

# MICROSOFT POWER PLATFORM LOW/NO CODE + AI

11 OCT 2023

PRESENTER: GARY CIRUJALES





Show two hands from an over the shoulder point of view patting soil around a small green plant that is growing from the ground between the two hands with a very colorful palette

Bing Image Creator | 1024 x 1024 jpg | 25 mins ago



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Content credentials

Generated with AI · September 30, 2023 at 5:03 PM



# AGENDA

- Introduction
- Why low/no code?
- What is the Power Platform?
- Ways to get started
- Live Walkthrough/Demo - Let's make some stuff
  - Basic navigation of the Power Platform
  - A basic application
  - A chatbot
  - Automation
  - Bring AI into it
- Power Platform Resources
- Discussion/Questions
- Saving last 5 minutes for career info

HELLO,  
I'M GARY.



Gary Cirujales

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Business Applications (Power Platform and Dynamics 365)

US Education

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Thanks to Dall-E for the photo 😊

Passionate about Low/No Code (especially the NO CODE part)

Working with State Departments of Education and Academic Medical Centers

# Why low-code

750M

new apps will be created by 2025, more than the number built over the past 40 years<sup>2</sup>

4M

shortfall of developers by 2025\*

Quantifying the Worldwide Shortage of Full-Time Developers (idc.com)

65%+

of application dev activity<sup>3</sup> will be low-code by 2024

<sup>1</sup>Source: Gartner, How to Deliver Enterprise Mobile Apps Faster 2017

<sup>2</sup>Source: International Data Corporation "IDC" FutureScape: Worldwide IT Industry 2019 Predictions

<sup>3</sup>Source: Gartner 2019 Magic Quadrant for Enterprise Low Code Application Platforms

# Microsoft Power Platform

## The most complete low-code platform



### Power Apps

Application development



### Power Automate

Process automation



### Power BI

Business analytics



### Power Virtual Agents

Intelligent bots



### Power Pages

Business websites

Connect to all your internal and external data sources

# OVER 1000 POWER PLATFORM DATA CONNECTORS

1

**Built-in connectivity** to cloud services, content services, databases, and APIs

2

**Seamless hybrid connectivity** via the on-premises data gateway

3

**Custom connectors** as building blocks for citizen developers

4

**Robotic Process Automation** is the ultimate connector, if necessary



# Low-code + Pro-code built to work together

1

GitHub

#1 dev community

2

Azure

Any language, any platform

3

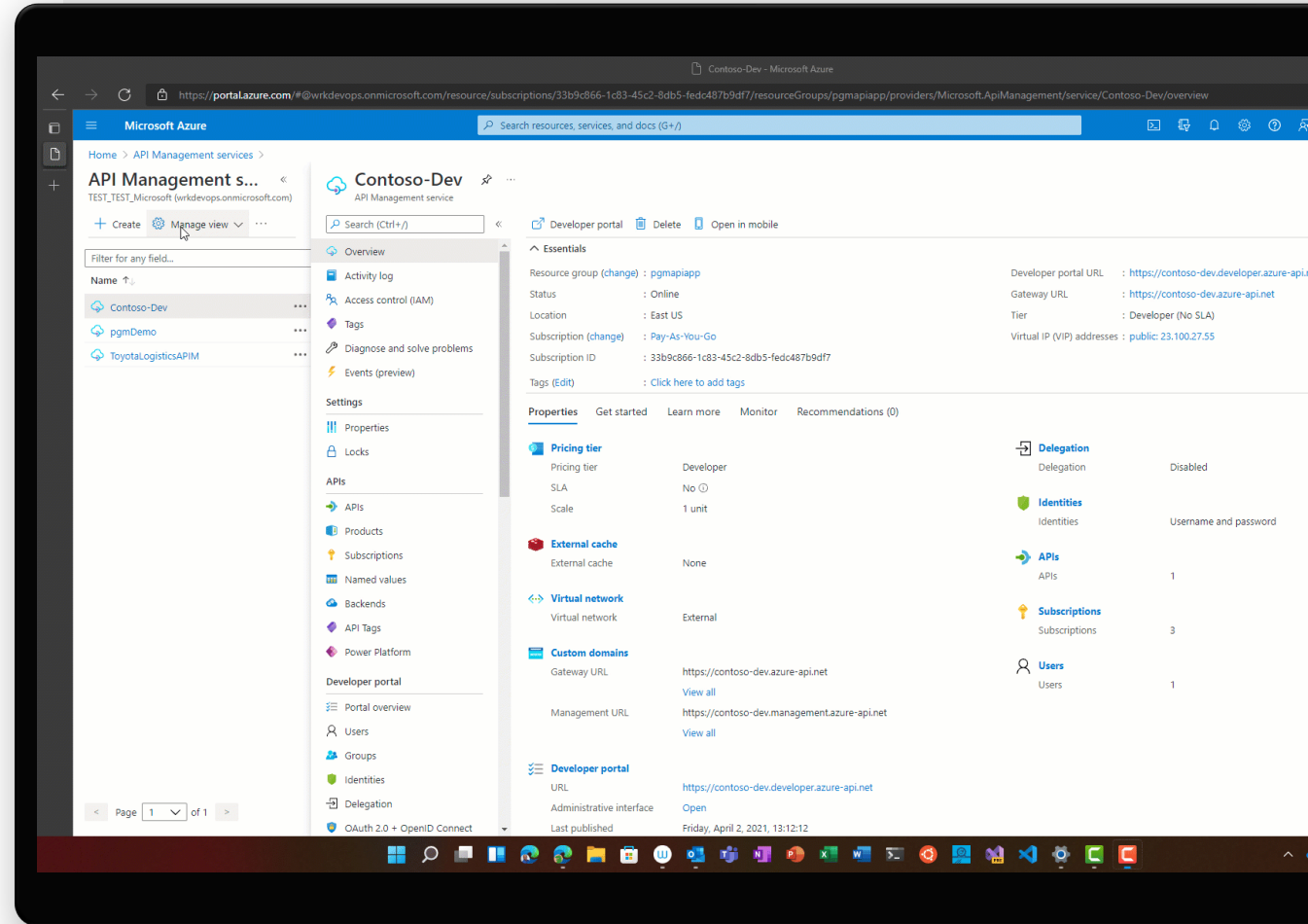
Visual Studio

#1 developer tool

4

Power Platform

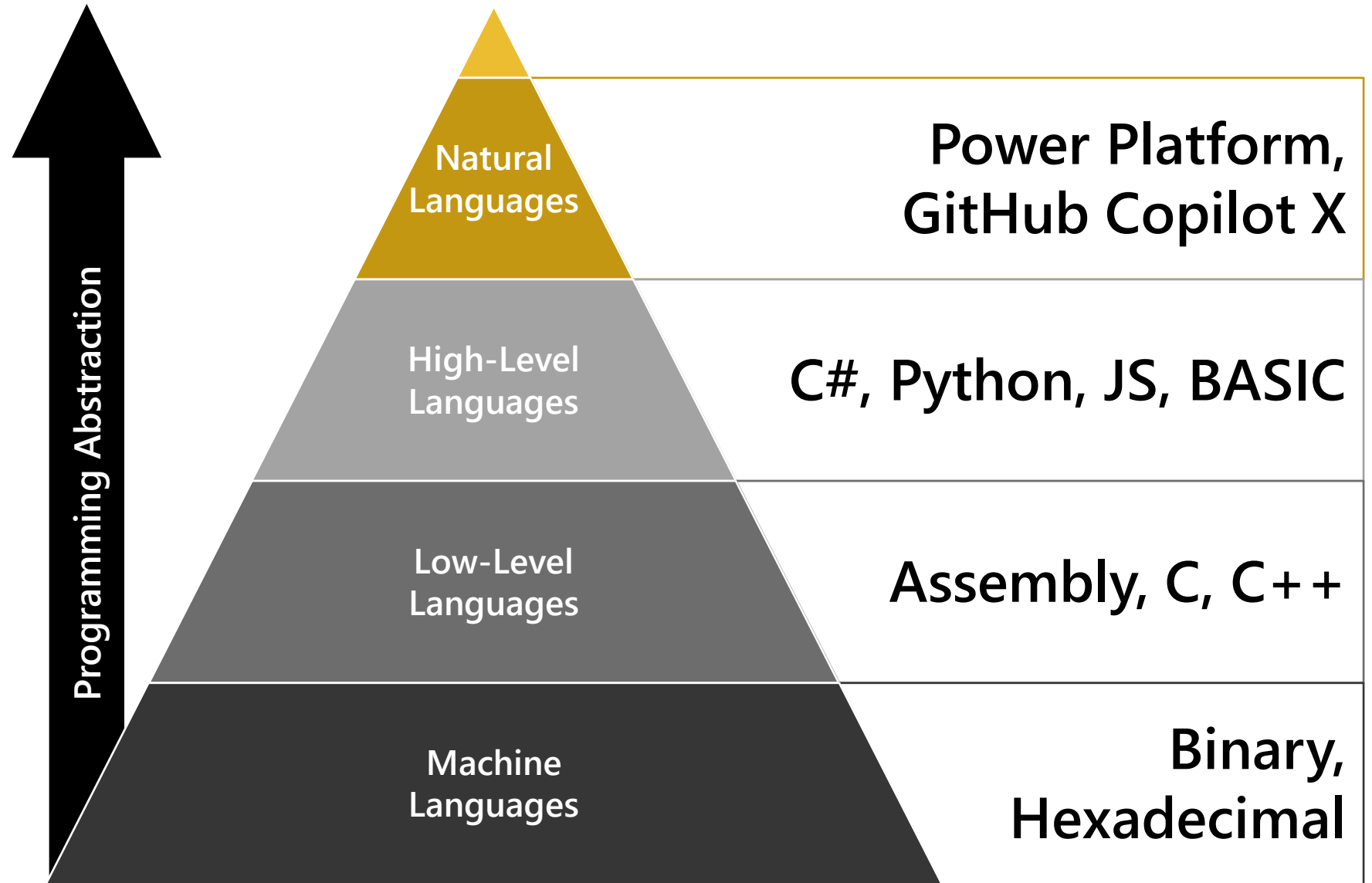
#1 low code platform





# Power Platform AI Overview

Is English a  
coding  
language?



# What AI does for Power Platform

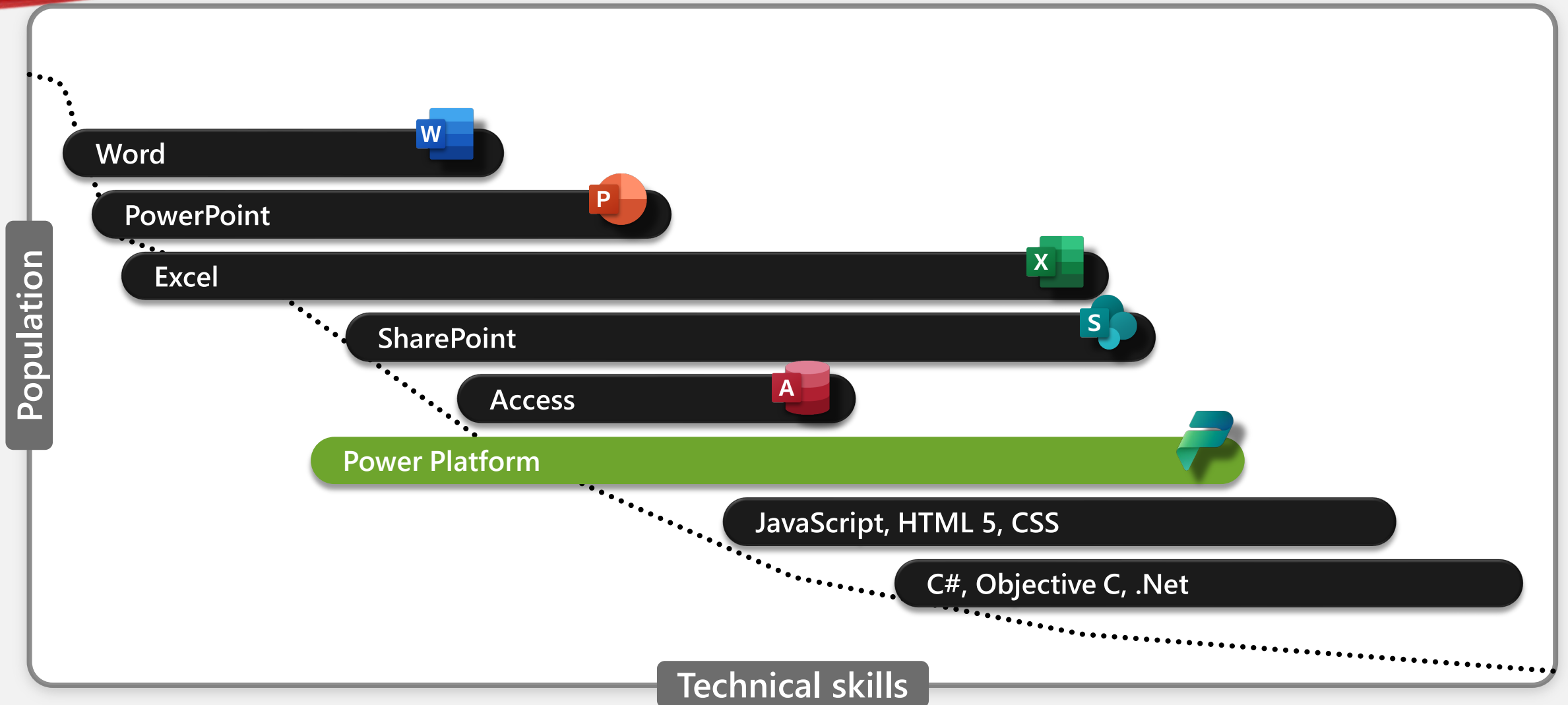


**Easier to create apps,  
automations, bots, and sites**

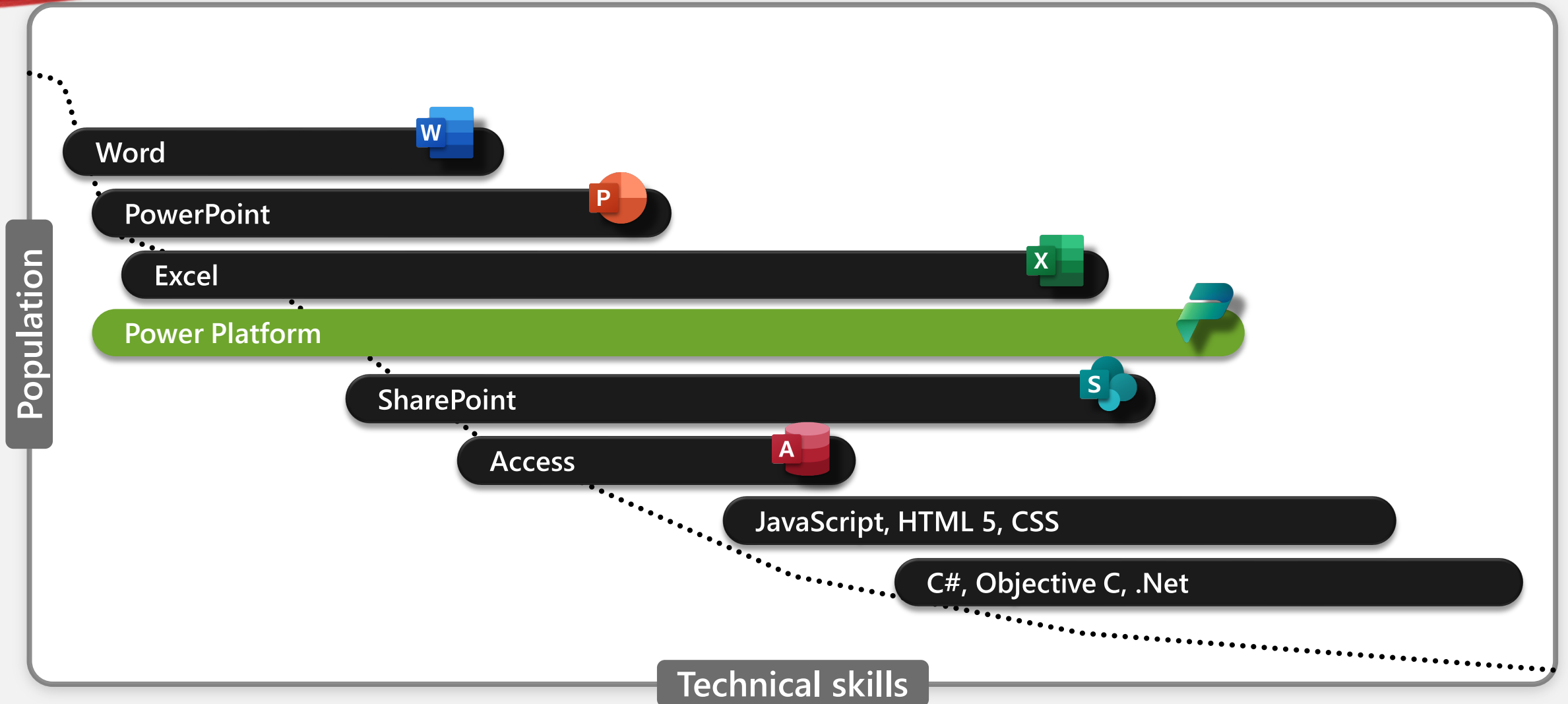
**Smarter and richer apps,  
automations, bots, and sites**



# Low Code Adoption



# Low Code Adoption + AI Copilot



# GET STARTED

- Get a trial or development environment to start exploring
  - [Business Apps | Microsoft Power Apps](#) (click on “Try free”)
  - [Developer Program | Microsoft 365 Dev Center](#)
  - [Power Apps Developer Plan | Microsoft Power Apps](#)
- Start learning – within PowerApps, Microsoft Learn, Online Videos
- Sign up for workshops (they fill up quickly)
  - [Power Platform In a Day Workshops | Microsoft Power Platform](#)
  - <https://events.microsoft.com/en-us/mvtd>
- Power Platform University Hub - Provides curriculum, vouchers for certifications, training environment to educational institutions – No cost: [Power Platform University Hub | Microsoft Power Platform](#)

# AI in Power Platform



## Power Apps

- [Copilot - Natural Language to App](#) (Public Preview)
- [Excel Workbook to Canvas App](#) (Public Preview)
- [Copilot Control in Canvas Apps](#) (Limited Preview)
- [Express Design via Image or Figma to Canvas App](#) (Public Preview)
- [Ideas via Natural Language to Power FX](#) (Generally Available)

## Power Automate

- [Copilot - Natural Language to Flow](#) (Public Preview)
- [Process Mining Root Cause Analysis](#) (General Availability)
- [Format data by Examples](#) (Generally Available)

## Power Virtual Agents

- [Copilot - Natural Language to Topics](#) (Public Preview)
- [Generative Actions](#) (Limited Preview)
- [Generative Answers](#) (Public Preview)
- [Conversation Booster](#) (Public Preview)
- [Azure Conversational Language](#)

## Power Pages

- [Copilot - Natural Language to Site](#) (Public Preview)

## Power BI

- [Copilot - Natural Language to Reports](#) (Private Preview)
- [Natural Language to DAX Quick Create](#) (Generally Available)

## AI Builder, Managed Environments, Dataverse

- [Azure OpenAI models with Templates](#) (Public Preview)
- [AI Models in Power Apps and Automate](#) (Generally Available)
- [Dataverse Enhancements for AI](#) (Limited Preview)

## Power Platform Release Planner

Features range from being in Private Preview, Limited Preview, Public Preview, or Generally Available (GA). Features may have prerequisites (e.g. require a US tenant, English only, etc.)


# Previews

Status	Description	Next Step
<b>Generally Available (GA)</b>	Feature commercially available.	<ul style="list-style-type: none"><li>• Learn about feature and any prerequisites (e.g. geography availability, language availability)</li><li>• Understand how to enable feature within tenant or admin portal if required</li></ul>
<b>Public Preview</b>	Wide test for a larger group of customers. Features are actively developed and may not be complete.	<ul style="list-style-type: none"><li>• Learn about feature and any prerequisites (e.g. geography availability, language availability)</li><li>• Read details around availability of preview feature and limitations</li><li>• Understand how to enable feature within tenant or admin portal if required</li></ul>
<b>Limited Preview</b>	Controlled test for a small group of customers. It is used to test new product capabilities.	<ul style="list-style-type: none"><li>• Learn about feature and any prerequisites (e.g. geography availability, language availability)</li><li>• Read details around limitations and signing-up, opting-in, or getting access to feature</li><li>• Understand how to enable feature within tenant or admin portal if required. SLAs may vary</li></ul>
<b>Private Preview</b>	Controlled test for a small group of customers. Typically invite-only and requires an NDA.	<ul style="list-style-type: none"><li>• Learn about feature and any prerequisites (e.g. geography availability, language availability)</li><li>• Customers invited experience a formal evaluation program.</li></ul>




# Microsoft and OpenAI

OpenAI is an AI research and deployment company. Azure OpenAI Service brings OpenAI API + Azure enterprise-level security, compliance, and regional availability.




Power Platform | Microsoft 365 | Dynamics 365 | Partner Solutions




Azure AI

Scenario-Based Services - Applied AI Services




Bot Service Cognitive Search Form Recognizer Video Analyzer Metrics Advisor Immersive Reader


Customizable AI Models - Cognitive Services



Vision Speech Decision Language



ML Platform  
Azure Machine Learning



ChatGPT  
Conversational AI chatbot

GPT-3  
Understand and generate natural language

Whisper  
Automatic speech recognition

Codex  
Understand and generate code

DALL-E  
Creating images from text

# Microsoft and OpenAI

OpenAI is an AI research and deployment company. Azure OpenAI Service brings OpenAI API + Azure enterprise-level security, compliance, and regional availability.

	Azure OpenAI Service	OpenAI
<b>Security &amp; Data Privacy</b>	Enterprise Security, RBAC, Customer-Managed Keys	Basic Security
<b>Compliance</b>	SOC2, ISO, HIPAA, CSA STAR	None
<b>Reliability</b>	Azure SLA	No SLA
<b>Responsible AI</b>	Built-in, enterprise-grade, low latency moderation, and harm prevention	Separate Safety Classifier (adds latency)
<b>Holistic Solution</b>	OpenAI Models, Complete AI Solution, and a Complete PaaS	Advanced LLM & Image Generation, Basic Speech
<b>APIs</b>	REST APIs + Python, C#, etc. SDKs	REST APIs + Python SDK

[Azure OpenAI Service](#)

# Enterprise Grade AI

## Enterprise Security

Your data does not leave the **Microsoft ecosystem**

Microsoft **cannot see your data**, except for debugging or abuse

Your data respects existing **permissions models**

**Azure security, enterprise promises, compliance**

Published availability **SLA**

## Responsible AI

Your data is not used to train AI for **other customers** or for ChatGPT

**Content moderation**

**Hallucination filter**

**Fairness and inclusive** policies

**Red-teaming** and adversarial testing

## Governance

Respects **existing security and privacy guardrails**

**Data loss prevention policies** to safeguard data

**Analytics reports** to provide admin visibility

**Data sharing** is opt-in only

Data, Privacy, & Security

# AI security, privacy & governance



[Brad Smith's NYT article \(LinkedIn\)](#)

[Copilot in D365 and Power Platform is enterprise-ready AI built for security and privacy](#)

[How do we best govern AI?](#)

[Report: Governing AI – A Blueprint for the Future](#)

[Data, privacy, and security for Azure OpenAI Service](#)

# Power Platform AI Showcase



# Power Platform AI Showcase

## Power Apps



[Copilot - Natural Language to App](#)  
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## Power Automate



[Copilot - Natural Language to Flow](#)  
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[Format data by Examples](#)

## Power Virtual Agents



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## Power Pages



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## AI Builder



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# Power Apps



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[Ideas via Natural Language to Power FX](#)

“Create a building safety inspection app”

PowerApps creates a Dataverse table with suggested columns and data and creates a working app you can customize and use.



The screenshot displays the Microsoft Power Apps web interface for a 'Building Safety Inspection' app. The top navigation bar includes the Power Apps logo, the app name, a search bar, and the environment 'CRM688601'. Below the navigation bar is a menu with options like 'Back', 'Insert', 'Add data', 'New screen', 'Theme', 'Background color', 'Background image', and 'Settings'. The main workspace is divided into three sections:

- Tree view:** A sidebar on the left showing the app's structure. It includes 'Screens' (MainScreen1) and 'Components' (ScreenContainer1, TableNameLabel1, TitleSeparator1, BodyContainer1, SidebarContainer1, SearchContainer1, NewRecordButtonBarContain, RecordsListSeparator1, RecordsGallery1, Separator1, NextArrow1, Body1, Subtitle1, Title1, RightSideContainer1).
- Building Safety Inspections:** A central list view showing a table of inspection records. The table has columns for 'Inspection Name', 'Inspection Notes', 'Manager Name', 'Inspection Id', 'Inspection Date', and 'Inspection Status'. The records are: Fire Safety (BSI001, 12/31/2019 7:00 PM, No issues found), Electrical Safety (BSI002, 1/31/2020 7:00 PM), Plumbing Safety (BSI003, 2/29/2020 7:00 PM), Structural Safety (BSI004, 3/31/2020 8:00 PM), and HVAC Safety (BSI005, 4/30/2020 8:00 PM).
- Form view:** A detailed view of a record on the right, showing fields for 'Inspection Name', 'Inspection Notes', 'Manager Name', 'Inspection Id', 'Inspection Date', and 'Inspection Status'. The 'Inspection Date' field is set to 12/31/2019 19:00, and the 'Inspection Status' is 'Pass'.





Create a Canvas app from an Excel table.

PowerApps recognizes column formats and inputs and creates a Dataverse table and app that you can customize and use.



Power Apps interface showing the 'Create an app' screen. The table 'Inventory Record' is displayed with the following data:

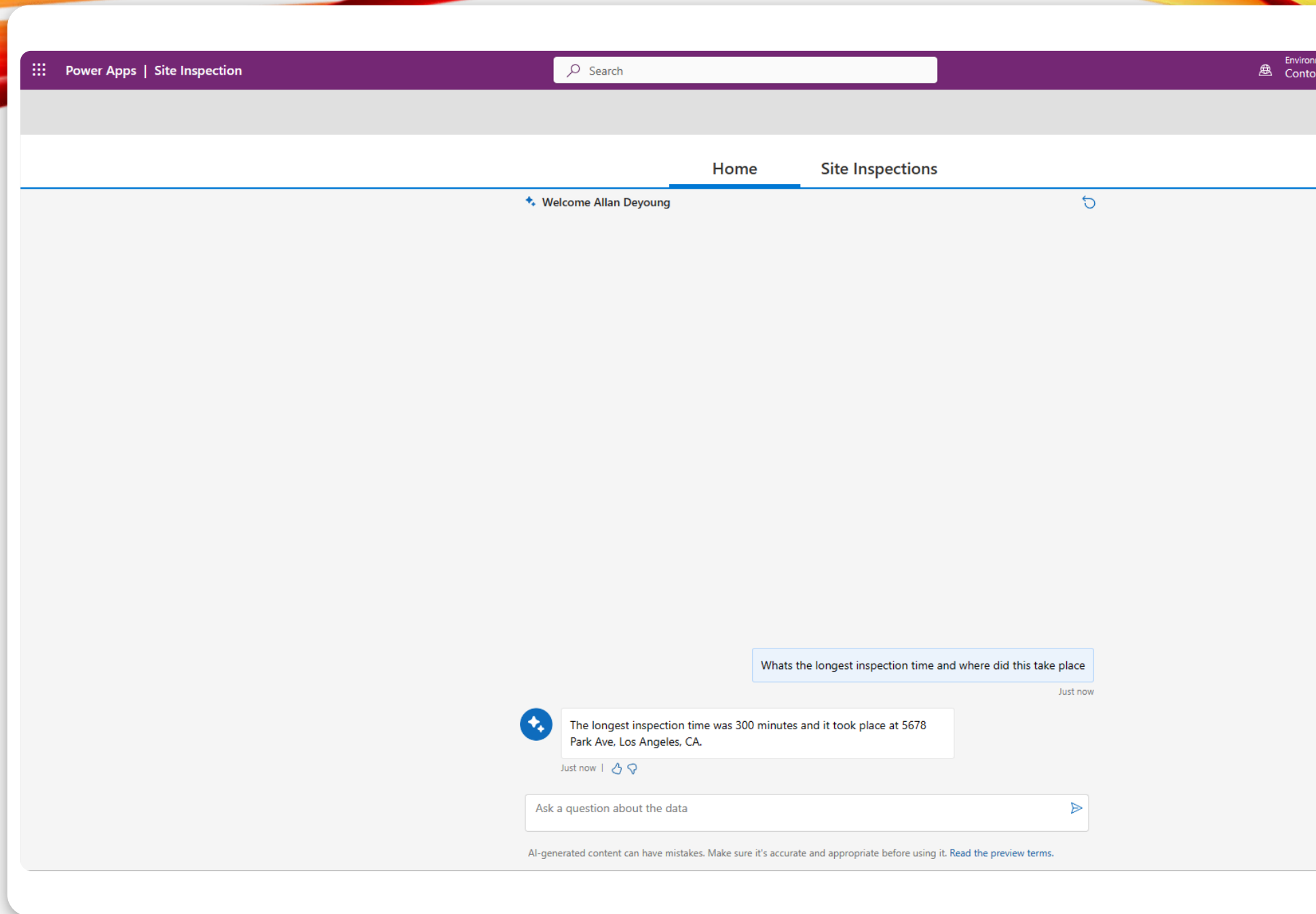
Inventory ID	Name	Description	Unit Price	Quantity in St...	Inventory Valu
IN0001	Item 1	Desc 1	51.00	25	1,27
IN0002	Item 2	Desc 2	93.00	132	12,27
IN0003	Item 3	Desc 3	57.00	151	8,60
IN0004	Item 4	Desc 4	19.00	186	3,53
IN0005	Item 5	Desc 5	75.00	62	4,65
IN0006	Item 6	Desc 6	11.00	5	5
IN0007	Item 7	Desc 7	56.00	58	3,24
IN0008	Item 8	Desc 8	38.00	101	3,83
IN0009	Item 9	Desc 9	59.00	122	7,19
IN0010	Item 10	Desc 10	50.00	175	8,75

Excel spreadsheet showing the 'Inventory List' table with the following data:

Inventory ID	Name	Description	Unit Price	Quantity in Stock
IN0001	Item 1	Desc 1	\$51.00	25
IN0002	Item 2	Desc 2	\$93.00	132
IN0003	Item 3	Desc 3	\$57.00	151
IN0004	Item 4	Desc 4	\$19.00	186
IN0005	Item 5	Desc 5	\$75.00	62
IN0006	Item 6	Desc 6	\$11.00	5
IN0007	Item 7	Desc 7	\$56.00	58
IN0008	Item 8	Desc 8	\$38.00	101
IN0009	Item 9	Desc 9	\$59.00	122
IN0010	Item 10	Desc 10	\$50.00	175
IN0011	Item 11	Desc 11	\$59.00	
IN0012	Item 12	Desc 12	\$18.00	
IN0013	Item 13	Desc 13	\$26.00	
IN0014	Item 14	Desc 14	\$42.00	
IN0015	Item 15	Desc 15	\$32.00	
IN0016	Item 16	Desc 16	\$90.00	
IN0017	Item 17	Desc 17	\$97.00	
IN0018	Item 18	Desc 18	\$12.00	
IN0019	Item 19	Desc 19	\$82.00	
IN0020	Item 20	Desc 20	\$16.00	

“What’s the longest inspection time and where did it take place”

PowerApps Copilot control adds Natural Language support to your apps and data making them easier to use.



The screenshot shows the Power Apps Copilot interface within a 'Site Inspection' application. The top navigation bar is purple and contains the text 'Power Apps | Site Inspection' on the left, a search bar with a magnifying glass icon and the word 'Search' in the center, and a user profile icon with the text 'Environ Conto' on the right. Below the navigation bar, there are two tabs: 'Home' and 'Site Inspections', with 'Site Inspections' being the active tab. The main content area displays a welcome message: 'Welcome Allan Deyoung' with a refresh icon to its right. At the bottom of the interface, there is a chat window. The chat window has a light blue header with the question: 'Whats the longest inspection time and where did this take place' and a timestamp 'Just now'. The response is a white bubble with a blue star icon, containing the text: 'The longest inspection time was 300 minutes and it took place at 5678 Park Ave, Los Angeles, CA.' Below the response is a timestamp 'Just now' and two small icons (a thumbs up and a speech bubble). At the bottom of the chat window is a text input field with the placeholder text 'Ask a question about the data' and a blue arrow icon to the right. Below the chat window, there is a small disclaimer: 'AI-generated content can have mistakes. Make sure it's accurate and appropriate before using it. [Read the preview terms.](#)'

Use an Image or Figma design to build a Canvas app.

PowerApps will recognize inputs and data validations and create an app you can customize and use.



## ← Draw tags and assign components

- Image
- Components
- Data
- Table
- Columns (optional)
- Review

Draw boxes, or tags, around things that should appear in the app. Then for each tag, assign a component. If something doesn't have a tag, draw a box around it. Learn more about tags

The screenshot shows a design canvas for an "Appointment Scheduler" app. The title "Appointment Scheduler" is highlighted with an orange tag. Below it, the labels "First name:" and "Last name:" are also tagged with orange boxes. The corresponding input fields are tagged with green boxes. A tooltip is visible over one of the input fields, titled "Tagged as text input", which explains that a text input is a box for user data and provides an example of a text input field. At the bottom of the canvas, there are radio buttons for "Geometry" and "Biology".

### Tags applied

#### Tagging

Each tag o  
app. You c  
remove th

- Te
- Te
- Ra
- Dr
- Bu
- D

Back

Next

# Power Automate



[Copilot - Natural Language to Flow](#)

[Process Mining Root Cause Analysis](#)

[Format data by Examples](#)



## Copilot - Natural Language to Flow (Public Preview)

“Collect the audit status from Dataverse table daily. For successful audits, compose an email attaching PDF result to customer. For failed audits, compose an email for the manager to review.”

Power Automate creates a flow from Natural Language that you can customize and use.

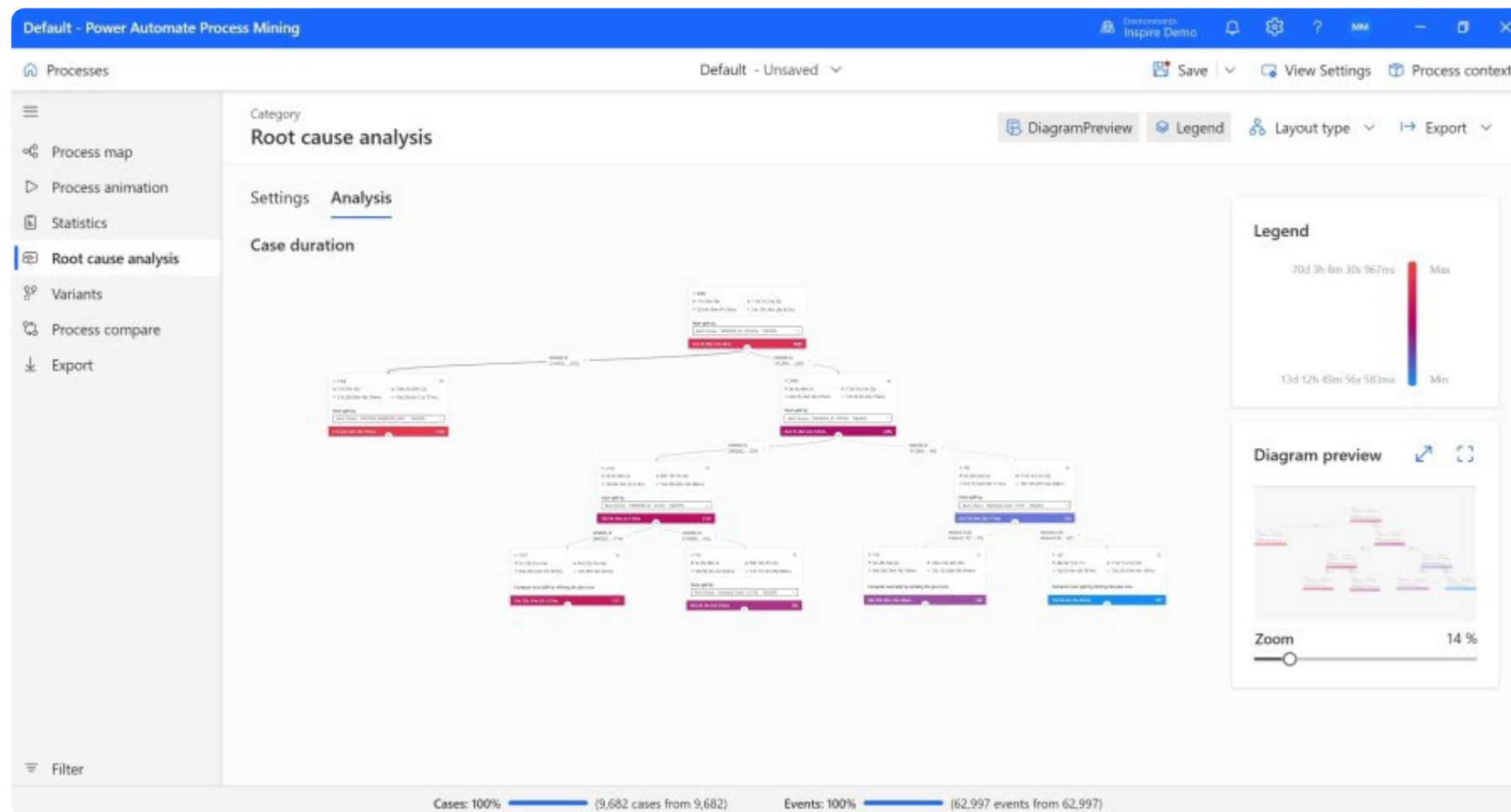


The screenshot displays the Power Automate web interface. The top navigation bar includes the 'Power Automate' logo, a search bar, and a user profile icon. The left sidebar contains navigation options: Home, Approvals, My flows (selected), Create, Templates, Connectors, Data, Monitor, AI Builder, Process advisor, Solutions, and Learn. The main workspace shows a flow titled 'Collect the audit status from dataverse table daily. For successful audits, compose an email attaching PDF result to customer. For failed audits, compose an email...'. The flow steps are: 1. Recurrence (blue), 2. List rows (green), 3. Foreach (grey) with a dropdown menu showing 'value x', 4. Condition (grey) with 'is equal to' logic, 5. If yes (green) branch containing 'Get file content using path' (green) and 'Send an email' (blue), 6. If no (red) branch containing 'Send an email 2' (blue). An 'Add an action' button is visible at the bottom right of the flow canvas.



## Process Mining Root Cause Analysis (General Availability)

See recommended  
key performance  
indicators (KPIs) and  
filter options to  
uncover  
inefficiencies and  
opportunities for  
automation.





## Format data by Examples (Generally Available)

Format text, dates, and numbers by providing examples of the output you want.

Power Automate will automatically generate the expression formula you can customize and use.



The screenshot shows the 'Format data by examples' dialog box in Power Automate. It is divided into two main sections: a configuration area on the left and a formatting area on the right.

**Configuration Area (Left):**

- Step 1:** 'When an item is created' (Trigger)
- Step 2:** 'Send an email (V2)' (Action)
- Fields:** 'To' (David Bea...), 'Subject' (New purchase...), 'Body' (Hello, everyone... We are excited... Description...)
- Options:** 'Show advanced options' (checked)

**Formatting Area (Right):**

- Title:** 'Format data by examples'
- Examples:** Two input boxes showing '2022-09-18' and 'September 18'. Below them is a '+ Add example' button.
- Action:** 'Get expression' button.
- Suggested expression:** A red-bordered box containing the following code:

```
formatDateTime(parseDateTime(triggerOutputs()?['body/Purchasedate'], 'en-US', 'yyyy-MM-dd'), 'MMMM d', 'en-US')
```
- Test value:** Input box with '2023-05-04'.
- Output:** Output box with 'May 4'.
- Test button:** A button with a flask icon and the text 'Test'.

# Power Virtual Agents



[Copilot - Natural Language to Topics](#)

[Generative Actions](#)

[Generative Answers](#)

[Conversation Booster](#)

[Azure Conversational Language Understanding - CLU](#)





## Copilot - Natural Language to Topics (Public Preview)

"Ask the user for their name, date of birth, SSN, gross income, and show a summary in an adaptive card and ask to confirm."

Power Virtual Agents creates topics you can customize and use.



The screenshot shows the Power Virtual Agents interface for a topic named "Apply for credit card". The interface includes a top navigation bar with "Power Virtual Agents" and "Contoso customer bot", and a right-hand menu with options like "Environment Default", "Comments", "Topic checker", "Test bot", and "Save". Below the navigation, there are icons for navigation, undo, redo, and delete. The main canvas displays a flowchart with three nodes: "Trigger", "Message", and "Question".

- Trigger Node:** Contains a "Phrases" section with the following text: "I'd like to get a card", "i want to apply for a card", and "apply for a credit card".
- Message Node:** Contains a text message: "I'm happy to hear you want to apply for a new credit card."
- Question Node:** Contains a text question: "Ask a question".

On the right side, there is a "Edit with Copilot (preview)" panel. It includes a text input field with the prompt: "Explain what you want to change or add from the topic". Below the input field are buttons for "Update" and "No nodes selected". There are also sections for "What you need to know" and "What you asked for" with example prompts.



## Generative Actions (Limited Preview)

Power Virtual Agent  
Generative Actions  
understands user's  
request, reviews  
library of actions,  
identifies ones that  
can fulfill request.  
Then, assembles  
them and generates  
follow-up questions  
to complete  
request.



The screenshot displays the Power Virtual Agents interface, split into two main sections: a chat window and a tracing mode window.

**Chat Window:**

- Header:** Power Virtual Agents Virtual Assistant
- Left Sidebar:** Chatbots, Overview, Create, Plugins, Data objects, Publish, Analytics, Settings, Bot details, Channels, Agent transfers, Security, AI capabilities, Language.
- Chat Content:**
  - Bot: Hello, I'm Virtual Assistant. How can I help? (Just now)
  - User: what last minute cruise options do you have next week to the bahamas, and what's the weather like there at the moment? (Just now)
  - Bot: **May 24, 2023**  
The Bahamas  
84°F  
Sunny (Just now)
  - User: Where are you departing from? (Just now)
  - User: Miami (Just now)
- Input Field:** Enter your response here

**Tracing mode Window:**

- Header:** Tracing mode
- Dynamic chain log:** The user asked about the cruise options, so the Get list of available cruises connector action was dynamically triggered.
- Get a list of available cruises:** Holland America Line
  - Description:** Searches on dates, port of departure, and destination to return a list of matching available cruises.
  - Inputs (3):**
    - global.Date: dateTime = May 24, 2023
    - global.Destination: text = Bahamas
    - global.PortOfDeparture: text = Missing information
  - Output (1):** global.Available cruises: list, record = Undefined
- Dynamic chain log:** This plugin isn't entirely filled in. Use the test chat to answer questions about the missing information.



## Generative Answers (Public Preview)

Power Virtual Agents Generative Answers lets you combine public websites and internal sites to create dynamic, generative answers.



The screenshot displays the Power Virtual Agents console interface. The main workspace shows a workflow diagram for a 'Virtual Assistant' in the 'Conversational boosting' plugin. The workflow starts with a 'Trigger' block for 'Unknown intent'. This leads to a 'Create generative answers' block, which has an input field for 'userUtterance' and is configured with 'Data sources' including 'SharePoint and OneDrive (1)'. The workflow then branches into two paths: one for a 'Condition' where 'FallbackCount' is 'is less than' 3, leading to a 'Message' block with the text 'I'm sorry, I'm not sure how to help with...'; and another for 'All other conditions' leading to a 'Redirect' block with an 'Escalate' action.

On the right side, a 'Create generative answers property' panel is open, showing 'Data sources' configuration. It includes a section for 'Add websites' with an input field 'Enter your websites' and a list of sources: 'Public websites', 'SharePoint and OneDrive (1)' (with a link to 'https://microsoft.sharepoint.com/teams...'), and 'Advanced'.



## Conversation Booster (Public Preview)

Try now at: [aka.ms/PVAdemo](https://aka.ms/PVAdemo)

Conversation  
Booster pointed to  
[halowaypoint.com](https://halowaypoint.com)

Power Virtual  
Agents creates a  
chatbot that and  
answer queries  
about information  
on a website and  
you can customize  
and use.



The screenshot displays the Power Virtual Agents (PVA) interface for a bot named HaloBot. The interface is divided into several sections:

- Left Sidebar:** Contains navigation options: Chatbots, Overview, Topics, Entities, Analytics, Publish, and Settings.
- Chat Window (Test bot):** Shows a conversation history. The first message is a user query: "When does Season 4 for Halo Infinite come out?". The bot's response is: "According to the official website, Season 4 for Halo Infinite will come out on June 20th. You can find more information here: <https://www.halowaypoint.com/news/spa-rtan-chatter-season-4-infection-career-rank>". The second message is another user query: "Do I need Xbox Live Gold to Play Halo Infinite Multiplayer?". The bot's response is: "According to the official Halo website, you do not need Xbox Live Gold to play Halo Infinite Multiplayer. You can find more information about the Multiplayer Beta here: <https://www.halowaypoint.com/news/wel-come-to-the-halo-infinite-mp-beta>".
- Main Content Area:** Titled "HaloBot", it shows the "View Solution (Default Solution)" and includes a "Create generative answers (preview)" section with a "Go to AI Capabilities settings" button. Below this is a "Learn more" section with a link to "Power Virtual Agents documentation" and a "Product videos" section with a link to "Building bots better together".
- Right Sidebar:** Contains options to "Edit and test your bot" (with a "Test bot" button) and "Tell us what you think" (with a link to "Ask questions and learn Support community").

# Power Pages



[Copilot - Natural Language to Site](#)

Copilot - Natural Language to Site  
(Public Preview)

“I need an application form for a student loan.”

Power Pages creates a form for your site that you can customize and use.



The screenshot shows the Power Pages web interface. At the top, the browser address bar shows 'https://make.powerpages.com/'. The main header is 'Power Pages' with a navigation menu on the left containing 'Pages', 'Main navigation', 'Styling', 'Data', and 'Set up'. The 'Pages' section is active, showing 'Home', 'Application', and 'Contact Us'. A dialog box titled 'Do you want to make any changes?' is open, with a text area for updates and a 'PREVIEW' button. Below the dialog, a 'History' section shows the prompt 'I need an application form for a student loan' and a confirmation 'A form has been created for you.' At the bottom of the dialog are 'Add form' and 'Cancel' buttons. To the right, a 'Preview' window shows a 'Student Loan Application' form with fields for 'First name', 'Last name', 'Gender', 'Status', 'Institution / school', and 'Purpose of Loan', along with a 'Submit' button. Below the preview, three steps are listed: '1. Submission', '2. All Applications Reviewed', and '3. Decision Published', each with a sample text description.

# AI Builder



[Azure OpenAI models with Templates](#)

[AI Models in Power Apps and Automate](#)



Generate text,  
responses,  
summarizations,  
and more.

AI Builder lets you  
create GPT models  
for your data you  
can customize and  
use.



The screenshot displays the Microsoft AI Builder interface. On the left is a navigation menu with the following items: Home, Approvals, My flows, Create, Templates, Connectors, Data, Monitor, AI Builder, Explore (highlighted), Models, Document automation, Process advisor, Solutions, and Learn. At the bottom of the menu is a 'Ask a chatbot' button. The main content area features a blue banner at the top with the text 'Unlock the power of generative AI with GPT' and a 'Try the preview' button. Below the banner is a section titled 'AI Models > Explore' with filter tabs for 'All', 'Documents', 'Text', 'Structured data', and 'Images'. A grid of AI models is displayed below, including: Invoice processing (Extract information from invoices), Text recognition (Extract all the text in photos and PDF documents (OCR)), Receipt processing (Extract information from receipts), Identity document reader (Extract information from identity documents), Business card reader (Extract information from business cards), Document processing (Extract custom information from documents), Azure OpenAI Service (Create text, answer questions, summarize documents and more with GPT), and Sentiment analysis (Detect positive, negative, or neutral sentiment in text data).





Process, Recognize,  
Read, analyze,  
classify, extract,  
translate, classify,  
predict, detect, and  
more.

AI Builder lets you  
create and train  
models for your  
data you can  
customize and use.



The screenshot displays the 'AI Models > Explore' page in the AI Builder application. On the left is a navigation sidebar with options: Home, Approvals, My flows, Create, Templates, Connectors, Data, Monitor, AI Builder, Explore (selected), Models, Document automation, Process advisor, Solutions, and Learn. At the bottom of the sidebar is a 'Ask a chatbot' button. The main content area features a breadcrumb 'AI Models > Explore' and a filter bar with 'All' (selected), Documents, Text, Structured data, and Images. Below the filter bar is a grid of 12 AI model cards, each with an icon, a title, a description, and a 'Preview' button. The models are: Invoice processing, Text recognition, Receipt processing, Identity document reader, Text generation, Sentiment analysis, Category classification, Entity extraction, Text translation, Category classification (Custom model), Entity extraction (Custom model), and Prediction (Custom model).

AI Models > Explore

☆ All | Documents | Text | Structured data | Images

- Invoice processing**  
Extract information from invoices
- Text recognition**  
Extract all the text in photos and PDF documents (OCR)
- Receipt processing**  
Extract information from receipts
- Identity document reader**  
Extract information from identity documents
- Text generation** (Preview)  
Create text, summarize documents, and more with GPT
- Sentiment analysis**  
Detect positive, negative, or neutral sentiment in text data
- Category classification** (Preview)  
Classify customer feedback into predefined categories
- Entity extraction**  
Extract key elements from text, and classifies them into predefined categories
- Text translation**  
Detect and translate more than 90 supported languages
- Category classification** (Custom model)  
Classify texts into custom categories
- Entity extraction** (Custom model)  
Extract custom entities from your text
- Prediction** (Custom model)  
Predict future outcomes from historical data

# Power BI

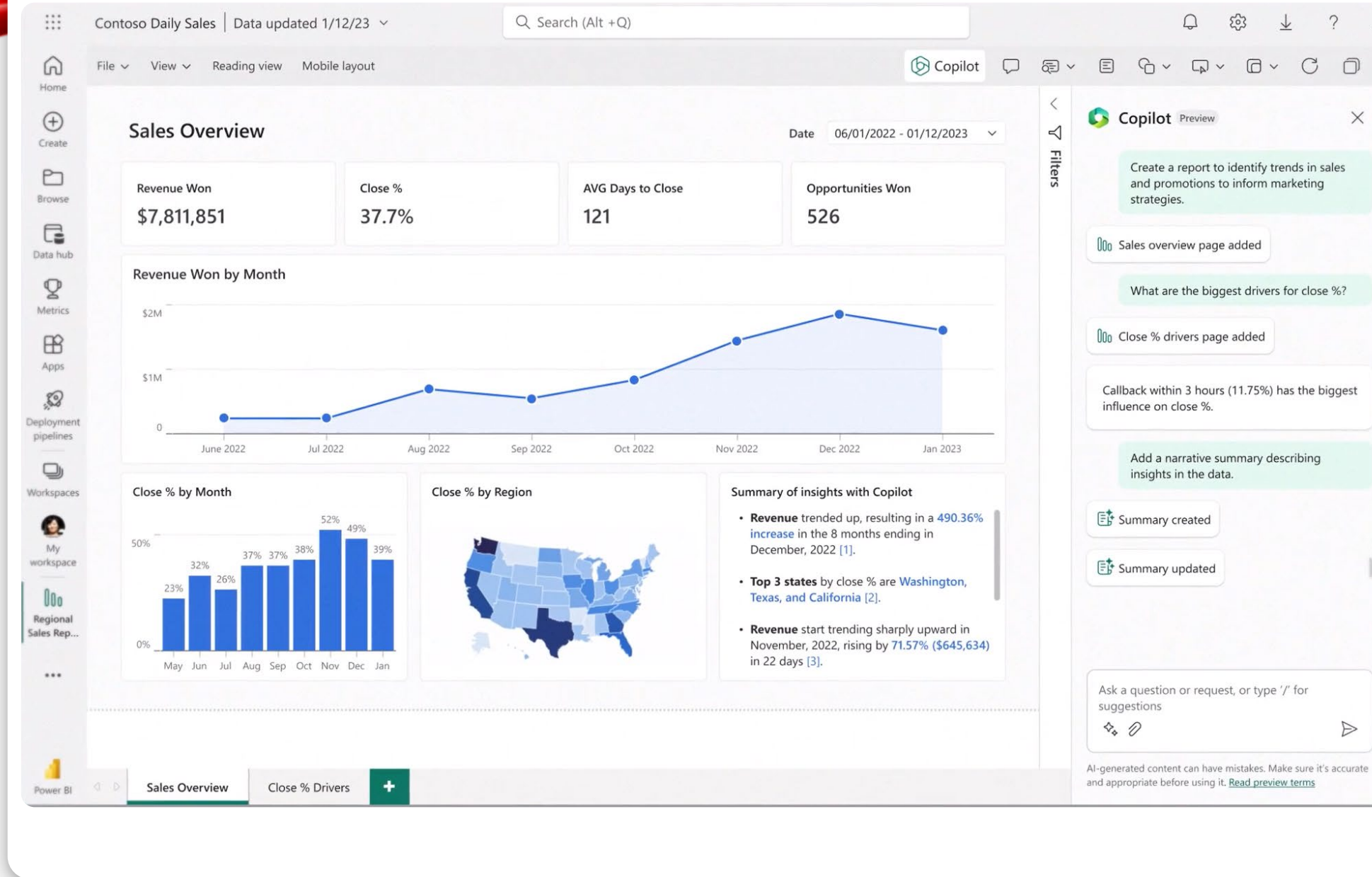


[Copilot - Natural Language to Reports](#)

[Natural Language to DAX Quick Create](#)

“Create a report to identify trends in sales and promotions to inform marketing strategies.”

Power BI understands your data and creates a report you can customize and use.



**Natural Language to DAX Quick Create**  
**(Generally Available)**

**“Rolling 10 day average of inspections”**  
**Power BI writes DAX queries you can customize and use.**



The screenshot displays the Power BI Desktop interface for a 'T-MOBILE DASHBOARD'. The dashboard includes several visualizations:

- Inspections by Response:** A donut chart showing 22K total inspections, with 7K (31.47%) marked as 'Issue' and 15K (68.53%) marked as 'OK'.
- Inspections by Date and Response:** A line chart showing inspection trends from May 2020 to August 2020, with 'Issue' inspections in red and 'OK' inspections in grey.
- Inspections by Checklist Item and Response:** A horizontal bar chart showing counts for items like 'Clutter free & accessible' (4.8K), 'Clean and hygienic' (1.8K), 'Filled with available Products' (2.7K), and 'Devices are confirmed to be operational'.
- Percentage Issues, Inspections and Inspection Score by Area Inspected:** A bubble chart showing inspection counts and issue percentages for areas like 'Store Entrance', 'Waiting Area', 'Phones', 'Front Tables', 'Information Kiosk', 'Tablets', 'Back Tables', and 'Register'.

On the right side, the 'Easy measures' pane is active, showing a natural language query: 'rolling 10 day average of inspections'. The 'Submit' button is highlighted. Below the query, the 'Suggested measures' pane shows the 'Rolling ten-day average of Inspections' with a preview value of 149.90. The DAX formula for this measure is:

```
DAX  
AVERAGEX(  
  DATESINPERIOD(  
    'Store Inspection'[Date],  
    LASTDATE('Store Inspection'[Date]),  
    -10,  
    DAY  
  ),  
  'Store Inspection'[Inspections]  
)
```

# EXPRESS DESIGN

AUTO-GENERATE APPS  
FROM DESIGNS USING AI



Paper sketching



PDFs or static image



Figma design files

# Registration Sign-up

First Name

Last Name

T-Shirt Size

Dietary Need

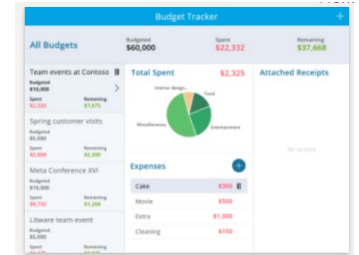
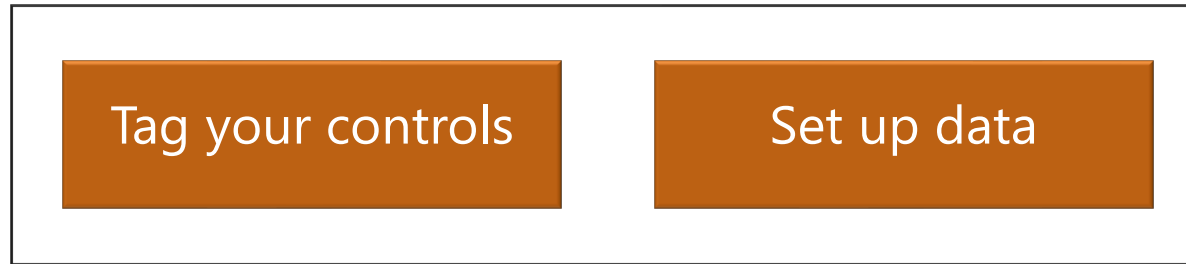
Yes  No

# USING AI TO TURN IMAGES INTO APPS

Your Image

Image to App Wizard

APPS  
Your App



**Azure Custom Vision**  
(identify controls)

**Azure Computer Vision**  
(text recognition)

**Dataverse**  
(custom data schema)

## ← Draw tags and assign components

- ✓ Image
- Components
- Data
- Table
- Columns (optional)
- Review

Draw boxes, or tags, around things that should appear in the app. Then for each tag, assign a component. If something doesn't have a tag, draw a box around it. [Learn more about tags](#)

A hand-drawn registration form titled "Registration Sign-up". The form contains the following elements, each with a colored tag:

- Registration Sign-up**: Orange tag (Text label)
- First Name**: Orange tag (Text label)
- : Green tag (Text input)
- Last Name**: Orange tag (Text label)
- : Green tag (Text input)
- T-Shirt Size**: Orange tag (Text label)
- : Orange tag (Text input)
- Dietary Need**: Orange tag (Text label)
- : Blue tag (Check box)
- Submit**: Purple tag (Button)
- Cancel**: Purple tag (Button)

Tags applied Guidance

### Tagging

Each tag corresponds to a component in the app. You can draw new tags, change them, or remove them. [Tagging tips](#)

- Text label
- Text input
- Check box
- Button

Back

Next

Close



**Tree view**

Screens Components

Search

+ New screen

App

- Screen1
  - Form1
  - Button4
  - Button1
  - Label6

Registration Sign-up

First Name

Last Name

T-Shirt Size

Dietary Need  Yes  No

Screen1 60%

SCREEN Screen1

Properties Advanced Ideas

Fill

Background image

Image position



## Registration Sign-up

First Name

Last Name

T-Shirt Size

Dietary Need

Submit

Cancel

# MICROSOFT CAREER RESOURCES

- <https://aka.ms/careers> - General Microsoft Job Search Site
- <https://careers.microsoft.com/v2/global/en/students> - Current Student Focus
- <https://powerup.microsoft.com/> - Group learning for career switchers
- <https://military.microsoft.com/mssa/> - Veterans transitioning into a technology career

# POINTERS ON CAREERS SITE

- Set up alerts
- Filter
- Looking for Remote roles? “Work site” and “100% work from home”

The screenshot displays the Microsoft Careers website interface. At the top, the Microsoft logo is followed by navigation links: Careers, Locations, Professions, Programs, Life at Microsoft, and Hiring tips. A search bar and a 'Sign in' link are in the top right. Below the navigation is a green banner with a link to 'Take a quick look at how you can get the most out of the new experience. Take a look'. The main search area features a search bar with the placeholder 'Search by job title, ID, or keyword' and a location field 'City, state, or country/region'. A 'Find jobs' button is to the right. Below the search bar are several filter dropdowns: Experience, Work site, Profession, Discipline, Role type, Employment type, and Level of education. The 'Employment type' dropdown is open, showing options: Internship (117) (checked), Full-Time (8), Post Doc Research (4), and Part-Time (2). Below the filters, it shows 'Showing 1-20 of 131 results'. At the bottom, there is a toggle for 'Turn job alert on', a 'Share result' button, and a 'Sort by' dropdown set to 'Most relevant'.

# POWER PLATFORM LEARNING RESOURCES

- [Official Microsoft Power Platform documentation - Power Platform | Microsoft Learn](#)
- Embedded within Power/Apps/BI/Virtual Agents/Pages
- Microsoft Unified Support Offerings
- Microsoft Partners

# CALL TO ACTION

- Get a trial or development environment to start exploring
  - [Business Apps | Microsoft Power Apps](#) (click on “Try free”)
  - [Developer Program | Microsoft 365 Dev Center](#)
  - [Power Apps Developer Plan | Microsoft Power Apps](#)
- Start learning – within PowerApps, Microsoft Learn, Online Videos
- Sign up for workshops (they fill up quickly)
  - [Power Platform In a Day Workshops | Microsoft Power Platform](#)
  - <https://events.microsoft.com/en-us/mvtd>
- Power Platform University Hub - Provides curriculum, vouchers for certifications, training environment to educational institutions – No cost: [Power Platform University Hub | Microsoft Power Platform](#)

# THANK YOU!

Gary Cirujales

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## Survey: Post-Microsoft + HAC Power Platform Workshop



<https://forms.office.com/r/3et5fyE1X8>

Work Power Apps

https://make.preview.powerapps.com/environment/5a79e038-d920-e908-b9be-b1a5ddc37418/aibuilder/models/ab30b998-d7c1-49b4-a6fc-59b39dfb1961/editor

Admin Data Tools Technical ITWeb (Microsoft IT) MSW (Microsoft W... My Microsoft IT Pointers Other favorites

Power Apps Environment BizApps for EDU & AMC

Object Detection 10/11/2023, 11:43:27 AM | Save and close

- Select domain  
Objects on retail shelves
- Choose objects  
3 object names selected
- Add images  
37 images added
- Tag images
- Model summary

You will need to tag at least 15 images per object to continue.

### Tag the objects in your images

All

Back Next

#### Quick tips

##### Tagging requirements

You must tag at least 15 images for each object. Tagging more than 50 images for each object could yield better results. You can have multiple tags per image.

- 0 Action Figure
- 0 Plant
- 0 Artwork

##### Want to add more images?

Adding more images may increase model performance.

+ [Add images](#)

##### Get help or send feedback

Get the answers you need, or tell us about your experiences.

[Get help](#)





Choose object ✕

Action Figure

Plant

Artwork





- ✓ Select domain  
Objects on retail shelves
- ✓ Choose objects  
4 object names selected
- ✓ Add images  
62 images added
- ✓ Tag images  
57 images tagged
- Model summary

### Model summary

Review your model's details below. If something is missing you can go back to the previous steps. If everything looks good, select Train. Learn more about training. [Learn more about training](#)

#### Overview

Owner  
Gary Cirujales


#### Image sources

Data source  
 My device

#### Information to extract

##### Object

Action Figure	
Artwork	16
Plant	19
Mini-Figure	15



**Your model is training**

This may take a few minutes depending on the size of your training data.  
You can close this window and come back later.

Finalizing

Back Training

#### Quick tips

##### What is training?

Training prepares your model to be used, based on the information you provided.

##### What's next?

Once trained, you will be able to evaluate your model performance results and publish your model for use in Power Apps. At any time, you can add and tag more images.

##### Get help or send feedback

Get the answers you need, or tell us about your experiences.

[Get help](#)