

Creating an Endangered Animal Detector cloud application

<**NAME**> - <TITLE/COMPANY>
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amynic completed custom vision task 9a25242 on Aug 21

1 contributor

32 lines (21 sloc) 3.08 KB Raw Blame History

Creating an Endangered Animal Detector cloud application

In this 60 min workshop you will create a cloud application that will help detect endangered animals in the wild. Being able to analyse the contents of images and act on the information is a great intelligent feature than can enhance your application.

You will build a prototype application infused with intelligence using Azure Platform-as-a-Service (PaaS) offerings such as [Azure Custom Vision service](#), [Azure Logic Apps](#) and [Bonus] [Microsoft PowerApps's](#) platforms. By linking these services together you can build reliable, scalable AI applications and get your users testing them as soon as possible.

Pre-Requisites for your machine:

- Clone this repository to your local machine to gain images and code samples you need for the app: git clone <> or choose 'Clone or Download' green button and then 'Download ZIP'
- Microsoft Azure Subscription - see details on [main readme.md file](#)
- Laptop with a modern web browser (Google Chrome, Microsoft Edge)

All demos and content have been tested on a Windows PC, however all options should run from macOS and Linux machines as well. Please provide information via an issue or pull request if you have feedback

Go to Sections:

- Section 1: Azure Custom Vision - Creating Endangered Animal Detector Classification Algorithm, [go to section](#)
- Section 2: Azure Logic Apps - Creating serverless process to analyse an image and email you, [go to section](#)
- Section 3: Microsoft Powerapps - Creating a front end application to take a picture of an animal and analyse it, [go to section](#)

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<https://bit.ly/2msSXFb>

Customized language understanding **Text-to-speech**
Content moderation **Spell**
Speech translation check
Custom image classification
Speaker recognition Entity linking
Sentiment analysis, & augmentation
key phrase extraction **Image tagging**
Custom Object detection Text translation Intend
voice **OCR handwriting** analysis
Emotion detection
Video insights **recognition** Custom translation
Face Custom speech Assisted text moderation
identification Speech transcription

AI



Vision



Speech



Language

Azure AI



AI apps & agents

Azure Bot Service
Azure Cognitive Services



Knowledge mining

Azure Cognitive Search



Machine learning

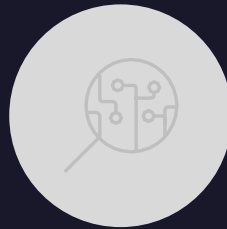
Azure Databricks
Azure Machine Learning
Azure AI Infrastructure

Azure AI



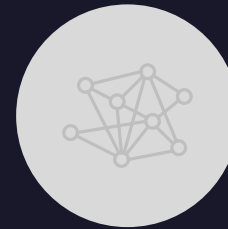
AI apps & agents

Azure Bot Service
Azure Cognitive Services



Knowledge mining

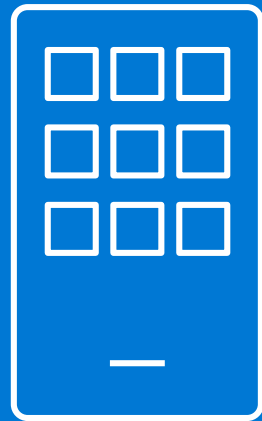
Azure Cognitive Search



Machine learning

Azure Databricks
Azure Machine Learning
Azure AI Infrastructure

Building AI apps & agents



Your apps



Vision

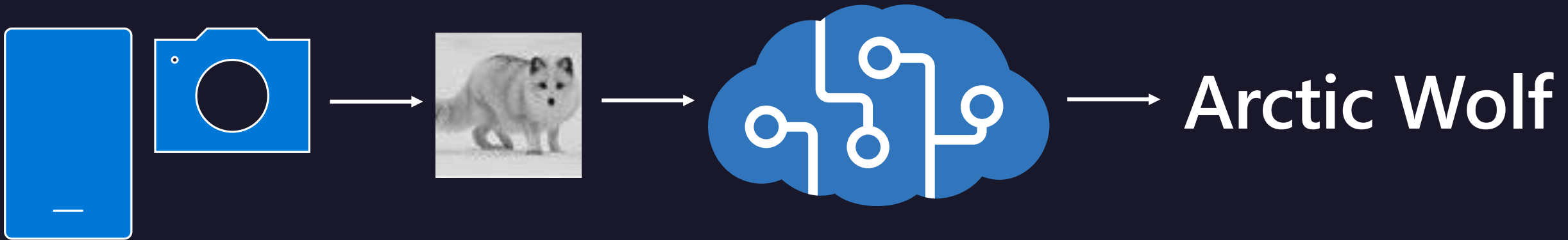


Speech

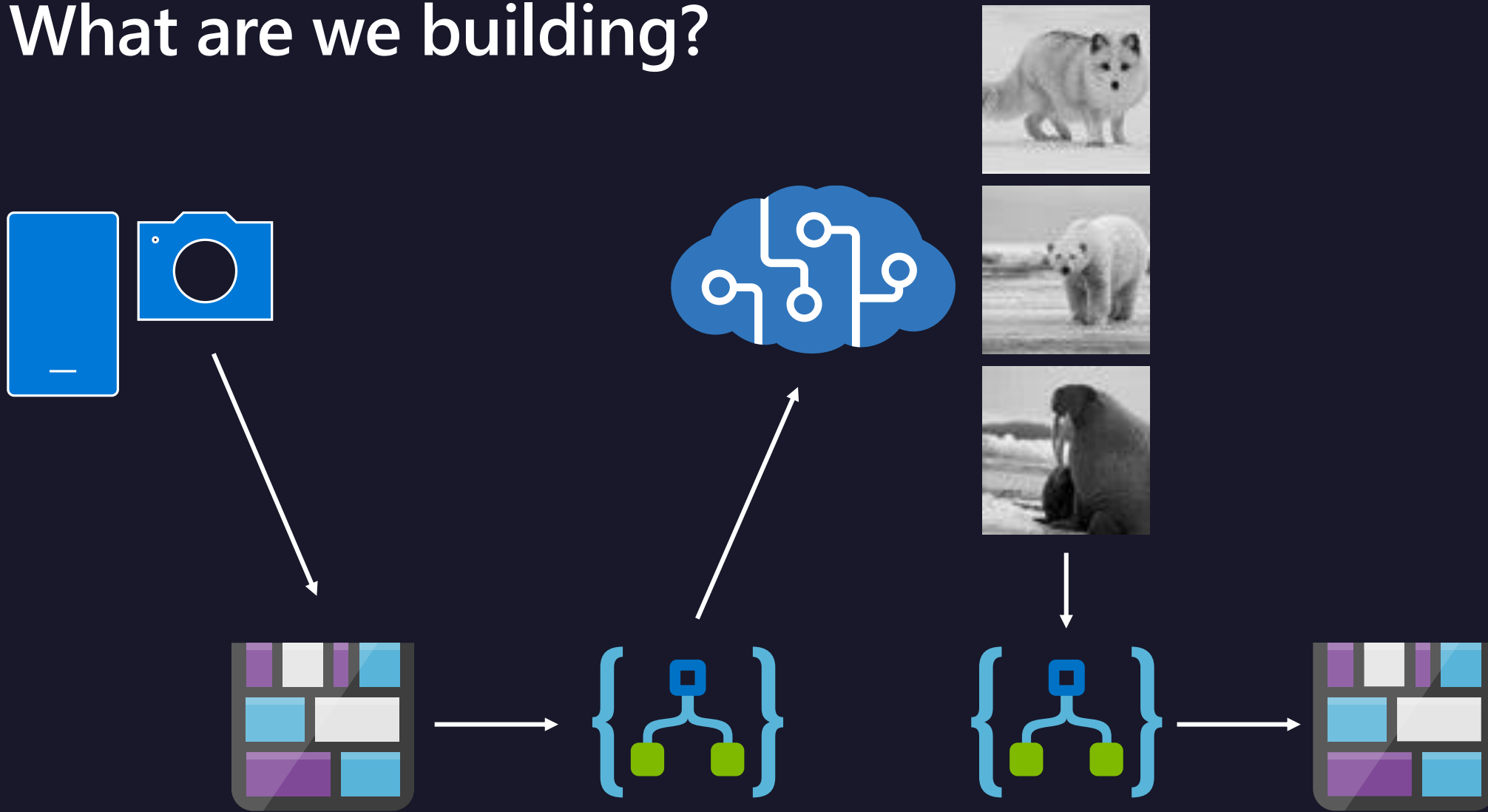


Language

What are we building?

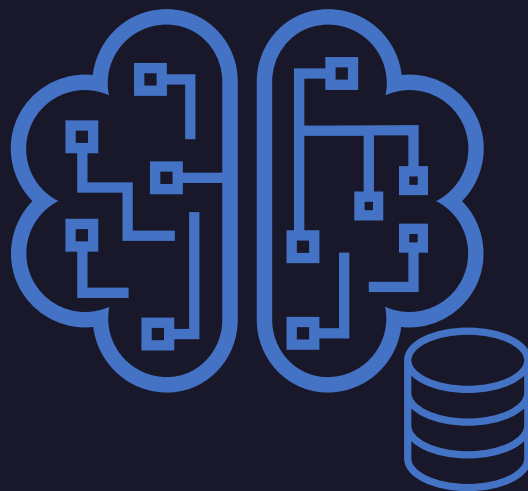


What are we building?

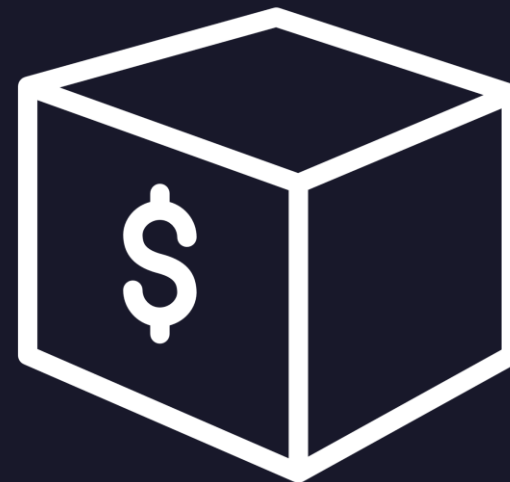




idea



customize
prebuilt AI



reality

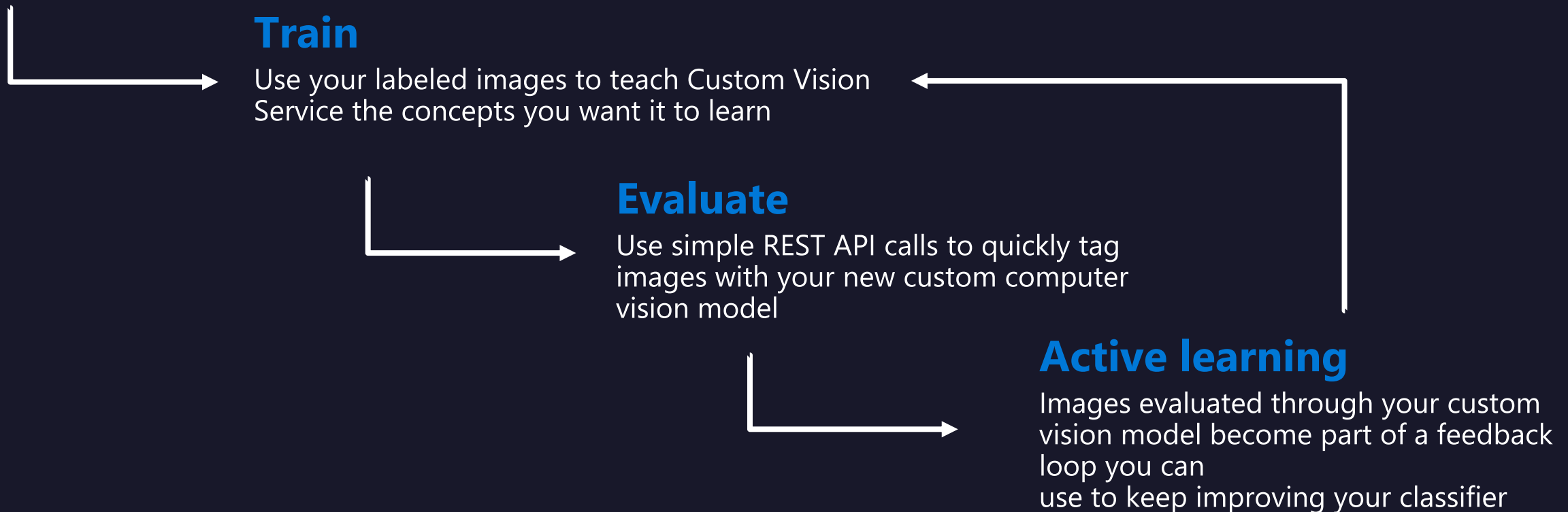
Custom Vision

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

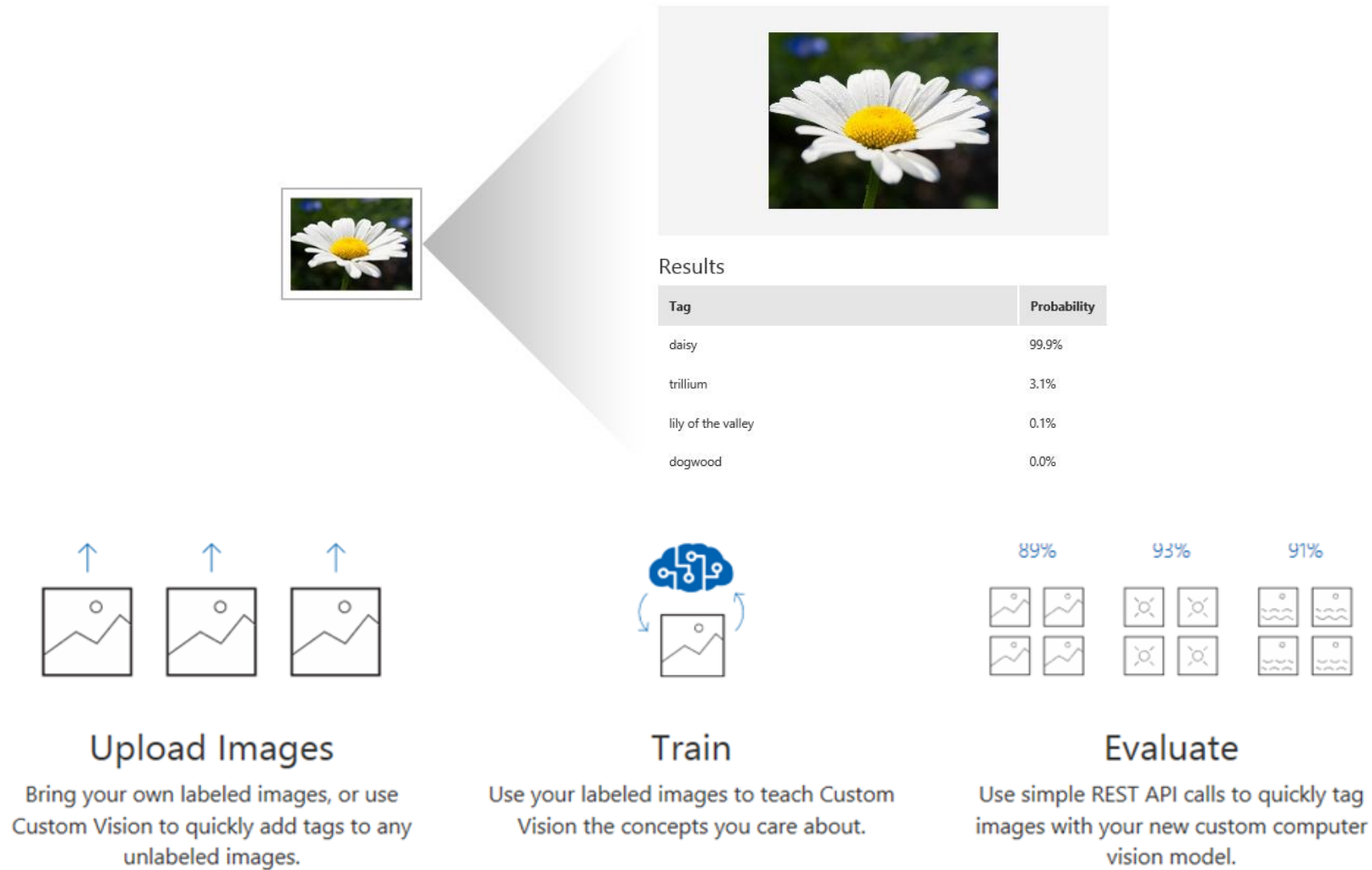


Upload images

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



Custom Vision

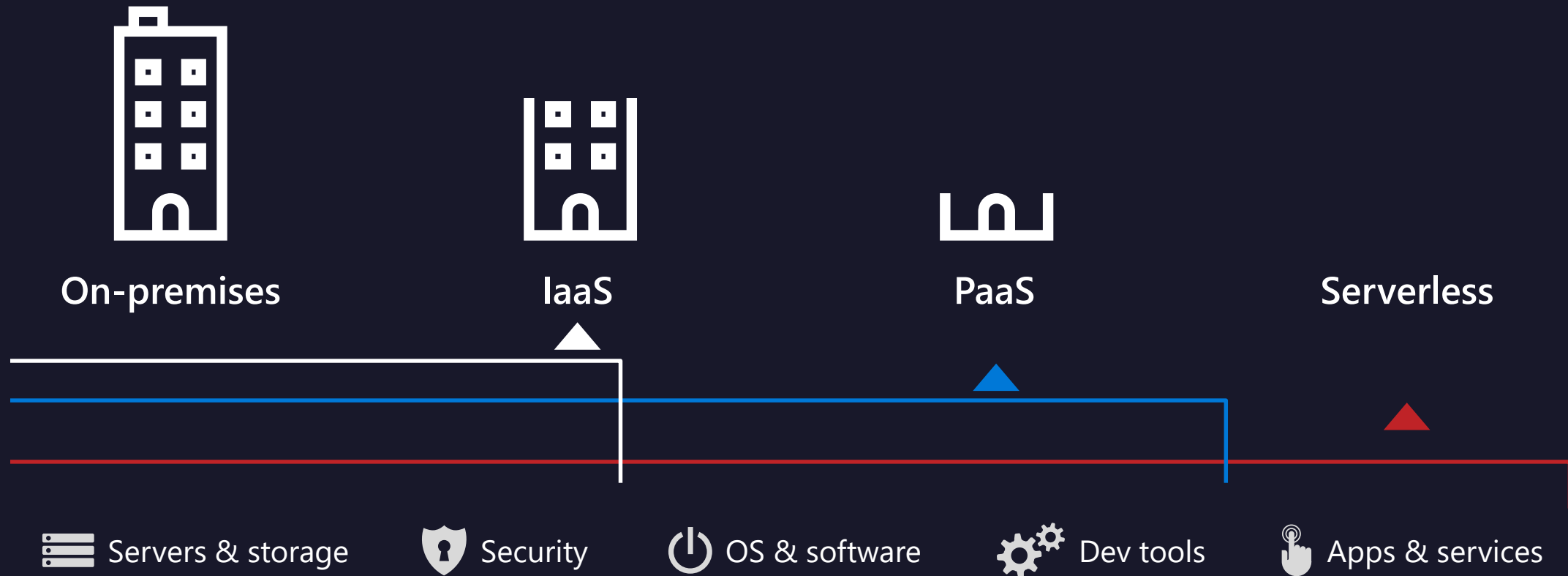


Demo

Azure Custom Vision

History of cloud development

Increasingly advanced cloud technologies have led companies to entrust more and more of their IT activities to service providers



What is serverless?



Full abstraction of servers

Developers can just focus on their code—there are no distractions around server management, capacity planning, or availability.



Instant, event-driven scalability

Application components react to events and triggers in near real-time with virtually unlimited scalability; compute resources are used as needed.



Pay-per-use

Only pay for what you use: billing is typically calculated on the number of function calls, code execution time, and memory used.*

*Supporting services, like storage and networking, may be charged separately.

Azure Serverless Ecosystem

Development

 IDE support

 Integrated DevOps

 Local development

 Monitoring

 Visual debug history

Platform

 Event Grid

Manage all events that can trigger code or logic

 Functions

Execute your code based on events you specify

 Logic Apps

Design workflows and orchestrate processes

Database



Storage



Analytics



Intelligence



Security



IoT



Demo

Custom Vision and Logic Apps

Azure Cognitive Services

- Azure Custom Vision Service:
<https://aka.ms/ead-customvision>
- Azure Logic Apps Documentation:
<https://aka.ms/ead-logicapps>
- Microsoft PowerApps Documentation:
<https://aka.ms/ead-powerapps>

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