country code</p> | | | | |
| <p>15g Foreign tax is</p> | | | | |
| <p>15h Address (number and street)</p> | | | | |
| <p>15i City or town, state or province, country</p> | | | | |
| <p>16a Payer's name</p> | | | | |
| <p>16c Payer's GIIN</p> | | | | |
| <p>17a State income tax withheld</p> | | | | |
| <p>17b Pay</p> | | | | |

Form Recognizer

Start with any type of form



Quickly **extract text, tables and key value pairs** with simple REST API calls

The Form Recognizer difference



Quickly and accurately extract text and structure without code



Stay confident with a secure and private foundation



Flexibility to apply anywhere from the cloud to the edge



Customize to your forms

Quickly extract text, keys, and tables from your documents

Core Scenarios



Robotic process automation

"My company manually enters data from documents into structured schema, or hires 3rd party companies to processing forms, and the cost per page is prohibitive."



Intelligent search indexes

"My company manually reads thousands of forms (invoices, tax forms, etc.) to find important information like PO amounts, totals on tax forms, etc."



Industry-specific applications

"My company has industry-specific documents like drilling reports or medical reports, that our teams need to analyze for a variety of purposes like internal benchmarking and patient processing."

The Metropolitan Museum of Art

Connecting people to creativity, knowledge, and ideas.

Solution

Art exploration application
allowing for anyone to
explore The Met's Open
Access collection

Results

- Discover artworks with new pathways to similar or related works
- Explore enriched information about the artist and their works
- Find connections to artworks based on location and time period

"We're in the midst of a renaissance right now, with AI bringing art and science together in a way that will enable online visitors to develop a deeper and more personally relevant connection to art."

Maria Kessler

Senior Program Manager, Digital Partnerships
The Metropolitan Museum of Art

**THE
MET**

Royal IHC

Using Cognitive Search to Improve Customer Service

Solution

Intuitive, personalized document search solution empowers service engineers to more effectively support customers

Results

- Enables employees to focus time and effort on the customer
- Delivers an intuitive solution that is personalized and highly accurate
- Provides easier access from remote locations while simultaneously maintaining data and application security



"The new document search solution co-created with OrangeNXT helps service engineers answer customers better and faster, thereby fostering customer loyalty and increasing revenue in the after-market. It enables our employees to focus their time and effort on focusing on the customer needs, as opposed to wasting time on searching for documents, making their work more rewarding and fun. Our engineers value the solution as more intuitive, more personalized and more accurate."

Arjan van Limborgh
Product Owner Digital Business
Royal IHC



Improving Efficiency and Reducing Risk in Bid Proposal Process

Solution

Collaboration portal to enable fast, efficient review of RFP documents, reduce risk and improve engineer collaboration

Results

- Automatically extracts known risks as part of the document ingestion process
- Engineers can effectively collaborate and share information throughout the project lifecycle
- Increased RFP response time....

“Complex customer needs and difficult markets are our daily business. Azure Cognitive Search enables us to augment expert knowledge and experience for reviewing complex technical requirements into an automated solution that empowers knowledge workers throughout our organization.”

Chris van Ravenswaay
Business Solution Manager
Howden



Solution

Icertis Contract Management platform uses Cognitive Search for:

- Intelligent digitization and indexing of inherently unstructured contract data
- Enrich contract data sources (contracts, templates, clauses, legacy contracts)
- Cloud scale intelligent search across complex, distributed contract repositories

Benefits

- Import legacy contracts up to 80% faster
- Rapidly set up third party contracts
- Improve post-execution compliance by up to 90%
- Reduce the cost of compliance by up to 60%
- Find insights you could not search for before, and find insights you did not even know you had before

“Contracts are the foundation of commerce and for the first time in history, they are being digitized.

Applying AI to this new pool of digitized data transforms contracts from static documents into live contracts which can interact with people, surrounding systems and ultimately even other contracts.”

Monish Darda, Icertis CTO and Co-founder

Port Authority of València

Historical Archive Consultation

Solution

Search Application that OCRs, tags, classifies and indexes historic documents from the 19th century to the present day.

Results

- Citizens and researchers can search historic documents from the 19th century to the present day.
- New way to browse documents using facets and automatic tags

"Historical port documentation is a documentary heritage that belongs to the citizens. With this project, and thanks to the application of Artificial Intelligence, the Port Authority of València makes available to citizens and researchers a magnificent way of accessing the knowledge it holds."

Xavier Mulet i Baixauli

Head of Electronic Administration and Records Management
Autoridad Portuaria de Valencia



encamina

Digital archiving service delivers faster, deeper, more cost-effective data insights with Azure Cognitive Search

For companies in highly regulated industries, the ability to verify and search through archived data with ease can be the difference between extracting timely insights and incurring hefty fines. Archive360—an intelligent information management ISV—gives those companies an easy way to manage their archived data in the cloud and, now with the addition of Microsoft Azure Cognitive Search, enables them to ask complex questions of petabyte-sized datasets both quickly and cost-effectively.



Products and Services

Microsoft Azure
Azure Cosmos DB
Azure Cosmos DB API for Gremlin (graph)
Azure Search

Organization Size

110 employees

Industry

Partner Professional Services

Country

United States





autoTrader.ca moved millions of user vehicle photos into Microsoft Azure—and because of the success of the solution, it is now moving its application search functionality and web properties to Azure too. In other words, the company is moving all its operations to platform-as-a-service.

Canada's largest automobile search site takes Azure for a spin, drives business success

Situation

autoTrader.ca needed to replace an old, slow search engine and to be able to create new offerings such as a dealer-to-dealer auction site.

Solution

Azure Cognitive Search now powers the company's auction site—and is about to speed up its consumer portal, too.

Benefits

- Serves mobile customers—a growing segment of users—faster and more efficiently.
- Eliminates high costs of maintaining and scaling traditional infrastructure.
- Frees up IT for strategic projects that help expand the business.



Unlock insights on any data

"We wanted our IT team fully focused on building websites and apps that help consumers buy cars with confidence, not running a datacenter. Azure takes care of that for us, like a utility we know can keep pace with our explosive growth."

Allen Wales
Vice President of Technology



Using Azure Cognitive Search to drive inbound requests for tens of thousands of properties, JLL can give its employees and customers a higher-performing search experience and it can help investors find the right property to invest in.

Prime Property and Data Discovery with Cloud-Based Search and Analytics

Situation

JLL wanted to change the way its applications are designed and hosted by taking advantage of the cloud..

Solution

The company is using Microsoft Azure Cognitive Search to power its commercial property listings site and an Azure big data solution for new data insights.

Benefits

- Helping investors quickly find the right property
- Getting deeper insight into local real estate markets
- Empowering local teams
- Answering critical questions



Unlock insights on
any data

"It has always been our plan to have our entire web listings platform in the cloud, but the only component that stopped us from doing that was search. Now, with the Azure Cognitive Search service, we can realize our goal."

Sridhar Potineni
Director of Innovation

Dentsu Aegis Network

Global Brand and Marketing Company

Solution

"Smart Invoice" application that extracts data from invoices

Results

Quickly extract text, fields, and tables from invoices
A smarter way to process invoices
Automatic extraction of important data

"I wanted the ability to recognize a key value pair regardless of how it's structured within the document—and Form Recognizer actually does that. That capability played a big role in convincing me that we'd found our solution."

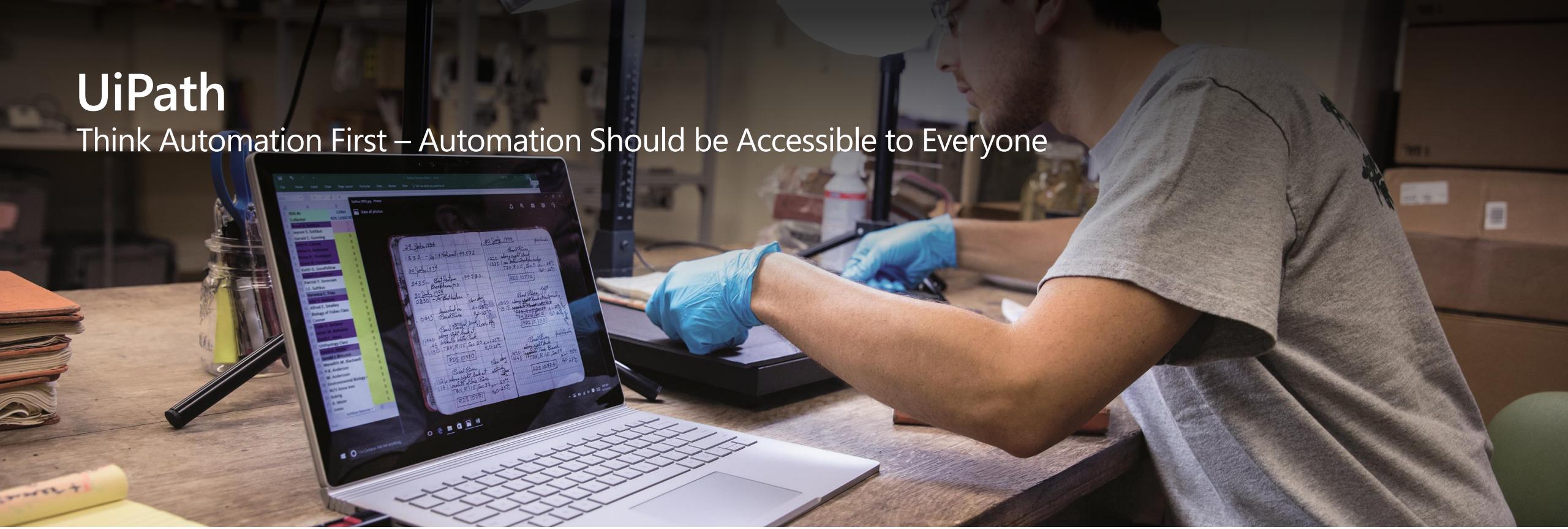


Boris Coto

Solution Architect
Dentsu Aegis Network



Think Automation First – Automation Should be Accessible to Everyone



Solution

Leverages UiPath's leading enterprise automation platform and human-in-the-loop capabilities to enable Humans, Robots, and AI to work together to accomplish a mission.

Results

Rapid automation of document processing

Intelligent extraction of text, fields, and tables from forms

Human-in-the-loop for human data validation

Automates data entry

Reduces time to business insights and discovery

"We're excited to leverage Form Recognizer as a key document extraction capability on our Robotic Process Automation (RPA) platform and our open AI ecosystem. UiPath's and Microsoft's investments in AI are streamlining the process of unlocking key business data, making possible a new era of AI-driven business insights and knowledge management.", Director Artificial Intelligence, Document Understanding Product Manager, UiPath

Mark Benyovszky

Director Artificial Intelligence
Document Understanding Product Manager

UIPath



Financial Fabric

Financial DataHub Platform



Solution

Financial DataHub extracting data from semi-structured PDF documents to generate insight

Results

Quickly extract text, fields, and tables from forms

Ingest a few sample documents to start parsing data intelligently

"We see major benefits with Form Recognizer, such as cost reductions and accelerated time to market. Using it, we're able to extract and analyze data at a fraction of the cost of how other providers do it in-house using traditional manual, ETL methods."

Subhra Bose

Chief Executive Officer
Financial Fabric



Documents revealed.
Let's find out what happened that day.

 oswald

SEARCH

Démonstration

<http://jfk-demo.azurewebsites.net/#/>

Démonstration Azure Cognitive Search Wolters Kluwer

<http://wolterskluwereap.azurewebsites.net/>

The screenshot displays the Wolters Kluwer search interface. At the top, there is a navigation bar with the Wolters Kluwer logo and a "Sign in" link. Below the navigation bar is a large blue search bar containing the placeholder text "What are you searching for today?" followed by a green magnifying glass icon.

SAMPLE SEARCHES

- Documents containing both Microsoft and Apple
Microsoft+Apple
- Documents containing Cybersecurity risks
risks:"Cybersecurity"
- Documents where fraud and risk within 10 words
"fraud risk"~10
- All Comment Letters
exhibitType: "Letter"

SAMPLE DOCUMENTS

- FORM 10-K (UNICO AMERICAN CORP)
- FORM 10-K (STAR GOLD CORP)
- FORM 10-K (DIME COMMUNITY BANCSHARES INC)
- FORM 10-K (CELADON GROUP, INC.)
- FORM 10-K (COVENANT TRANSPORTATION GROUP INC)

TARGETED SEARCH

Search Term:

Area: Filings & Exhibits

Search



Azure Cognitive Search documentation & ressources

Documentation Azure Cognitive Search

- Website
 - <https://azure.microsoft.com/en-us/services/search/>
- Pricing
 - <https://azure.microsoft.com/en-us/pricing/details/search/>
- Documentation
 - <https://docs.microsoft.com/en-us/azure/search/>
- What's new
 - <https://azure.microsoft.com/en-us/updates/?product=search>



Get Started Guide for Azure Developers



Azure Application Architecture Guide



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Get Started

Products

SDKs/Tools

Architecture

All

Compute

Compute

Linux Virtual Machines

Windows Virtual Machines

App Service

Functions

Batch

Networking

Networking Overview

Content Delivery Network

ExpressRoute

Azure DNS

Virtual Network

Storage

Storage

StorSimple

Data Lake Storage Gen2

Data Lake Storage Gen1

Blob Storage

Web

App Service - Web Apps

API Management

Content Delivery Network

Notification Hubs

Azure Search

Documentation Microsoft

<https://docs.microsoft.com/en-us/azure/#pivot=products>

Filter by title

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> Example scenarios

> Reference architectures

Overview

> AI

> Big data

> Enterprise integration

> Hybrid networks

> Identity management

Internet of Things (IoT)

> Microservices

> Network DMZ

Azure Reference Architectures

Our reference architectures are arranged by scenario. Each architecture includes recommended practices, along with considerations for scalability, availability, manageability, and security. Most also include a deployable solution or reference implementation.

Jump to: [AI](#) | [Big data](#) | [IoT](#) | [Microservices](#) | [Serverless](#) | [Virtual networks](#) | [VM workloads](#) | [SAP](#) | [Active Directory](#) | [Web apps](#)

AI and machine learning



Training of Python scikit-learn models

Recommended practices for tuning the hyperparameters of a scikit-learn Python model.



Distributed training of deep learning models

Run distributed training of deep learning models across clusters of GPU-enabled VMs.



Batch scoring of Python models

Batch score many Python models in parallel on a schedule using Azure Machine Learning.



Batch scoring for deep learning models



Real-time scoring of Python and deep learning models



MLOps for Python models using Azure Machine Learning

Architectures Microsoft
<https://docs.microsoft.com/en-us/azure/architecture/>

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Microsoft Learn

<https://docs.microsoft.com/en-us/learn/>



AI

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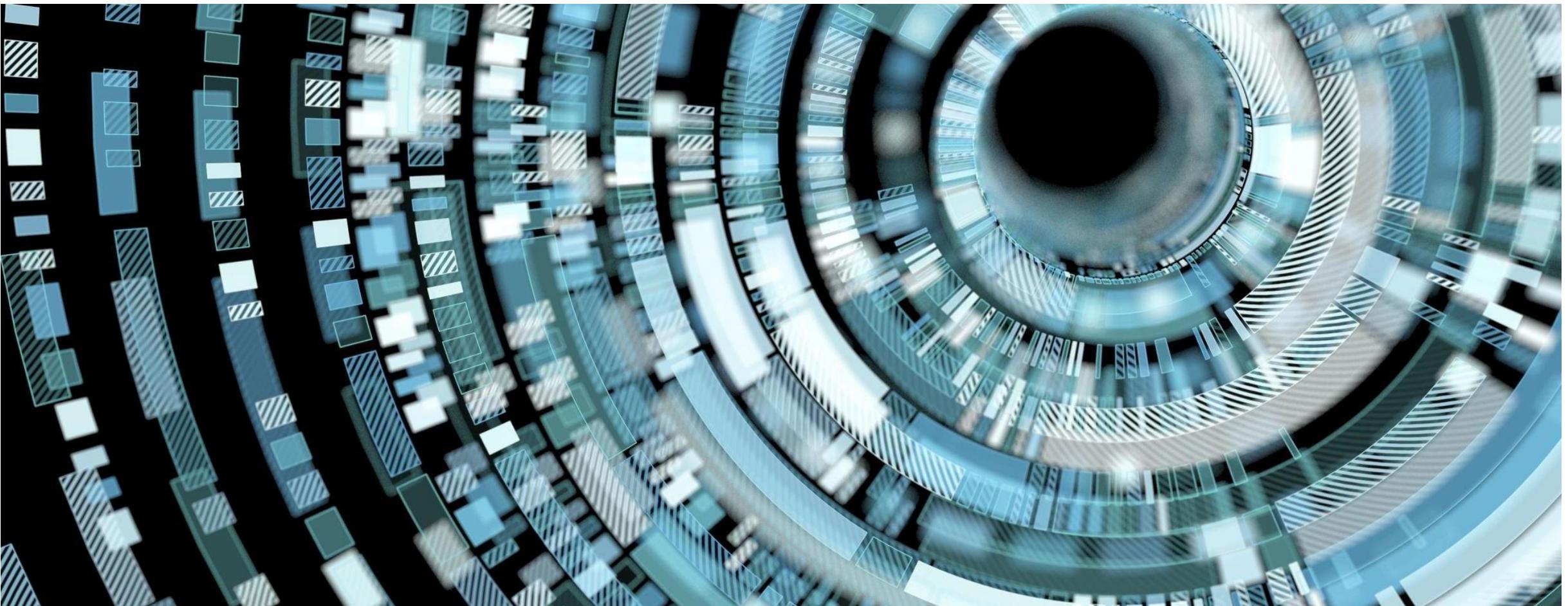
AI School

Whether you're completely new to AI or a seasoned professional looking to stay on top of your game, AI School is quite simply the best place to find the information, learning materials and resources you need to start building intelligence into your solutions.

[AI Business School](#)[Conversational AI](#)[AI Services](#)[Machine Learning](#)[Autonomous Systems](#)[Responsible AI](#)

Microsoft AI School

<https://aischool.microsoft.com/en-us/home>

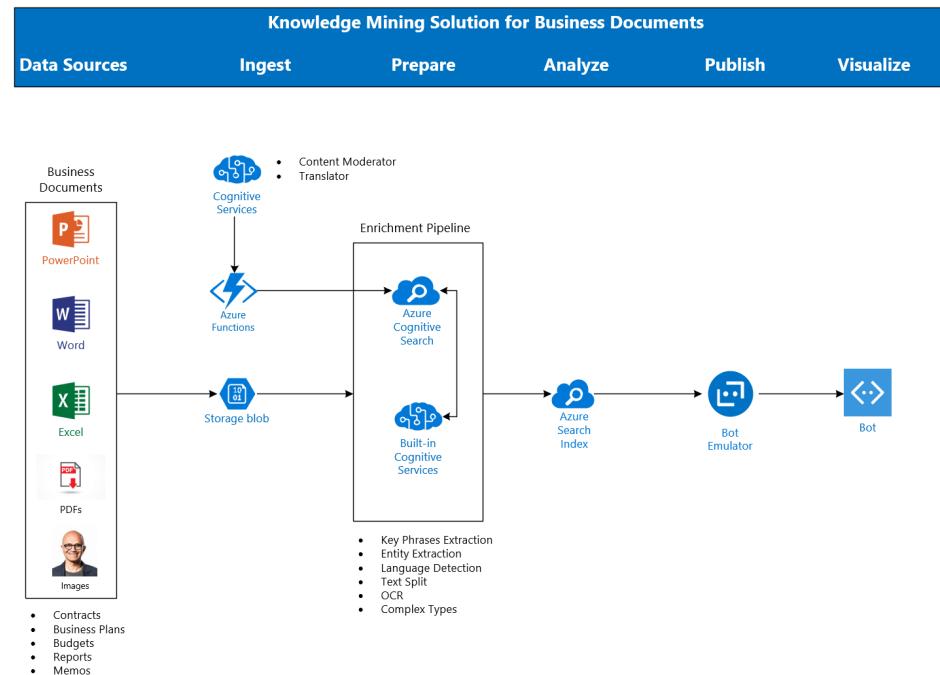


Lab

Présentations

<https://aka.ms/PresentationsACS>

Contenu du workshop Azure Cognitive Search



<https://aka.ms/WorkshopACS>

Architecture workshop

