Build a Connector – Live!

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Agenda

- Microsoft Power Platform

- Connectors

  - What is a connector?
  - Why use custom connectors?
  - Develop a connector
  - Connector types
  - Demo #1: build your first connector

- Tools

- Demo #2: download, edit & update the connector

- Resources

- Wrap up

Microsoft Power Platform

What is the Microsoft Power Platform?

Microsoft Power Platform

One low-code platform that spans Office 365, Dynamics 365, Azure and standalone applications

Dynamics 365

Office 365

Azure

Your business apps & data

Power BI
Business analytics

Power Apps
Application development

Power Automate
Workflow automation

Power Virtual Agents
Intelligent virtual agents

Power Pages
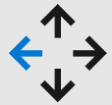Build websites

Dataverse

Data connectors

AI Builder

Power Platform: Everyone's platform for transformation

No Code
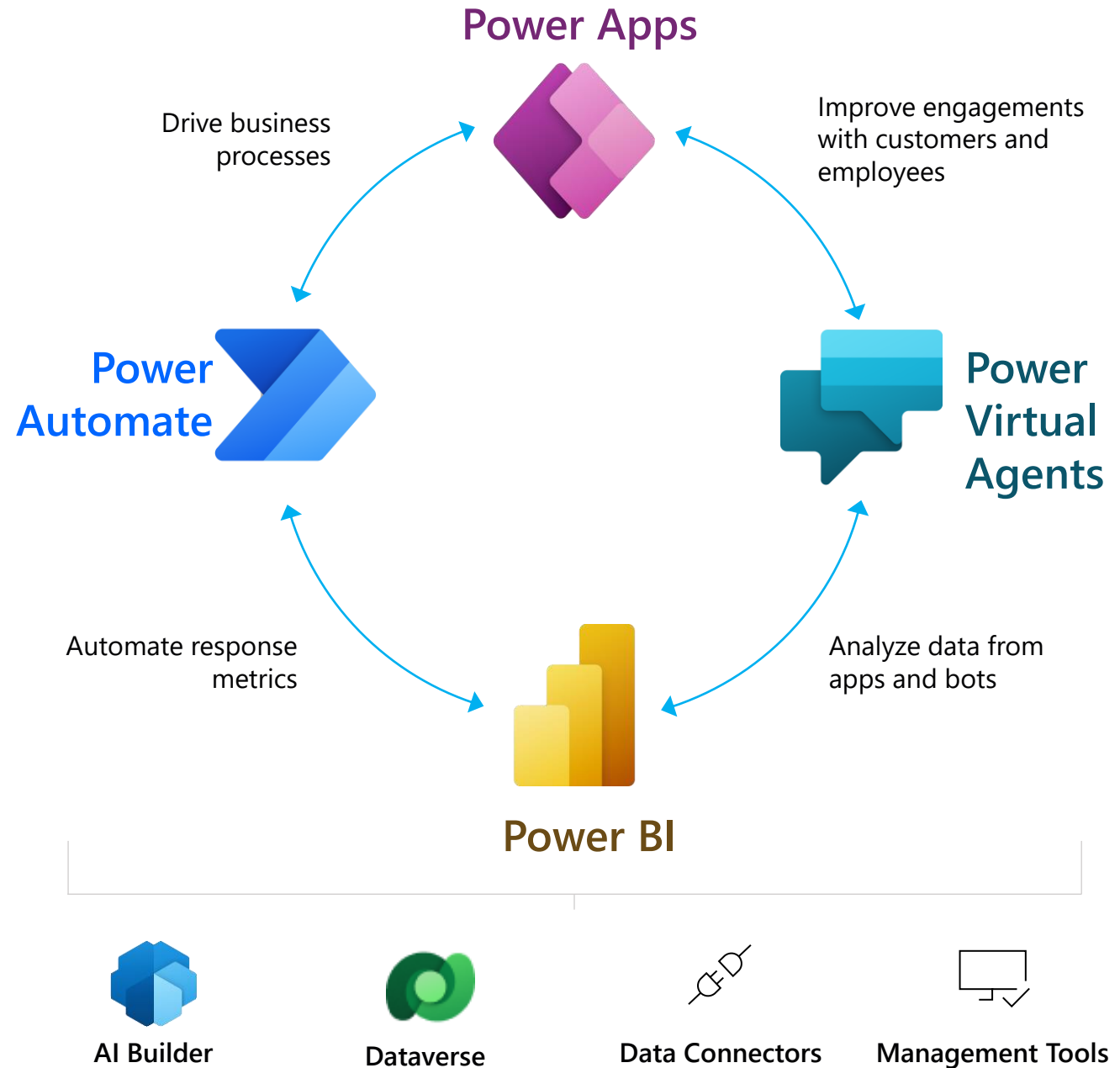
Drag and drop experiences that are like PowerPoint

Low Code

Drag and drop plus Excel-like formulas for functionality

Code First

Professional development and extensibility across Microsoft

Power Apps

Drive business processes

Improve engagements with customers and employees

Power Automate

Power Virtual Agents

Automate response metrics

Analyze data from apps and bots

Power BI

AI Builder

Dataverse

Data Connectors

Management Tools

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Dynamics 365

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Power Pages
Build websites

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Data connectors
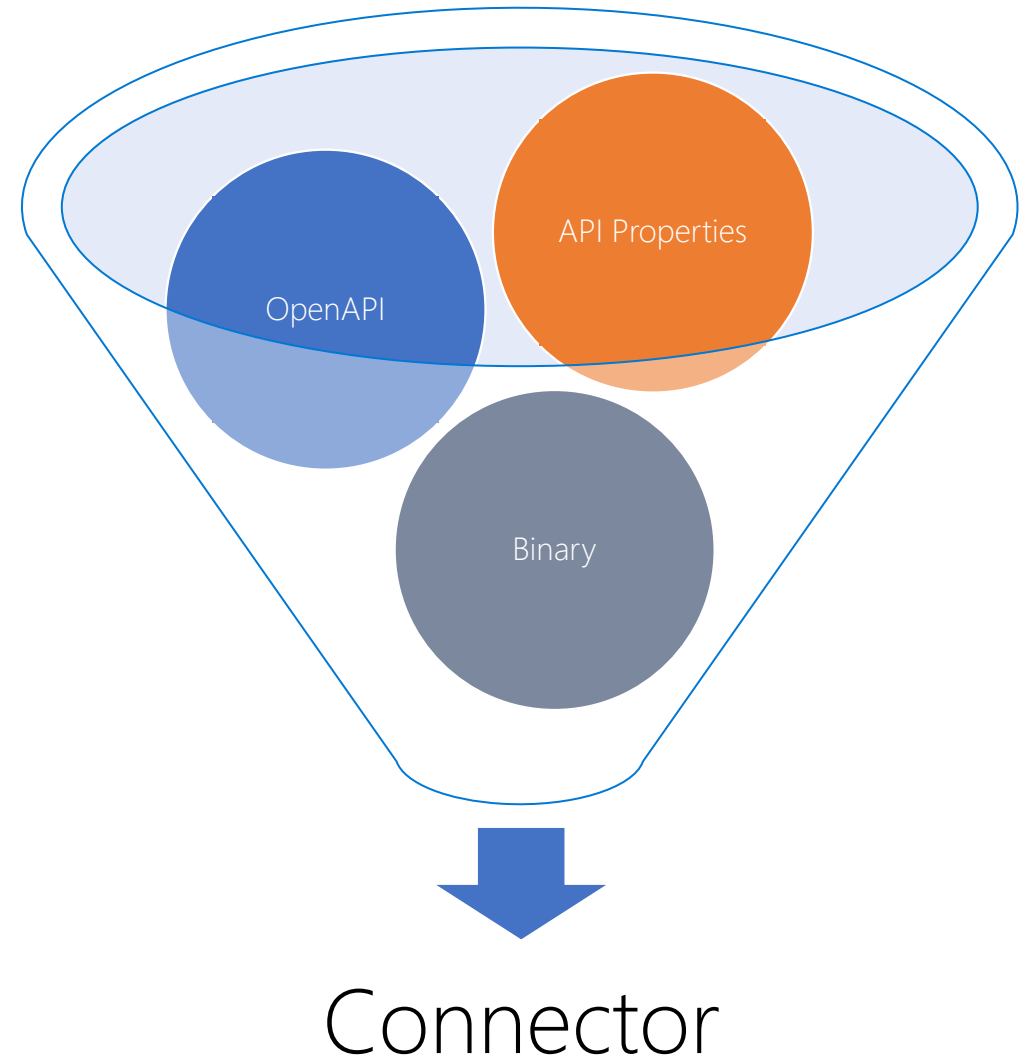
AI Builder

Connectors

What is a connector?

What is a connector?

A formal definition of a **REST API**

Allows the **REST service** to talk to Microsoft Power Apps, Power Automate, and Logic Apps

Currently **800+** connectors in the product

OpenAPI

API Properties

Binary

Connector

800+ Connectors

Why use custom connectors?

- Add services that are not currently supported

- Expand connectors that currently don't have the trigger/action you want

- Custom connectors are simple to build, don't require a lot of coding

- Can be built using the wizard, a postman collection, or with your favourite IDE (for instance VS Code)

- Can be shared, packaged and certified via GitHub

Step by step: Build a connector

Read the docs / know the API you want to build the connector for

Start in one of the products (Power Apps, Power Automate or Logic Apps)

Set up the authentication

Define the operations (triggers / actions) for your connector

Add code if needed (for now, C# code is supported)

Save and test your connector

Start in one of the products

- Create from blank
- Create from Azure Service (Preview)
- Import an OpenAPI file
- Import an OpenAPI from URL
- Import a Postman collection
- Import from GitHub
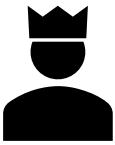
Types of connectors

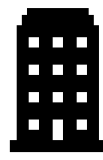| Connector Type	Custom Connector	Certified Connector	Independent Publisher Connector
API Availability	Public or private	Public	Public
Service Owner	Connector developer or someone else	Connector developer	Someone else
Audience	Internal	Everyone	Everyone

Demo
Build your first custom connector.

Tools
Help with building your custom connectors.

Tools (1/2)

- Paconn CLI
  - Helps with the ALM story of Custom Connectors
  - You can deploy, download and update your connectors with the CLI through the following commands:
    - Paconn login
    - Paconn download
    - Paconn create
    - Paconn update (*)
- Power Platform Connectors (VS Code Extension)
  - Helps you to easily add properties and other objects in Visual Studio Code by providing snippets
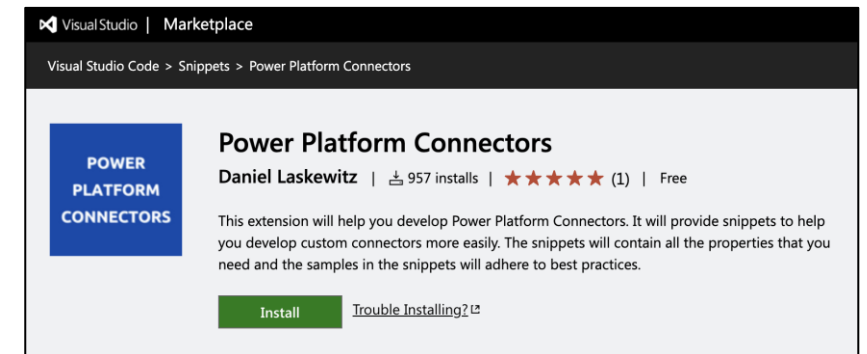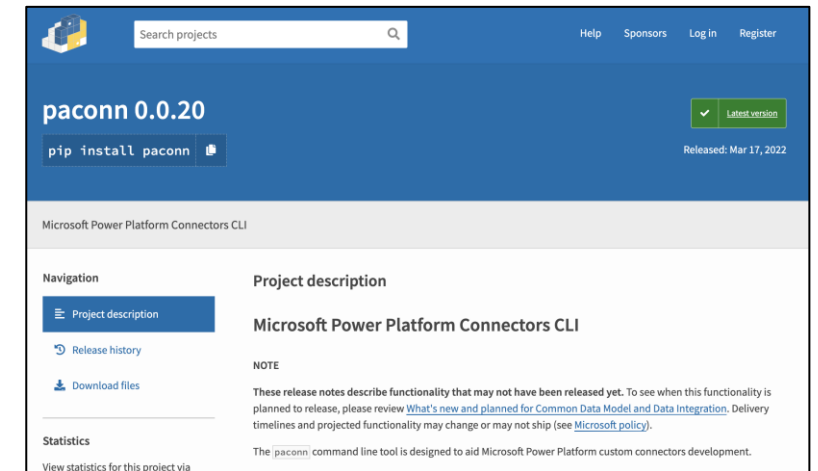
Tools (2/2)

- Power Platform CLI
    - 'pac canvas create' command generates a canvas app from a custom connector
    - This is great for pro code dev hand-off to citizen dev / makers

Demo
Download, edit & update the connector.

Resources
Handy links that will help you.

Resources (1/2)

- Docs
  https://aka.ms/connectors

- Get your connector certified
  https://aka.ms/ConnectorCertification

- Power Platform Connectors GitHub repository
  https://github.com/Microsoft/PowerPlatformConnectors

- Extend an OpenAPI Definition
  https://docs.microsoft.com/en-us/connectors/custom-connectors/openapi-extensions

- Custom code in custom connectors
  https://docs.microsoft.com/en-us/connectors/custom-connectors/write-code

Resources (2/2)

- Create a connector from a Postman Collection
  https://docs.microsoft.com/en-us/connectors/custom-connectors/define-postman-collection

- Custom Connectors Coding Standards
  https://docs.microsoft.com/en-us/connectors/custom-connectors/coding-standards

- Policy support in Custom Connectors
  https://docs.microsoft.com/en-us/connectors/custom-connectors/policy-templates

- Paconn CLI
  https://docs.microsoft.com/en-us/connectors/custom-connectors/paconn-cli

- Power Platform Connectors (VS Code Extension)
  https://aka.ms/ppc-vscode

- Power Platform CLI
  https://aka.ms/powerplatformcli

Wrap-up
What now?

Wrap-up

- Check out the top connector asks on GitHub and pick one
- Go build your first connector
- Test, test, test!
- Spread the word about custom connectors

Questions?

Thanks!