25. – 27.
SEPTEMBER
2023

PORTOROŽ

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AI-enriched Low-Code Development

Uroš Kastelic

Technology Specialist – Low-Code, Microsoft

Microsoft Power Platform

Power BI

Business analytics

Power Apps

Application development

Power Automate

Workflow automation

Power Virtual Agents

Intelligent virtual agents

Power Pages

Website development

Common underlying services

Microsoft Power Platform

Power BI	Power Apps	Power Automate	Power Virtual Agents	Power Pages
Business analytics	Application development	Workflow automation	Intelligent virtual agents	Website development

Dataverse   AI Builder   Power Fx

... and Low Code has a Copilot

AI as a real-time collaborator

that generates content

that sparks creativity

that automates cognitive tasks

that creates user experiences

Power Platform Copilot
since 2021

2021

Power Apps
Natural language to Power Fx formulas

Power BI
Natural language to DAX Quick Create

2022

Power Automate
Natural language to flow, format data by examples

Power Apps
Image & Figma to app

2023

Power Virtual Agents
Generative answers

AI Builder
Azure OpenAI model with templates

Power Virtual Agents
Natural language to bot (Copilot)

Power Apps
Natural language to app (Copilot)
PVA in Power Apps
AI analytics

Power Automate
Enhanced natural language to flow (Copilot)

Power Pages
Natural language to webpage (Copilot)

Power BI
Natural language to data insights (Copilot)

Power Virtual Agents
Generative actions

Power Apps
Excel Data import

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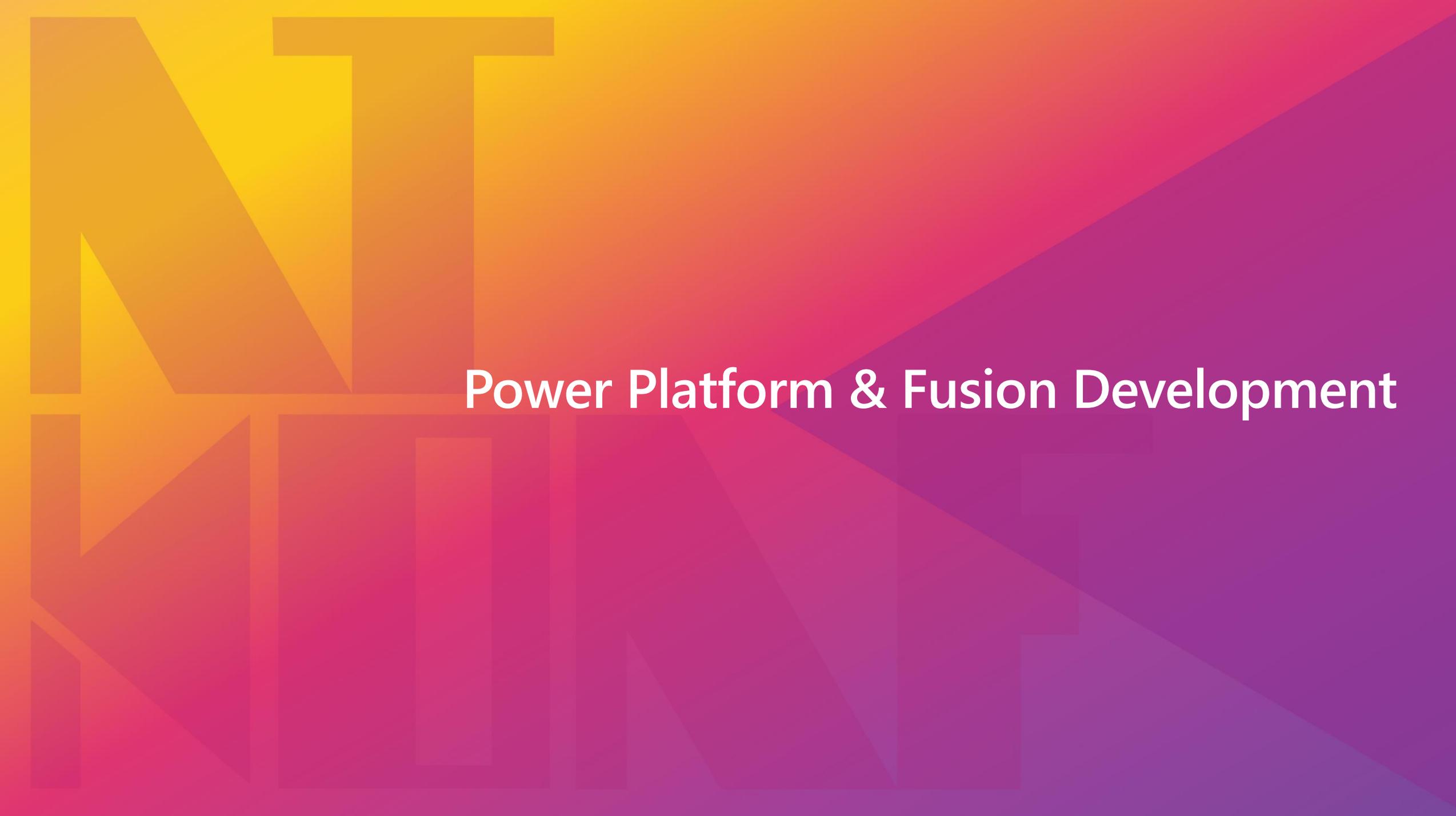
Power Platform & Fusion Development

What is Fusion Development?

Fusion Dev

Fusion Development is a term coined by Gartner

- Digital "fusion teams" are distributed and multidisciplinary digital business teams that blend technology and other types of domain expertise >> Basically, union of IT Pros, Business Devs and Pro Devs is *Fusion Teams*

- Combining traditional full-stack development with modern low-code technology

learn.microsoft.com/fusion-development

Fusion teams in action

IT professional

Works with CIO and other leaders on governance, security and community

Professional developer

Works with business users/makers to build and integrate advanced functionality

Scale through fusion teams

Business Users/Makers

Plan, build, co-author and launch solutions

Innovate faster than ever with Fusion Dev
Azure + Power Platform + M365 = Fusion Development

Microsoft Teams

Power Platform

Power BI Business analytics

Power Apps Application development

Power Automate Workflow automation

Power Virtual Agents Intelligent virtual agents

Power Pages Secure external business websites

Every developer (low-code)

GitHub

Azure services

Analysis services

API management

Function apps

Kubernetes services

Logic apps

Cognitive services

Bot services

Pro developer (code-first)

Azure DevOps

Azure / Office data services

Dataverse

Microsoft Graph

SQL Database

SQL Data Warehouse

Cosmos Database

Visual Studio

VS Code

Identity, Management, Security & Compliance

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Roles & Responsibilities: Fusion teams in practice

Plan	Build	Deploy	Scale

Business User/Maker

Identify business requirements. Work with other domain experts and makers to design and refine prototype.

Add custom component to app.

Co-author app with dev on advanced functionality.

Publish app for use across organization.

Add app to showcase to inspire other makers.

Begin work on new mission critical app using DevOps and fusion development.

Developer

Design custom connectors and components required for app.

Build APIs for connectors.

Add custom components to component library.

Export API to Power Apps and create custom connector.

Organize hackathon and events to showcase apps and generate ideas for new apps.

IT pro

Publish APIs and control which users and apps can access.

Track deployment history and usage of app to measure success, identify best practices, and evangelize.

Set up DevOps for Power Platform and install ALM Accelerator

Supporting tools

| | Power Apps Studio | Power Apps Studio
Visual Studio Code
Azure API Service
Azure API Management | Power Apps component framework
Visual Studio Code
Microsoft AppSource | Power Apps Studio | Power Platform admin center
GitHub Actions for Power Platform
ALM Accelerator for Power Platform |

No-Code Development or guidance?

Answer is...Bing Chat

I want you to act as a Power Apps expert. I want you to be my Power Apps educator. I'm using PowerApps. ...

Power Platform Copilots

Power Platform Copilots

- ## Power Apps
  - Dataverse – tables creation
  - PowerFx Ideas
- Power Automate
- Power Virtual Agents
- Power Pages
- AI Builder

Power Platform Copilots

- ~~Power Apps~~
  - ~~Dataverse – tables creation~~
  - ~~PowerFx Ideas~~

- ## Power Automate
- Power Virtual Agents
- Power Pages
- AI Builder

Power Platform Copilots

- ~~Power Apps~~
  - ~~Dataverse – tables creation~~
  - ~~PowerFx Ideas~~

Power Automate

- Process Mining

- Power Virtual Agents
- Power Pages
- AI Builder

Power Platform Copilots

- ~~Power Apps~~
  - ~~Dataverse – tables creation~~
  - ~~PowerFx Ideas~~
- ~~Power Automate~~

- ## Power Virtual Agents
- Power Pages
- AI Builder

Power Platform Copilots

- ~~Power Apps~~
  - ~~Dataverse – tables creation~~
  - ~~PowerFx Ideas~~
- ~~Power Automate~~
- ~~Power Virtual Agents~~

- ## Power Pages
- AI Builder
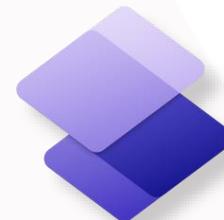
Power Platform Copilots

- ~~Power Apps~~
  - ~~Dataverse – tables creation~~
  - ~~PowerFx Ideas~~
- ~~Power Automate~~
- ~~Power Virtual Agents~~
- ~~Power Pages~~

- AI Builder

Power Platform Copilots

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  - ~~PowerFx Ideas~~
- ~~Power Automate~~
- ~~Power Virtual Agents~~
- ~~Power Pages~~
- ~~AI Builder~~

Integrations with Azure OpenAI

AI Portfolio Overview

Application layer
Integrated Solutions

Microsoft 365

Dynamics 365

Industry Solutions

ISV Solutions

Customer Care Application	Finance & Operations	Sales

Power Platform
Low code development platform

Power BI | Power Apps | Power Pages | Power Automate | Power Virtual Agents

AI Builder

Use Pre-built Models	Customize Models	Bring Your Own Model	Model Governance	Feedback Loop	Starter Kits	Lobe

Azure AI
Scenario-Based Services

Bot Service	Cognitive Search	Content Moderator	Form Recognizer	Video Indexer	Metrics Advisor	Immersive Reader

Customizable AI Models
Cognitive Services

Vision	Speech	Language	Decision

ML Platform
Azure Machine Learning

E2E Business processes

Managed solutions that leverage AI Builder model customization and governance

*Ex: SharePoint Syntex leverages AI Builder Document Processing*

No Code Maker Experience

AI abstraction layer that focuses on allowing makers to customize AI to solve business problems, leveraging Azure AI capabilities

Ex: AI Builder Document Processing leverages Azure Form Recognizer for content extraction

AI Capabilities

Core AI capabilities that empower maker experiences

Business Users

Citizen Developers

Developers & Data Scientists

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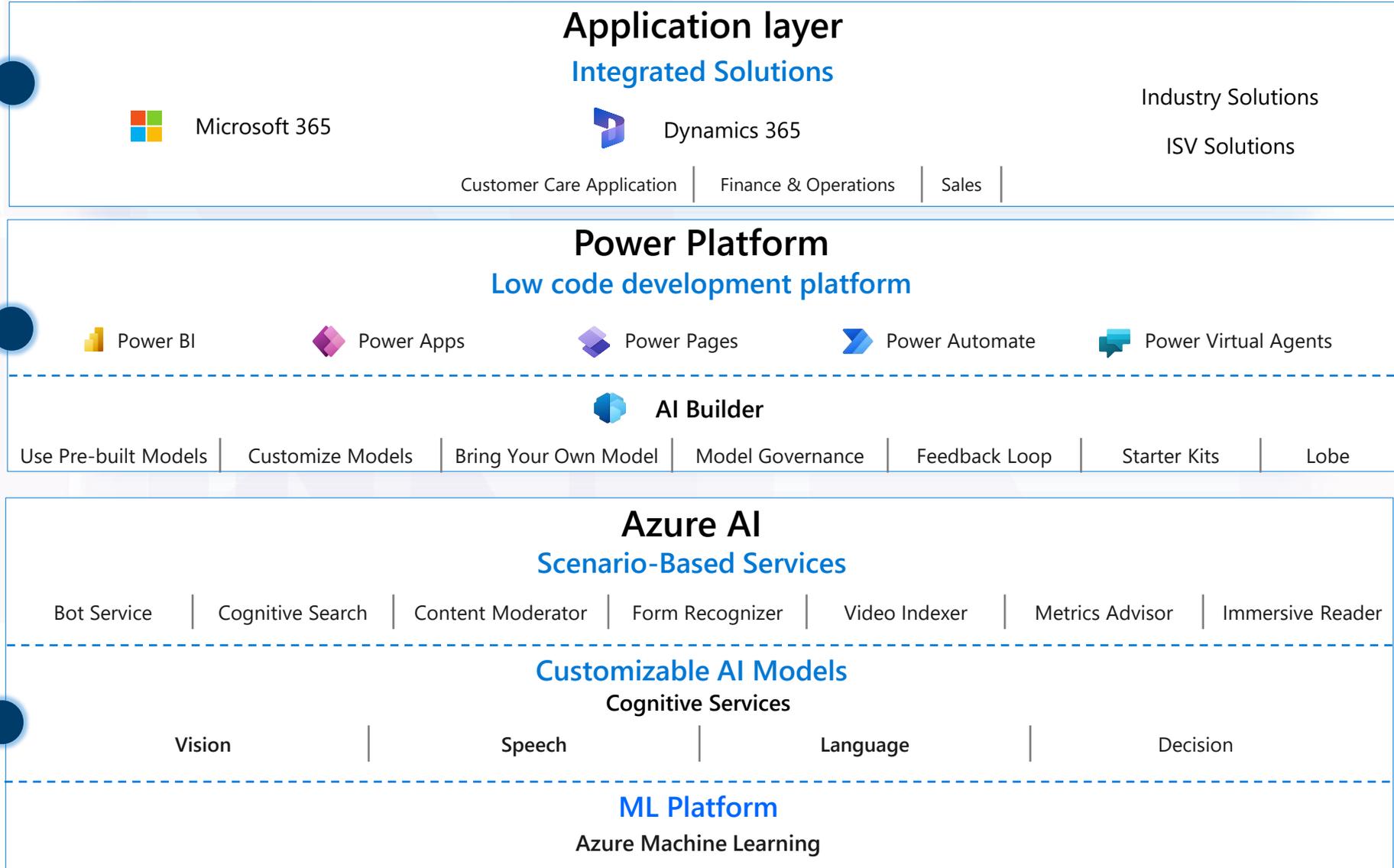
Microsoft and OpenAI partnership

OpenAI

Ensure that artificial general intelligence (AGI) benefits humanity

+

Microsoft
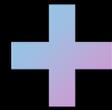
Empower every person and organization on the planet to achieve more

GPT-3.5 and GPT-4	ChatGPT	Codex	DALL·E 2
Text	Conversation	Code	Images

Azure OpenAI

Top Capabilities and Use Cases

Content generation

Intelligent Virtual Agent: automatically generate responses to inquiries

Customized Copilot: Augment decision steps in business processes

Generate engaging web content

Summarization

Subject matter expert document: summarization (e.g. compliance and training documents)

Social media trends summarization

Code generation

Convert natural language to SQL (or vice versa) for telemetry data

Code documentation

Semantic search

**Knowledge Exploration:** Search reviews for a specific product/service

Information discovery and knowledge mining

Customer 360: hyper-personalisation using timely summarization of customer queries & trends, search, and content generation

Business process automation: search through structured & unstructured documentation, generate code to query data models, content generation

Power Platform - Connects to all your data
1000+ Connectors + Custom

POWER APPS

POWER AUTOMATE

Microsoft Azure

Microsoft 365

Microsoft Dynamics 365

Other Microsoft

3rd Party Enterprise
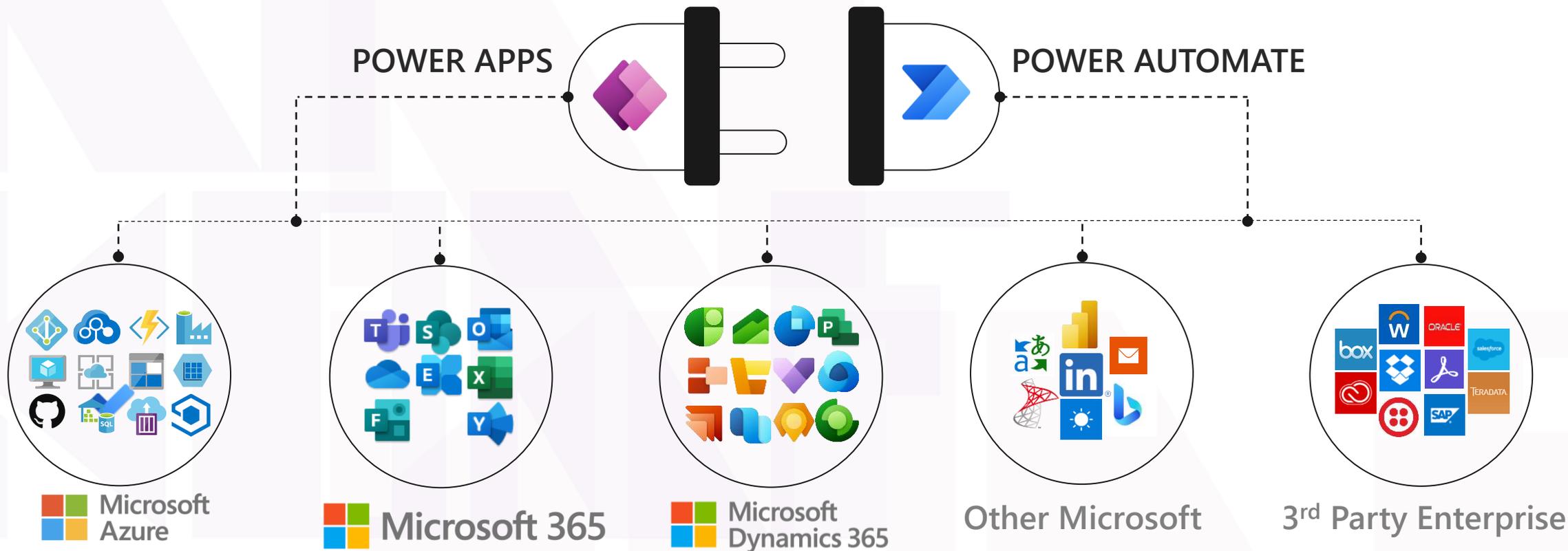
Power Platform supports a rich ecosystem of connectors across Microsoft and non-Microsoft cloud and on-prem services

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Integration Services are a gateway to Azure
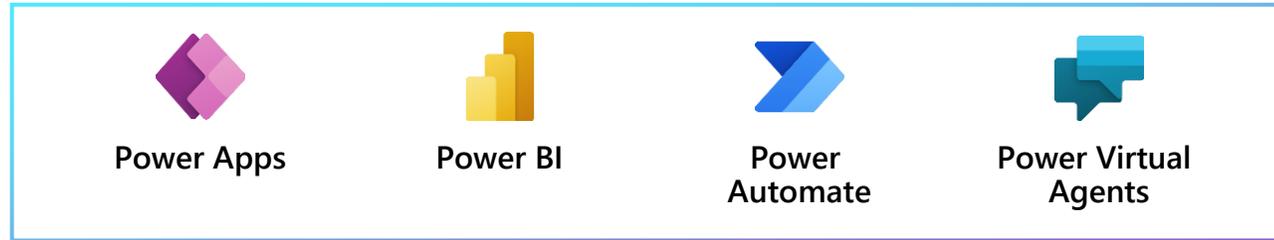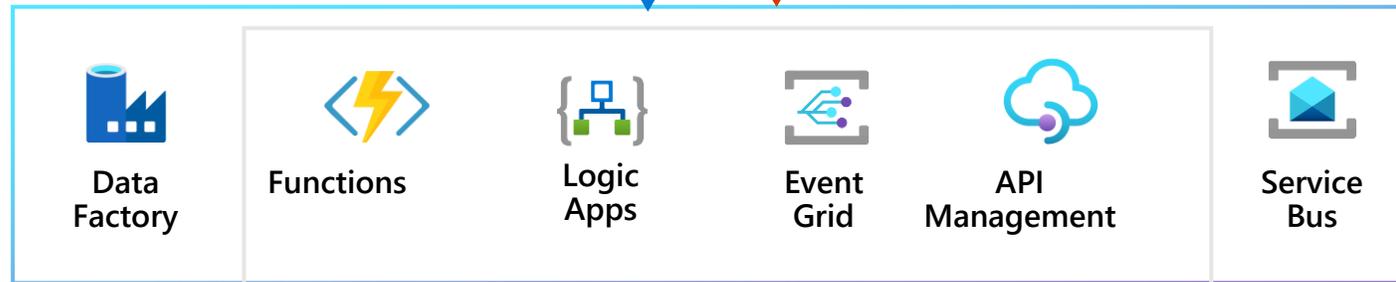
Azure OpenAI Service connector

[PowerPlatformConnectors/custom-connectors/AzureOpenAIService at dev · microsoft/PowerPlatformConnectors (github.com)](https://github.com)

Or create your own custom connector…

{Demo}
Integration with
Azure OpenAI

Thank you!

Q&A?

Survey...

This is not school, but we love to get grades. Please fill out our questoineers and leave us your feedback. You may even win some cool rewards.

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