Microsoft Power Apps

Create solutions quickly with low-code tools that are accessible to everyone

Contact David@d365.Global



d365.Global

Why low-code

Accelerate app modernization

500 million new apps will be built in the next 5 years—more than all apps built in the last 40 years!¹

Demand for mobile apps is growing **5x** faster than IT departments can deliver ²

Over **85%** of surveyed organizations struggle to analyze unstructured data³

86% of surveyed organizations struggle to find technical talent⁴



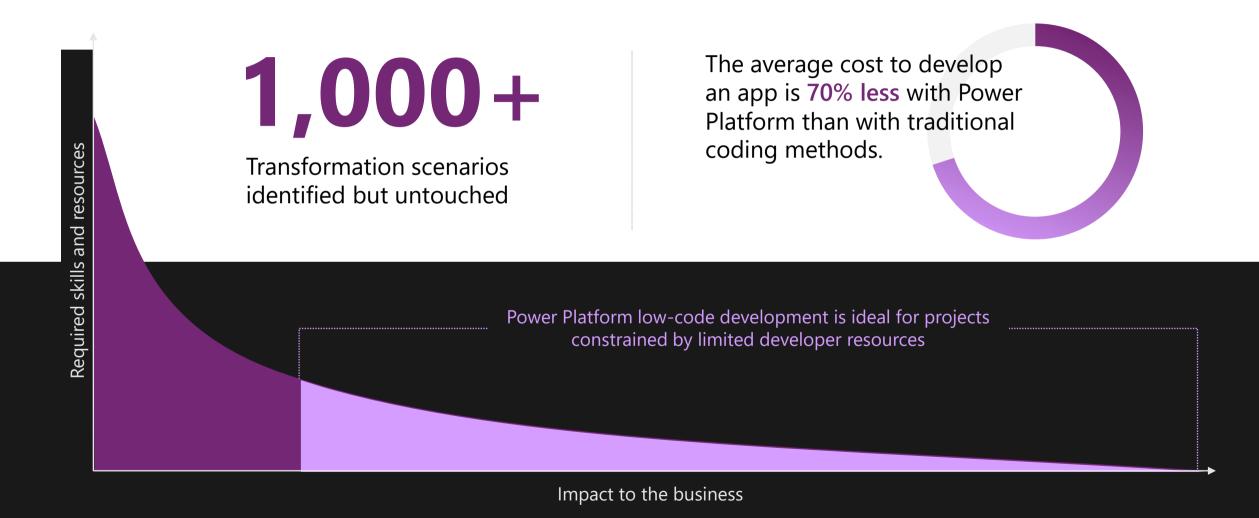
65%

of enterprise application development will be in the low-code category by 2024⁵



^{1.} Satya Nadella, Microsoft FY19 Q4 earnings call, July 2019, 2. <u>"Achieving business resilience with cloud application development," Microsoft Azure blog, 3</u>. IDG: Big Data Survey 2017, 4. <u>"Microsoft Goes All-In On Hybrid Cloud And Edge At Ignite 2019," Forbes</u>, 5. <u>"Gartner Magic Quadrant for Enterprise Low-Code Application Platforms," Gartner</u>

Low-code extends your development potential



This is our new reality

Shift to remote work and emphasis on resilience

41%1

of employees will work remotely after the pandemic, compared to 30% before

55%²

of surveyed businesses were focused on efficiency, not resiliency, pre-COVID, and were fragile as a result

Workforce expectations for digital experiences

35%³

of the workforce is currently digitalnative millennials who demand better digital experiences in the workplace

5X⁴

Demand for mobile apps is growing 5X faster than IT departments can deliver

Economic downturn and drive for efficiency

6.1%⁵

Contraction in US GDP in 2020—the most severe recession since the end of WWII

92%6

of surveyed business leaders agree that to survive and flourish post-COVID, companies must enable process automation

^{1. &}quot;Gartner HR Survey Reveals 41% of Employees Likely to Work Remotely at Least Some of the Time Post Coronavirus Pandemic," Gartner

^{2. &}quot;9 Future of Work Trends Post-COVID-19," Gartner

^{3. &}quot;The Low Code Revolution - Charles Lamanna." YouTube

<u> 4. "How to Deliver Enterprise Mobile Apps Faster," Gartner</u>

^{5. &}quot;COVID-19 to Plunge Global Economy into Worst Recession since World War II," World Bank

^{6. &}quot;Business Process Automation to Thrive in the Post-COVID World," The Harris Poll

Business and IT challenges



Budget constraints



Technical skills shortages



Security and compliance risks



Time and resource constraints



Rising customer expectations



IT/business partnership

Customers that don't adapt face a tough road ahead



System vulnerability

Lack of control over IT governance and security

Inability to respond to new compliance requirements

Demand for remote worker access leaves systems exposed



Operational inefficiency

Disruption of supply chain & new bottlenecks

Money & worker hours spent on manual and duplicative tasks

Labor-intensive and slow analytics



Inability to scale

Inefficient scalability to current market demands

Outgrown legacy systems and processes

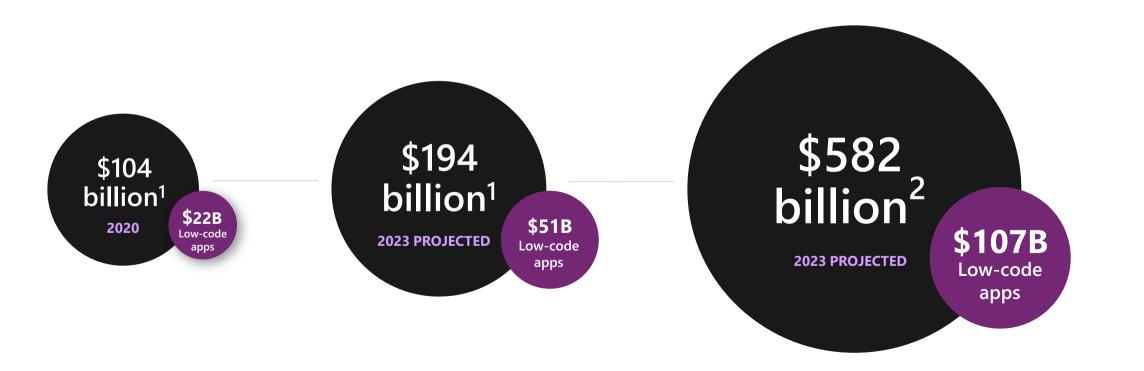
Lack of system integration across systems creates reporting limitations

Why Microsoft Power Platform?

The addressable market for low-code applications continues to grow

Addressable market

Services opportunity



^{1.} Microsoft internal research, 2020

^{2.} Forrester TEI, 2019 and Microsoft internal research, 2020

74% \$ Reduction in application development costs

Customer adoption is accelerating partner momentum

3x-5x services revenue

>132K Worker hours saved from streamlined and automated activities

6 months

Payback period on original investment

90% ©
Partners hiring new architects and developers in 2021

We have never been busier, and never made more money"

Dave Chennault Partner, Skylite Systems

Ability to impact business processes changed and created a major shift and brings value so much faster...[We have] grown engagements but need less people because they can be on multiple projects."

Rem Saparco

Co-Founder, Fidelity Factory

A lot of what we do is educate people on the art of the possible. Understanding what you can do at little to no effort to build applications and automate business processes gets customers excited—and drives adoption."

lan Dicker

Director of App Modernization, **Spyglass Solutions**

Low-code reduces barrier to entry and makes it easy to prototype, enables quick development and iterations, and simplifies bespoke development, making it more valuable."

Henri Fourie

Head of Delivery, Mint Group

I would say we've seen an explosion in growth, where we're into hundreds of percent growth in terms of the Power Platform team and revenue. We've gone from relatively small numbers, and being a sort of niche, to being something that practically is included in almost everything we do."

Paul Saxton

Chief Technology Officer, DXC

Transform with Power Platform



No code

Drag and drop experiences that are like PowerPoint



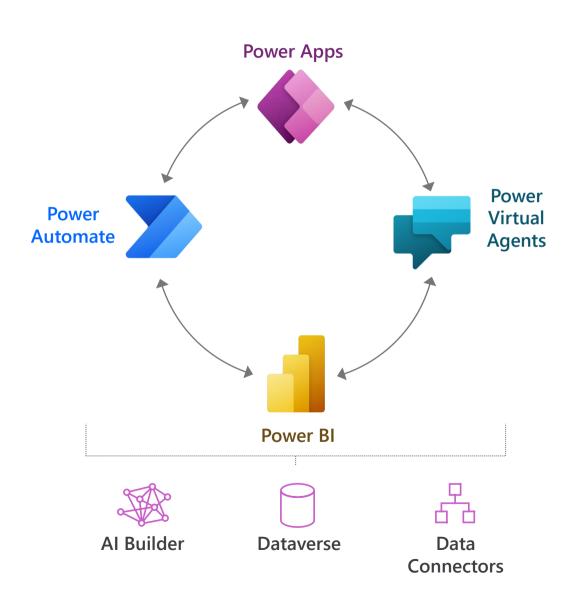
Low-code

Drag and drop plus Excel-like formulas for functionality



Code first

Professional development & extensibility across Microsoft



Turn great ideas into impactful solutions

Work together to meet challenges effectively with **Microsoft Power Platform**—analyze data, build solutions, automate processes, and create virtual agents

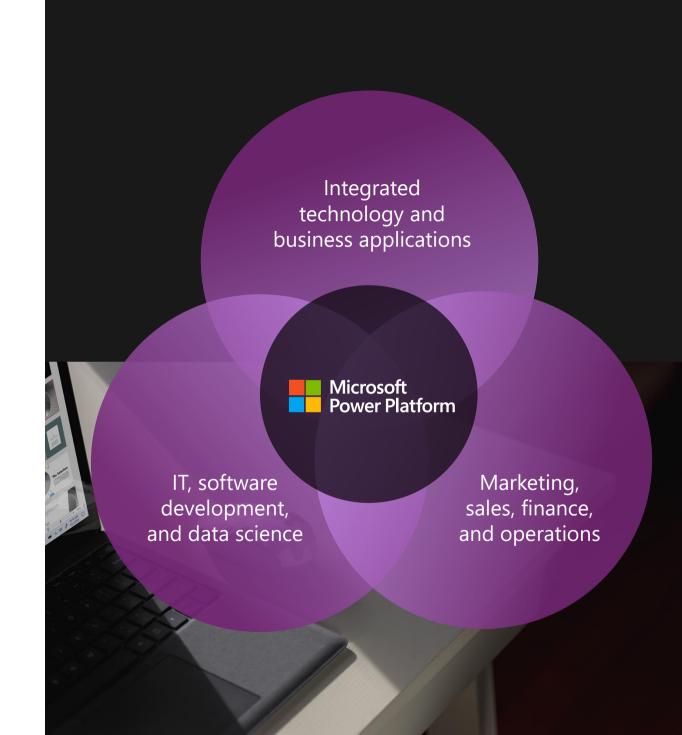
Microsoft Power Platform is an intuitive, extensible platform of low-code tools that empowers all your users—regardless of their technical capability—to collaborate and build transformational solutions across your organization.



Rapid development

Modular building blocks

Agile, flexible solutions



500+ built-in connectors



Seamless hybrid connectivity to onpremises systems via the on-premises data gateway



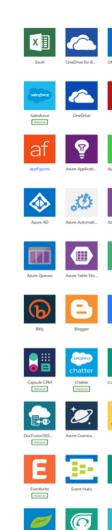
Develop and register custom connectors as a building block for citizen developers



Use multiple data sources in a single application for processes that span systems



Connect to cloud services, content services, databases, and APIs





























































































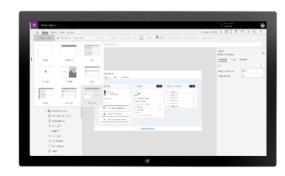




Create Microsoft Teams hosted apps with Power Apps



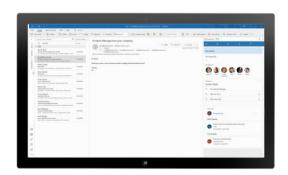
Publish Power Apps as a SharePoint web part or create a custom SharePoint list experience



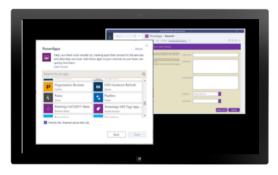
Use Microsoft 365¹ data through built-in connectors and screen templates



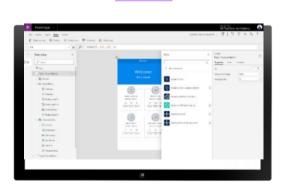
Dynamics 365¹ for customer engagement runs on Microsoft Dataverse



Bring data from Microsoft Dataverse and Power Apps UX to Outlook with the mail app.



Microsoft Teams hosted apps with Power Apps



Extend Dynamics 365 with mobile Power Apps solutions

Power Apps: a low-code approach to building apps



Build standalone web and mobile apps, or customize existing apps in Microsoft 365 and Dynamics 365



Connect to all your data with 400+ pre-built connectors and custom connectors



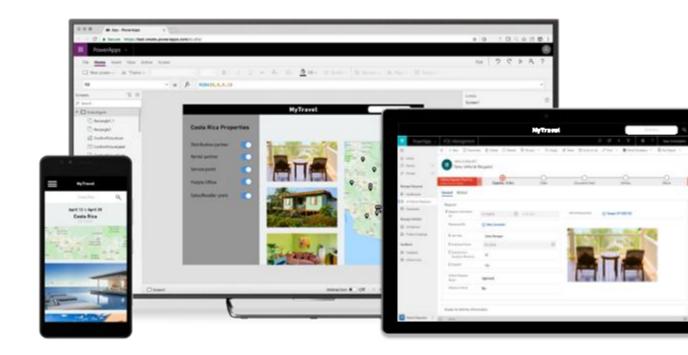
Add AI and intelligence with ease through built-in cognitive services



Provide IT guardrails with enterprise-grade governance and security controls



Pro-developer extensibility enables a "no limits" platform that spans business users to professional developers



Low-code back end with Microsoft Dataverse



Jumpstart apps using an extensible data model with business logic, security, and integration built in



Enable AI through built-in cognitive services powered by AI Builder and Azure



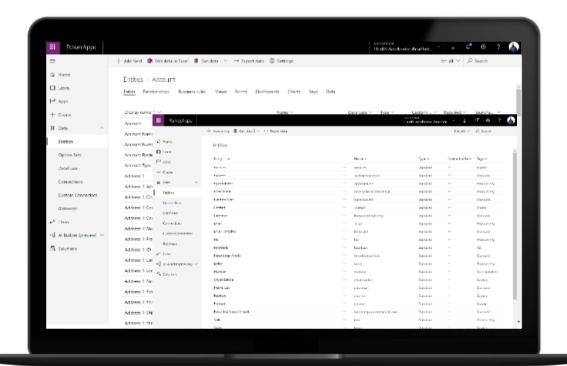
Extend data and processes to external and anonymous users with Power Apps portals



Support all your data: relational data, file and blob storage, logs, and search indexing

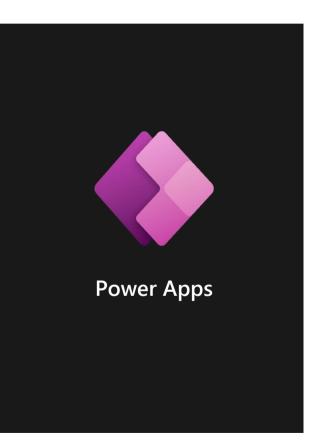


Effortless Dynamics 365, Microsoft 365, and Azure integration as well as powerful integration capabilities



Innovate at the speed of your creativity

Comprehensive set of multi-experience app capabilities



Physical and digital world













IoT Edge

IoT Hub

Mixed reality

Geospatial

Mapping

HoloLens

Artificial intelligence solutions



Al builder



Azure cognitive

services

panitive Robotic Process



Automation



Power Virtual Agents

Power BI

Innovative integrations



GitHub



Teams



Portals



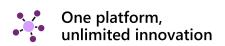
350+ connectors



API management







"Microsoft 365, Dynamics 365, and the **Power Platform**, on top of what we're doing with Azure, is the core of what we are doing as a company."

Satya Nadella



A platform for all makers

Citizen developer, IT administrator, professional developer, app wizard: we've got you



Intuitive to use & easy to learn for citizen developers



One admin center to rule them all for IT administrators



World-class pro developer support and ALM

Basic

CITIZEN DEV

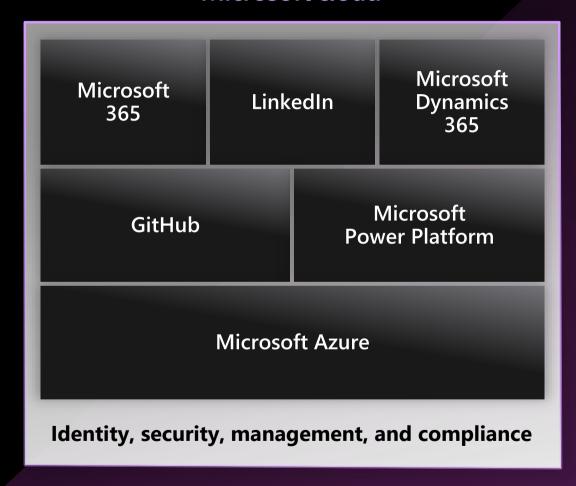
PRO DEV

Power Platform Profitability

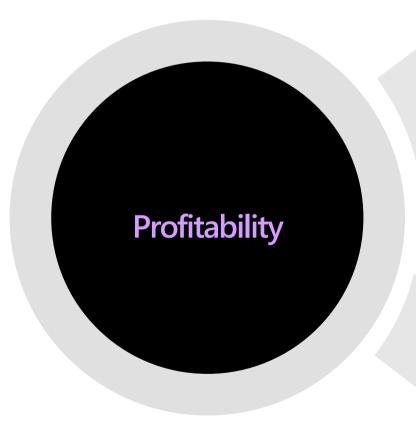
Become the strategic advisor to enable business growth

Expand your service offerings further in a comprehensive cloud ecosystem

Microsoft cloud



Power Platform profitability overview



Add reoccurring revenue streams

Drive innovation

Advise and enable

Build an app (solution development)

Add a high-margin, reoccurring revenue stream to your P&L.¹

Bolster existing managed services offerings

Simplify implementation with low-code development and easy integration

Increase customer loyalty

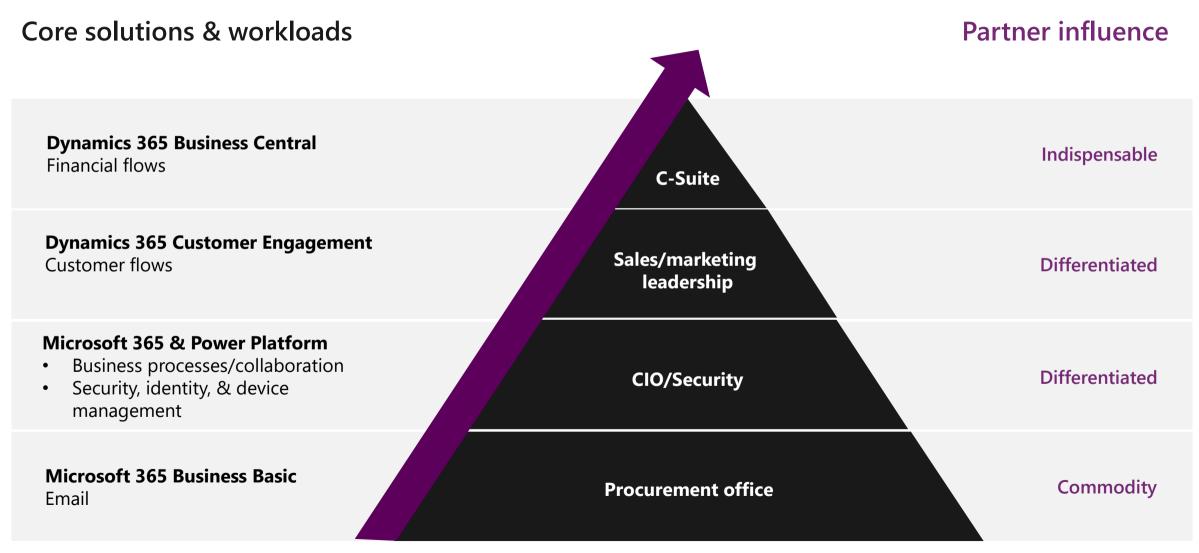
Reduce customer acquisition costs

Become a trusted advisor and build your low-code practice with business process automation.

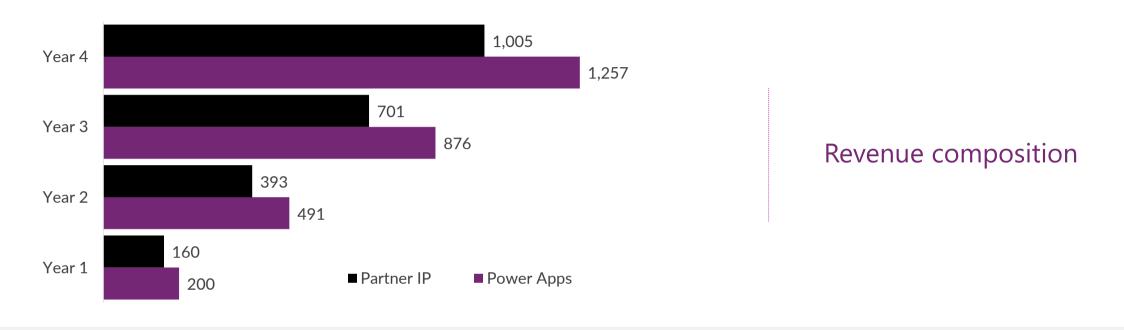
Enable your customers to increase agility and speed time-to-market by automating business processes

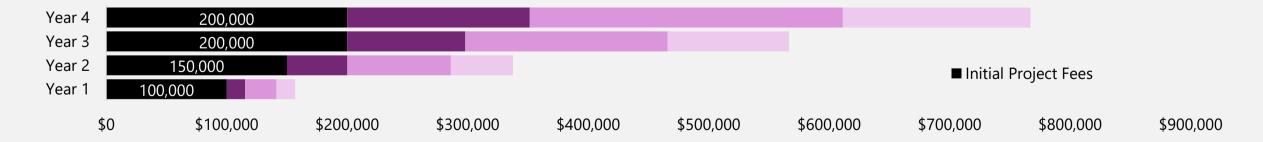
^{1.} Based on Partner Economics benchmarking database, partner-owned IP typically generates margins in excess of 70%+

Land & expand: target workloads, solutions, and contacts



Example: Power Platform growth opportunity through Power Apps Partner profitability revenue composition¹





Partner return on investment¹

P&L impact summary

| | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 |
|--------------------------|-----------|--------------------|-----------|-------------|
| Revenue | \$213,793 | \$525,956 | \$935,061 | \$1,337,058 |
| Revenue/FTE | \$213,793 | \$350,637 | \$623,374 | \$891,372 |
| Contribution margin (\$) | \$29,427 | \$134,026 | \$312,596 | \$475,598 |
| Contribution margin (%) | 13.8% | 25.5% | 34.4% | 35.6% |
| | | P&L impact summary | | |

\$4,441

Typical annual cost fees

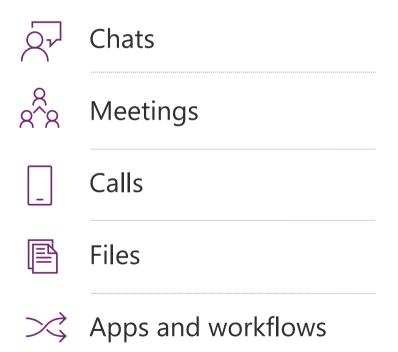
| Initial project fees | \$10,000 |
|------------------------------|----------|
| Ongoing support fees | \$2,500 |
| Power app subscription fees | \$1,1440 |
| Partner IP subscription fees | \$180 |

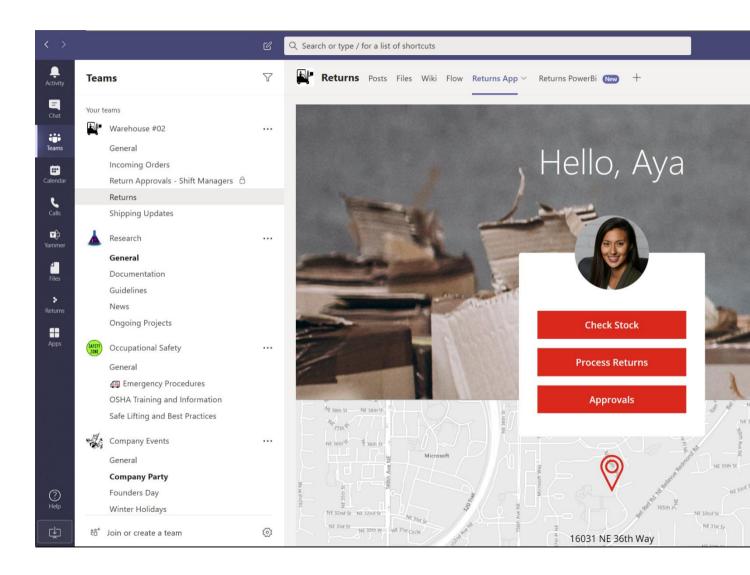
^{1.} This is an example: for your own revenue potential, see the <u>Power Apps Financial Model</u>.

Where does Microsoft Teams fit into all of this?

Microsoft Teams

The hub for teamwork in Microsoft 365





Teams is a platform for your apps and workflows



Microsoft Teams

Productivity apps

























Low-code dev and automation









Processes and custom apps



Departmental



Employee





Support and

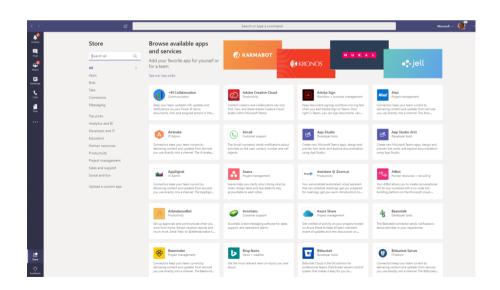
Integrated apps, processes automation, and business intelligence

Teams as an application platform

Microsoft Teams provides a powerful and extensible platform

Build apps with a rich set of capabilities to reach your users through chat, channels, notifications, and personal workspace.

Integrate with new or existing business processes and services.



TABS

Surface rich content as well as Power Apps and SharePoint Framework-based solutions

POWER APPS, POWER BI

MESSAGING EXTENSIONS

Allow users to query and share rich cards in conversations

ADAPTIVE CARDS

Add rich interaction to your connector cards

POWER AUTOMATE

MICROSOFT GRAPH

Build in intelligence and connect to data that drives productivity

BOTS

Help users get tasks done in conversations

POWER VIRTUAL AGENTS

CONNECTORS

Post rich updates to channels

ACTIVITY FEED

Engage users via feed notifications

POWER AUTOMATE

APP STORE

Drive engagement by submitting your app to our app store or just to certain company stores

POWER APPS

Teams + Power Platform Consistent investment and demand

NOVEMBER 2019

Apps can be published to Teams as personal apps

MAY 2019

Ability to add Power Virtual Agents chatbots to Teams is announced

JAN 2021

Apps can now be shared beyond a team—broad distribution apps

MARCH 2020

"Crisis Comms" template published for customers to download/deploy to Teams

AUG 2020

Deepened Teams + Power Platform integration



Thousands of organizations are relying on new integrations between Microsoft Teams and Power Apps to share timely information"

Satya Nadella April 2020



Power Platform integration with Teams makes these tools more discoverable and accessible to users, and unlocks a conversational approach to streamlining productivity scenarios"

Jared SpataroNovember 2019



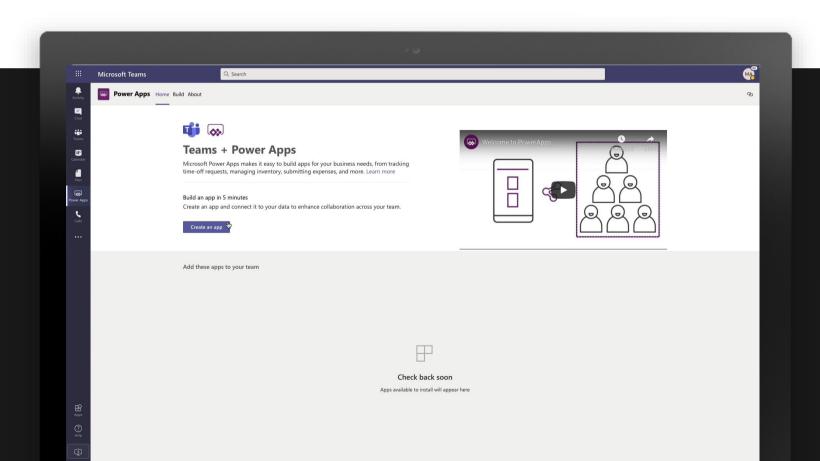
Power Apps in Teams usage has more than tripled since February alone"

Rajesh Jha May 2020

Power Apps + Teams

Every Teams user can build Power Apps right from Teams with Microsoft Dataverse for Teams, a data service back end based on the full Microsoft Dataverse

Every user can now target a powerful built-in low-code data platform, supporting relational, file, and image data, for any Teams user



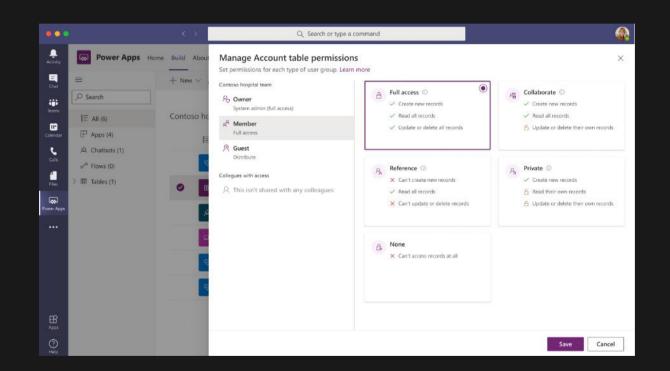
Robust and easy-to-use security for the team...

Microsoft Dataverse for Teams is enterprise grade and designed to work within Teams.

For Teams, it aligns with the core roles identified in that environment, such as team owners, members, and guests.

Access to the environment is restricted to just the team owners, members, and guests.

Different security roles can be assigned to team owners and members.



... and for users outside the team

The IT team can develop an app that's used by a department, a division, or the entire company.

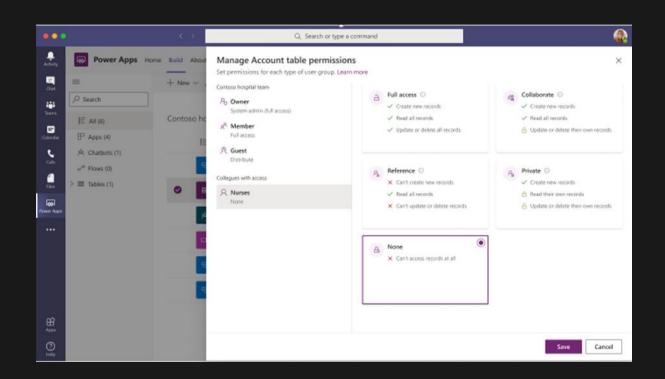
These organizational apps have a team of people who build them and a group of people who use them.

App users are:

Given access only to the apps you specify.

Not members of the team.

Part of an AAD group you identify, such as "All Contoso" employees.



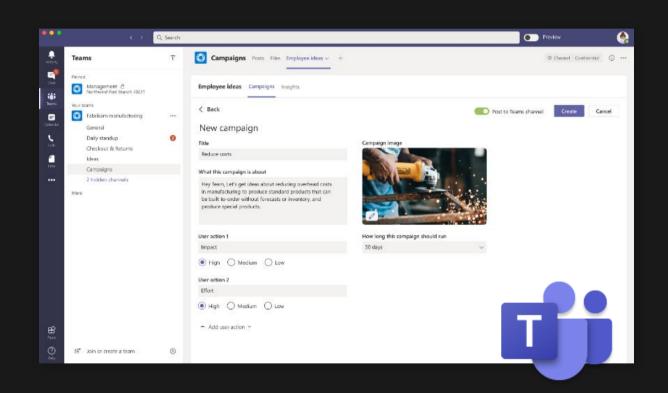
Solutions for Teams deliver pre-built solutions for common scenarios

Take advantage of applications that address common scenarios across industries

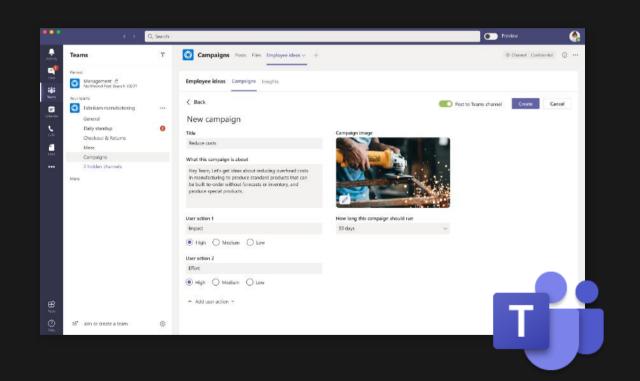
Ready to use out of the box

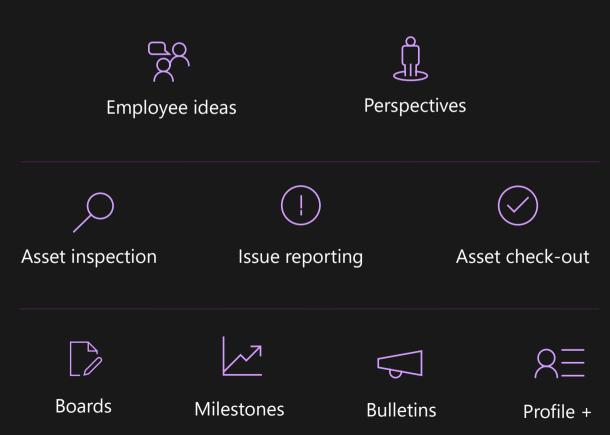
Customize by:

- Applying theme with corporate branding
- Integrating with internal systems
- Modifying or extending functionality



Enhance common scenarios with customizable templates

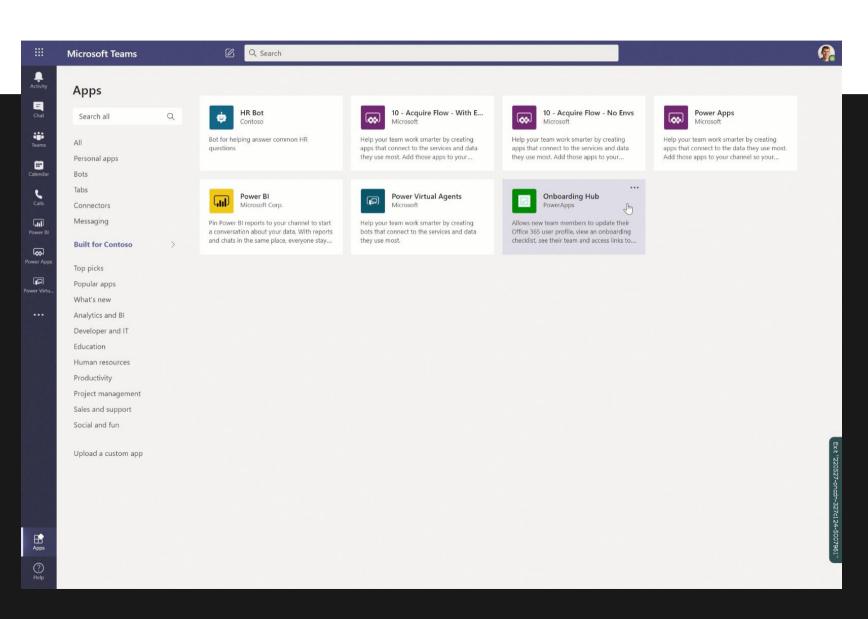




Install Power Platform solutions into Teams with a single click

Thanks to Dataverse for Teams, users can find and install custom solutions in the Teams app store.

Citizen developers or partners can now easily put their solutions where Teams users know where to look.



Power Apps + Azure API Management

Empower developers with "no-cliffs" extensibility from Teams and Power Platform to Azure

Extend and distribute your Azure APIs as Power Platform connectors.

Create custom connectors to unlock access to any Microsoft cloud-hosted data source.

Seamlessly push custom connectors to dedicated Power Platform environments for easy discovery in Power Apps.

Leverage Azure Functions and Azure API Management to enable citizen developers to distribute Power Apps in Teams at no additional licensing cost.



Distribute your Power Apps

solution in Teams.

Use the custom connector in

your Power Apps solution.

Tacoma Public Schools

"When I learned about Power Apps, that changed the game for me. I found Flow, and OMG, this is a life-changer!"

Lauren Taylor

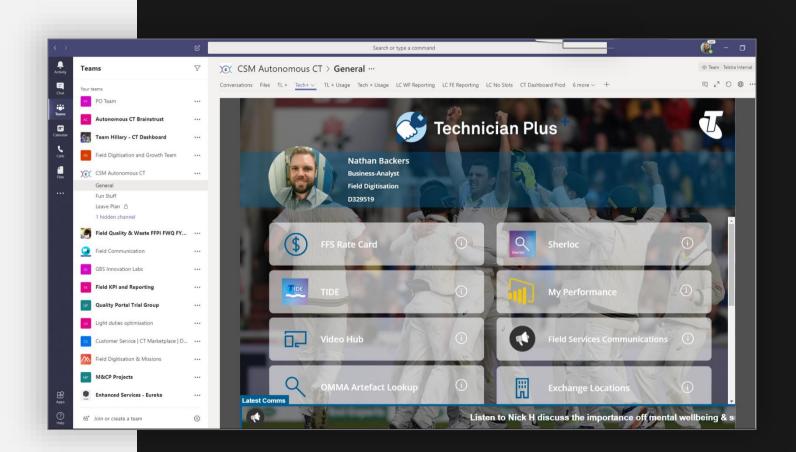
Assistant Principal, Manitou Park Elementary, Tacoma Public School District, Tacoma, WA



Telstra

"We've seen customer service complaints drop 60%, we've been able to document and recover damages to the tune of AU\$16M annually, and have given our field service technicians a singular desktop-to-mobile work experience"

Richard FrenchPrincipal – Field Digitization

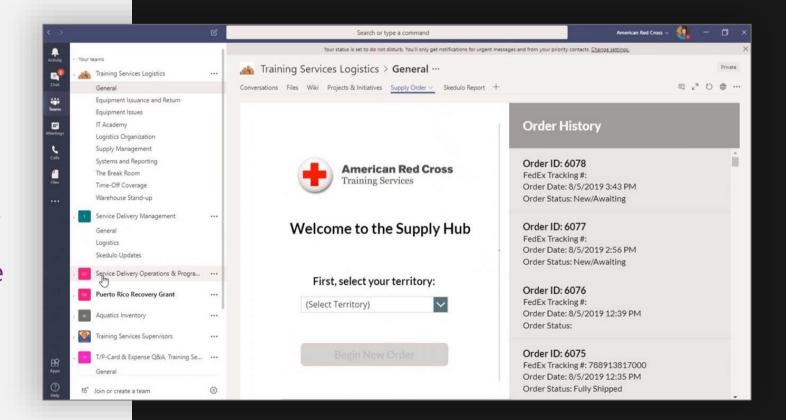


American Red Cross

"The app allows instructors to add supplies to a shopping cart, provide the address where they would like the supplies shipped, and then check out the items when ready—an intuitive online 'shopping' experience we are all already familiar with"

Nick Gill

National Manager of Service Delivery



Data platform capabilities included in Microsoft Dataverse for Teams

Clients

Microsoft Teams

Data

Rational

Basic data types

Common data modeling (coming soon)

Custom tables

File + Image

Find, filter, sort

Integration

Power automate O356 and Microsoft Dataverse for Teams included, premium with license

Data flows (import only)

Security + compliance

Encryption at rest

Encryption in transit

Business unit (1 per team)

Admin roles

User roles

Environment lifecycle

One environment per team

Promote to common data service/D365

Backup

Pont-in-time restore

Disaster recovery

App lifecycle

Unmanaged solution (1 per team)

Managed solution (gallery)

Managed solution (classic import/export)

Business rules and workflows

Power automate

N/A

Reporting

Data visualization

Power BI (coming soon)

Data platform capabilities that extend capacity, control and security when you need it

Clients

Web Mobile (power Apps/D365 Player) Desktop Microsoft Outlook Microsoft Excel Microsoft Teams

Data

Advanced Data Types
Activities/Activity Feeds
Common Data Model
Managed Lake
Mobile Offline
Non-Relational Log
Relevance Search
Virtual Entities
Relational
Basic Datatypes
Common Data Model (coming Soon)
Custom Tables
File + Image, Find, Filter, Sort

Integration

API Access
Event to Event Hub
Events to Service Bus
Export to Lake
Plugins
Server-Side Sync
Web Hooks
Power Automate
O365 and Microsoft Dataverse for
Teams included, Premium with
license
Data Flows (Import only)

Security + compliance

Admin Roles
User Roles
Business unites (multiple)
Customer Managed Keys
Hierarchical Security
Field Level Security
Sharing WS Trust/Legacy AuthN
Activity Logging
Auditing
Encryption at Rest
Encryption in Transit
Business unit (1 per Team)

Environment lifecycle

Unlimited environments
Reset
Copy
Promote to Common Data
Service/D365
Backup
Point-in-time Restore
Disaster Recovery

App lifecycle

Unmanaged solutions (unlimited) Managed solutions (unlimited)

Business rules and workflows

Business Rules Business Process Flows

Reporting

Paginated reports (SSRS) Data Visualization Power BI (Coming soon)

Extensibility

Develop faster than ever before

Leverage existing skills and code investments

Use the tools you are familiar with

Extension for visuals in the Power Platform is based on **TypeScript**

Developers can use Visual Studio or Visual Studio Code

APIs with many helper functions

Use common frameworks like React

Command-line tools for building and testing

```
larElementComponent > 🏗 index.ts > JavaScript and TypeScript IntelliSense > {} index" > ધ PCFAngularElementComponent > 😚 updateView
1 ∨ import {IInputs, IOutputs} from "./generated/ManifestTypes";
     import './../PCFAngulaElement/dist/PCFAngulaElement/bundle';
   export class PCFAngularElementComponent implements ComponentFramework.StandardControl∢IInputs, IOutputs> ⟨
         private htmlElement: HTMLElement;
        private notifyOutputChanged: () => void:
        constructor() {}
         public init(context: ComponentFramework.Context<IInputs>, notifyOutputChanged: () => void, state: ComponentFramework
             this. container = container;
             this._notifyOutputChanged = notifyOutputChanged;
             container.appendChild(this. htmlE
         public updateView(context: Componer
                                                          PowerBI Custom Visual Tool
                                                      Jsage: pbiviz [options] [command]
                                                                      Create a new visual
Display info about the current visual
                                                                   output the version number
Create new localhost certificate
```

Support for the whole development lifecycle

1

Build using Visual Studio or VS Code

2

Test and validate using the command-line tool—including live debugging

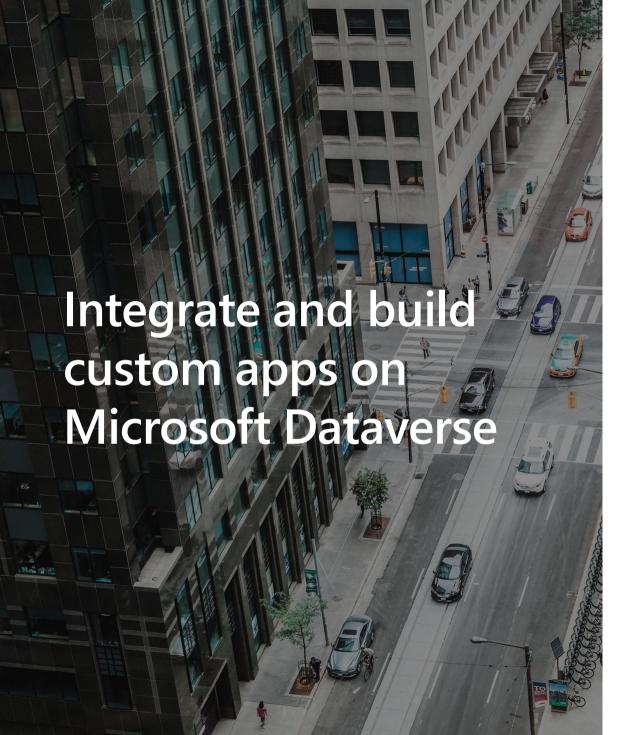
3

Check in to source control (Git) and support automated, continuous deployment

4

Deploy inside an organization or distribute across





Standard data operations



Transaction and bulk operations

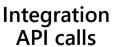


Work with metadata



Working with Microsoft Dataverse APIs







Automate deployments



Custom messages

Low-code creation of reusable components



Quickly develop reusable, embeddable components with the low-code canvas



Reuse within and across apps; compose with pro-dev components



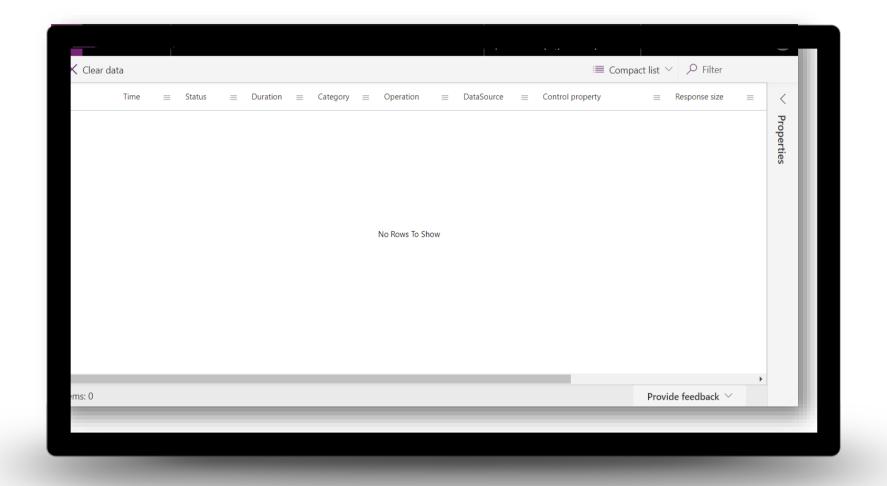
Enable faster and more consistent development when many makers are using the same components



Admin and governance

Enabling low-code innovation in your organization

Debug and optimize with Power Apps Monitor



Enterprise-grade governance

Extend the power of the platform to build a framework for governance



Identity management and multi-factor authentication for enhanced identity protection and secure guest access



Built-in information protection and usage analytics with full audit logs, data loss prevention policies, and more



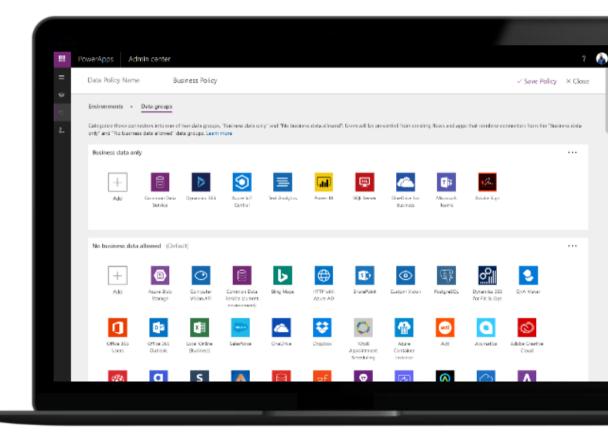
Secure and control data on mobile devices with Intune mobile application management



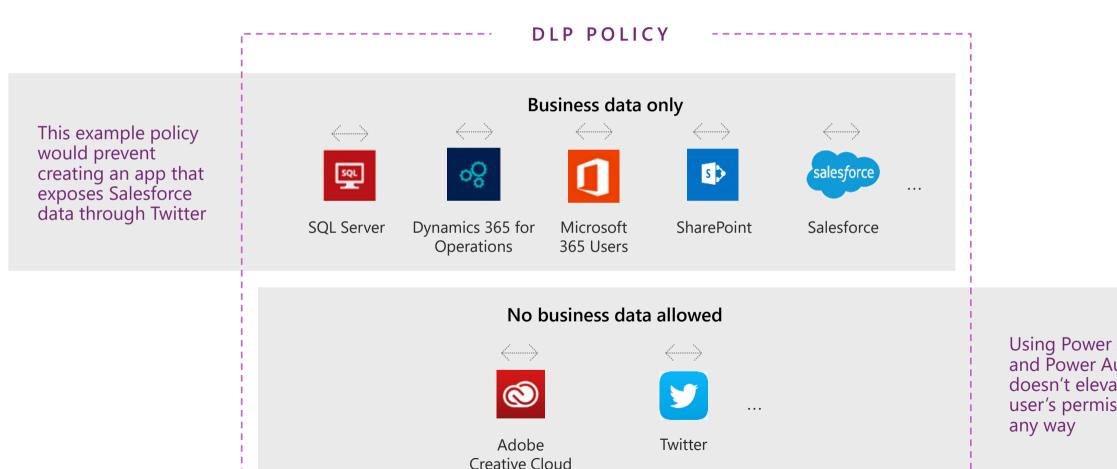
Compliance leadership with 13+ standards including FedRAMP high, HIPAA, EU model clauses, SOC, and GDPR



Manage all aspects—users, apps, usage, and settings—in a single admin experience

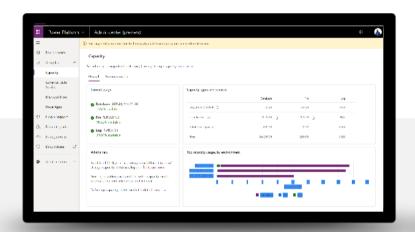


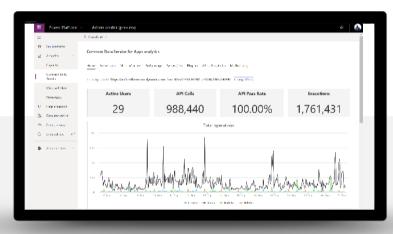
Data loss prevention (DLP) policies control which connectors can be used in the same app or flow

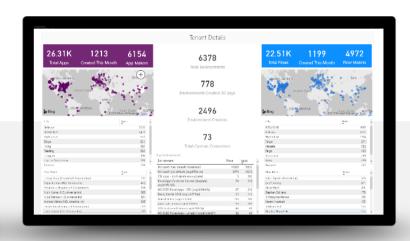


Using Power Apps and Power Automate doesn't elevate a user's permissions in

Admin reporting and analytics in the Power Platform admin center







Admin insights provide deep visibility into usage and performance of applications

- Users
- Locations
- Capacity

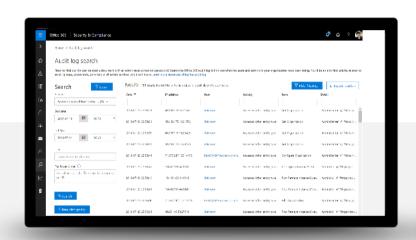
Analytics track health and implementation metrics and help keep users on track

- Service performance
- Error reporting
- App usage

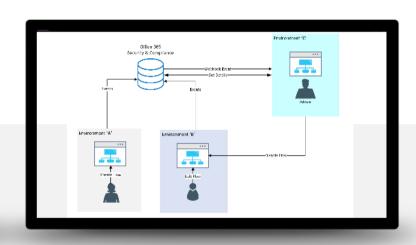
Personalize insights and drive action with custom Power BI reports and Power Automate

- All-up view of what's being created
- Discover your champions
- Trigger automated actions

Activity logging integrated with Microsoft 365 security and compliance







Audit records are stored in Microsoft 365 security and compliance center

Microsoft 365 management activity API enables creation of custom monitoring solutions or integration with SIEM vendors Automate actions and alerts by connecting Power Automate to audit events

Adoption strategy

Enable low-code innovation in your organization

Establishing a Power Platform Center of Excellence



Strategy and vision



Admin and governance



Nurture and support

Roles and responsibilities



Low-code strategy

Align Power Platform strategy with digital transformation strategy

Drive innovation

Key decision-makers

Business value

Adoption and change management

Empower new ways of working



Power Platform admin team

Environment strategy

DLP policies

Data integration/ migration guidelines

Guardrails

License management



Power Platform nurture team

App-in-a-day/ hackathons
Solution envisioning
Community of practice
Evangelize platform



Power Platform reusable assets & automation

Automation/Azure DevOps

Application and architecture review

Library of common utilities, patterns, and templates

App catalog



User support team

Help desk guidance/ FAQ

Ticketing process

Support process & resources

Enterprise tooling: Center of Excellence (CoE) Starter Kit



Existing offering

Admin center capabilities: extensibility via connectors



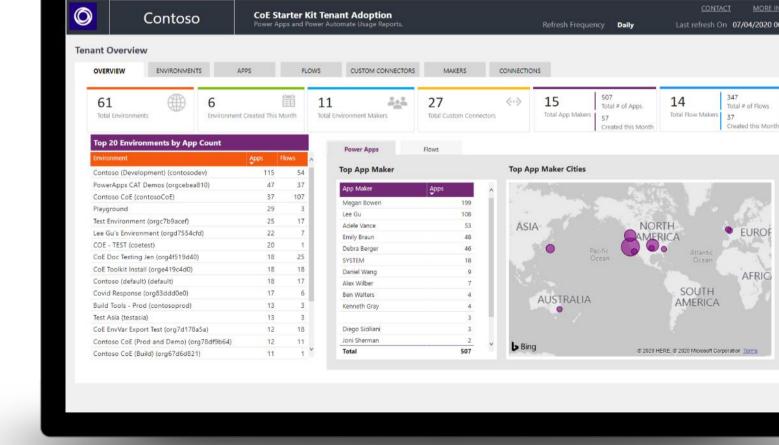
Templates

A templatized implementation of best practices



CoE Starter Kit

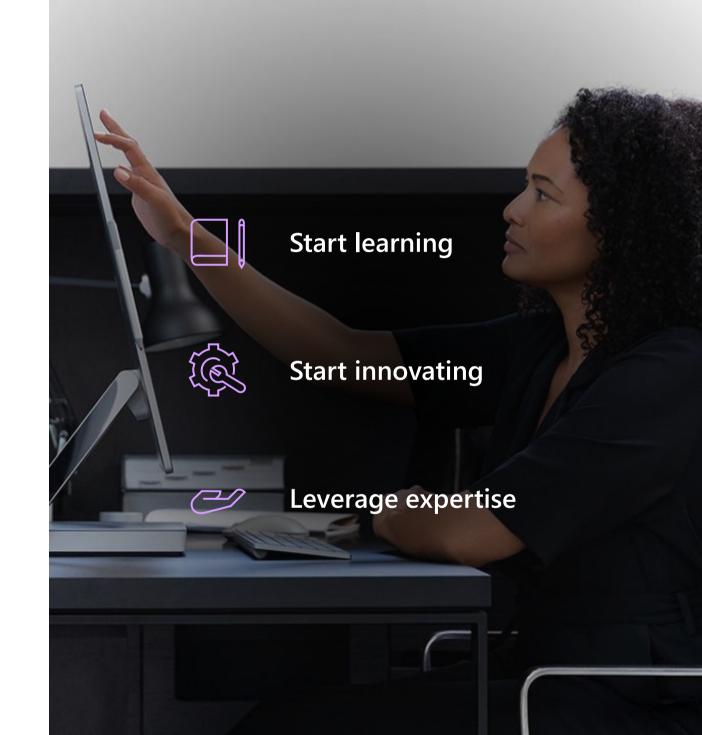
A collection of components and tools designed to help you get started with developing a strategy for adopting and supporting the Power Platform



aka.ms/coestarterkit



A solid and future-proof foundation to digitize your organization



Start learning



Accessible online learning for citizen developers, IT admins, and professional developers



Step-by-step guidance and extensive documentation, from high-level concepts to advanced topics



Structured learning journeys guide makers through scenarios with a gamified badging system



Start learning today:

for resources by customer persona, visit docs.microsoft.com/en-us/powerapps/



Microsoft low-code practice journey for Modern Workplace Partners



Understand partner value & opportunity

- Download Partner pitch deck and watch video
- <u>Partner Profitability</u>
 Calculator
- Review other partner success stories
- Review the Power Apps partner playbook

2

Get training and certification

- Review Learning Path to get trained
- <u>Power Platform</u>
 Fundamentals
- <u>Microsoft Power</u>
 <u>Platform App Maker</u>
 Associate

3

Identify opportunities

- Power Play Overview
- Power Apps
 Envisioning and
 Hackathons Guide

4

Develop GTM plan

Differentiate Yourself:

- Create repeatable IP
- <u>Publish and promote</u> your apps & consulting services on AppSource

GTM Assets:

 GTM BOM – <u>emails</u>, <u>nfographics</u>, <u>social</u>

Generate demand with: Microsoft Go To Market resources

5

Win customers

Sales Assets:

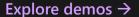
- DEMOs
- Customer Pitch Deck
- Customer Journey
- <u>Power Apps</u> <u>Conversation Guide</u>
- <u>Power Automate</u>
 Conversation Guide
- Review Power Apps CSP Incentives
- Microsoft Customer
 Stories Search
- Take advantage of offers

6

Enhance your practice

- Find the right Microsoft Power Platform certification for you - Microsoft Tech Community
- Download the <u>Center of Excellence Starter Kit</u> (optimal)

Expand your Power Platform community: Power Platform Adoption Framework





Power Platform adoption & guidance

Overview

- → Power Apps
- → Power Automate
- → Power BI
- → <u>Power Virtual Agents</u>

Create your first app

- → Canvas App
- → Model-driven app
- → Flow
- → <u>Dashboard</u>
- → Chatbot

Training labs

- → App in a Day
- → Flow in a Day
- → Power Virtual Agents in a Day
- → More Power Platform labs

Browse documentation

- → <u>Power Apps</u>
- → Power Automate
- → <u>Power Virtual Agents</u>
- → Power BI
- → Microsoft Dataverse
- → Connectors









Thank you



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