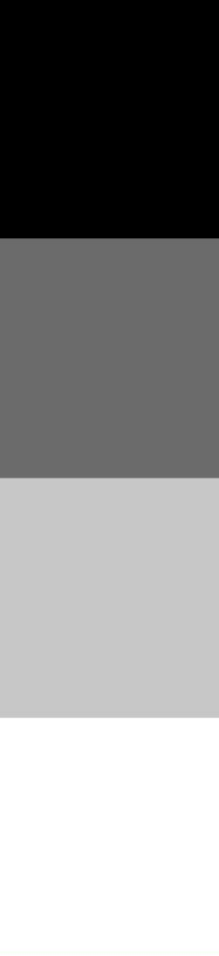
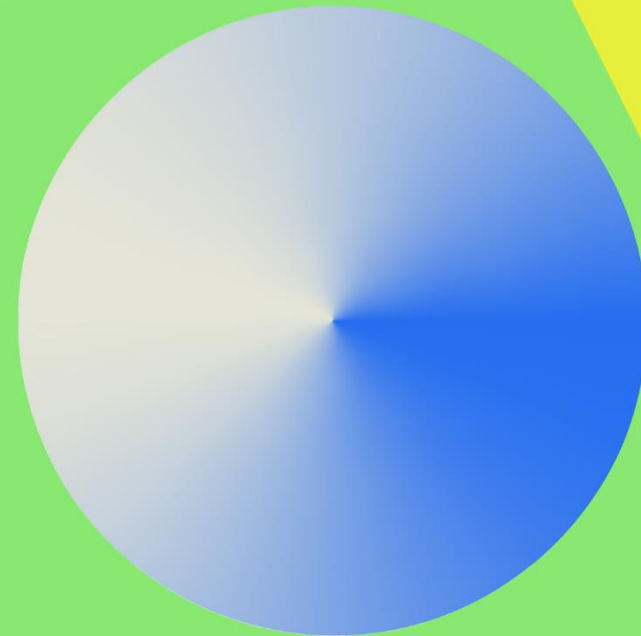


Azure Cognitive Services

Asen Lichkov – Focus Sales Manager
Azure



THE FUTURE OF AI IS NOW

▶ AI ADOPTION CONTINUES TO ACCELERATE

▶ 95%

▶ Of enterprises consider AI technology to be important for their digital transformation efforts

▶ AI IS NOT THE FUTURE, IT IS NOW

▶ 80%

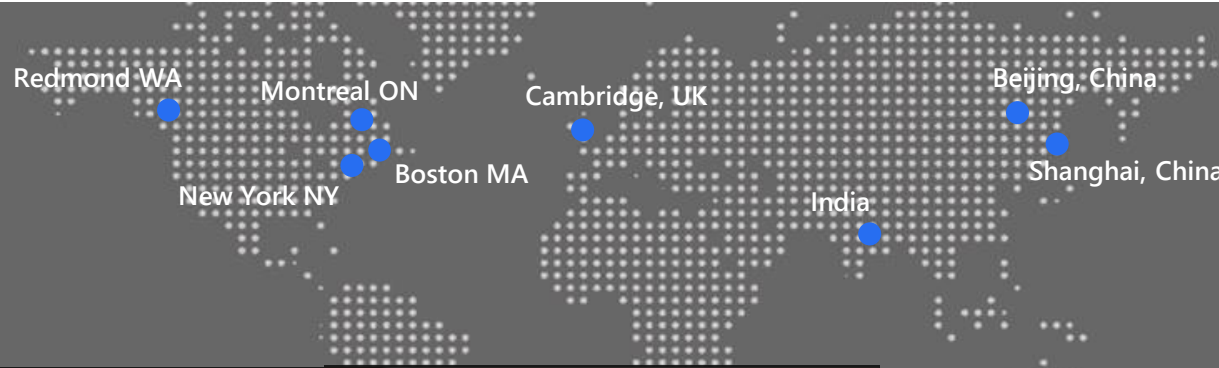
▶ Of enterprises report that they are using some form of AI in production

▶ DELIVERING BUSINESS RESULTS

▶ 81%

▶ Of enterprises report positive ROI in less than two years

AI INNOVATION FUELED BY RESEARCH



8

**Global
research
centers**

1k+

**Researchers
employed
worldwide**

20k

**AI-related
patents**

1k+

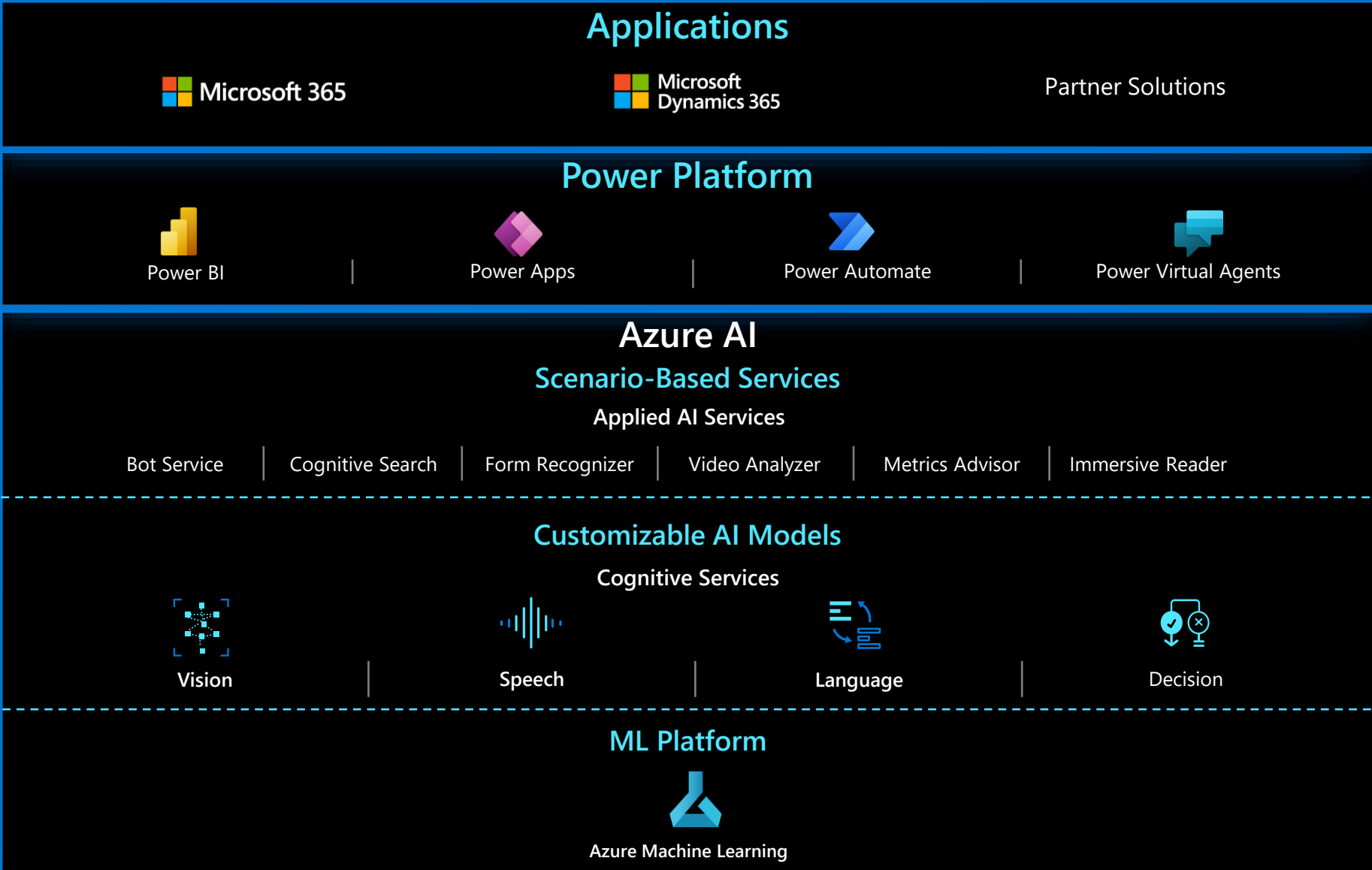
**AI
research
papers
published**

1st

**Human parity
milestone on
vision, speech,
and language**

AI Portfolio

Microsoft Portfolio for AI



Microsoft continuing to lead the market

Gartner

- ▶ Magic Quadrant
 - ▶ Leader
 - ▶ 2021 Cloud AI Developer Services
 - ▶ 2021 Analytics & Business Intelligence Systems
 - ▶ 2020 Cloud Database Management Systems

▶ Source:

▶ Gartner Analyst Report

FORRESTER®

- ▶ Forrester Wave
 - ▶ Leader
 - ▶ 2020 Notebook-based Predictive Analytics & Machine Learning
 - ▶ 2019 Computer Vision Platforms
 - ▶ 2019 Cognitive Search

▶ Source:

▶ Forrester AML Report

IDC

- ▶ IDC MarketScape
 - ▶ Leader
 - ▶ 2020 Worldwide Advanced Machine Learning Software Platforms
 - ▶ 2019-2020 Worldwide General-Purpose Artificial Intelligence Software Platforms

▶ Source:

▶ IDC Analyst Report

Gartner

- ▶ Magic Quadrant
 - ▶ Visionary
 - ▶ 2021 Data Science and Machine Learning Platforms
 - ▶ 2020 Data Science and Machine Learning Platforms

▶ Source:

▶ Magic Quadrant for DSML

AZURE COGNITIVE SERVICES

Language

Language understanding
Custom Question Answering
Text Analytics
Translator

Telefonica

KPMG

VOLKSWAGEN
GROUP

Vision

Computer vision
Custom vision
Face API



GE Aviation



Volpara
HEALTH



Cloudinary

Speech

Speech to text
Text to speech
Speech translation
Speaker recognition



Pearson

PROGRESSIVE

duolingo

Decision

Anomaly detection
Content Moderator
Personalizer

BIG
FISH

AIRBUS

NBA



ACCELERATE AI MODELS WITH COGNITIVE SERVICES



Customizable pretrained models

Built with breakthrough AI research



Deploy anywhere

Cross-cloud and edge support with containers



No ML expertise required

Get started quickly regardless of experience level



Responsible AI in action

Develop responsibly and empower responsible use

SPEECH TRANSCRIPTION & ANALYTICS

▶ **85%**



- ▶ *Of videos are watched on Facebook every day without sound¹*

▶ **44%**



- ▶ *Of experts think that web conferencing transcription has experienced the biggest positive impact during the pandemic²*

[Speech service documentation - Tutorials, API Reference - Azure Cognitive Services - Azure Cognitive Services | Microsoft Learn](#)




**Call Transcription
& Analytics**

ThermoFisher
SCIENTIFIC

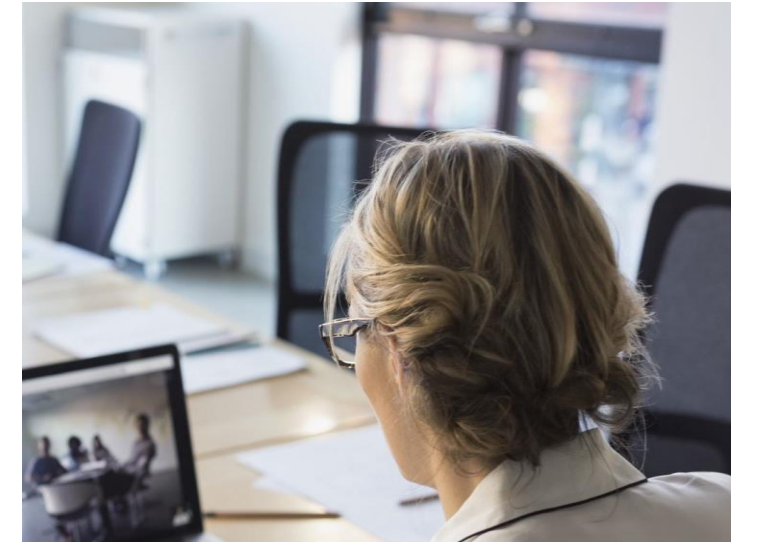
Allstate

PROGRESSIVE



**Multimedia Content
Captioning**


Spotify



**Conversation
Transcription**

KPMG

mediavalet



Conversational AI

45%



End users prefer chatbots as the primary mode of communication for customer service ¹

1B



Service tickets will be raised automatically by chatbots and virtual agents – or their near-future cousins by 2030 ²

[Azure Cognitive Service for language documentation - Tutorials, API Reference - Azure Cognitive Services | Microsoft Learn](#)



Conversational AI



Customer Service Assistant

vodafone asos [[Wolford]] Allstate



Smart Personalized Care for Health

CDC



Voice Control

Telefonica



UNIVERSAL ELECTRONICS

BBC

Transforming customer service with Conversational AI

96K

Active bots run on Azure

2.9B

Monthly messages

100M

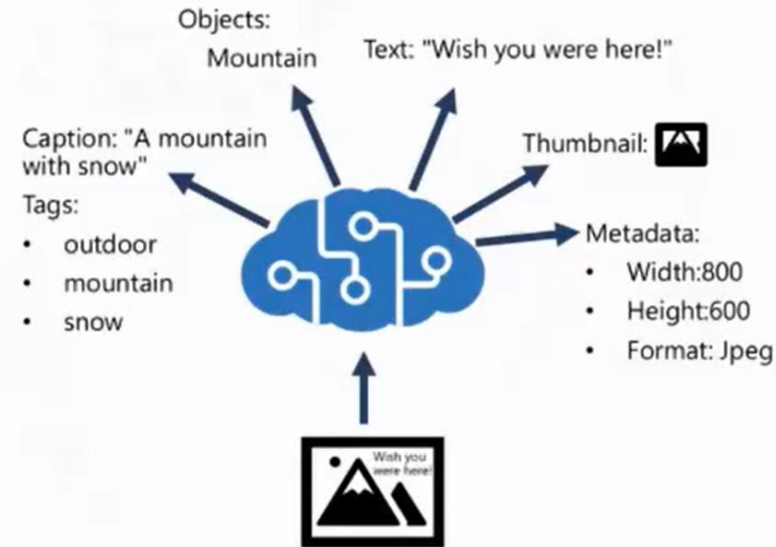
Azure Health Bot users



VISION API

The Computer Vision Service

- Image analysis:
 - Description and tag generation
 - Object detection
 - Face detection
 - Image metadata, color, and type analysis
 - Categorization - including, celebrity and landmark identification
 - Brand detection
 - Moderation ratings
 - Optical character recognition
 - Smart thumbnail generation
- Can be used as:
 - Standalone **Computer Vision** resource
 - Multi-service **Cognitive Services** resource



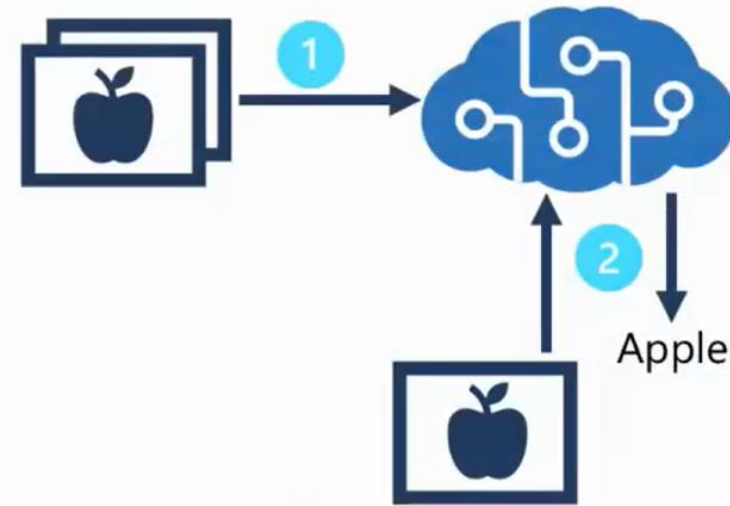
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[What is Computer Vision? - Azure Cognitive Services | Microsoft Learn](#)



The Custom Vision Service

- Train custom models with your own images
 - Image classification
 - Object detection
- Requires two kinds of resource:
 - Training Resource:
 - Cognitive Services
 - Custom Vision (Training)
 - Prediction Resource:
 - Cognitive Services
 - Custom Vision (Prediction)



1. Use your own images to train a model
2. Use the model to predict labels for new images

[What is Custom Vision? - Azure Cognitive Services | Microsoft Learn](#)



Face Detection with the Computer Vision Service

Use the **Analyze Image** function, specifying **Faces** as a visual feature

Note: age and gender are depreciated and unavailable to new customers

```
https://{endpoint}/vision/v3.1/analyze?visualFeatures="Faces"
```

Body:

```
{ "url": "http://path-to-image"
```

or

```
[ binary-image-data]
```



```
{
  "faces": [
    {
      "age": 32,
      "gender": "Female",
      "faceRectangle": {
        "top": 225,
        "left": 237,
        "width": 130,
        "height": 130
      }
    },
    {
      "age": 29,
      "gender": "Female",
      "faceRectangle": {
        "top": 309,
        "left": 534,
        "width": 119,
        "height": 119
      }
    }
  ]
}
```

[What is the Azure Face service? - Azure Cognitive Services | Microsoft Learn](#)





CHATBOT AND TEXT TO SPEECH DEMO



GET STARTED WITH AZURE COGNITIVE SERVICES

Azure Cognitive Services Documentation: [Azure Cognitive Services documentation | Microsoft Learn](#)

AI 900 Microsoft Azure AI Fundamentals training: [AI-900 - Training | Microsoft Learn](#)

AI-102: Designing and Implementing a Microsoft Azure AI Solution: [Exam AI-102: Designing and Implementing a Microsoft Azure AI Solution - Certifications | Microsoft Learn](#)

Real life solutions, including Azure Cognitive Services:

[VEGAS Creative Software gives video makers natural-sounding voiceover using Azure Cognitive Services](#)

[NBA accelerates modern app time to market to ramp up fans' excitement](#)

[KPMG helps banking customers identify financial risks by unifying data with Azure AI](#)

[Spanish telco builds digital assistant based on natural language bot, engages customers on new level](#)

[Microsoft Customer Story-Nature-inspired beauty products provider, Oriflame, optimizes selling processes using Microsoft Azure](#)





THANK YOU

