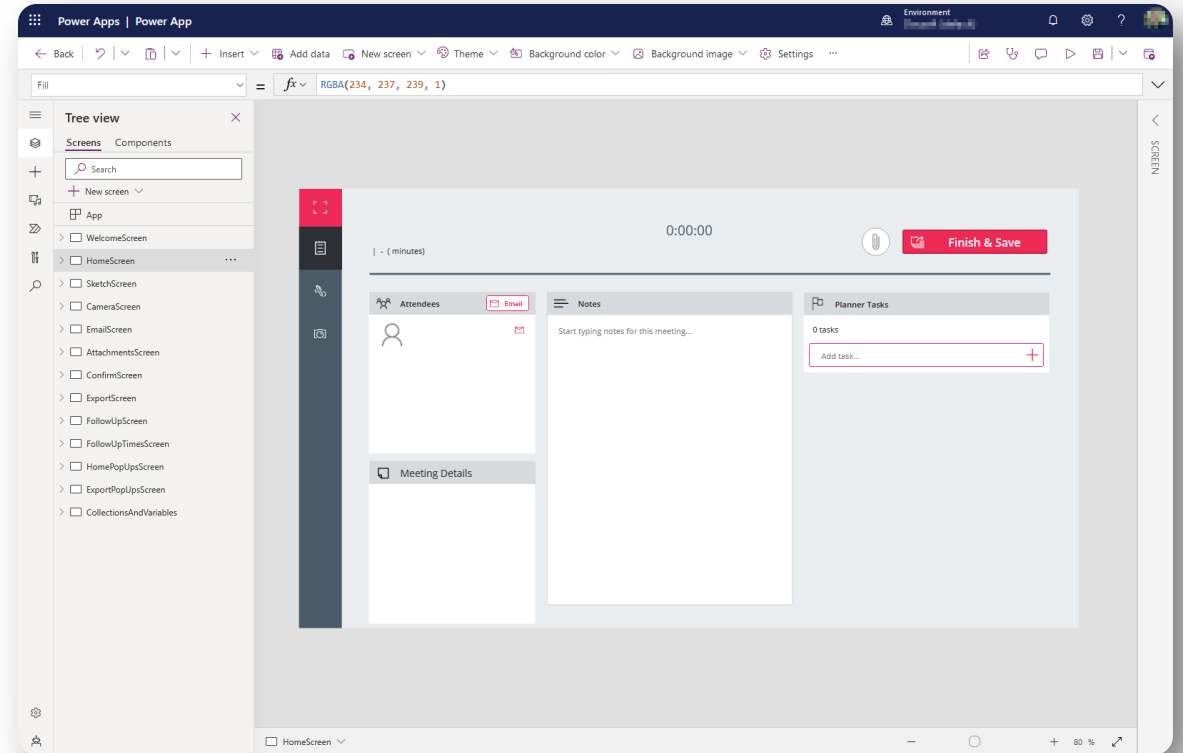# Microsoft Power Apps introduction.

Microsoft Power Apps introduction.

Agenda

- ✓ What is low-code?
- ✓ Microsoft Power Apps
- ✓ Combine Power Apps with other MT Portfolio Technologies
- ✓ What we can do for you
- ✓ Pricing
- ✓ Resources
- ✓ Contact

What is low-code?

Low-code reduces manual coding in application development.

Definition

Low-code refers to a visual development approach that allows for the creation of software applications with minimal manual coding.

Low-code application development platforms speed up development and make it accessible to your whole organization.

How can low-code help?

Organizations need to respond more quickly to changing business needs and customer expectations. Low-code helps them with their need to speed up application development to create more applications in shorter periods and prevent long backlogs.

To do more in less time, organizations need to apply digital transformation and automate their business processes as much as possible.

There is a shortage of developers. Low-code makes software development more accessible to non-technical users and reduces the cost of development and reduces the reliance on IT departments.
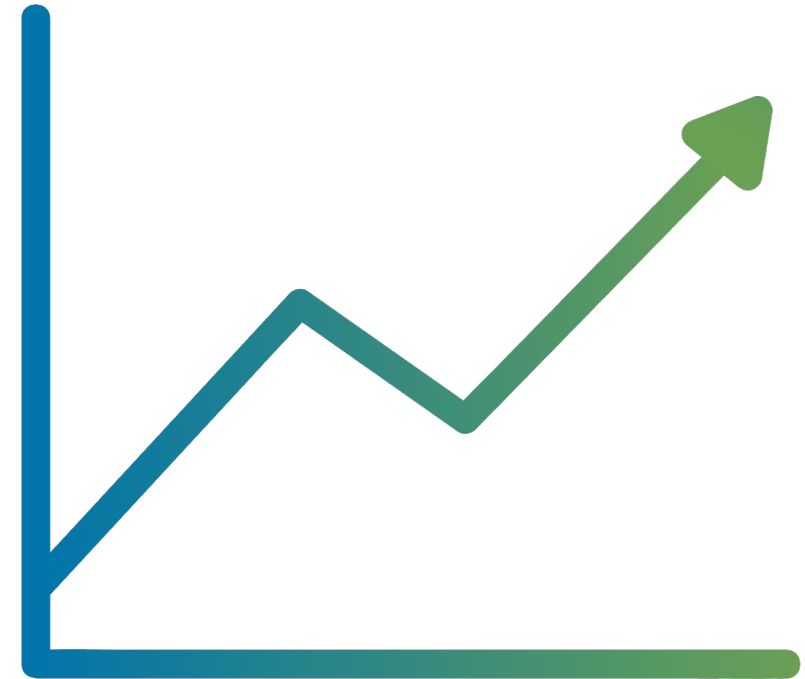
More development speed and quality optimizations.

- Drag-and-drop interface for creating software
- Pre-built reusable templates and components
- Connectors for web services and external systems
- Visual representation of the application's architecture
- Automated code generation

Source: https://www.outsystems.com
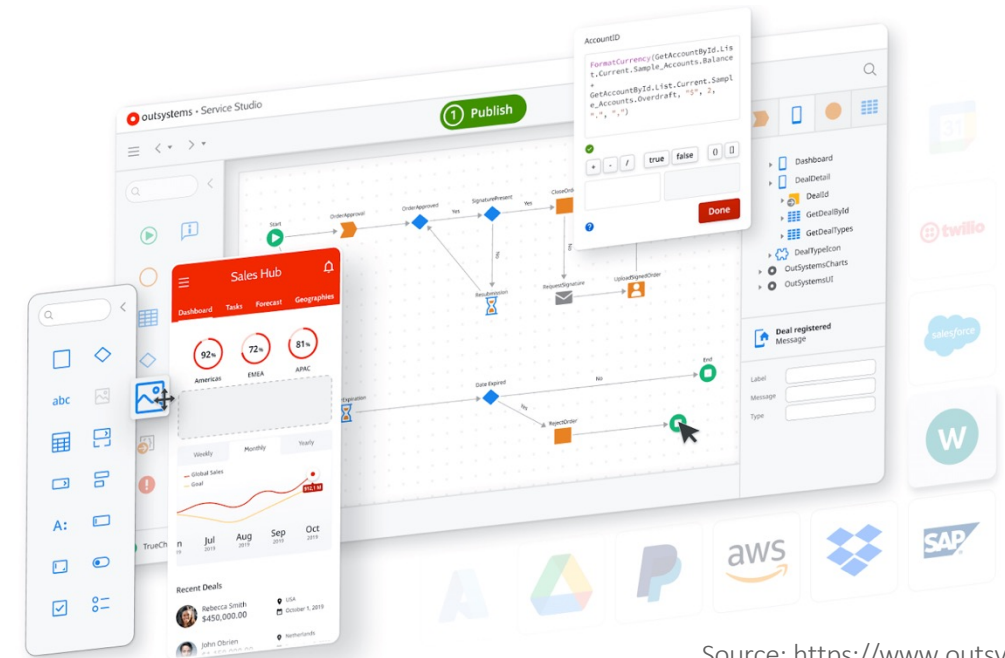
Low-code forecasts 20 percent growth in 2023.

Gartner

Gartner forecasts worldwide low-code development technologies market to grow 20 percent in 2023

Business technologists, hyperautomation and composability will drive low-code technology adoption through 2026.

Source: https://www.gartner.com/en/newsroom/press-releases/2022-12-13-gartner-forecasts-worldwide-low-code-development-technologies-market-to-grow-20-percent-in-2023

Table 1. Low-Code Development Technologies Revenue (Millions of U.S. Dollars)

	2021	2022	2023	2024
Low-Code Application Platforms (LCAP)	6,324	7,968	9,960	12,351
Business Process Automation (BPA)	2,416	2,585	2,761	2,940
Multiexperience Development Platforms (MDXP)	2,081	2,508	2,999	3,563
Robotic Process Automation (RPA)	2,350	2,892	3,401	3,879
Integration Platform as a Service (iPaaS)	4,680	5,668	6,668	7,838
Citizen Automation and Development Platforms (CADP)	554	732	953	1,232
Other Low-Code Development (LCD) Technologies*	92	109	126	146
Total	**18,497**	**22,462**	**26,869**	**31,949**

*Other low-code development technologies include rapid mobile app development (RMAD) tools and rapid application development (RAD) tools. RAD tools are/were on-premises only and desktop-bound applications mainly. Low code is the evolution of RAD to cloud and SaaS models.

Notes: Gartner defines a no-code application platform as an LCAP that only requires text entry for formulae or simple expressions. The LCAP market, therefore, includes no-code platforms. Furthermore, "no code" is not a sufficient criterion for tasks like citizen development, as many complex tooling configuration tasks are no code but still require specialist skills. Columns may not add to totals shown because of rounding.

Source: Gartner (December 2022)

Microsoft is a leader among the enterprise low-code application platforms.

Some well-known platforms

- ✓ Microsoft (Power Apps)
- ✓ Mendix
- ✓ OutSystems
- ✓ Salesforce
- ✓ ServiceNow
- ✓ Appian
- ✓ Oracle (APEX)
- ✓ Pegasystems

Microsoft Power Apps.

Part of the low-code Power Platform.

Power Platform contains multiple powerful low-code products.

More than the sum of its parts

Connect them together and to Microsoft 365 (Office), Azure, Dynamics 365, and hundreds of other apps - and build end-to-end business solutions

Source: https://powerplatform.microsoft.com

Microsoft Power Platform

The low code platform that spans Microsoft 365, Azure, Dynamics 365, and standalone apps.

Power BI
Business analytics

Power Apps
App development

Power Automate
Process automation

Power Virtual Agents
Intelligent virtual agents

Power Pages
External-facing websites

Data connectors

AI Builder

Dataverse

Create your own custom business apps with Power Apps.

**Two different types: Canvas and Model-Driven**

1. Canvas apps

Great for custom 'Pixel Perfect' designed, responsive web apps (desktop/tablet/mobile) and native tablet/mobile apps. Can use all kinds of data and services via approx. 900 different Connectors.
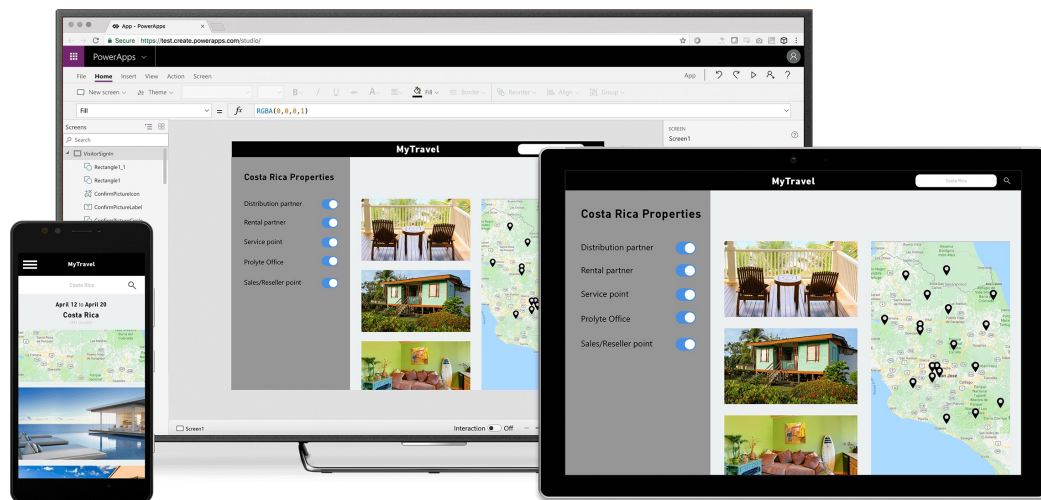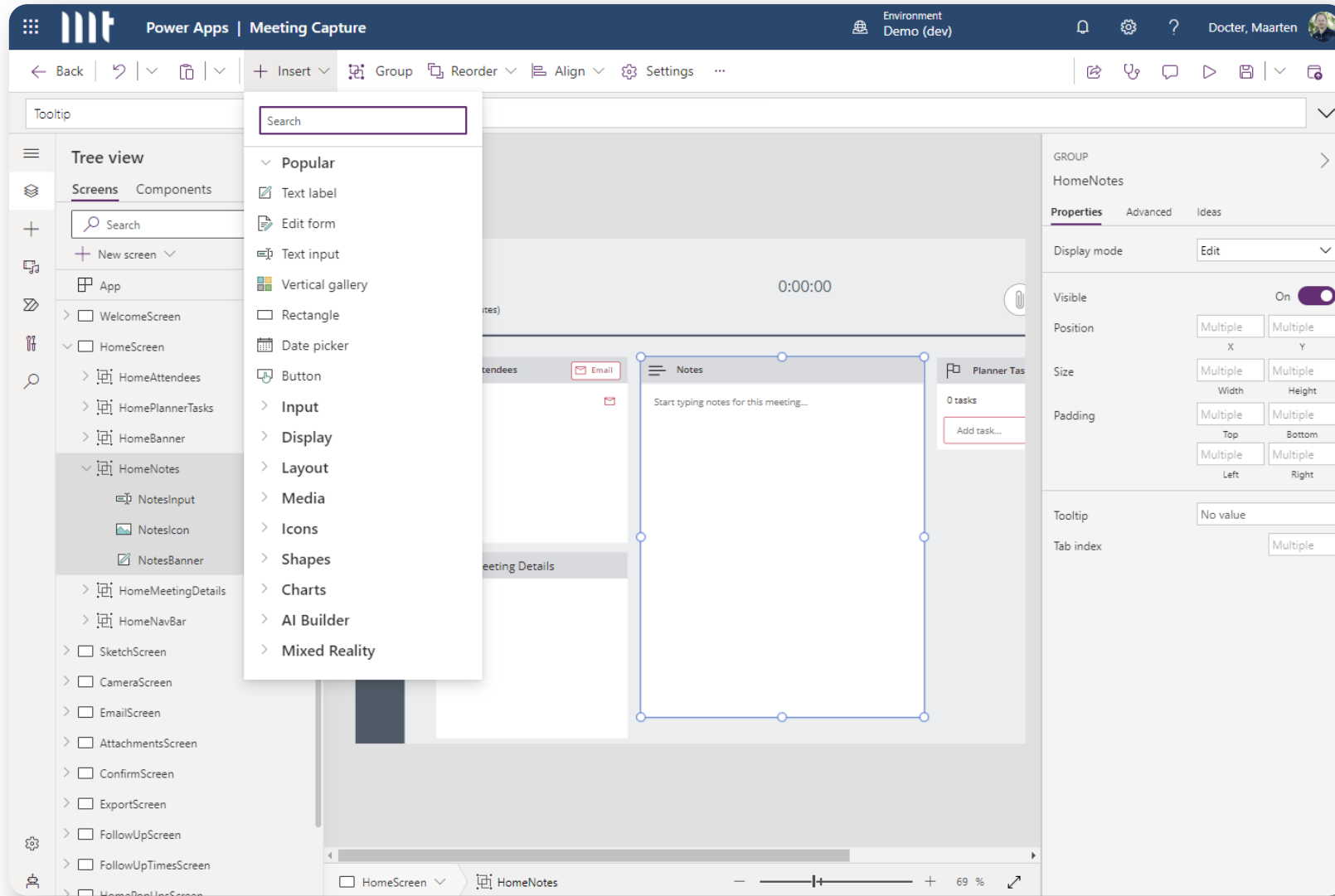

2. Model-Driven apps

Great for forms, data lists and dashboards-oriented apps. Uses Microsoft Dataverse for data storage but can 'virtually' work with data in any external database or data source.

Source: https://learn.microsoft.com
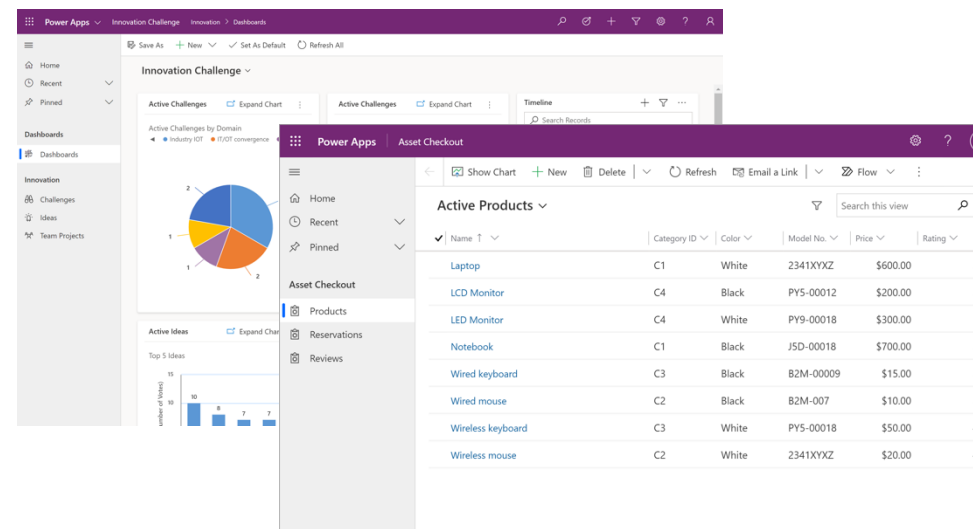
Use a drag-and-drop interface to visually compose your Power Apps.

Connect to various data sources and services via connectors.

Power Apps includes connectors for 880+ popular services and on-premises data sources, including HTTP REST/SOAP, SharePoint, SQL Server, Oracle, Office 365, Salesforce and Twitter and allows you to add your own custom connectors (= wrappers around API's).

Some popular connectors

|			
	Microsoft Dataverse		Cloud storage **
	Dynamics AX		Excel
	Microsoft Translator		Office 365 Outlook
	Office 365 Users		Oracle
	Power BI		SharePoint
	SQL Server		Twitter

Source: https://learn.microsoft.com

Canvas apps enable you to create responsive web, mobile, card, and Teams apps.

The versatility of Canvas Power Apps

Responsive Web Apps

- Automatically align to different screen sizes
- Pure web applications
- Can use browser features, like Location
- Build once
- Limited offline capabilities
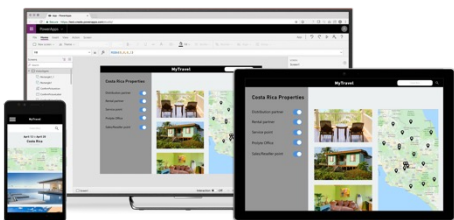
Native Mobile Apps

- No-code mobile app development
- Managed mobile app builds
- Seamless end-to-end branding
- Multiple canvas apps support
- Enterprise governance with Microsoft Intune
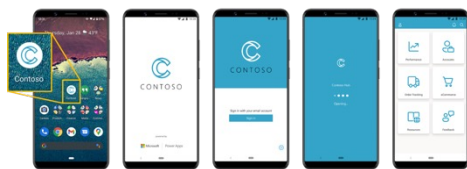
Adaptive Cards

- Still in preview
- Micro-apps with enterprise data and workflows and interactive, lightweight UI elements that other applications can use as content
- Uses Power Fx and connectors
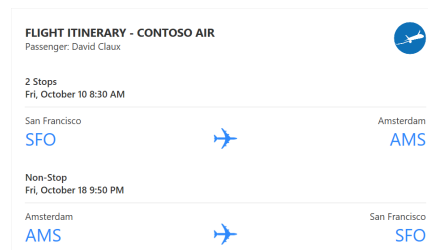
Microsoft Teams Apps

- Embed canvas and model-driven apps as a tab- or personal app in Teams
- Create apps in Teams backed by Microsoft Dataverse for Teams

Automate repetitive tasks by combining Power Automate.

From outdated to automated

Automate business processes and improve efficiency

- Automate quickly and more securely

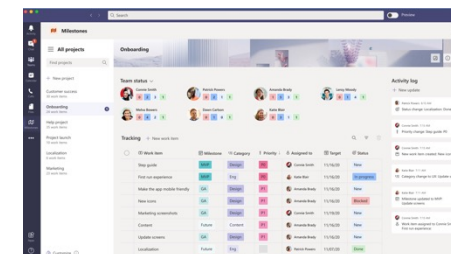 Empower everyone to build automated processes using low-code, drag-and-drop tools. With hundreds of pre-built connectors, thousands of templates, and AI assistance, it's easy to automate repetitive tasks.

- Boost efficiency

  Record and visualize end-to-end processes using process and task mining with process advisor. It takes the guesswork out of what to automate by providing guided recommendations for creating flows.

- Enhance workflows with AI

  Make your automations even smarter using AI Builder. Quickly process forms using document automation, plus process approvals, detect images and text, or create with prebuilt models.
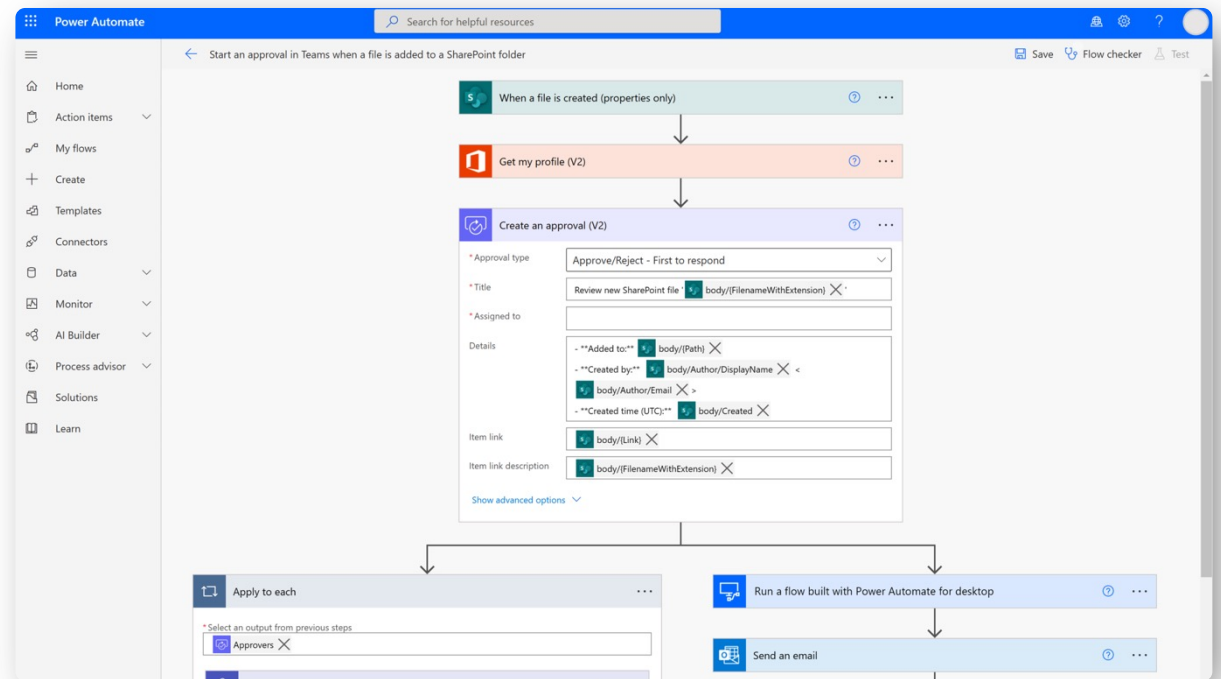
Endless integration options.

Include AI or insights from Power BI, Azure, Microsoft Graph, Cognitive Services or connect to the whole world.

Advanced Integrations

- Use AI Builder in Power Apps and Power Automate

  AI Builder is a Microsoft Power Platform capability that provides AI models designed to optimize your business processes.

- Embed Power BI Dashboards and Reports

  Power BI is a collection of software services, apps, and connectors that work together to turn your unrelated sources of data into coherent, visually immersive, and interactive insights.

- Connect to Azure and other smart services, like the Microsoft Graph or Cognitive Services and unlock the world

AI Builder
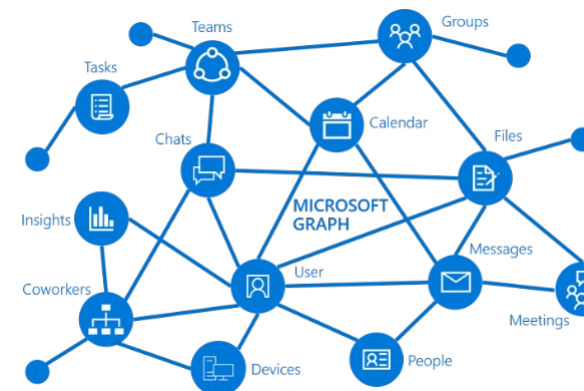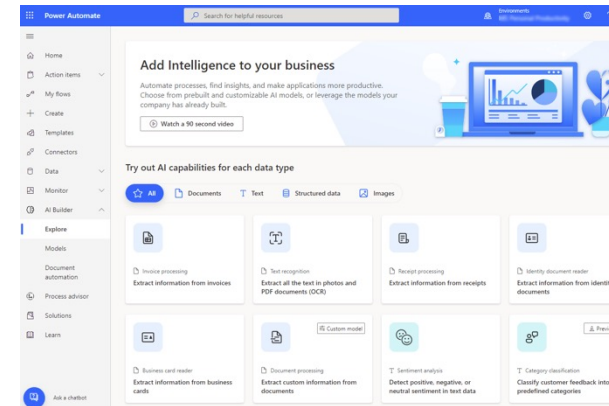
The Power Platform is a cloud service, but can use on-premises systems and/or data.

On-premises data gateway

The on-premises data gateway acts as a bridge to provide quick and secure data transfer between on-premises data (data that isn't in the public cloud) and several Microsoft cloud services.

These cloud services include Power BI, Power Apps, Power Automate, Azure Analysis Services, and Azure Logic Apps.

By using a gateway, organizations can keep databases and other data sources on their on-premises networks, yet securely use that on-premises data in cloud services.

Requires premium licenses, so doesn't work with Microsoft/Office 365 licenses.

How the gateway works

Cloud

on-premises data gateway

SAP

SQL
SQL Server

ORACLE

on-premises data sources
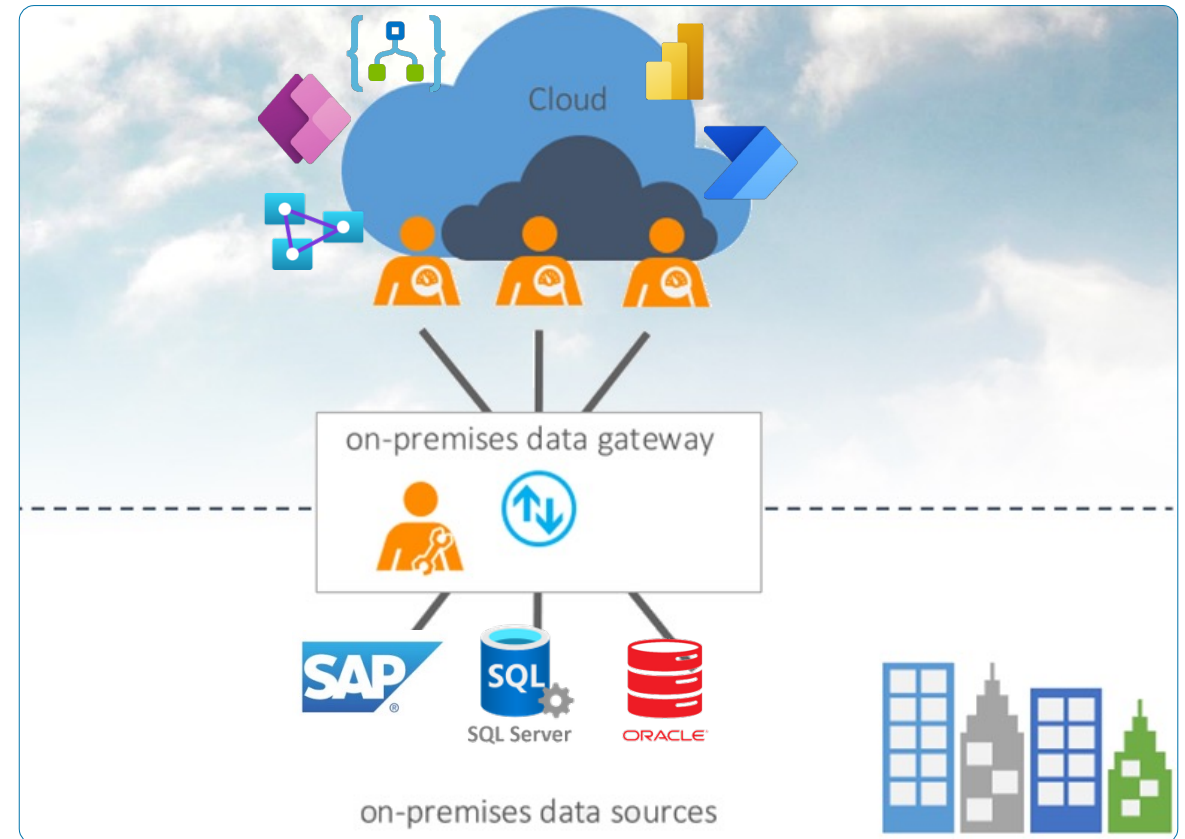
What we can do for you.

What we can do for you.

Consulting and Coaching

- Detailed advice on Microsoft Power Apps
- Introduction to Power Apps
- Coaching of your employees
- Microsoft Power Platform Licensing Advice

Development

- Development of your applications
- Development of customer-specific connectors
- Migration of data
- Development of Microsoft Power App products

Combine Power Apps with other MT Portfolio Technologies.

Oracle APEX combined with Power Apps.

Oracle ā'pĕks (#orclapex)

- ✓ More focused on developers and database administrators

- ✓ Uses pro-developer JavaScript and PL/SQL for Business Logic

- ✓ Advanced reporting and dashboarding built-in

- ✓ Only for responsive web applications

- ✓ Includes extranet portal functionality without extra licensing costs

- ✓ Requires Flows for APEX for business process management

Microsoft PowerApps

- ✓ Designed to be more user-friendly for non-technical users

- ✓ Uses a user-friendly and simple Excel like formula language (Power Fx) and low-code Power Automate for Business Logic

- ✓ Simple reporting and dashboarding built-in, requires (for example) Power BI for advanced reporting

- ✓ Allows native mobile, MS Teams and Card apps next to responsive web applications

- ✓ For internal apps only, for extranet portal functionality you need to use Microsoft Power Pages which has extra licensing costs

- ✓ Power Automate provides process automation and business process management flows

Power Apps can provide the unified user interface to MuleSoft integrated data and services

MuleSoft

- ✓ MuleSoft enables easy access for everyone - business and IT – to existing, new, internal and external data.

- ✓ MuleSoft significantly promotes the reuse of business objects and services in other contexts.

- ✓ MuleSoft enables the rapid, innovative opening of new business areas by testing new business models.

Power Apps
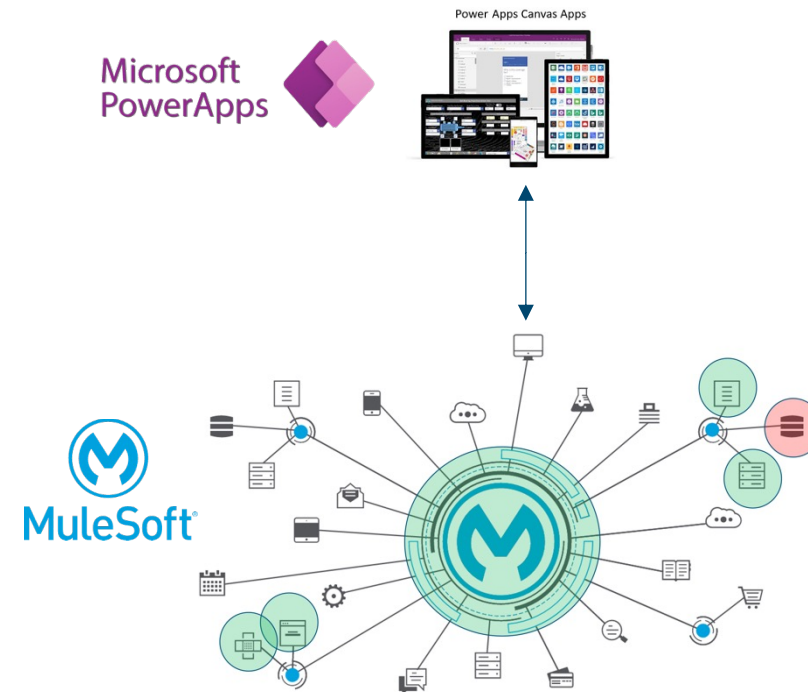
Pricing.

Power Apps licensing.

Subscription plans

Best for businesses that want predictable user-based licensing – with the flexibility to license users to run one app at a time or run unlimited apps.

Per app plan

4,20 €
per user/app/month

Run one app or portal per user, stacking licenses for access to each additional as their needs change.

- Includes 250 AI Builder service credits per month.[1]
- Requires access to the Microsoft 365 admin center with global administrator or billing administrator roles.

Buy now >

Per user plan

16,90 €
per user/month

Run unlimited apps and portals per user for one flat monthly rate.

- Includes 500 AI Builder service credits per month.[1]
- Available to buy now with a credit card.
- 40% discount available to eligible customers with 2,000+ licenses.[3] Contact sales for details.

Buy now >

Pay-as-you-go plan

Best for businesses that want the agility to pay only when a user runs an app during a monthly period.

Per app plan

8,43 €
per active user/app/month[2]

Use an Azure subscription to pay per user based on the number of unique apps a user runs each month.

- Requires an Azure subscription.

Learn more >

40 % discount when 2000 or more licenses are bought

Prices shown are for marketing purposes only and may not be reflective of actual list price due to currency, country, and regional variant factors. Your actual price will be reflected at checkout.

[1] Receive 250 AI Builder service credits per month for each Power Apps per app plan license and 500 AI Builder service credits per month for each Power Apps per user plan license up to a total of 1 million service credits. Additional AI Builder service credits may be purchased for $500 per unit/month. Read documentation to learn more about managing AI Builder capacity and service credit allocation.

[2] The Power Apps per app pay-as-you-go plan covers authenticated users of internal apps. See documentation for specific guidance on how monthly activity is calculated.

[3] A 40% discount on 2,000+ Power Apps per user licenses is available to commercial and public sector customers through volume licensing (VL) or cloud solution provider (CSP) channels.

Source: https://powerapps.microsoft.com/de-de/pricing/

Power Automate licensing (Part 1 of 2).

Subscription plans

Best for businesses that want predictable licensing with per-user or per-flow plans

License by user	License by user	License by flow
Per-user plan	Per-user plan with attended RPA	Per-flow plan
12,60 €	**33,70 €**	**84,30 €**
per user/month	per user/month	per flow/month, minimum 5 flows[1, 2]
Allow individuals to automate cloud apps, services, and data with digital process automation (DPA). This plan allows people to create and run unlimited flows.	Allow the same capabilities as the base plan, plus the ability to automate legacy apps on a desktop via robotic process automation (RPA) in attended mode.	Allow an unlimited number of people within an organization to run digital process automation (DPA) from the same flow.
Includes the following:	**Includes the following:**	**Includes the following:**
• Cloud flows (DPA)	• Cloud flows (DPA) • Desktop flows (RPA) in attended mode • 5,000 AI Builder credits/month	• Cloud flows (DPA)
Buy now ⟩	Buy now ⟩	Buy now ⟩

Source: https://powerautomate.microsoft.com/de-de/pricing/

Power Automate licensing (Part 2 of 2).

Pay-as-you-go plans

Best for businesses that want the flexibility to pay only when a person runs a flow connected with premium connectors[3]

License by flow run	License by flow run	License by flow run
0,50 € per flow run[4]	**0,50 €** per flow run[4]	**2,50 €** per flow run[4]
Pay for each cloud flow run	Pay for each desktop flow (attended mode) run	Pay for each desktop flow (unattended mode) run
Includes the following:	Includes the following:	Includes the following:
• Cloud flows (DPA)	• Desktop flows (RPA) in attended mode	• Desktop flows (RPA) in unattended mode
Learn more >	Learn more >	

Prices shown are for marketing purposes only and may not be reflective of actual list price due to currency, country, regional, and organizational variant factors.
Your actual price will be reflected at checkout.

[1] Minimum purchase requirement of five flows.

[2] Requires access to the Microsoft 365 admin center with global administrator or billing administrator roles.

[3] Flow runs are billed on a monthly basis and charged to an Azure subscription. Learn how flow runs are measured.

[4] Requires an Azure subscription.

Resources.

Resources.

Links

Microsoft Power Platform website:
https://powerplatform.microsoft.com

Microsoft Power Apps website:
https://powerapps.microsoft.com

Microsoft Power Automate website:
https://powerautomate.microsoft.com

Documentation:
https://learn.microsoft.com/en-us/power-platform/

Learning resources:
https://learn.microsoft.com
https://aka.ms/PowerPlatformResources

Haben wir Ihr Interesse geweckt?

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