Artificial Intelligence
Copilot

29/05/2024

Agenda

What is Intelligence?

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Intelligence can be defined as the ability to solve complex problems or make decisions with outcomes benefiting the actor and has evolved in lifeforms to adapt to diverse environments for their survival and reproduction.

Problem Solving

Reasoning

Decision Making

Environment Adaptation

Human Brain

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The human brain's remarkable cognitive abilities inspired the development of Azure Cognitive Services, which aim to imitate aspects of human perception, reasoning, and decision-making through advanced AI and machine learning technologies.

Motor Control
Touch & Pressure
Body Awareness
Problem Solving
Speech
Taste
Smell
Vision
Coordination
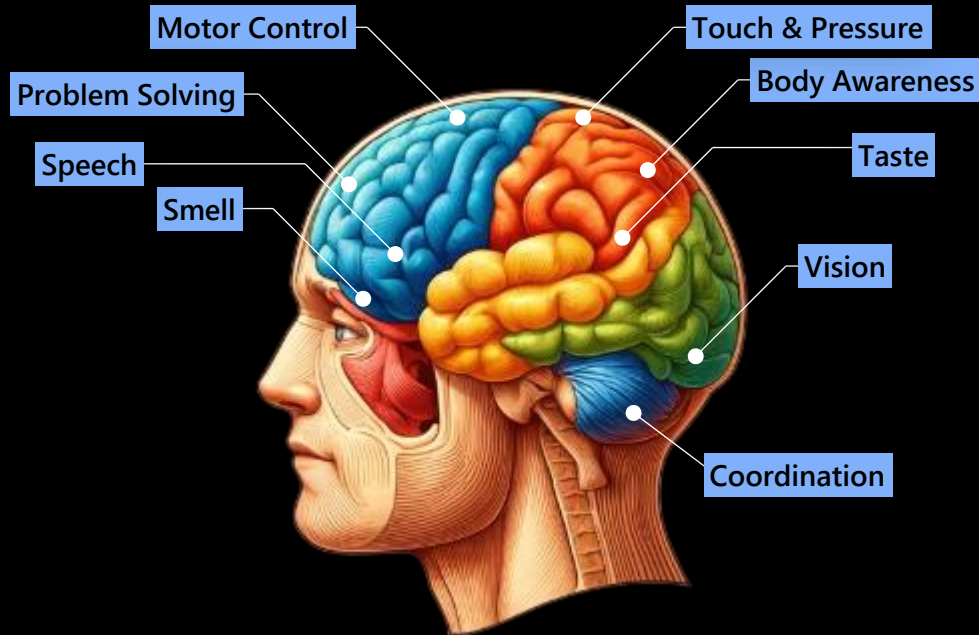
The human brain orchestrates a vast array of functions, from processing complex emotions and retaining memories to managing sensory input and executing motor skills, making it the central organ of human cognition and physical activity.
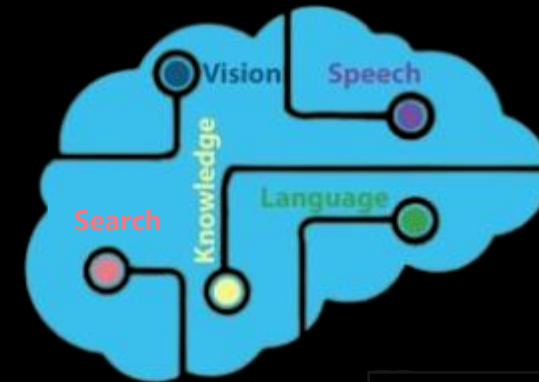
Azure Services

Azure Cognitive Services encompass a suite of artificial intelligence services and cognitive APIs that empower developers to build intelligent applications capable of:

- Seeing – AI Vision
- Hearing – AI Speech
- Speaking – AI Speech & Language
- Understanding – AI Knowledge
- Reasoning – AI Search

AI Machines

Capture Information

Machines designed to collect vast amounts of data from their surroundings using sensors and digital inputs.

Register Knowledge

These systems store and categorize the acquired information, creating an accessible repository of knowledge.

Understand Topics

Advanced algorithms analyze the stored data to detect patterns and comprehend complex topics within the information.

Be smart to Learn and predict

Leveraging machine learning, these machines continually evolve their understanding and predict outcomes based on new data.

React based on Audience

They adjust their responses dynamically according to the audience's reactions or changes in the environment.

Take Action

Empowered with decision-making capabilities, these machines autonomously execute actions based on their analyses and predictions.

Copilot – Creation of a Bot

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Bot Aspects

Knowledge

Topics

Language

Actions

Channels

Monitoring

Copilot Name

Copilot Icon

Copilot Description

AI – Enabled Worker

Safety

Ethics

Compliance

Security

AI Models

Copilot Bots Benefits

Streamlines workflows and reduces manual effort

Reduces human error in repetitive tasks

Tailors' responses to individual user preferences.

Increases user interaction and satisfaction

Offers round-the-clock assistance and support

Easily scales to meet growing customer demands.

Copilot Knowledge Sources

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Dataverse
Customize and deploy custom data tables

Public Websites
Add public websites for real-time answers

Microsoft Fabric
Accelerate data analysis with AI capabilities

Files
Upload documents from your local computer

Connectors
Thousands of connectors available to integrate with any data source

SharePoint & OneDrive
Securely integrate and manage real time data

Copilot Topics

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1. Manual Topics

Manually create trigger phrases, add conversational nodes and create the whole topic path.

3. Generate Content

The Copilot uses its knowledgebase to generate content from the sources provided

2. Input a Prompt

The user provides the copilot with a description or sample of the desired content

Goal

What do you want from Copilot?

"I want a list of 3-5 bullet points to prepare me..."

+

Context

Why do you need it and who is involved?

"... for an upcoming meeting with {client} focusing on their current state and what they are looking to achieve"

+

Expectations

How should Copilot respond to your request

"Respond with a tone that is friendly but authoritative..."

+

Source

What information do you want Copilot to use

"... and focus on email and Teams chats with {people} over the last two weeks.

AI Connectors – Use Others Intelligence

Explore the transformative potential of AI Connectors and how they leverage external intelligence to enhance the capabilities and functionalities of your bots.

Azure Cognitive Service for Language

Enhance your Copilot Studio's capabilities by integrating an existing conversational language understanding (CLU) model from Azure Cognitive Services, offering an alternative to the platform's native language processing tools

AI Models from Azure OpenAI

Utilize AI models from Azure Open AI to integrate your own data into AI solutions, enabling the models to serve as a dynamic data source for generating accurate answers to user inquiries

Copilot SDK

The Copilot SDK enables you to enhance your copilot with advanced pro-code capabilities and facilitates a streamlined transition to Microsoft Copilot Studio through specialized skills.

Generative AI

Revolutionize content creation by automating and enhancing the generation of accurate, contextually relevant material across various applications using Generative AI in Copilot Studio.

Classic
Build predefined topics with trigger phrases and configuration of actions linked to these topics.

Generative
Employs generative AI to dynamically determine the best combination of actions and topics for responding to user interactions

Intelligent Authoring with Copilot
Allows users to input topics they need assistance with, and Copilot will autonomously develop and refine these topics

Gen AI

Copilot Bot Security
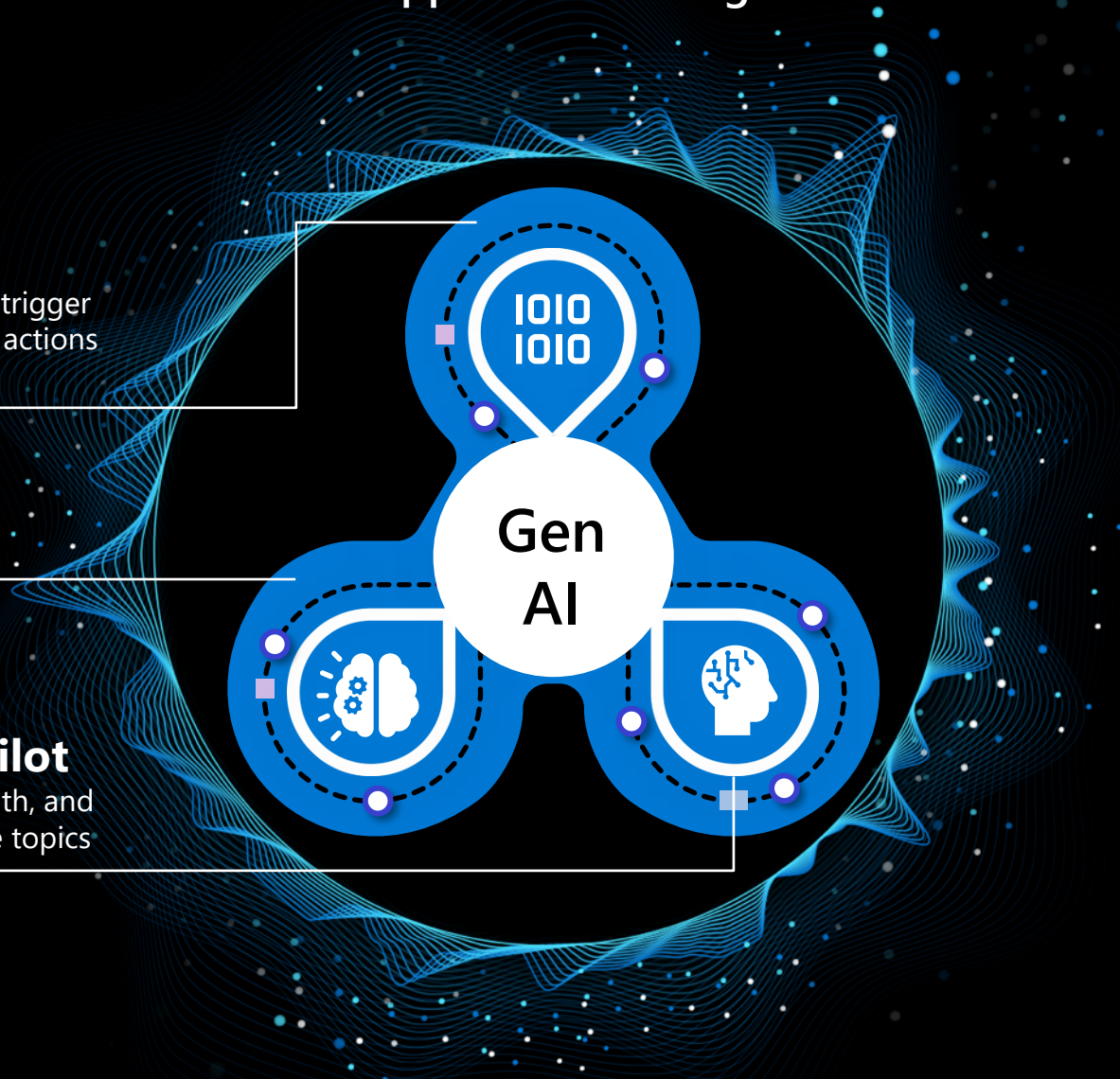
Copilot Studio provides you with several ways that could keep the bots you create secure

Authentication

Authentication allows users to sign in, giving your copilot access to a restricted resource or information. Users can sign in with Microsoft Entra ID, or with any OAuth2 identity provider such as Google or Facebook. Authentication options available:

- No authentication
- Authenticate with Microsoft
- Authenticate manually

Web Channel Security

Refers to a suite of enhanced security measures designed to protect communications and data transmitted over web channels. This feature ensures that all interactions through web-based interfaces are secure, safeguarding against unauthorized access, data breaches, and other cyber threats.

Sharing

You can share your copilots with others to grant them special permissions. There are two different sharing methods:

- Grant security groups, or your whole organization, permission to chat with the copilot.
- Invite users to collaborate on your copilot project. Collaborators always have permission to chat with the copilot.

Allowlist

Designed to control and manage which other copilots can interact with your copilot by invoking it as a skill. This allows you to restrict access and ensure that only trusted and pre-approved copilots can call upon your copilot for tasks or information.

Copilot Bot Skills

Copilot Studio skills enable you to enhance your copilot by integrating Bot Framework skills that have been developed and deployed within your organization.

You can convert and register existing bots as skills in a Copilot Studio copilot, facilitating sophisticated interactions such as triggering skill actions directly within conversations.

Copilot Bot Actions

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Extend the capabilities of your copilot by adding one or more actions that can used by your copilot to respond to users automatically, using generative actions, or you can call them explicitly from within a topic.

Action Types

Prebuilt connector action

Custom connector action

Bot Framework skill

Power Automate cloud flow

AI Builder prompts

Action Nodes

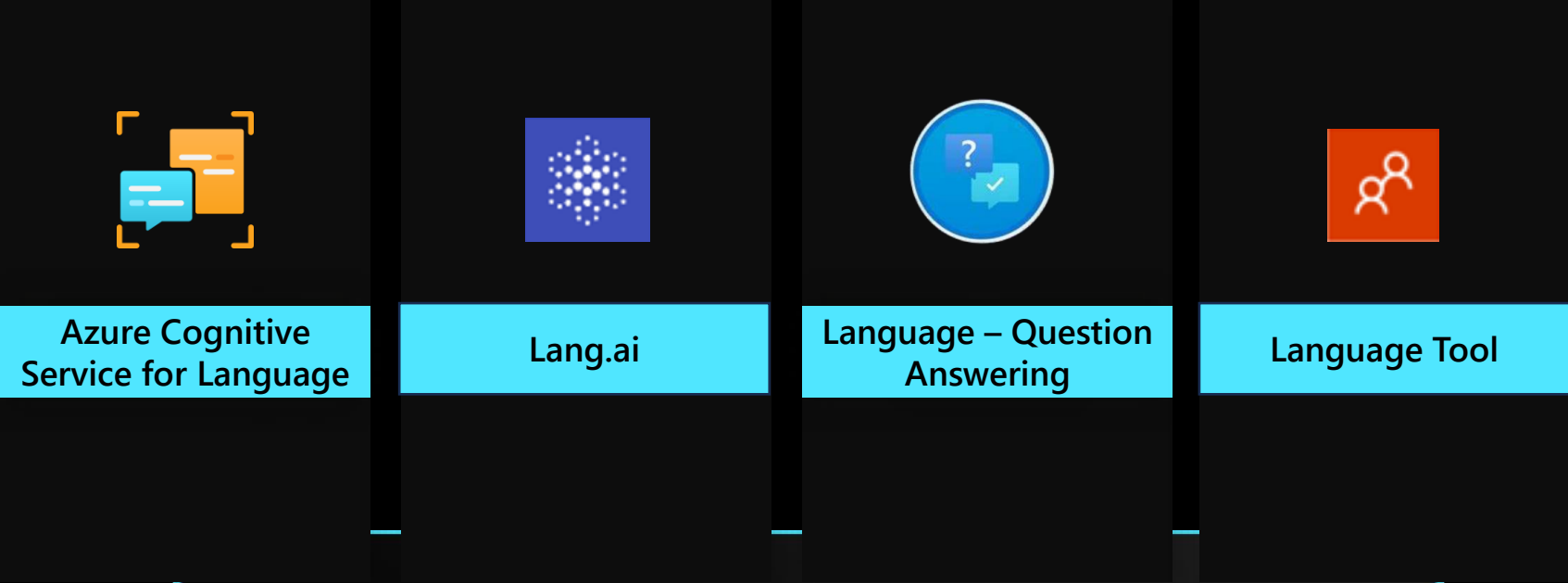|			
Delete a Row	Request Status	Run Script	HTTP Flows
Get a Row	Get Forecast for Today	Search D365 Knowledge	List Rows in Table
Update a Row	D365 Field Service	Get Worksheets	Send Email Notification

Language Understanding

| Azure Cognitive Service for Language | Lang.ai | Language – Question Answering | Language Tool |

Integrate your conversational Language Understanding (CLU) model with a Copilot Studio bot

Azure Cognitive Service for Language

Machine-learning Intelligence
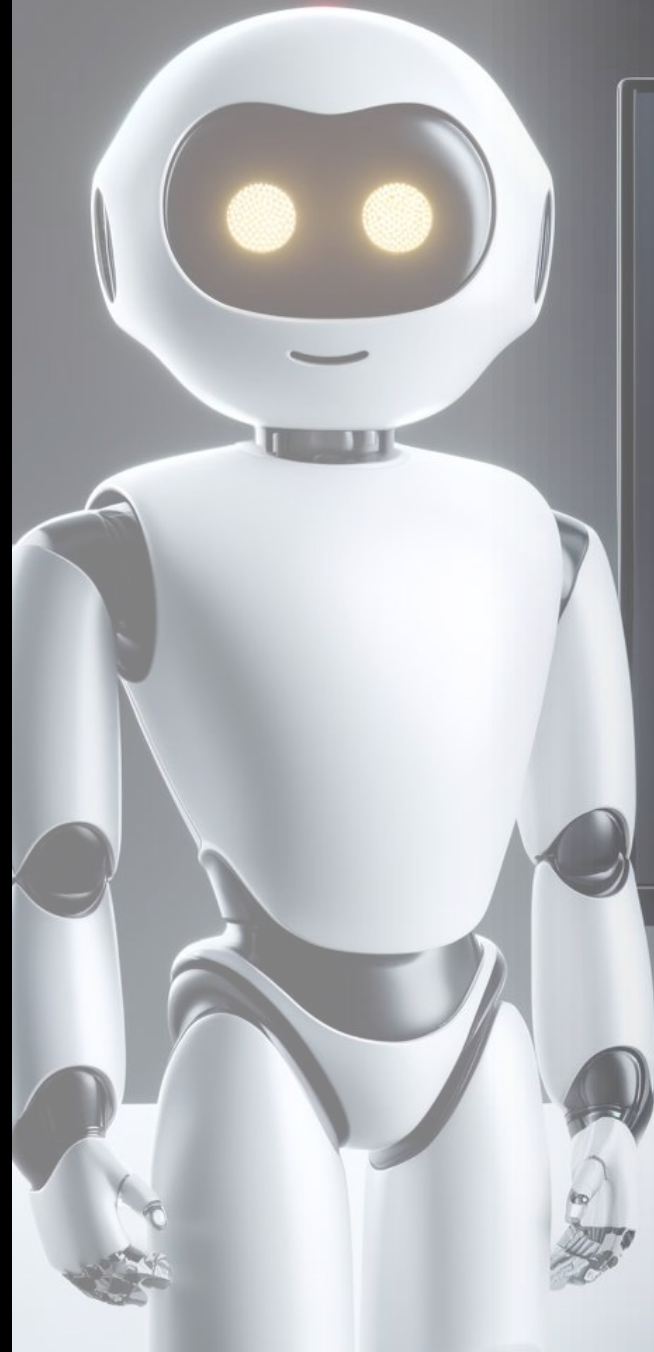
Copilot Bot Analytics

Monitor

Watch all what the BOT did

Correct

Discover his mistakes and Behaviour

Copilot Bot Channels

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Configure copilot channels to meet your customers where they are, on any channel they use

Microsoft Teams	**Custom Website**	**Slack**
Twilio	**Demo Website**	**Direct Line Speech**
Email	**Mobile App**	**Skype**