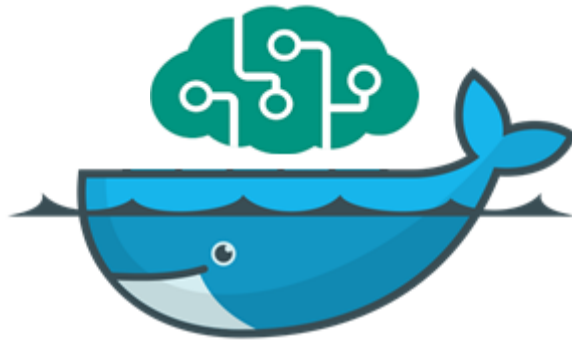


Container Support for Azure Cognitive Services



Agenda

Azure Cognitive Services

Why Containers?

Customer Benefits

Containers in Public Preview

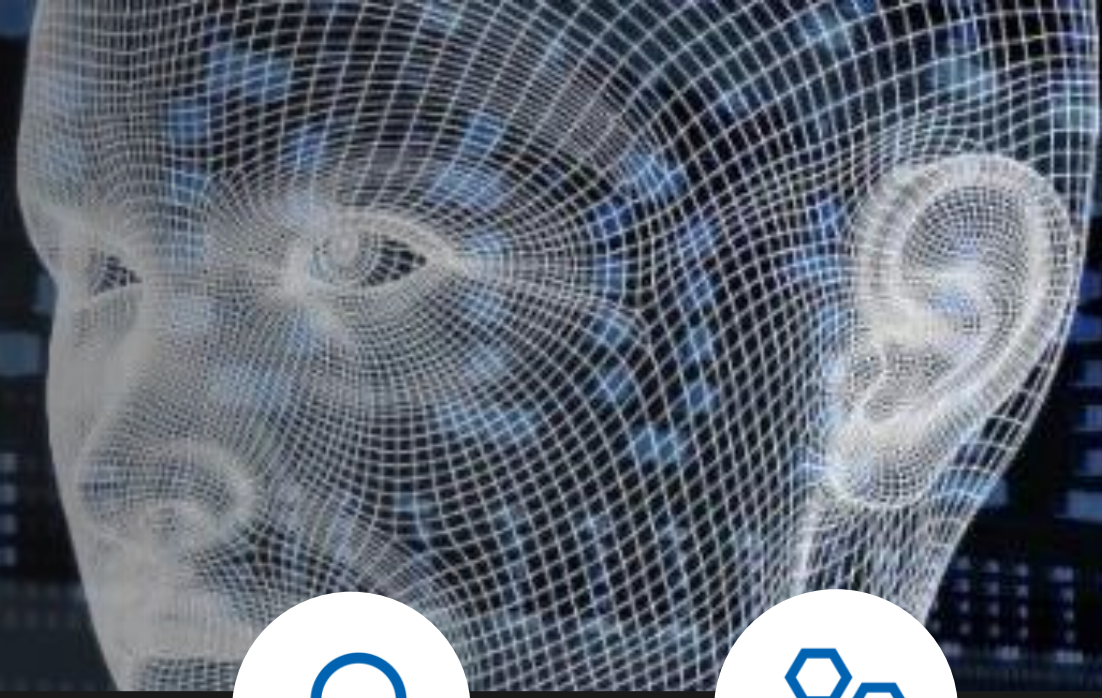
User experience

How billing works

Q&A

Azure Cognitive Services

Give your apps a human side



Vision

From objects to faces and feelings, enable your apps to analyze still images and video.



Speech

Speak to and hear your users, compensating for environmental noise. Use with **Language** for max results.



Language

Analyze text to extract user feeling and intent. Extract knowledge from existing sources and use it to seed chat bots. Translate between 60+ languages and growing.



Search

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



Knowledge

Preview the newest capabilities from analyzing time series to personalization over reinforcement learning.

Cognitive Services capabilities

Infuse your apps, websites, and bots with human-like intelligence



Vision

Object, scene, and activity detection

Face recognition and identification*

Celebrity and landmark recognition

Emotion recognition

Text and handwriting recognition (OCR)*

Customizable image recognition

Video metadata, audio, and keyframe extraction and analysis

Explicit or offensive content moderation

Container support



Speech

Speech transcription (speech-to-text)

Custom speech models for unique vocabularies or complex environment

Text-to-speech

Custom Voice

Real-time speech translation

Customizable speech transcription and translation

Speaker identification and verification



Language

Language detection*

Named entity recognition

Key phrase extraction*

Text sentiment analysis*

Multilingual and contextual spell checking

Explicit or offensive text content moderation

PII detection for text moderation

Text translation

Customizable text translation

Contextual language understanding*

Container Support



Knowledge

Q&A extraction from unstructured text

Knowledge base creation from collections of Q&As

Semantic matching for knowledge bases

Customizable content personalization learning



Search

Ad-free web, news, image, and video search results

Trends for video, news

Image identification, classification and knowledge extraction

Identification of similar images and products

Named entity recognition and classification

Knowledge acquisition for named entities

Search query autosuggest

Ad-free custom search engine creation

* Also available with container support

Why Containerization?

Enterprises interested in Azure AI, but:

- Unable to load all their data into the cloud.
- Regulatory requirements on handling customer data.
- Security & Privacy concerns
- Low Bandwidth or intermittently connected environments

Container enables new possibilities:

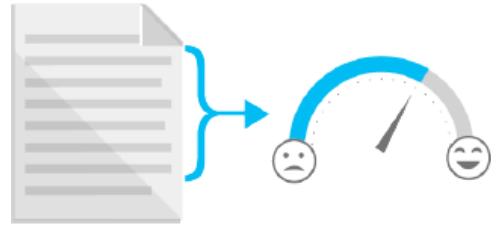
- Run AI locally in their own context, and in their own network.
- Easier to deploy and manage software.
- It opens the doors and democratizes these AI techniques to a variety of people who may not have been able to use them before.
- Makes AI portable so that it could go to a variety of different environments.
- Provides a high-throughput scenario for faster operations

Customer Benefits

- **Control over data:** It is essential for customers that cannot send data to the cloud but need access to Cognitive Services technology.
- **Control over model updates:** Provide customers flexibility in versioning and updating of models deployed in their solutions.
- **Portable architecture:** Enable the creation of a portable application architecture that can be deployed in the cloud, on-premises and the edge.
- **High throughput / low latency:** Provide customers the ability to scale for high throughput, low latency, requirements by enabling to run with more resources.

Containers Availability – Public preview

Text Analytics Containers



Sentiment Analysis



Keyphrase Extraction



Language detection

Vision Containers



Face API



Recognize Text (OCR)

Language Containers



Language Understanding

Face Recognition

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



Computer Vision

Analyze an image

Understand content within an image

OCR

Detect and recognize words within an image

Recognize celebrities

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



Text Analytics

Sentiment analysis

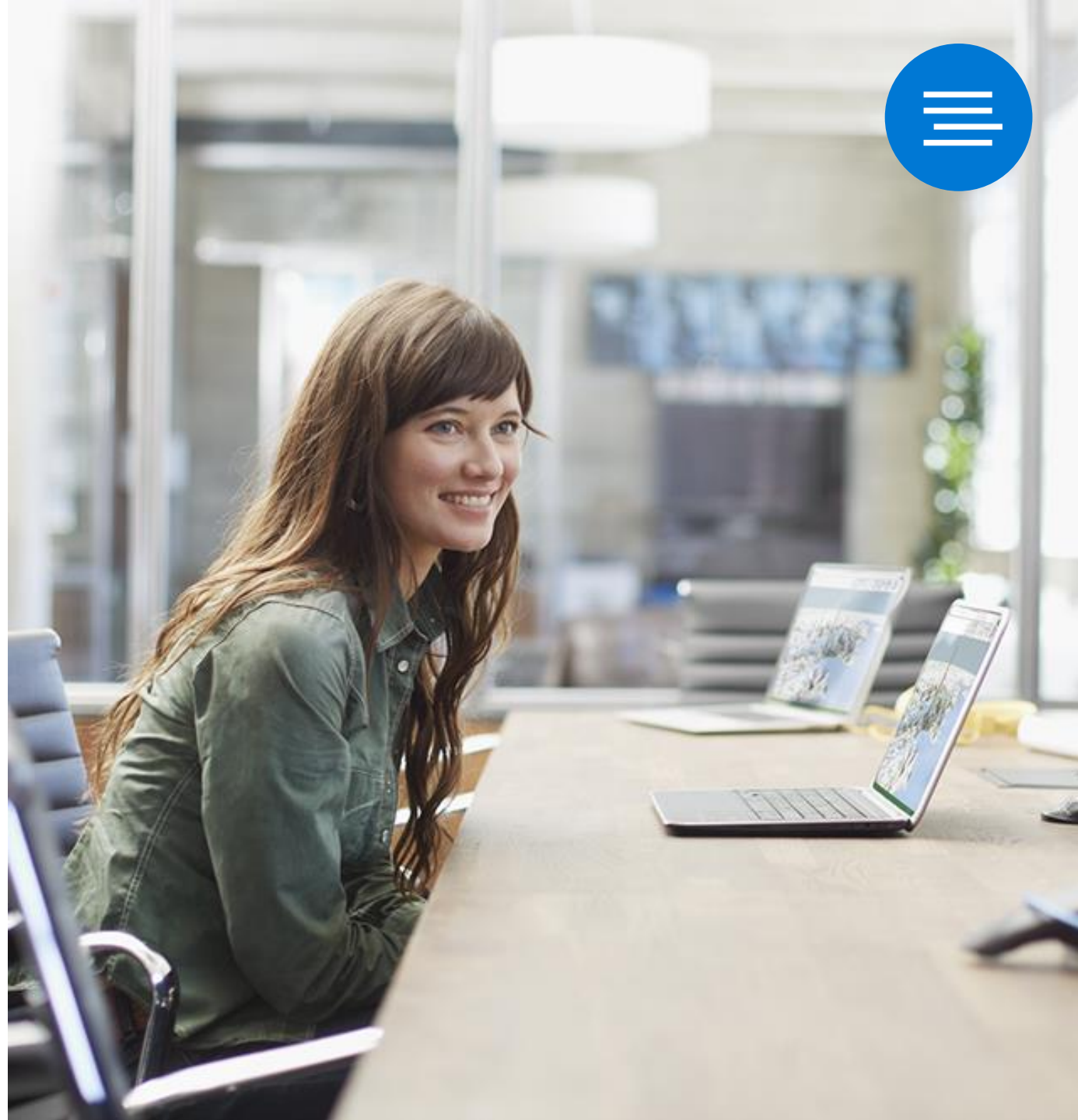
Understand if a record has positive or negative sentiment

Key phrase extraction

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

Language detection

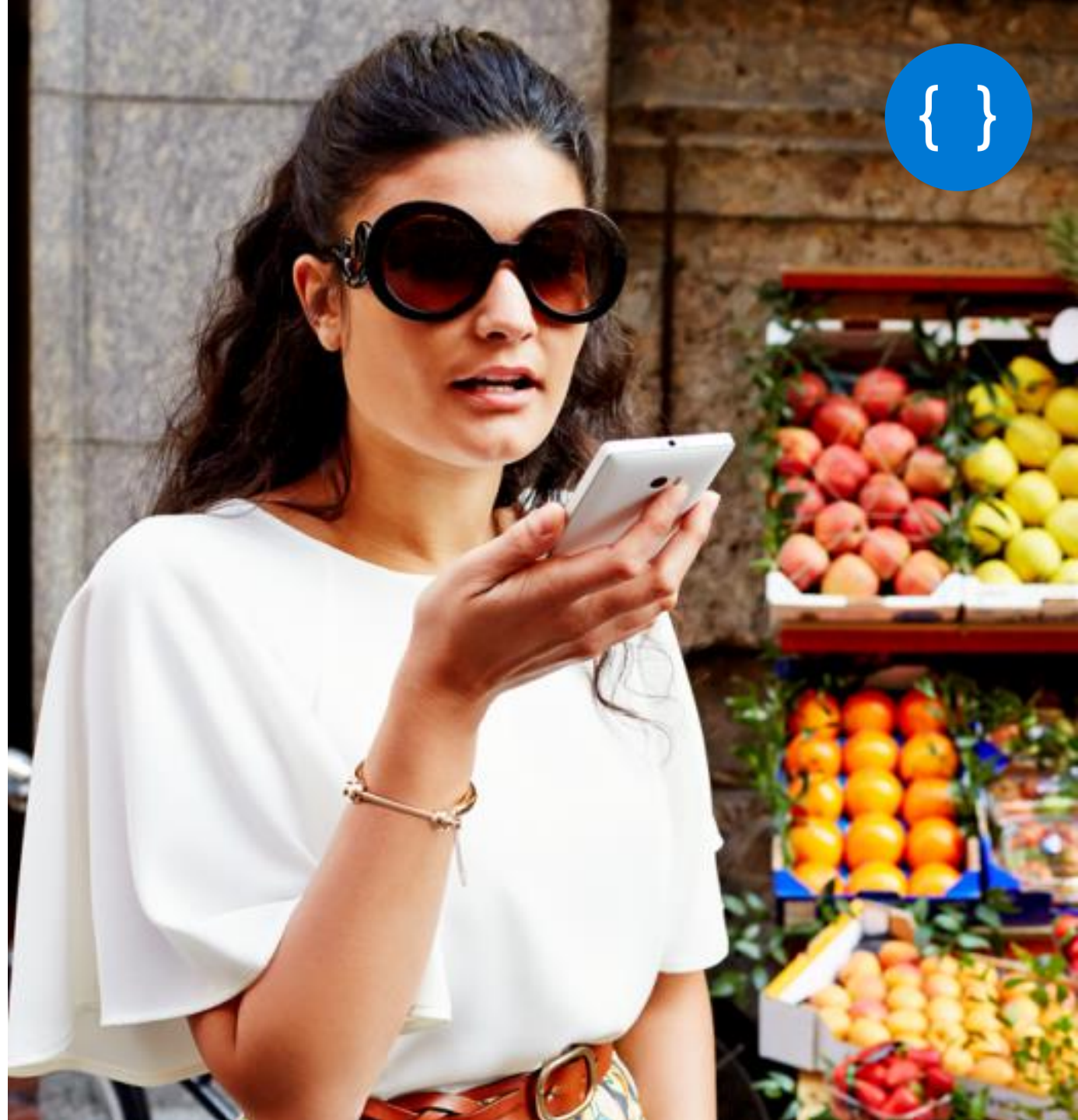
Identify the language,
120 supported languages



Language Understanding Intelligent Service (LUIS)

**Understand what
your users are saying and
create agents that perform
custom actions**

Use pre-built models or create your own



User Experience

- Can discover through:
 - ACOM
 - Azure portal
 - Microsoft container registry
 - Docker Hub

User advantages

- No new signup for containers specific
- One API Key for both Web and Container
- Unified billing

Q&A