The Power Platform

Power Apps, Power BI, Power Automate, Power Virtual Agents, and much more



The Power Platform What is it?

The Microsoft Power Platform is a business application platform that helps support and extend Microsoft 365, Dynamics 365, and Azure, as well as third-party services and applications. The Power Platform offers low-code automation, actionable data-driven applications, customizable business logic and smart chat-bots that can improve business processes, systems, and workflows. It is used to model data for analysis and surface insights.

What are its components?

Power Bl

Business analytics

Pull your unrelated data sources into one simple view

Find and share meaningful insights with hundreds of data visualizations, built-in Al capabilities, tight Excel integration, and data connectors.

Power Apps Application development

Start building and launching apps right away using pre-built templates, dragand-drop simplicity, and quick deployment

Provide professional developers the tools to seamlessly extend app capabilities

Power Automate

Process automation

Automate timeconsuming manual tasks giving you more time to focus on high-value actions.

Build secure workflows with a no-code guided experience and cloud-based management services.

Power Virtual Agents

Intelligent chat bots

Create powerful chatbots without the need for developers or data scientists by using a guided, no-code graphical interface.

Monitor and continuously improve chatbot performance using datadriven insights.



What is a citizen developer?

A citizen developer is a non-professional developer who builds applications for use by other people without the knowledge and expertise that a real developer would have. Citizen developers leverage low-code/no-code software, such as the Power Platform, to build their own applications on top of already existing IT infrastructure provided. This means organisations can massively broaden the number of people who can assist and engage with the digital transformation, without incurring in the costs of the necessary high skilling required by actual IT professionals.

Power Bl

Turning data into opportunity

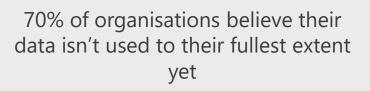
Why Power BI?

- Traditional BI platforms required IT to install a data warehouse, integrate it with the transactional applications, model the data, and build dashboards and reports for the business users, and run reports that often took hours, making it impossible to interact with the system. **Therefore, information quickly became obsolete and unusable.**
- 2. With modern Business Intelligence tools, performance is significantly faster, allowing business users to interact with data and gain more real-time insights.
- Power BI comes into play as 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**. Your data may be an Excel spreadsheet, or a collection of cloud-based and on-premises hybrid data warehouses. Power BI lets you easily connect to your data sources, visualize and discover what's important, and share that with anyone or everyone you want.

Trends in business analytics

We are seeing many changes in business analytics. Data collection is ever increasing and keeping up with its growth is becoming an issue for many businesses. Providing actionable outcomes from data requires hiring analysts and data scientists that can become costly. Thus a scalable, simple, collaborative solution is required to make sense of this information, allowing every stakeholder, from a salesperson to a dashboard designer to leverage what collected to its fullest extent.





65% of us are visual learners and data analysts are some of the hardest roles to recruit



Worldwide data creation is projected to reach 163zb by 2025, yet 86% of businesses still struggle to analyse unstructured data

The key features of Power BI



Use 270+ connectors to get a **unified consolidated view** of your data collection through a single pane of reports

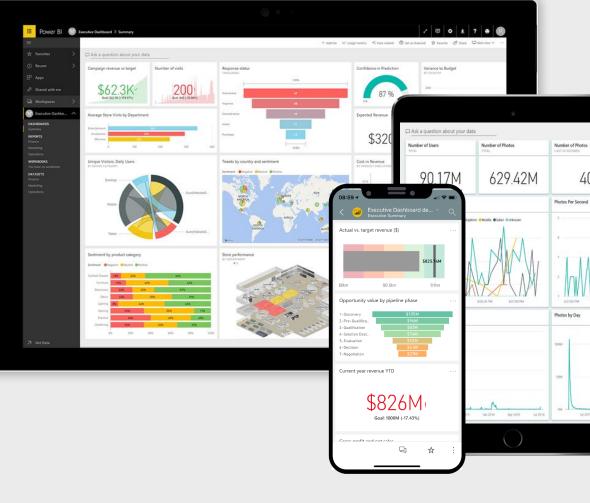




Build smart apps by **infusing insights** from Power BI and drive action with the rest of the Power Platform, Dynamics 365, and Office 365



Leverage artificial intelligence to gain insights across dashboards, reports, visuals and datasets



Power Apps Turn bright ideas into brilliant apps

Why Power Apps?

Power Apps is a service that provides a rapid application development environment for building low-code/no code apps that can be tailored to fit a business' needs by running seamlessly across multiple different devices (in browser or mobile).

Apps can be quickly built by **connecting to your business data** stored either in the underlying data platform (Common Data Service) or in various online and on-premises data sources (SharePoint, Excel, Office 365, Dynamics 365, SQL Server, and so on).

Apps built using Power Apps provide **rich business logic and workflow capabilities to transform your manual business processes into digital, automated processes**. Power Apps also provides an extensible platform that lets pro developers programmatically interact with data and metadata, apply business logic, create custom connectors, and integrate with external data.

Canvas Apps

Leverage a pixel-perfect what you see is what you get editor that allows you to drag and drop controls and leverage native mobile phone resources, such as GPS, cameras, audio recording etc.

Easily deploy, publish or share new versions of your apps with other organization users

Build highly customized task- and role-based canvas apps with data from one or multiple sources

Consume fully accessible apps across web and mobile, embedded or standalone, on any device



Model-Driven Apps

Generate immersive model-driven apps (in the style of Dynamics 365), starting from your data model and business processes

Create rich design responsive cross browser web applications that can be distributed as a solution

Develop your own server-side business rules without coding starting from data

Embed a canvas app into a Model-Driven app form and provide an engaging experience to your users

Portals

Create external-facing websites that allow users outside their organizations to sign in with a wide variety of

MUMMC, was domained to

Al Builder

Bring the power of AI through a pointand-click experience. With AI Builder, you can add intelligence to your apps even if you have no coding or data science skills.



identities, create and view data in CDS, or even browse content anonymously.

Leverage the full capabilities of Dynamics 365 Portals, now available completely standalone inside of Power Apps.



Makers can reuse page designs through templates, add forms and views to display key data from the Common Data Service, and publish them to users. Choose from a growing set of Al solutions such as object detection, predictions, text classification, form processing, business card readers etc.

Select your business-specific data and tweak the AI model to optimize how your AI performs.

< 3 Months 700%

Train your model to resolve your business problem and obtain insights to understand how to improve your current solution

Power Apps Total Economic Impact (TEI)

70% Less application development cost & effort 362%

Return on investment over 3 years term Payback

Growth in Power Apps production in the last year

Source: The Total Economic Impact[™] Of PowerApps And Microsoft Flow, a commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2018 Source: The Total Economic Impact[™] Of PowerApps And Microsoft Flow, a commissioned study conducted by Forrester Consulting on behalf of Microsoft, June 2018

Power Automate

Business automation made simple

Power Automate, previously Microsoft Flow, is a workflow service that automates actions across apps and services.

Automation for everyone

Seamless, secure integration

Efficiently scale automation across your organization

Allow everybody in your organization to automate workflows using their favorite on-premises and cloud-based apps and services.

Securely integrate automation at every level

Confidently enable end users to build automated workflows in a secure, compliant manner, and focus your skilled IT resources on more complex, strategic work.

Accelerate productivity and focus on more

Accelerated

productivity

strategic work

Minimize repetitive, manual, time-consuming tasks and create more time for your teams to drive your business and plan your company's future.

	_
	When a record is created
	Run a UI flow for desktop
	UI flow
	Automating data sync in Microsoft Acc
	Account name *
	Level *
	E Level ×
	L Condition
If yes	
Q Send me an email notification	
Subject *	
Employee status	
Body *	
Employee has Balance days × balance Training completion × trainings.	ce days left and has completed
a contract of the second secon	Add a dynamic value
	Plad a dynamic value a
	Paid a system is vision

The anatomy of a workflow



Hundreds of triggers

Triggers start your flow, initiated from buttons, connected cloud apps, and schedules.



Share flows like documents Collaborate on building flows and distribute flow templates to your organization.



Seamless integration Directly integrated with PowerApps, Power Bl, Microsoft Teams, Office 365, Dynamics 365, and Azure.

Built-in data platform Use the Common Data Service to store app data in a standardized Common Data Model.

Extensibility model No limits. Automate advanced scenarios with multiple steps, branching conditions, and more. Seamlessly synchronize files between first- and third-party systems.



Intelligent automation Build flows that leverage AI

Builder to process unstructured data and continually improve processes.



Thousands of actions Choose from built-in actions or create your own, using cloud services or on-premises solutions.



Data connectivity Connect to over 270 services with built-in connectors for everything from Adobe to Zendesk to

on-premises solutions.





30%

Cost savings	in the	first 18-24	months
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Scheduled Flows-Trigger an action at a set time

Long-term cost savings

Business Process Flows-Provide a streamlined user experience

through defined organisational processes

Examples of a workflow

Automated Flows-Trigger an action from a designated flow

Ö \triangleleft When my alarm goes off **Opportunity - Qualify** \checkmark \checkmark \downarrow Filter to users with more than 100 followers \triangleleft Check the weather for the day Quote - Propose \downarrow \checkmark \checkmark \triangleleft Order - Contract Add as a lead to Dynamics CRM Send me a mobile notification \checkmark \downarrow \downarrow Schedule a picnic for lunchtime \triangleleft Order - Close Add to Mailchimp for follow up

UI Flows-Robotic Process Automation (RPA) for everyone

×	Click button to start UI Flow
	\checkmark
	Record desktop screen
	\checkmark
Η×	Run calculator script Launch calculator
	Keyboard - Click 5 - Click + - Click 1

Power Virtual Agents

Smart chat-bots at scale

Introduced in October 2019, Power Virtual Agents empowers teams to easily **create bots using a guided**, **no-code graphical interface without the need for data scientists or developers.** Power Virtual Agents addresses many of the major issues with bot building in the industry today. It eliminates the gap between the subject matter experts and the development teams building the bots, and the long latency between teams recognizing an issue and updating the bot to address it. It removes the complexity of exposing teams to the nuances of conversational AI and the need to write complex code. It also minimizes the IT effort required to deploy and maintain a custom conversational solution.

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End of Conve	rsation	🖒 Discard changes 🤌 Undo 🤇 Redo 🤨 Topic checker 🗟 Save
		Trigger Phrases
		Trigger phrases
		Question
		• Ask a question
		Did that answer your question?
		Identify
		🗄 Boolean >
		Save response as
		(x) PRR Survey Question (Boolean)
	Condition :	Condition : Conditic
	(x) PRR Survey Question (Boolean) ×	(x) PRR Survey Question (Boolean) × All other
€	is equal to V	is equal to False
Ö		raise
ବ୍	0	0
0	Redirect	Redirect :
{ <i>x</i> }	Confirmed Success	Confirmed Failure

Get started in seconds. Start deploying bots in a few clicks, avoiding
the complexities of an infrastructure to maintain

Enable rich natural conversations. Simply provide a few short examples of the topic you want the bot to handle, build the conversation using our graphical editor and your bot is ready to handle customer requests about it.

 Enable bots to take action. Easily integrate with services and backend systems out-of-the-box or through hundreds of easy-to-add custom connectors using Power Automate. This makes it simple to create a bot that not only responds to the user, but also takes action on their behalf.

Monitor and improve bot performance. Keep an eye on how your bots are performing by using powerful metrics and AI-driven dashboards. Easily see which topics are doing well and where the bot can improve, and quickly make adjustments to improve performance.

Integrate Power Virtual Agents with Dynamics 365 Customer Service Insights

Improve customer satisfaction

 Build loyalty by resolving emerging issues before they impact more customers.



 Gain a comprehensive understanding of customer satisfaction score (CSAT) drivers and use AI insights to implement datadriven improvements.

Increase operational efficiency

- Streamline operations with case resolution insights, backlog trends, and historical comparisons to evaluate agent performance and business impact.
- Monitor case volume and incoming support topics to optimize agent productivity.

								Surveys com	pleted	CSA	T collection	rate
Customer satisfaction driv	ers							8	200		80.	7%
Торіс	Volume	Resolutions	Surveys completed	Avg CSAT	Impact		Î		-6.5	% 🔻		0.39
Inquiry on the back to scho	2.1%	216	161	2.94		-0.1%						
Mobile app crashes when t	4.4%	450	353	2.95		-0.3%		Avg CSA	r		3.00	
User failed to remove a deb	1.9%	197	157	3.05	1.1	-0.1%					1	
Wants to get information o	3.2%	321	257	3.05		-0.1%						
promotion expiry date liste	4.8%	485	402	3.06		-0.1%				~		
Got a member reward, and	7.2%	731	590	3.12		-0.1%				3.15	0.0%	
Asking how they will get no	2.4%	244	213	3.13		-0.0%		0.00			-0.010	5.00
user asking is there weill be	1.2%	126	99	3.15		0.0%	11	Custome	r satisfactio	n breakdov	vn	
User wants to add items to	8,7%	880	738	3.17		0.1%		Phone	24.7%	21.1% 15	7% 19.1%	19.3%
Inquiry on available promo	1.5%	156	119	3.17		0.0%		Email	27.2%		18.1% 15.3	
Checking whether he can re	6.7%	683	547	3.19		0.1%		Web	25.1%	18.6% 14.9	56 20.7%	20.7%
Cannot find where to subsr	1.5%	148	115	3.20		0.0%		Facebook	13.8% 15.4%	16.9%	26.2%	27.7%
Having an issue that the sto	1.5%	155	110	3.21	1	0.0%	×	Twitter	14.4% 18.9		22.2%	23.3%
								Very satis	fied Satisfied	Neutral Dis	satisfied Over	dissatisfied

The Common Data Service

The underlying layer of data

Building an app typically involves data from more than one source, while this can sometimes be done at the application level, there are also cases where integrating this data together into a common store allows for an easier app building experience, and a single set of logic to maintain and operate over the data. **The Common Data Service allows data to be integrated from multiple sources into a single store which can then be used in Power Apps, Power Automate, Power BI, and Power Virtual Agents along with data already available from the Dynamics 365 applications.**

Why use the Common Data Service?

The Common Data Service (CDS) lets you securely store and manage data that's used by business applications. Data within Common Data Service is stored within a set of entities. An entity is a set of records used to store data, similar to how a table stores data within a database. CDS includes a base set of standard entities that cover typical scenarios, but you can also create custom entities specific to your organization and populate them with data using Power Query. Using this data apps, flows and agents can be built.

If you're not sure if entities are your best option, consider these **benefits**:

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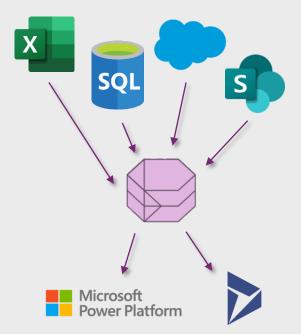
Logic and validation

Define calculated fields, business rules, workflows, and business process flows to ensure data quality and drive business processes Easy to secure

Data is securely stored so that users can see it only if you grant them access. Role-based security allows you to control access to entities for different users within your organization. бх

Easy to manage

Both the metadata and data are stored in the cloud. You don't need to worry about the details of how they're stored.



The CDS streamlines business logic when integrating the over 270 data connectors with Dynamics 365 and the Power Platform

Common Data Service default subscription capacity

Power Apps, Power Automate, and Power Virtual Agents default subscription capacities leverage the same

tenant and infrastructure and will accrue across one tenant. **Every tenant** with a Power Apps, Power Automate or Power Virtual Agents license **receives default capacity.**

Power Apps Default Capacity per tenant	Default per user	Default per app	Accrued per user	Accrued per app	Power Automate Default Capacity per tenant	Default per user	Default per flow	Accrued per user	Accrued per flow
Common Data Service Database capacity	10GB	1GB	250MB	50MB	Common Data Service Database capacity	1GB	1GB	50MB	50MB
Common Data Service File capacity	20GB	2GB	2GB	400MB	Common Data Service File capacity	2GB	2GB	200MB	200MB
Common Data Service Log capacity	2GB	200MB	-		Common Data Service Log capacity	200MB	200MB	-	-

Power Virtual Agents Default Capacity per tenant	Default per user
Common Data Service Database capacity	10GB
Common Data Service File capacity	20GB
Common Data Service Log capacity	2GB

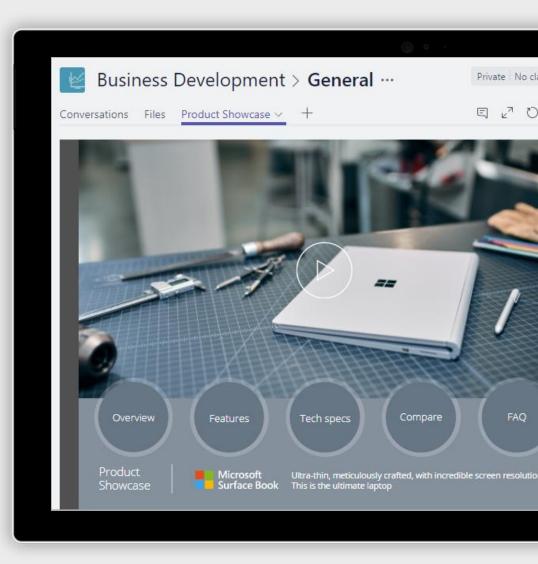
Microsoft Teams and Dynamics 365 Integration

Microsoft Teams Integration

You can share a Power App or a Power BI report you've created by embedding it directly into Microsoft Teams. Users can select + to add an app/report to any team channel or conversation. The app/report appears as a tile under Tabs for your team.

You can generate a workflow by using Microsoft Teams as a trigger or action. By leveraging Power Automate, users can streamline approvals, launch bots and manage alerts, messages and notifications all in one place.

Share your knowledge with the rest of your organisation through Power Virtual Agents. You can add your own bot to Microsoft Teams so other users can interact with it, ask questions and get an answer in a responsive and simple manner.

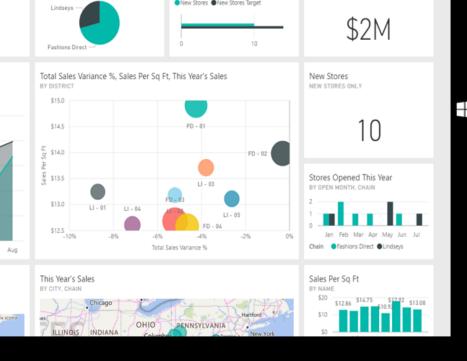


Dynamics 365 Integration

SIGN	Ø REFRESH ALL	OPEN IN POWER BI	ADV/	ANCED FIND		
	This Year	's Sales		New Stores, New Stores Target	This Year's Sales	
	BY CHAIN			YEAR TO DATE	NEW STORES ONLY	

Power Apps and Finance and Supply Chain

Management. Power Apps can be embedded in F&SCM to augment the product's functionality. You might build a Power App to supplement Dynamics with information



retrieved from another system.

Power BI visuals. Personalize workspaces by embedding tiles hosted on Power BI without leaving the application. If you're an ISV or SI, you can package workspaces that are enabled for Power BI Embedded for Dynamics 365 and then customised on the desktop app.

Leverage Power Automate to respond to Dynamics 365 triggers and actions. Thanks to the Common Data Service and the Dynamics 365 connectors you can now create flows that will help your business streamline manual processes.

Licensing The Power Platform*

*PRICING FOR GUIDANCE ONLY-PLEASE CONTACT A PARTNER FOR FURTHER DETAILS

Power Apps and Power Automate

Plans and capabili	ities	Power Apps per app plan \$10 per user/app/month	Power Apps per user plan \$40 per user/month
Run custom apps /	Run custom apps (canvas/model driven)	2 apps	Unlimited apps
portals	Run custom portals	1 custom portal	Unlimited custom portals
Connect to your data	Use pre-built connectors (standard, premium)	•	•
	Use custom and on-premises connectors	•	•
	Utilize Common Data Service	•	•
Store and manage data	Create and access custom entities	•	•
	Dynamics 365 restricted entities access	Read only	Read only
-	Power Automate use rights	Within app context	Within app context
Execute workflows	(Classic CDS) Non real-time and real-time workflows	•	•
	Common Data Service Database Capacity ¹	50 MB	250 MB
Per license capacity ²	Common Data Service File Capacity ¹	400 MB	2 GB
	Daily API request limit ²	1,000	5,000
Infuse Al	AI Builder capacity add-on	\$	\$

Plans and capabilit	ies	Power Automate \$15 per user/month	Power Automate \$100 per flow/month
	Minimum purchase	Not applicable	5 units
Execute workflows	User license required?	Yes	-
	Use business process flows	•	•
Connect to your	Use pre-built connectors (standard and premium)	•	•
data	Use custom and on-premises connectors	•	•
Store and manage	Access to Common Data Service	•	•
data	Create and access custom entities	•	•
Den lissen er site 1	Common Data Service Database Capacity (pooled ²)	50 MB	50 MB
Per license capacity ¹	Common Data Service File Capacity (pooled ²)	200 MB	200 MB
	Daily API Requests ¹	5,000	15,000
Infuse AI	Al Builder capacity add-on ³	\$	\$

Seeded Power Automate license within Office 365 and Dynamics 365

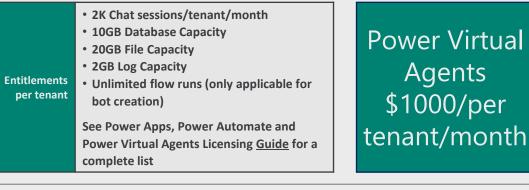
Plans and capabilities		Flow use rights within Dynamics 365 licenses
Execute Flows ^{1,2}	Workflows	•
	Business process flows	•
Connect to your data	Standard connectors	•
	Premium connectors	•
	On-premises data gateway	•
	Custom connectors	•
Store and manage data	Common data service use rights	•

Plans and capabilities		Flow use rights within Office 365 licenses
Execute Flows ¹	Workflows	Unlimited ¹
	Business process flows	-
Connect to your data	Standard connectors	•
	Premium connectors	-
	On-premises data gateway	-
	Custom connectors	-
Store and manage data	Common data service use rights	-
Per license capacity	Daily API Requests ¹	2,000

Seeded Power Apps license within Office 365 and Dynamics 365

Capabilities		Office 365
Run custom apps/portals	Run custom apps (canvas apps)	Unlimited
	Run custom apps (model driven apps)	-
	Access custom portals	-
Connect to your data	Standard connectors (see <u>Appendix B</u>)	•
	Premium connectors	-
	On premise data gateway	-
	Custom connectors	-
e	Utilize Common Data Service	-
Store and manage data	Create and access custom entities (includes complex entities)	-
Execute workflows	Microsoft Flow use rights (See Flow with Office 365 section)	•
Per license capacity ² (shared capacity across all PowerApps and Flow usage)	Common Data Service Database Capacity ¹	-
	Common Data Service File Capacity ¹	-
	Daily API request limit ²	2,000
Infuse Al	Al Builder capacity add-on	\$

Power Virtual Agents



Power Bl

	Power BI Pro	Power BI Premium
Licensing differences		
Included with Microsoft Office 365 Enterprise E5	•	\$ ①
Licensed per user	•	
Licensed by dedicated cloud compute and storage resources		•
Deployment and administration		
On-premises reporting through Power BI Report Server		•
Compute processing environment	Shared	Dedicated
Deploy Power BI content to multiple regions		•
Incremental data refresh		•
Publish reports to be shared	•	
Widespread distribution of content without requiring a Power BI Pro license for content consumers		•
Publish and consume paginated reports in Power BI \textcircled{O}		•
Allocate compute resources		•
Monitor performance of dedicated compute and memory resources		•
Maximum size of individual data set	1 G	10 G
Maximum storage	10 G per user	100 TB
Maximum number of automatic refreshes per day	8	48
Store Power BI data to Azure Data Lake Storage Gen2 $$		•
Deployment, administration, compliance, and security		
Cloud service	•	• •
Select a chosen home region data center for your data processing environment	•	•
Monitor content creation, consumption, and publishing with user metrics	•	•
Data security and encryption	View full list	View full list
Meets industry, global, regional, and government certifications	View full list	View full list
Available in Microsoft national clouds	View full list	View full list
Data prep, modeling, and data visualization creation 🕐		
AI-powered data modeling using AutoML, Cognitive Services, and Azure Machine Learning		•
Creation of data visualizations, reports, and dashboards	•	•
Standard and big data prep and ETL	•	•
Access to a library of Power BI visuals and the custom visual SDK	•	•
Access to data connectors for cloud and on-premises data sources	•	•
Out-of-the-box visualizations, themes, and personalization options	•	•
Content consumption @		
Paginated reports provide fixed-layout documents optimized for printing and archiving		•
Analyze data in Microsoft Excel	•	•
Embed content in other interfaces like Teams, SharePoint, or other SaaS applications	•	•
View and interact with Power BI content	•	•
View and interact with Power BI content through the Power BI mobile app for iOS, Android, and Windows	•	•
Ask questions about data to get immediate answers and personalize definitions so Power BI understands your business language including acronyms.	•	•
Subscribe to reports for notifications about changes	•	•
View Power BI content in other interfaces $$	•	•

Capabilities		Dynamics 365 Applications ¹	Dynamics 365 Enterprise Applications ²
Run custom apps ³	Run standalone apps (canvas/standalone)	_	Custom apps within the same environment(s) as the licensed Dynamics 365 application(s)
Connect to your data	Standard connectors	•	•
	Premium connectors	•	•
	On premise data gateway	•	•
	Custom connectors	•	•
Store and manage data	Utilize Common Data Service	•	•
	Create and access custom entities	15 per application	•
	Dynamics 365 restricted entities use rights	Create, read, update and delete	Create, read, update and delete
Execute workflows	Microsoft Flow user rights	Within app context	Within app context
	(Classic CDS) Non real-time and real-time workflows	•	•
Infuse Al	Al Builder capacity add-on	\$	\$
PowerApps Portal use rights	Access standalone PowerApps Portals	-	Custom portals within the same environment(s) as the licensed Dynamics 365 application(s)

Scan the QR code to search additional premium connectors

