

## Al Builder

Build Intelligent business solutions with low code AI Tools

Version 1.0 from Feb 17, 2025

# Agenda





**Document Processing Capabilities** 

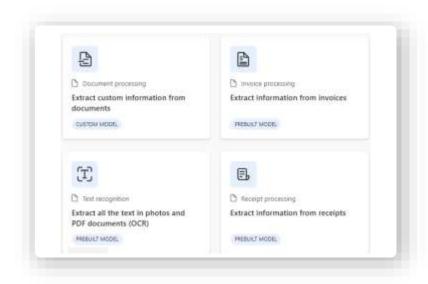
**Enterprise Governance** 

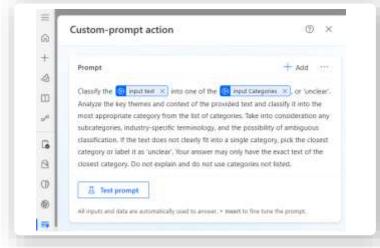
Responsible AI and data residency

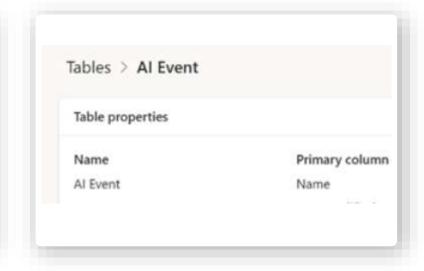
Closing



### Al Builder: empowering low-code makers with Al Tools







#### Al models

Democratized access to building custom AI models hosted in Azure, including document processing, object detection, and many more.

#### **Al Prompts**

Build and integrate custom GPTpowered actions that make low-code business solutions intelligent – all using natural language prompt engineering.

#### **Al Governance & Monitoring**

Control and assign Al capacity to specific environments and monitor Al activity across Power Platform.

#### **Capabilities**

## **Empower low-code makers with AI Tools**



#### **Generative Al**

Custom Al actions w/ GPT

**Categorize E-mails** 

**Extract entities** 

Extract key phrases

**Detect language** 

**Analyze sentiment** 

**Translate** 



#### **Documents**

Process structured forms and unstructured documents

Recognize text (OCR)

Process invoices and receipts

Process passports and US driver's licenses

**Process business cards** 



#### **Images**

**Detect objects** 

**Classify images** 

Describe images



#### **Structured Data**

**Predict quantity** 

**Predict outcomes** 

#### **Value Proposition**

## **Build Intelligent Business Solutions with AI Builder**



Copilots ————

Leverage Custom Prompts to tailor Copilot's responses for understanding your business data and executing specialized enterprise tasks.



**Automation** 

Incorporate Al Models and Prompts as automated actions to handle scenarios such as Intelligent Document Processing and Email Classification.



Apps ———

Enhance app functionality by creating intelligent controls that enable users to generate reports, derive custom insights, or process images instantly.



Data —

Create advanced data transformations and synthetic data with GPT Prompts.



# Al Builder

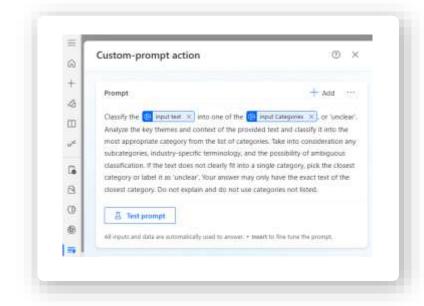
**Generative AI & Copilots** 

## **Prompt Builder**

Generally Available

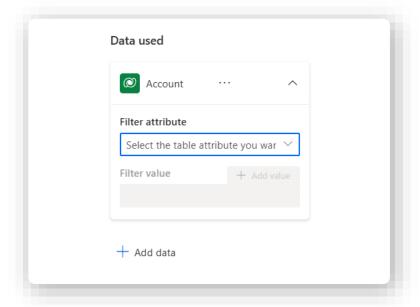


#### **Build Prompt-based actions**



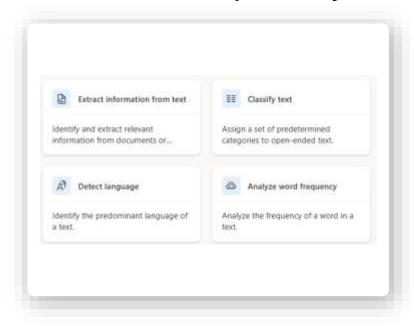
Build custom GPT-powered actions that make your business solutions intelligent.

#### Works with your data



Add dynamic inputs (ex: data from an automated workflow), and enterprise data to ground your prompts

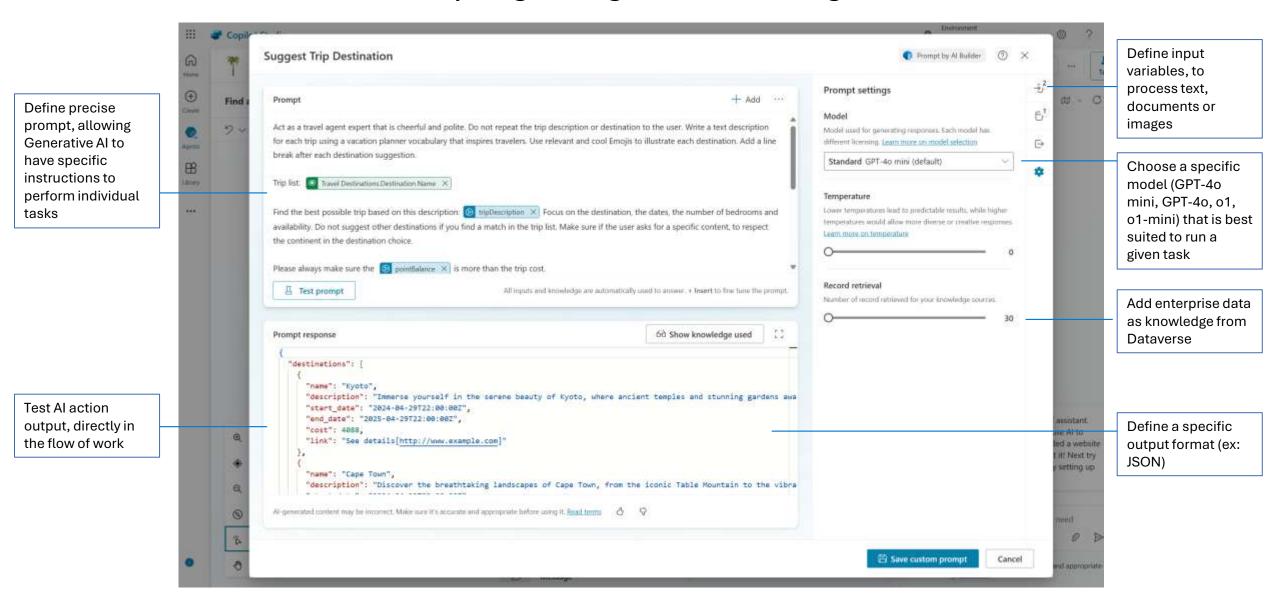
#### **Pre-Built Prompt Library**



Pre-built templates to easily get started using Generative AI prompts

## **Prompt Builder**

#### Low-Code Prompt Engineering Interface to configure Al Actions

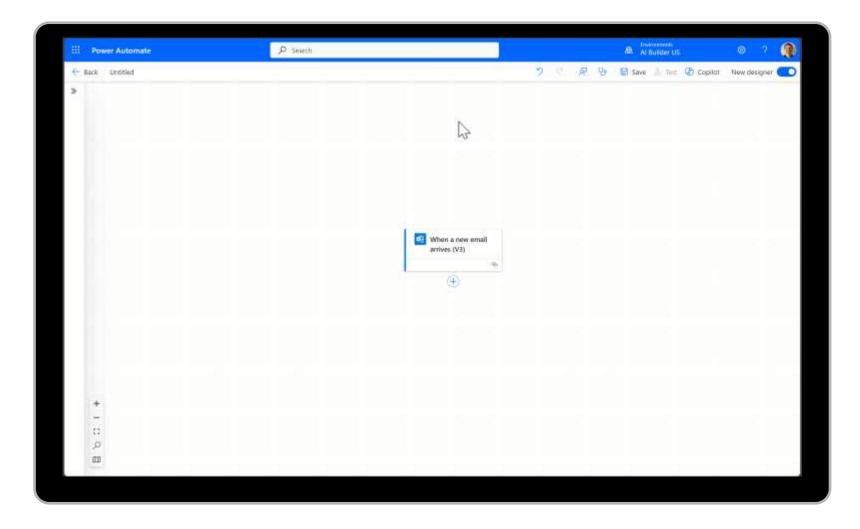




### Text generation with GPT



Custom Prompt engineering using Azure OpenAl service's large language (LLM) capability that can generate text, summarize documents, answer questions, and more.



Easily embed generative AI capabilities into Power Apps, Power Automate & Copilots

Choose the right model for the right task (updated to GPT-4o, GPT-4o mini, o1 and o1-mini)

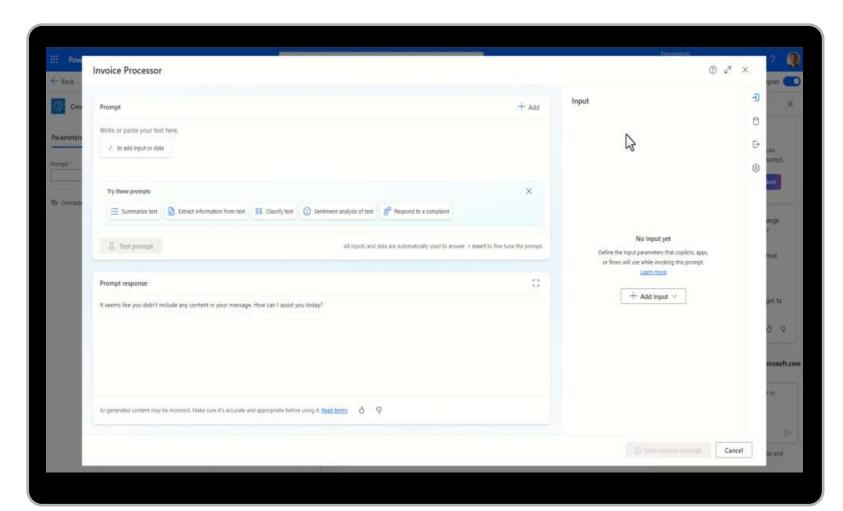
Responsible AI and human agency with optional human in the loop approvals



### **Process Documents and Images**



Use Prompts in natural language to process documents and images seamlessly, without the need to pre-label data or train custom models.



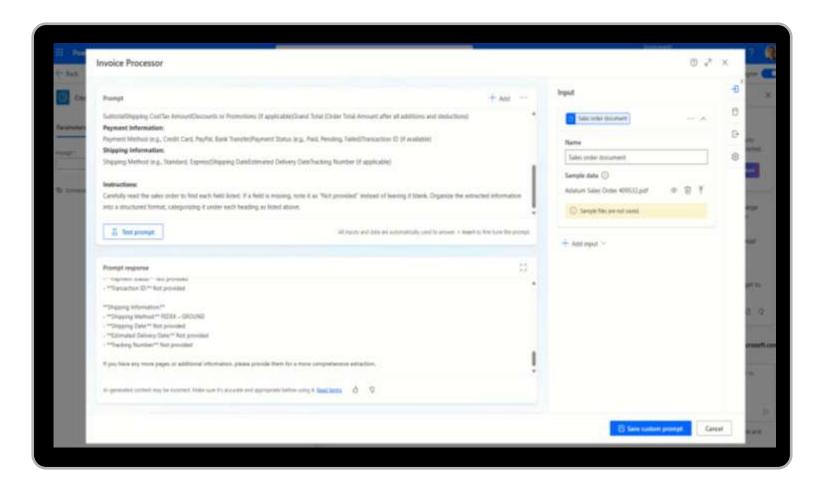
Define fields to extract and how to process content using natural language

Works with unstructured, tabular data, and image file types

Combine with JSON output formatting for integration in end-to-end processes



Customize prompt output format to generate deterministic JSON formatting for easier integration of Gen AI results in downstream processes



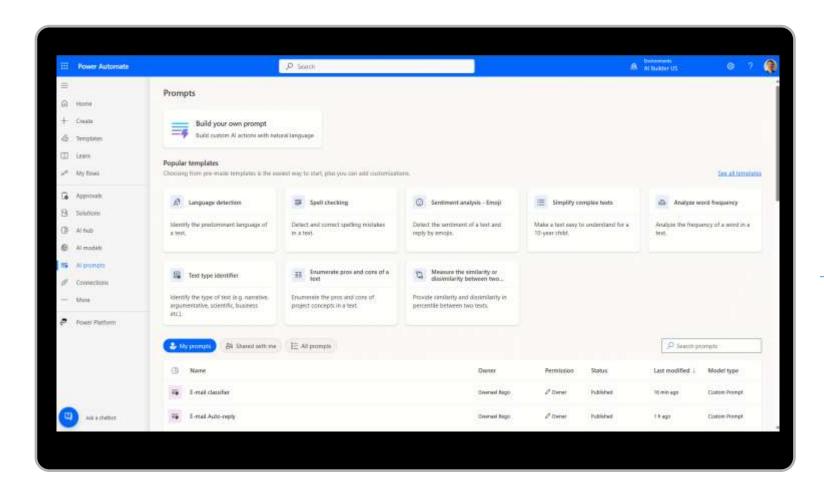
Auto-generate and lock JSON output formatting

**Embedded JSON Editor** 

Outputs available as downstream variables in Power Automate



Pre-built prompt templates to easily get started using Generative AI Prompts.



Dozens of pre-built prompt templates

Common prompt categories for text generation and language processing

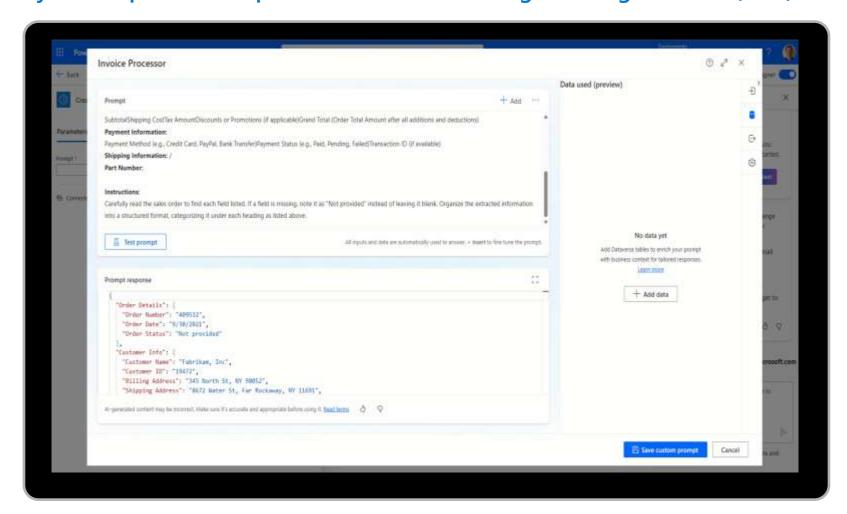
Customize and save as your own



### Dataverse data grounding



Add your enterprise data as knowledge context, extending LLMs to understand your unique business processes with retrieval augmented generation (RAG).



#### **Data Summarization**

Summarize data points included in Dataverse records

#### **Custom Filtering**

Filter your data tailored to your scenario

#### **Supports Multiple Tables**

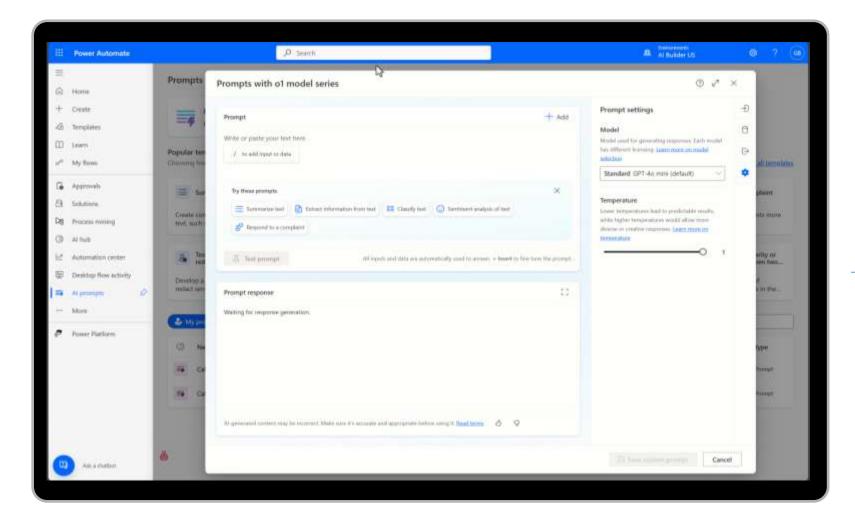
Single and Multiple Dataverse records



### Advanced Reasoning with o1

Preview

Leverage the latest Gen AI technology with advanced human like reasoning from Azure OpenAI's o1 model series (o1 and o1-mini).



Improved mathematical reasoning

Advanced content generation with reasoning explanations

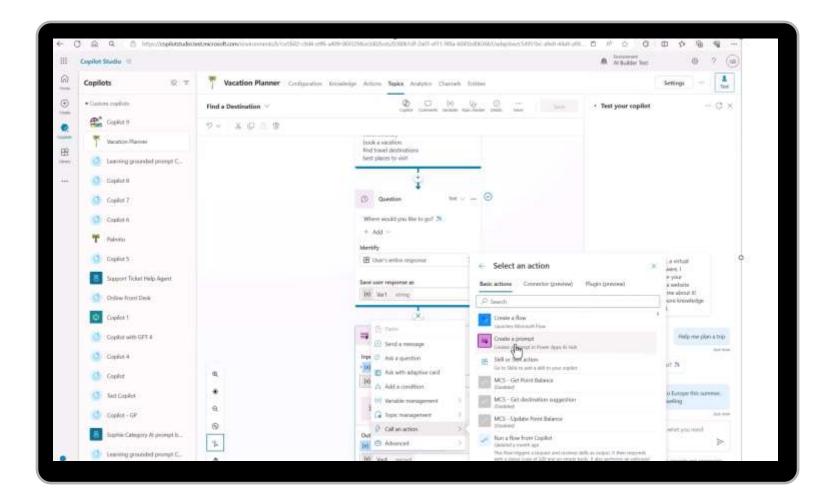
Able to reason over complex, unstructured data sets



### Customize Copilot actions with Prompt Builder



Leverage Custom Prompts to tailor Copilot's responses for understanding your business data and executing specialized enterprise tasks.



#### **Customize Copilot behavior**

Add business specific behaviors or modify existing Copilots behaviors using natural language

#### Improve response accuracy

Guide Copilot to understand your business data with natural language instructions

#### **Powerful data transformations**

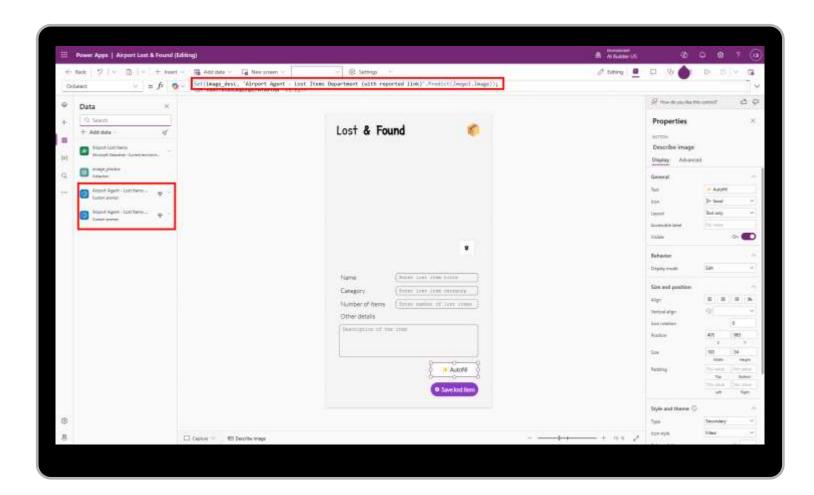
Parse and transform user inputs to map to your data standards



### Make your Power Apps controls intelligent



Enhance app functionality by creating intelligent controls that enable users to generate reports, derive custom insights, or process images instantly.



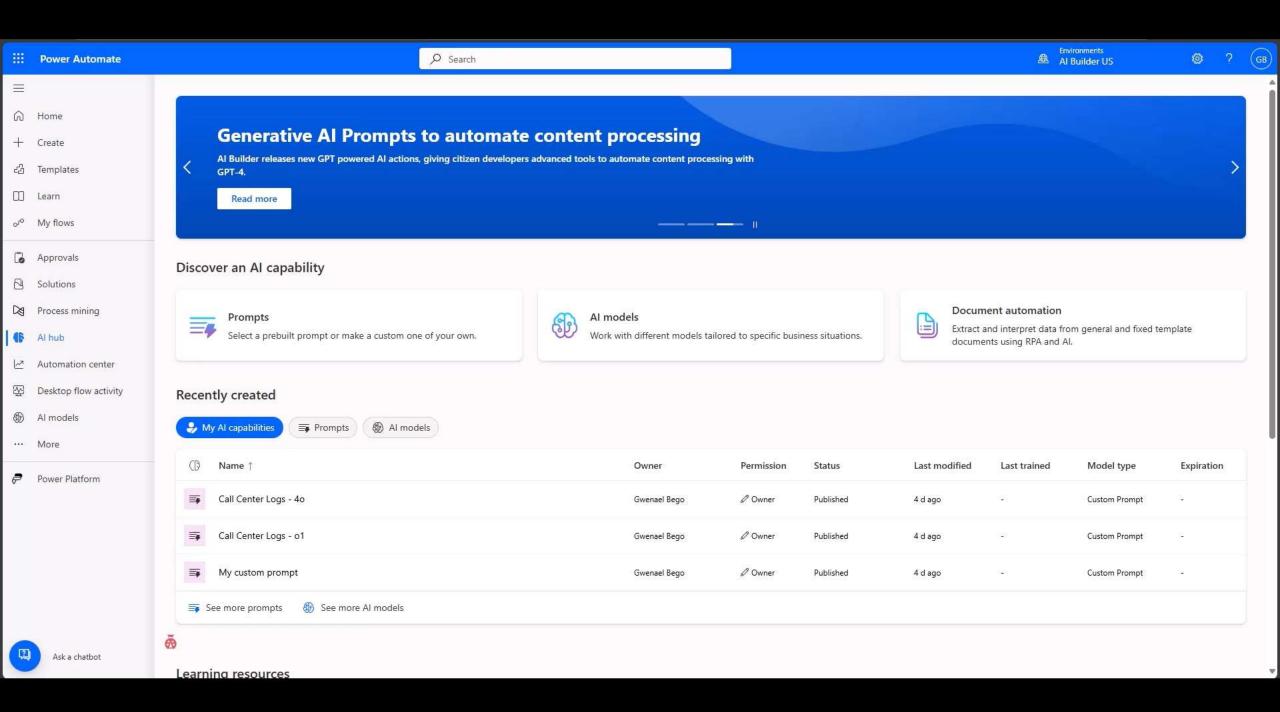
#### Add GPT Prompts to extent App controls

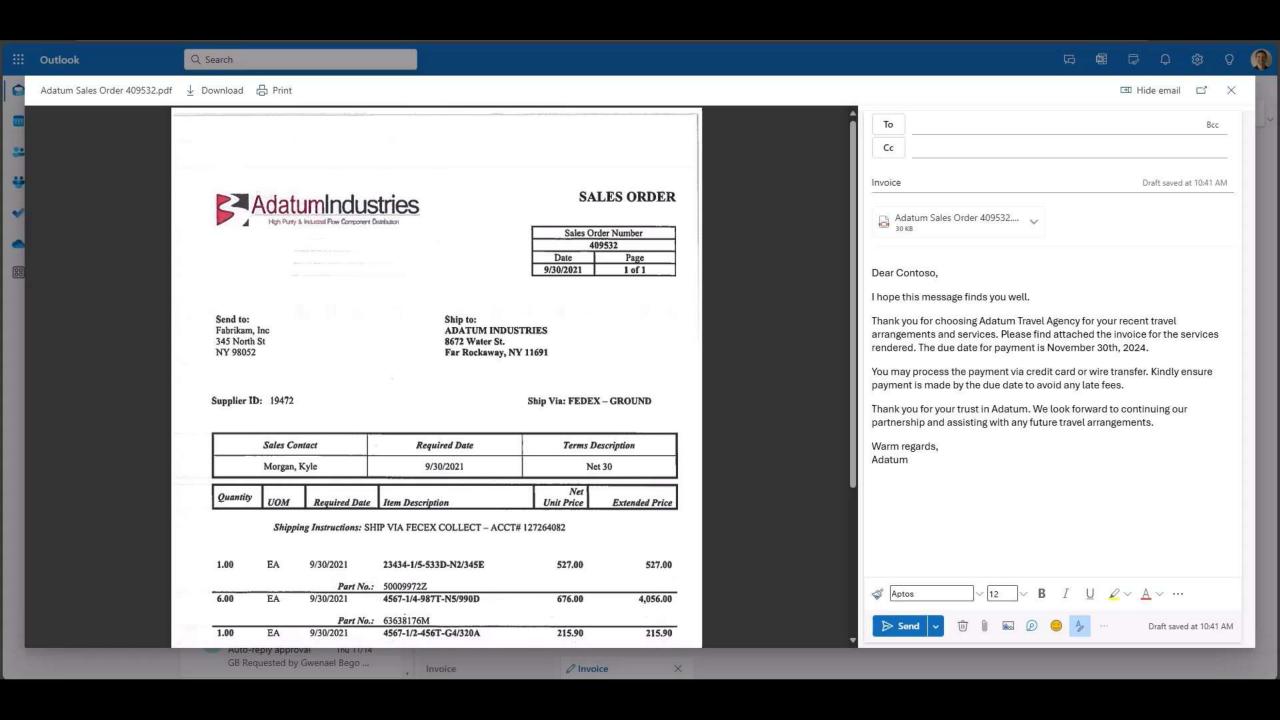
Add custom Al-powered capabilities to your controls (ex: image processing)

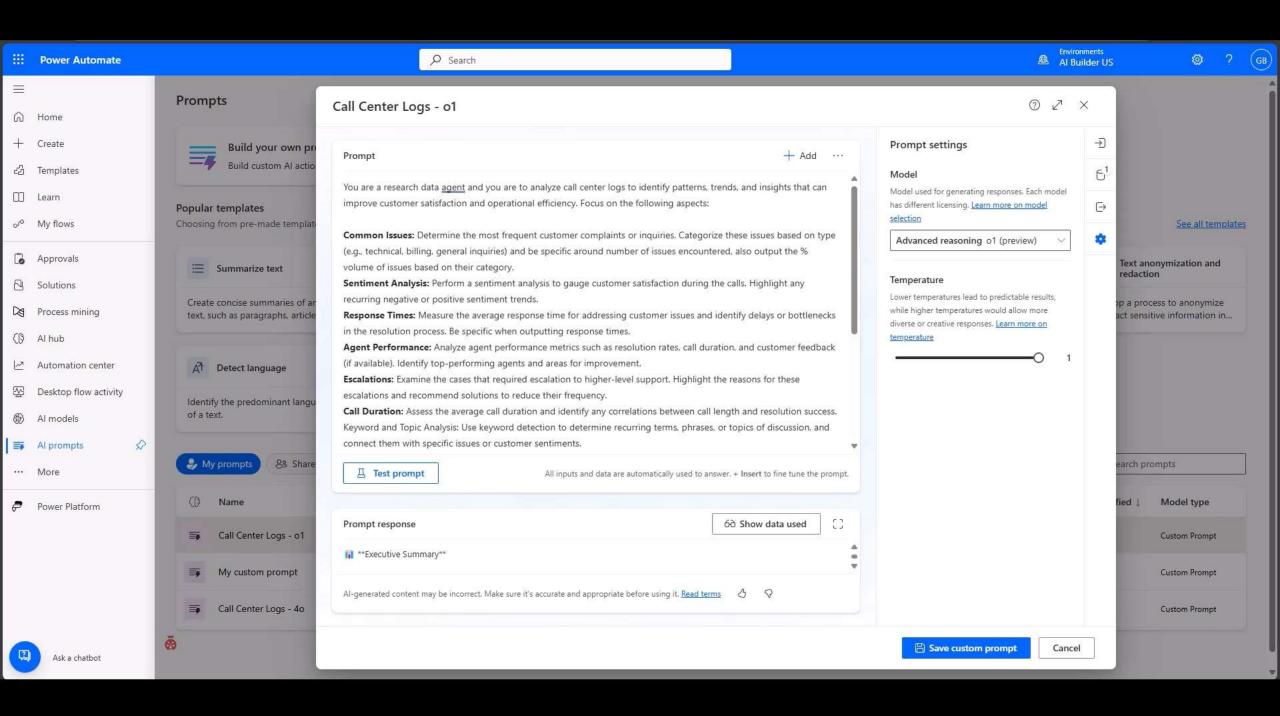
#### **Invoke GPT with Power Fx**

Leverage PowerFx to add summarization, data extraction, classification or content generation behaviors to your text controls

# Demo









# Al Builder

**Document Processing Capabilities** 

## **Intelligent Document Processing**



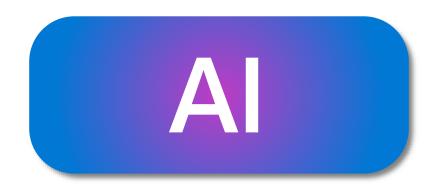
Intelligent Document Processing (IDP) is a software solution that captures and transforms data from documents (e.g. e-mail, text, PDF, scanned documents).



Using AI technologies such as computer vision, OCR, natural language processing (NLP) and machine/deep learning, the extracted data can be analyzed, categorized, transformed and exported to external systems in an end-to-end process.



Intelligent Document Processing can understand structured documents (forms, invoices, receipts, identity documents...) or unstructured documents (memos, contracts, customer feedback requests...)



## is here to help

OCR
Natural Language Processing
Machine Learning
Neural Networks
Deep Learning
Generative Al

### Custom vs. pre-built models for documents

#### Al Model

#### Text recognizer (OCR)



Ready to use, no training required

Basic OCR extracting printed
or handwritten text from a document/image

#### **Standard Document**



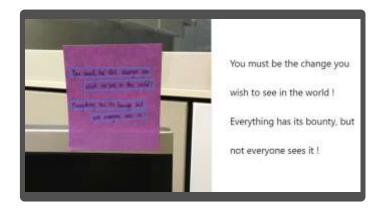
Ready to use, no training required

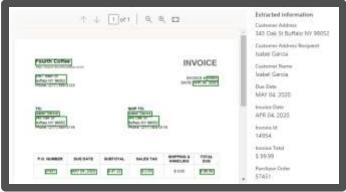
Models pretrained to extract data from standard document types

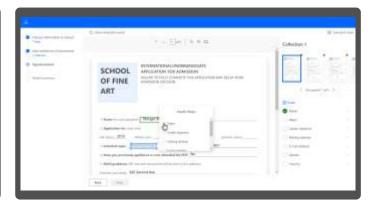
#### **Custom Document**



Custom train to extract data from any document Intelligent OCR. Tailor an AI model to understand a layout structure and content







### Applied scenario

Extract an identifier or a text pattern from a document

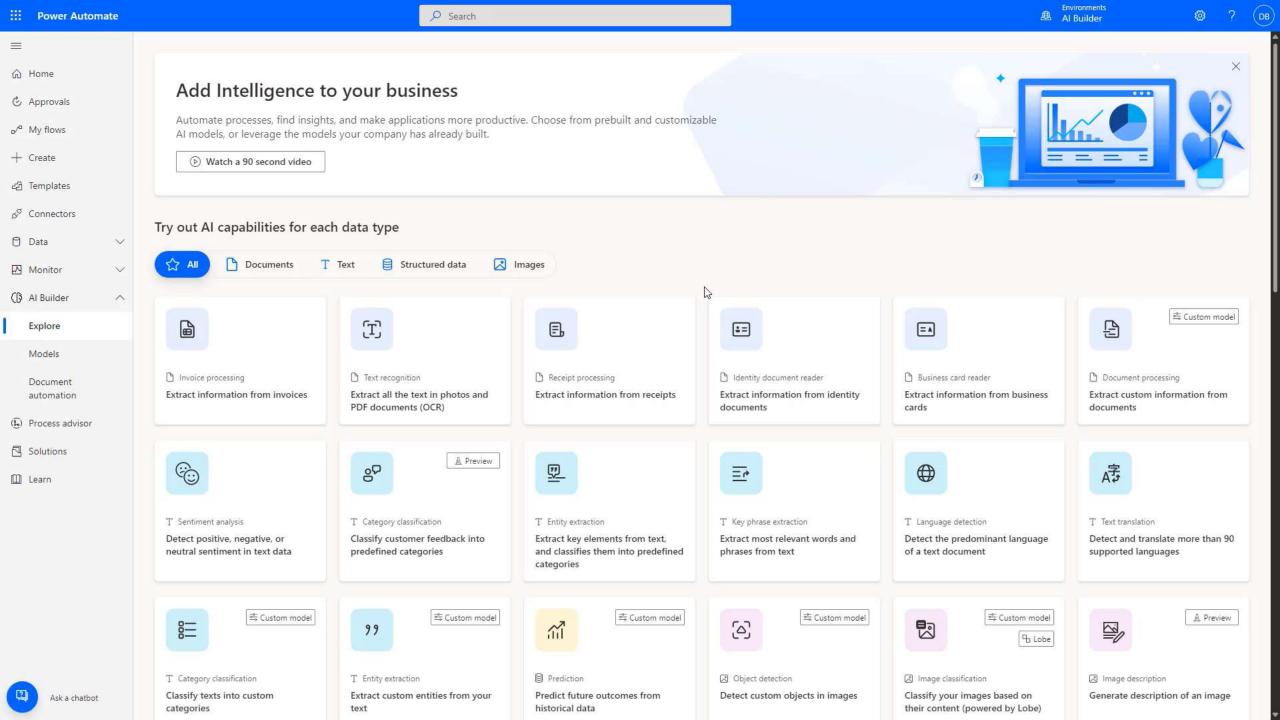
Extract most common fields from **Invoices**, **Receipts**, **Business Cards**, **Passports or US driver's licenses** 

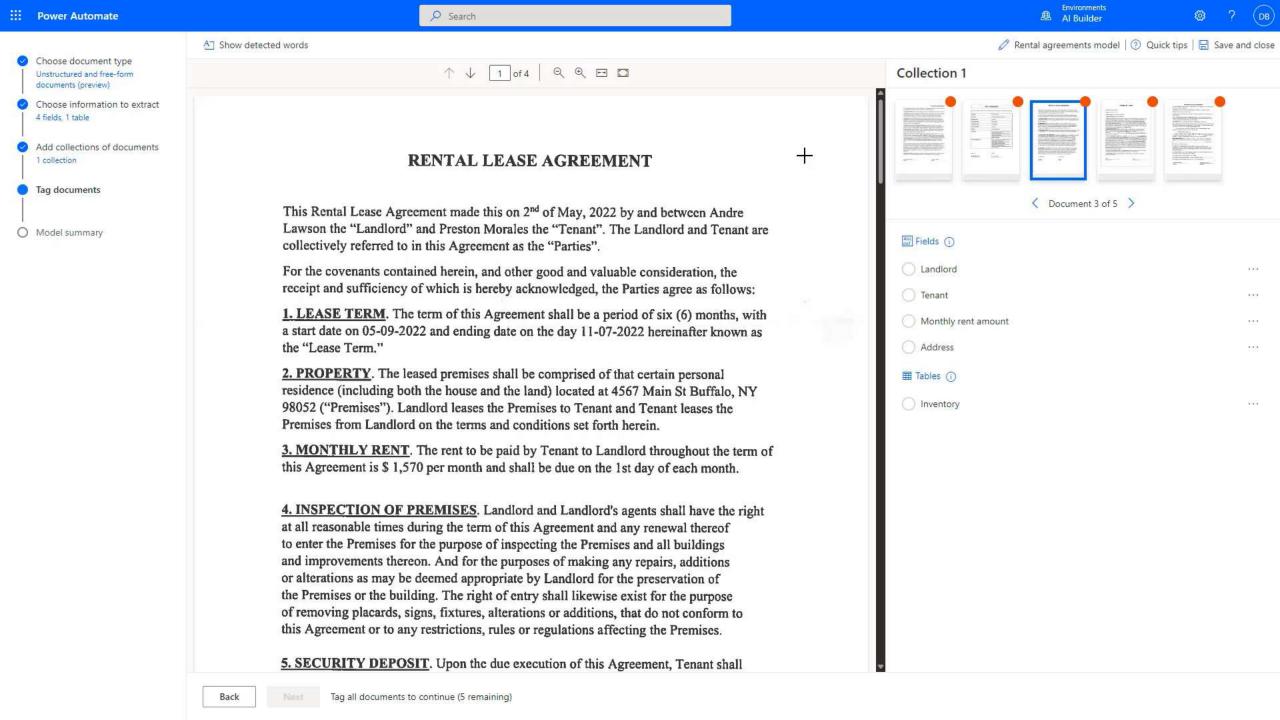
Use when the prebuilt didn't succeed to extract all fields

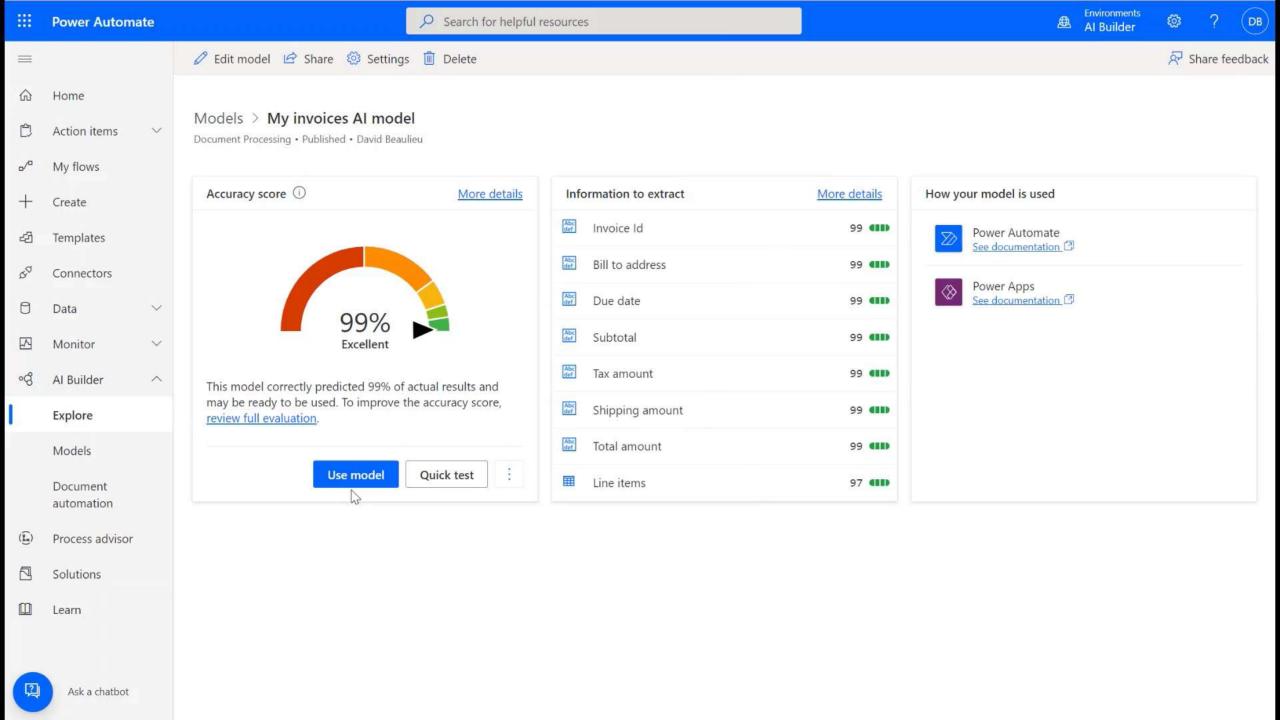
#### or

to extract data from other types of documents both structured and unstructured (loyalty cards, tax form, inventory form, contracts...)

# Demo

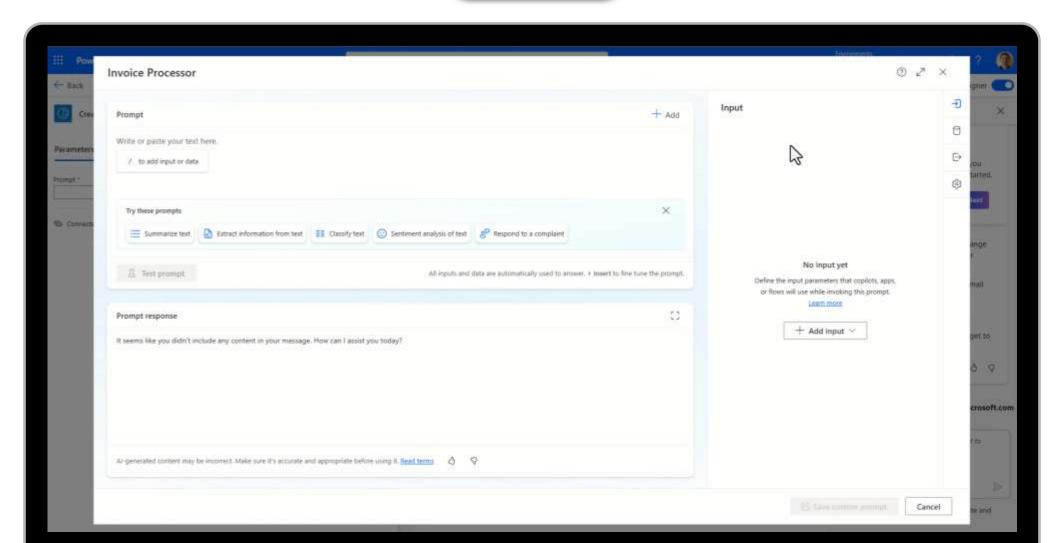






### Documents and Image Processing with with GPT-40





## **Document Processing Setup Workflow**

## With Traditional models Takes weeks/months

- **Define Fields to Extract**
- Create Collections
- Upload Historical Data
- Label Documents
- Train & Publish Model
- 🔵 🛮 Iterate with Feedback Loop 🔽

With GPT
Takes hours/days

- Create Instruction in Natural Language
- Test and Improve 🔽

## GPT is transformative for document processing



#### **Easier and faster to build:**

no training samples required no document labelling works with new layouts

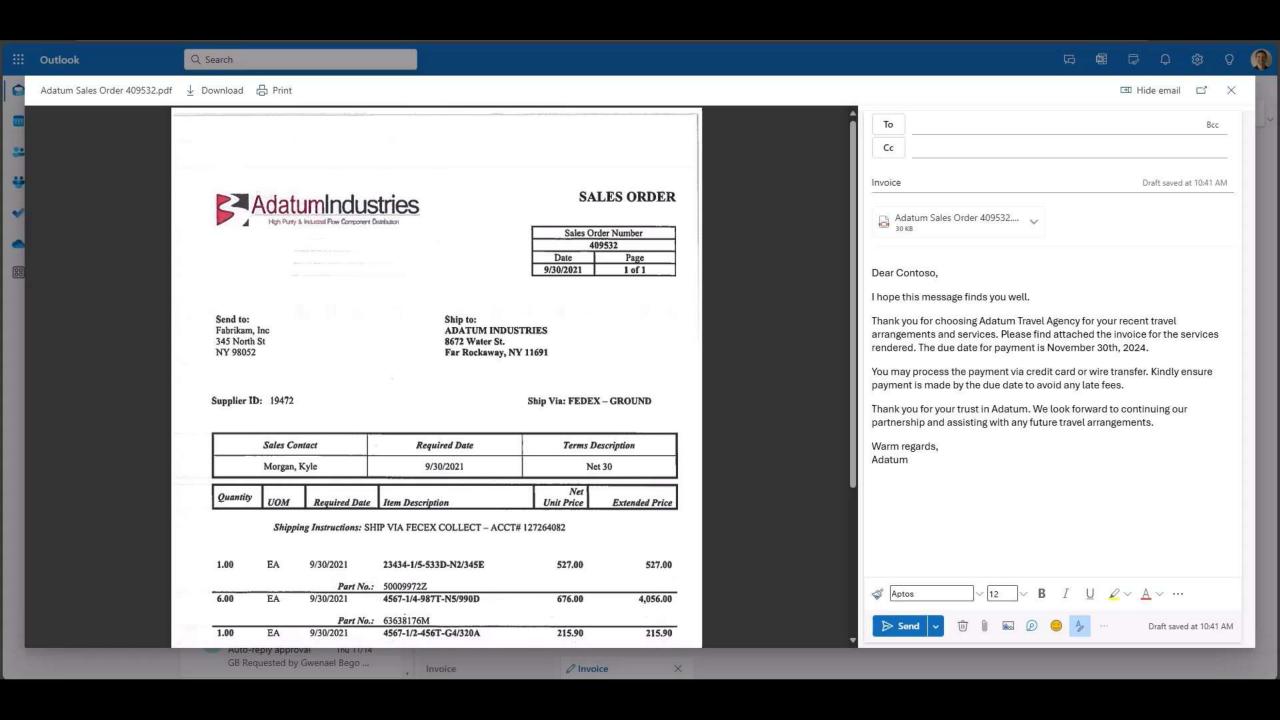
#### **Understands the documents:**

gives insights on the information can be augmented with knowledge

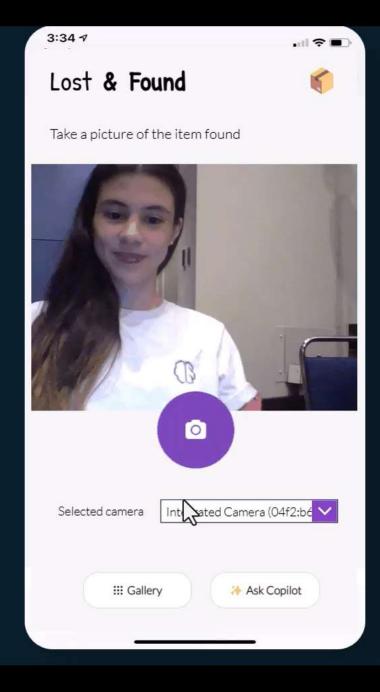


Low accuracy for complex layouts with today's models

# Demo



### **Image Processing**



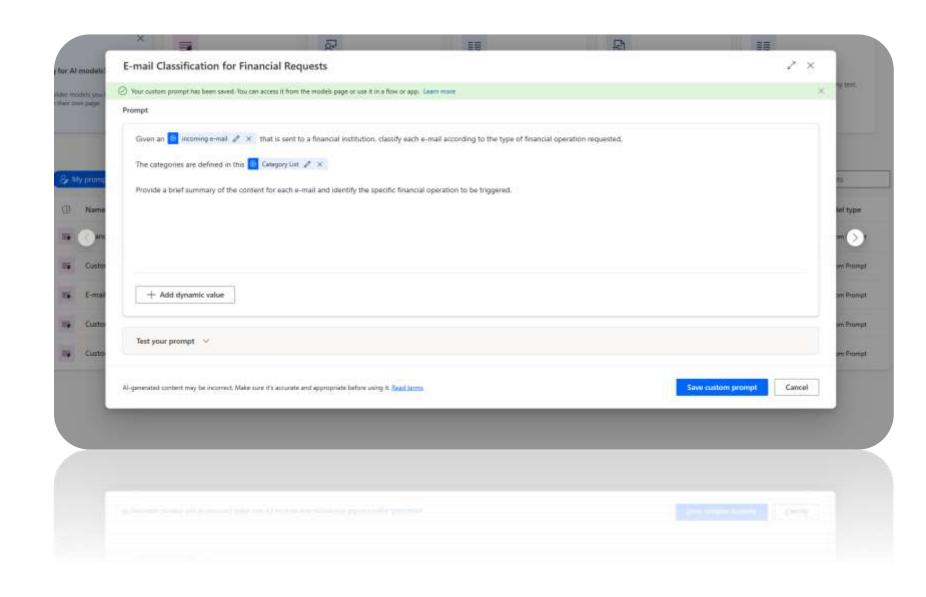


# Al Builder

**Enterprise Governance** 

## Save, Share and Deploy Prompts

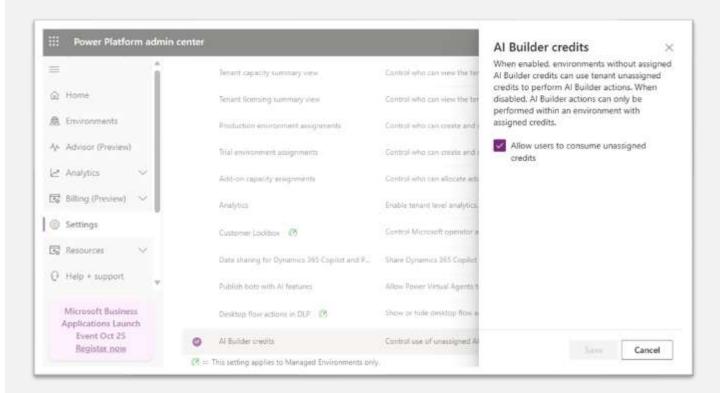
- Once you've crafted the right prompt, you can save it to re-use it across products and environments
- Prompts can be shared to different users, just like Models
- Prompts also support ALM and can be added to Solutions to be deployed across environments



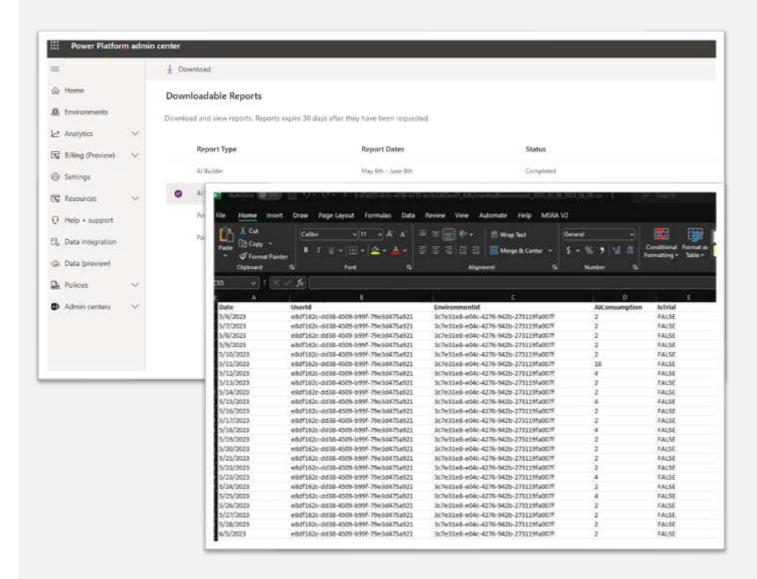
#### GA

# **Al Credit Management**

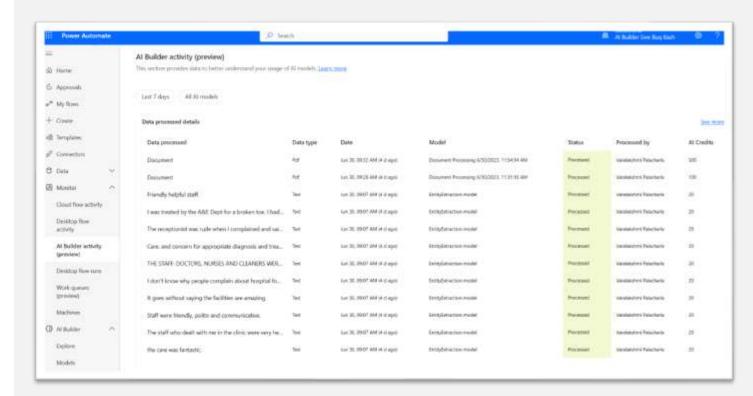
 Tenant level setting to control use of unassigned credits



- Download activity reports in .csv from Power Platform Admin Center
- Available data:
  - Date
  - User Id
  - Environment Id
  - Credits Consumed
  - License Type

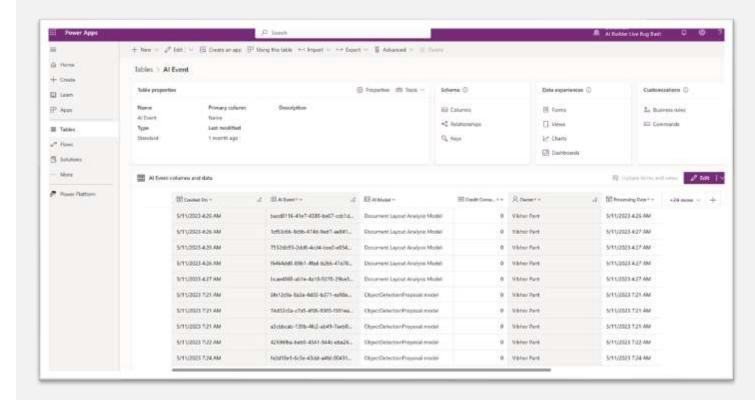


- View summary of AI Builder runs from Apps and Flows
- Available data:
  - Model type
  - Data type
  - Data processed
  - User
  - Date
  - Status
  - Credits consumed
- Makers see their own activity; admins see all activity on the environment

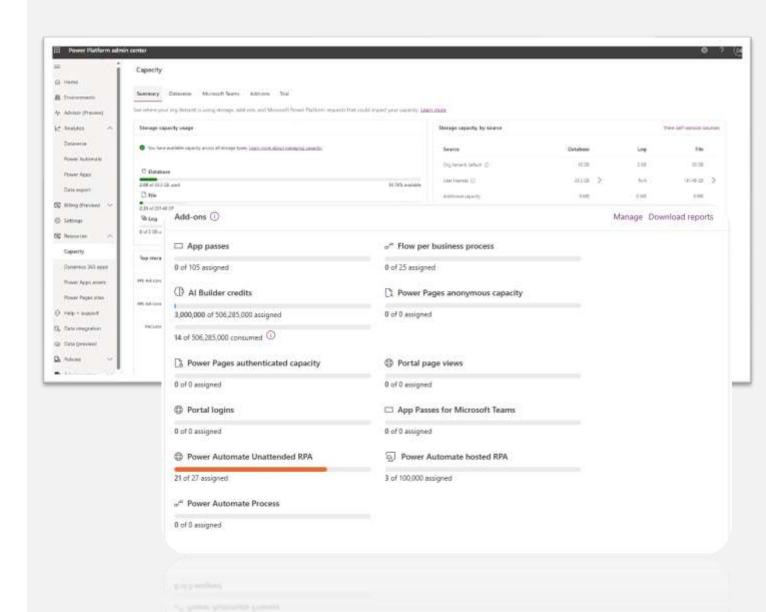


### GA

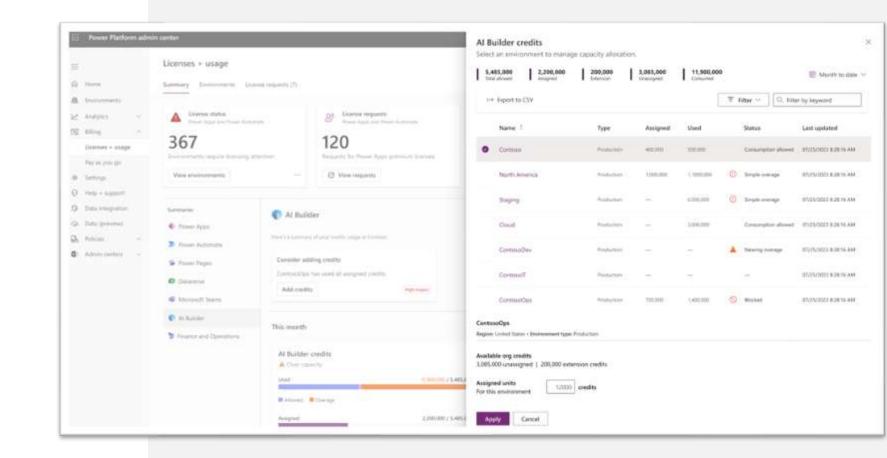
- Stored in the AI Event table in Dataverse
- Possibility to create custom monitoring reports based on AI Event data



- Al Builder credits enhanced view in Power Platform admin center Capacity Summary:
  - Available
  - Assigned
  - Consumed
- Admins see an aggregate view of all credits consumed across tenant environments



- Al Builder activity
   monitoring per
   environment Copilot
   Hub view
- See details of credits assigned and consumed across environments
- Assign credits to be used on dedicated environments, accessible from the Al Builder capacity tab





# Al Builder

Responsible AI and data residency

# Enterprise data protection for AI Builder Prompts and Models

- •We secure your data: We help protect your data with <u>encryption</u> at rest and in transit, rigorous physical security controls, and data isolation between tenants.
- •Your data is private: We won't use your data except as you instruct. Our commitments to <u>privacy</u> include support for <u>GDPR</u>, <u>ISO/IEC 27018<sup>[2]</sup></u>, and our Data Protection Addendum.
- •Your access controls and policies apply to Copilot: Copilot respects your <u>identity model</u> and <u>permissions</u>, inherits your <u>sensitivity labels</u>, applies your <u>retention</u> policies, supports <u>audit</u> of interactions, and follows your administrative settings. The specific controls and policies will vary depending on the underlying subscription plan.
- •You're protected against Al security risks: We help safeguard against Al-focused risks such as <a href="https://harmful.content">harmful content</a> and <a href="prompt injections">prompt injections</a>.
- •Your data isn't used to train foundation models: Microsoft Copilot uses the user's context to create relevant responses. Copilot for Microsoft 365 also uses Microsoft Graph data. Consistent with our other Copilot offers, prompts, responses, and data accessed through Microsoft Graph aren't used to train foundation models.

# Microsoft Cloud Runs on trust



Your data is **your** data



Your data is <u>not</u> used to train the foundation AI models

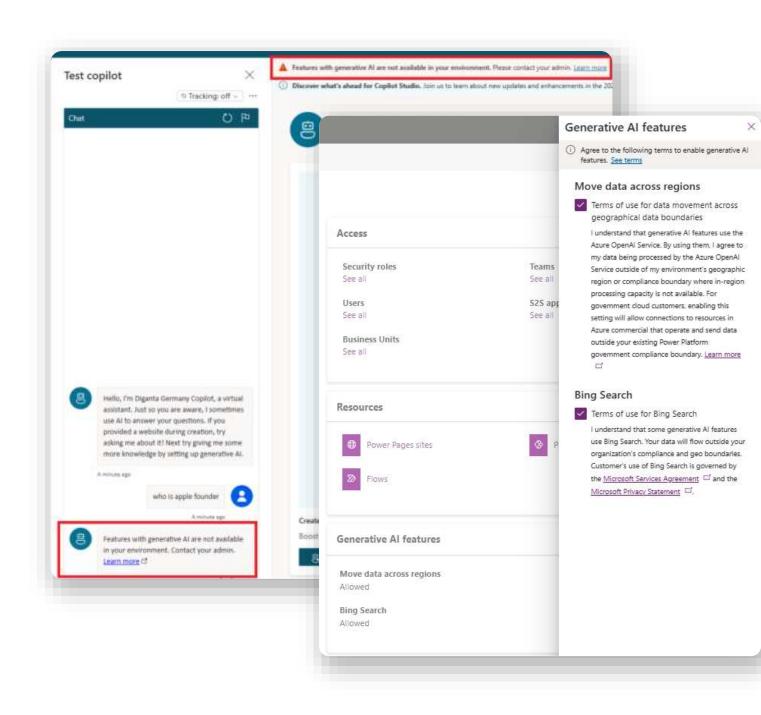


Your data is **protected** by the most comprehensive enterprise compliance and security controls

# Geo boundary compliance

Where Azure Open AI is available, customer data does not leave geo boundary.

If Azure OpenAI is not available in a geo, admins have granular controls to manage cross geo data movement per environment.





# Thank you!

## Ricardo de Souza

**Technology Specialist - Power Platform** 



in https://www.linkedin.com/in/ricardodesouza/





## **Al Builder Resources:**

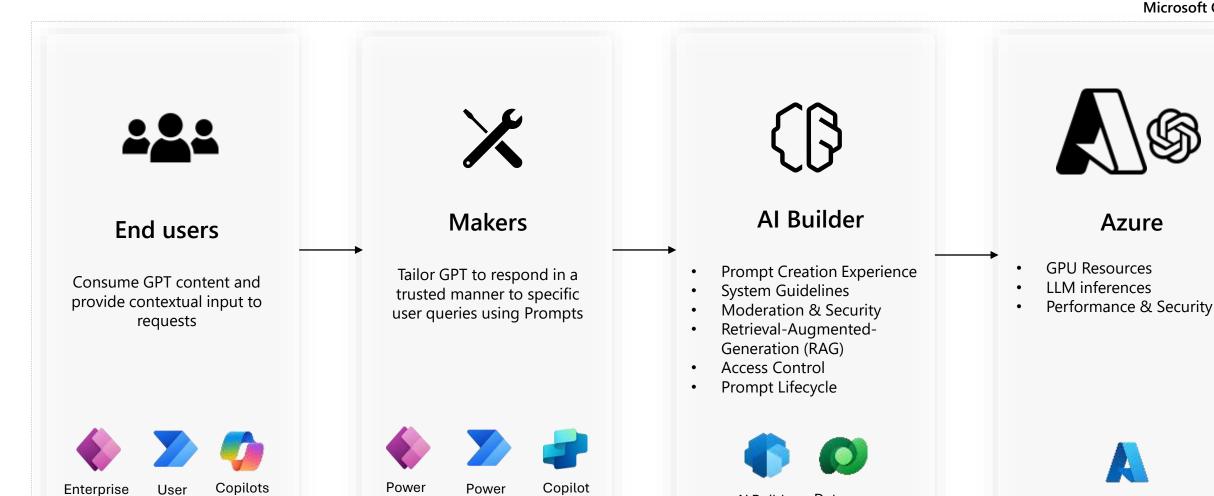
- Access Al Builder in Power Automate: <a href="https://aka.ms/tryaibuilder">https://aka.ms/tryaibuilder</a>
- Access Al Builder in Power Apps: <a href="https://aka.ms/aibuilderpowerapps">https://aka.ms/aibuilderpowerapps</a>
- What AI Model should I use ?: <a href="https://aka.ms/aibuildercheatsheet">https://aka.ms/aibuildercheatsheet</a>
- Access Prompt Builder: <a href="https://aka.ms/tryprompts">https://aka.ms/tryprompts</a>
- How to build an effective prompt: <a href="https://aka.ms/promptguide">https://aka.ms/promptguide</a>
- Prompt Builder documentation: Al Builder documentation | Microsoft Learn
- Monitor Prompt activity: <u>Detailed instructions in the community forum</u>
- ALM for Prompts: <u>Distribute your prompt using a solution | Microsoft Learn</u>
- Al Builder Governance whitepaper: <a href="Download">Download</a>
- Contact the Product Group: aibuilderhelpen@microsoft.com

# **Prompts - High Level Workflow**

Al Builder Dataverse

**Microsoft Cloud** 

Azure OpenAl Service



Studio

Apps

Apps

Flows

Automate

## Responsible Al

## Responsible AI compliance

Human oversight on generative Al capabilities

## **Leveraging Approvals**

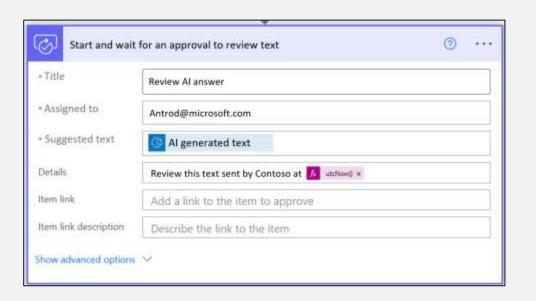
Validate/Approve GPT generated text with Approvals

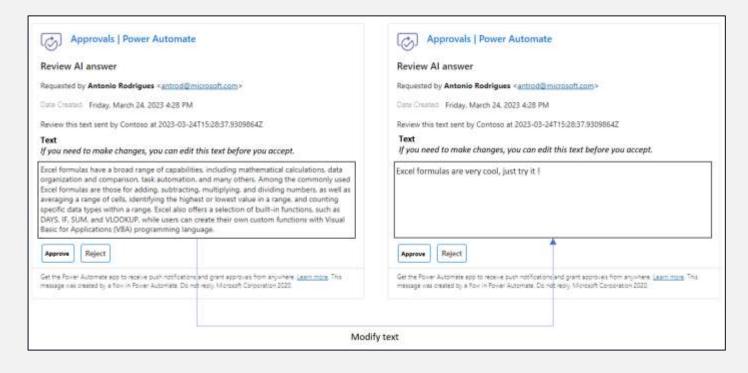
## **Human in the Loop Editing**

The Approvals experience extended to include the possibility to review text

#### Harmful content filters and moderation

Automatic filtering rules applied to every request to prevent inappropriate usage





## How to build an effective prompt

Prompt Engineering guide: <a href="https://aka.ms/promptguide">https://aka.ms/promptguide</a>



**Prompts** are how you ask AI model (GPT) to do something for you — it largely has two parts, **instruction** and **data context**. Focus on the key elements below when building a prompt:

