

Introduction to Power Apps - Session 2

20 Dec 2020, Talks academy



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AGENDA SLIDE

What we will cover today



01

Intro to Power Apps
Variables



02

Intro to Power Apps
Data Types



03

Intro to Power Apps
Collections



04

Intro to Power Apps
Connection, Data sources,
Delegation



05

Demos

House Keeping



6 pm IST - Start
of Session



Class Slides



Labs



Additional
Resources

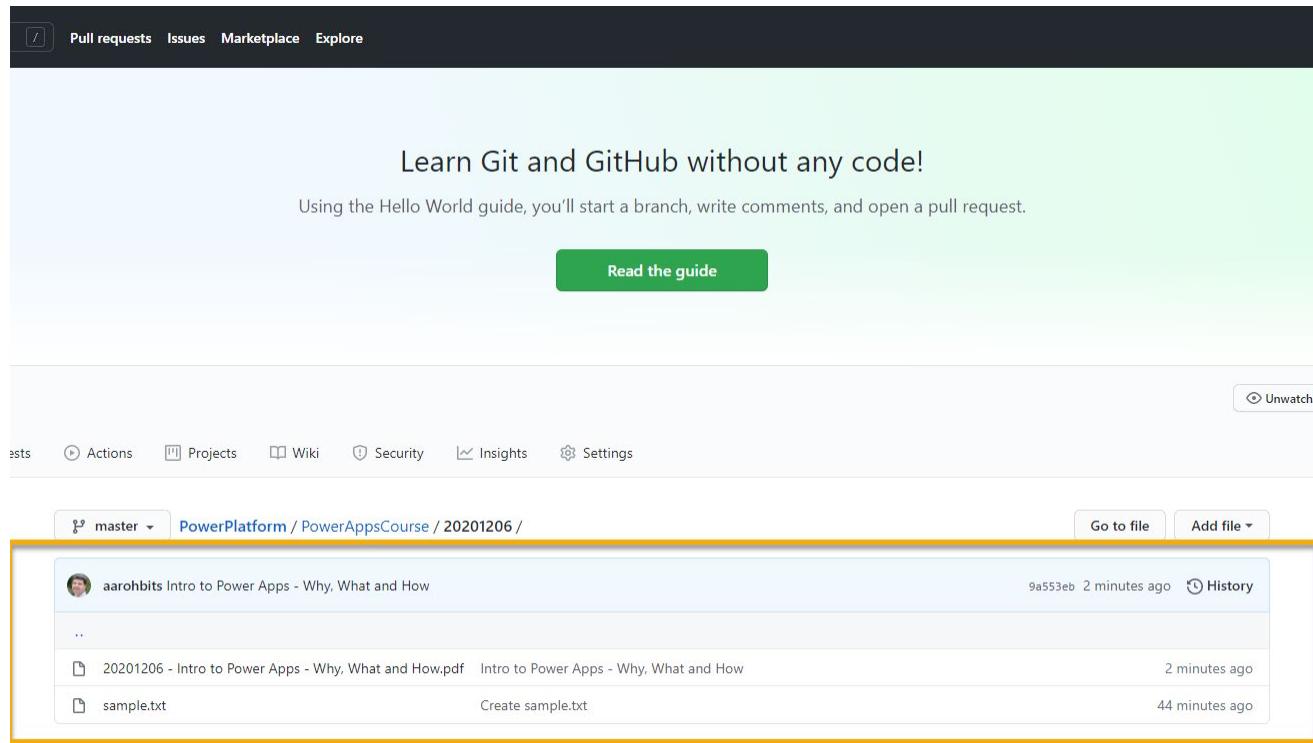


Video
Resources



Q & A

Location of Slides



- <https://github.com/aarohbits/PowerPlatform/tree/master/PowerAppsCourse/20201220>

Course Roadmap

Introduction to Power Apps

Introduction

Introduction on Power Apps.
Why, What & How

Connections

Using variables, collection,
data types, delegation
connections and different
data sources

Building Apps

Using Templates or build
from scratch. With
OneDrive, & SharePoint

Basics on Formulas,
Delegation, Search, Filter,
Patch function.

With Microsoft Teams,
Power Automate &
SharePoint Online

Building end to end solutions.
AI Builder & Mixed Reality.

Formulas

Integration

Real world

Low Code Concepts



**Declarative &
Imperative Logic**



Formulas



**Variables and
Collections**



Data Sources



**Controls &
Bindings**



Navigation

1. Declarative and Imperative Logic

- **Declarative logic (Excel, Power Apps)**
 - Define data flow dependencies between values.
 - Pull Changes
 - Logic automatically performed as value changes called as **recalculations**
 - For e.g., *Screen.Background = if (IsBlank(Name), Red, Green)*
- **Imperative logic (Visual Basic , C#, JavaScript)**
 - Defined Steps
 - Push Changes
 - Logic is event driven, executed once for each event
 - For e.g.,
private static void button_Click(object sender, EventArgs eventArgs)
{
 Screen.Background = if (IsBlank(Name), Red, Green)
}

2. Reference Access Sheets / Screen

A screenshot of Microsoft Excel. The formula bar at the top shows the cell reference `B2`, a dropdown arrow, a clear button (`X`), a checkmark button (`✓`), a formula icon (`fx`), and the formula `=Sheet1!A1`. Below the formula bar is a grid with columns labeled A, B, C, D and rows labeled 1, 2, 3, 4. Cell B2 is highlighted with a green border and contains the number 12. The ribbon at the bottom shows tabs for Sheet1 and Sheet2, with Sheet2 currently selected.

Excel

- Formulas can reference **any cell** in the workbook.
- Entire workbook is **recalculating** all the time, even if we can't see in screenshot

Power Apps

- Formulas can reference **any control** property.
- The entire app is **recalculating** all the time, even if we can't see in screenshot

A screenshot of the Power Apps Studio interface. On the left, a navigation pane titled "Screens" shows two screens: "Screen1" containing a "TextInput1" control, and "Screen2" containing a "Label1" control. On the right, the main area shows a formula bar with the formula `Text` followed by a dropdown arrow, an equals sign (`=`), a formula icon (`fx`), and the expression `<input>.Text`. Below the formula bar is a preview area showing a wireframe of a screen with four circular nodes connected by lines, with the number 12 displayed in the center node.

Excel Function in Power Apps

Abs	Collect	DateValue	ForAll	LookUp	Proper	Set	TimeValue
Acceleration	Color	Day	GroupBy	Lower	Radians	ShowColumns	TimeZoneOffset
Acos	ColorFade	Defaults	HashTags	Max	Rand	Shuffle	Today
Acot	ColorValue	Degrees	Hour	Mid	Refresh	Sin	Trim
AddColumns	Compass	Disable	If	Min	Remove	Sort	TrimEnds
And	Concat	Distinct	IsBlank	Minute	Removelf	SortByColumns	Ungroup
App	Concatenate	Download	IsEmpty	Mod	RenameColumns	Split	Update
Asin	Connection	DropColumns	IsMatch	Month	Replace	Sqrt	UpdateContext
Atan	Count	EditForm	IsNumeric	Navigate	Reset	StartsWith	UpdateIf
Atan2	Cos	Enable	IsToday	NewForm	ResetForm	StdevP	Upper
Average	Cot	EndsWith	Language	Not	Revert	Substitute	User
Back	CountA	Errors	Last	Now	RGB	SubmitForm	Validate
Blank	CountIf	EncodeUrl	LastN	Or	Right	Sum	Value
Calendar	CountRows	Exit	Launch	Param	Round	Switch	VarP
Char	DataSourceInfo	Exp	Left	Parent	RoundDown	Table	ViewForm
Clear	Date	Filter	Len	Patch	RoundUp	Tan	Weekday
ClearCollect	DateAdd	Find	Ln	Pi	SaveData	Text	
Clock	DateDiff	First	LoadData	PlainText	Search	ThisItem	
Coalesce	DateTimeValue	FirstN	Location	Power	Second	Time	

Imperative Functions

(Declarative and Imperative function)

Abs	Collect	DateValue	ForAll	LookUp	Proper	Set	TimeValue
Acceleration	Color	Day	GroupBy	Lower	Radians	ShowColumns	TimeZoneOffset
Acos	ColorFade	Defaults	HashTags	Max	Rand	Shuffle	Today
Acot	ColorValue	Degrees	Hour	Mid	Refresh	Sin	Trim
AddColumns	Compass	Disable	If	Min	Remove	Sort	TrimEnds
And	Concat	Distinct	IsBlank	Minute	Removelf	SortByColumns	Ungroup
App	Concatenate	Download	IsEmpty	Mod	RenameColumns	Split	Update
Asin	Connection	DropColumns	IsMatch	Month	Replace	Sqrt	UpdateContext
Atan	Count	EditForm	IsNumeric	Navigate	Reset	StartsWith	Updatelf
Atan2	Cos	Enable	IsToday	NewForm	ResetForm	StdevP	Upper
Average	Cot	EndsWith	Language	Not	Revert	Substitute	User
Back	CountA	Errors	Last	Now	RGBA	SubmitForm	Validate
Blank	CountIf	EncodeUrl	LastN	Or	Right	Sum	Value
Calendar	CountRows	Exit	Launch	Param	Round	Switch	VarP
Char	DataSourcesInfo	Exp	Left	Parent	RoundDown	Table	ViewForm
Clear	Date	Filter	Len	Patch	RoundUp	Tan	Weekday
ClearCollect	DateAdd	Find	Ln	Pi	SaveData	Text	
Clock	DateDiff	First	LoadData	PlainText	Search	ThisItem	
Coalesce	DateTimeValue	FirstN	Location	Power	Second	Time	

Variables

Variable Type	Scope	Description	Functions to Use
Global variables	App	Simplest to use. Holds a number, text string, Boolean, record, table, etc. that can be referenced from anywhere in the app.	<u>Set</u>
Context variables	Screen	Great for passing values to a screen, much like parameters to a procedure in other languages. Can be referenced from only one screen.	<u>UpdateContext</u> <u>Navigate</u>
Collections	App	Holds a table that can be referenced from anywhere in the app.	Collect <u>ClearCollect</u>

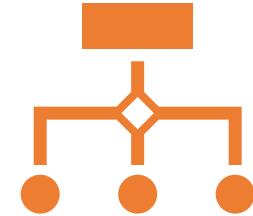
Collections



Why **Collections?**



Locally store data in your
apps



Group of items that are
similar such as **SPO**

Collections functions



How to use?



Collect



Clear



Clear Collect

Data Types

Data Type	Description	Examples
Boolean	A true or false value. Can be used directly in If, Filter and other functions without a comparison.	<i>True</i>
Color	A color specification, including an alpha channel.	Color.Red ColorValue("#102030") RGBA(255, 128, 0, 0.5)
Currency	A currency value that's stored in a floating-point number. Currency values are the same as number values with currency-formatting options.	123 4.56
Date	A date without a time, in the time zone of the app's user.	Date(2019, 5, 16)
DateTime	A date with a time, in the time zone of the app's user.	DateTimeValue("May 16, 2019 1:23:09 PM")
GUID	A <u>Globally Unique Identifier</u> .	GUID() GUID("123e4567-e89b-12d3-a456-426655440000")
Hyperlink	A text string that holds a hyperlink.	"https://powerapps.microsoft.com"

Data Types

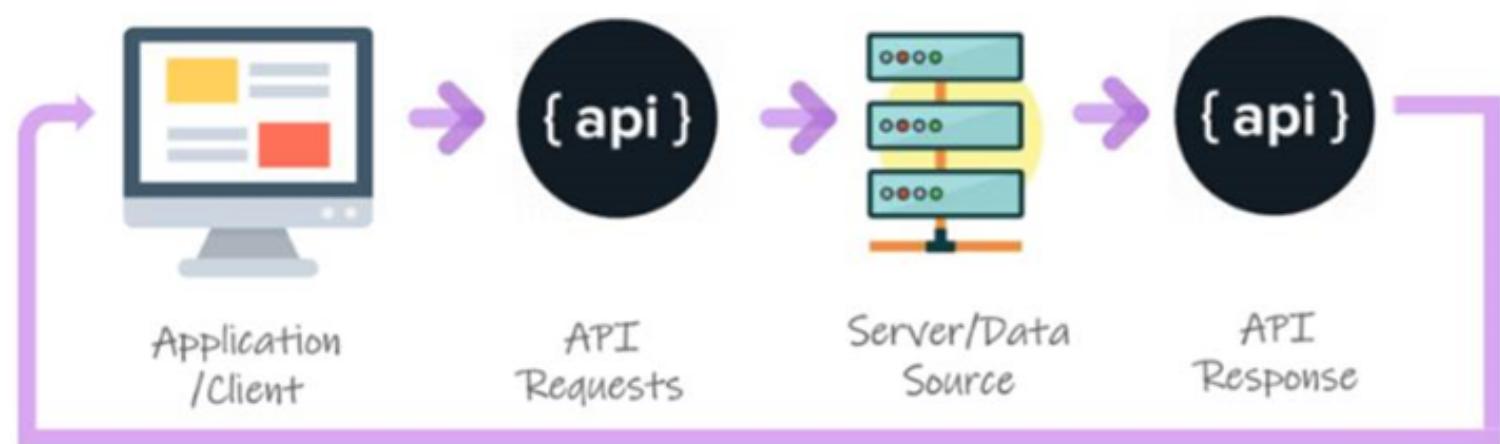
Data Type	Description	Examples
Image	A Universal Resource Identifier (URI) text string to an image in .jpeg, .png, .svg, .gif, or other common web-image format.	MyImage added as an app resource "https://northwindtraders.com/logo.jpg" "appres://blobmanager/7b12ffa2..."
Media* 1. Browser ~ supports 100 MB 2. Mobile ~ supports 30-70 MB	A URI text string to a video or audio recording.	MyVideo added as an app resource "https://northwindtraders.com/intro.mp4" "appres://blobmanager/3ba411c..."
Number	A floating-point number.	123 -4.567 8.903e121
Option set	A choice from a set of options, backed by a number. This data type combines a localizable text label with a numeric value. The label appears in the app, and the numeric value is stored and used for comparisons.	ThisItem.OrderStatus

Data Types

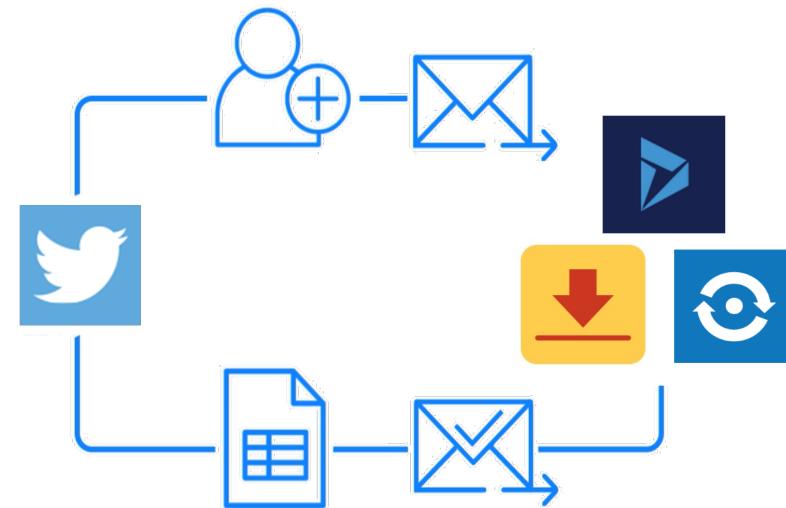
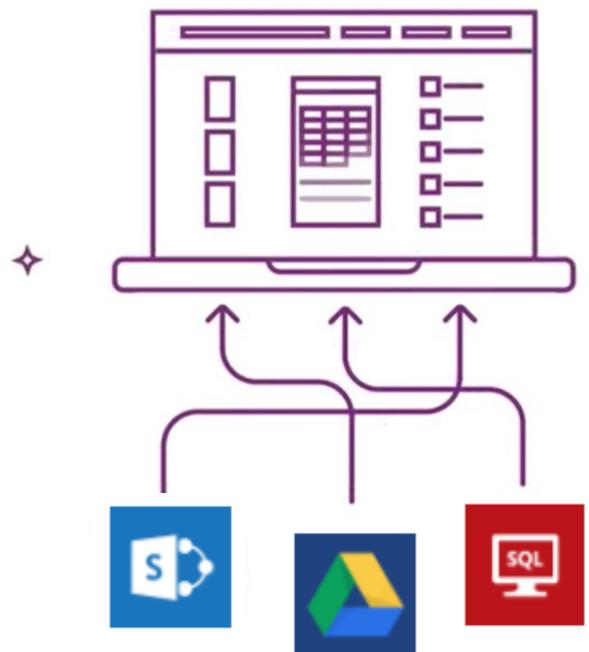
Data Type	Description	Examples
Record	A record of data values. This compound data type contains instances of other data types that are listed in this topic. More information: Working with tables .	{ Company: "Northwind Traders", Staff: 35, NonProfit: false }
Record reference	A reference to a record in an entity. Such references are often used with polymorphic lookups. More information: Working with references .	First(Accounts).Owner
Table	A table of records. All of the records must have the same names for their fields with the same data types, and omitted fields are treated as <i>blank</i> . This compound data type contains instances of other data types that are listed in this topic. More information: Working with tables .	Table({ FirstName: "Sidney", LastName: "Higa" }, { FirstName: "Nancy", LastName: "Anderson" })
Text	A Unicode text string.	"Hello, World"
Time	A time without a date, in the time zone of the app's user.	Time(11, 23, 45)
Two option	A choice from a set of two options, backed by a Boolean value. This data type combines a localizable text label with a boolean value.	ThisItem.Taxable

What's an API?

- API (Application Programming Interface) that allows **two** applications to talk to each other.
- A user initiates **Power Apps (Application)** to get a signature leveraging **Adobe Sign**, this will be the API call from **Application** (Power Apps) and **Adobe Sign** as a data source.



A connector is a wrapper around an API that allows the underlying service to talk to Power Automate and Power Apps



Power Platform Connectors Reference



POWER PLATFORM HAS 2 TYPES
OF CONNECTORS



STANDARD *
FREE FOR OFFICE 365 PLANS



PREMIUM **
COMES WITH \$ ADDITIONAL COST

Power Platform Connectors Reference

Tier	Release Status	Product	Publisher
<u>Standard</u>	<u>Preview</u>	<u>Power Apps</u>	<u>Microsoft</u>
<u>Premium</u>	<u>Production</u>	<u>Power Automate</u>	<u>Non-Microsoft</u>
		<u>Logic Apps</u>	

[List of all Power Apps connectors | Microsoft Docs](#)

Public connectors
available to all users

Custom connectors
built for your organization

Popular connectors



Office 365 Outl...



OneDrive for B...



Office 365 Users



SharePoint

Recently added or updated connectors



Instagram



MailChimp



Trello



Project Online

Custom connectors



AppreciateWeb...



GitHub Demo



HolidayApi



AppServiceApi

Types of data sources

Connect your apps to data

Data is at the core of every app. We make it easy to get your data into your apps with more than 200 connectors for many popular cloud services and even your on-premises data.



SharePoint Online



Office 365



Dynamics 365



Microsoft Azure



OneDrive



Excel



Dropbox



Salesforce



Data Gateway



SQL Server



Custom APIs



Slack

Kind of Data sources

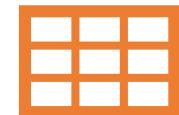
Data sources can be connected to a **cloud service**, or they can be **local to an app**.



Connected data
sources



Local data
sources



Tables



Collections

Excel vs SharePoint vs Dataverse

Excel vs SharePoint vs Dataverse

PRODUCT FEATURES	Excel	SharePoint	Dataverse
Ease of set up	✓	✓	✓
Backup	✓	✓	✓
Connectors.	✗	✗	✓
Security .	✗	✓	✓
Scalability	✗	✗	✓
Relational Database	✗	✗	✓

Name Changes (Dec 2020)

PRODUCT Names

Names Changes

Power Apps

Entity is not TABLES and filed us now COLUMN

Power Automate

Cloud flows & Desktop flows

Dataverse

Entity is not TABLES and filed us now COLUMN

The screenshot shows the Power Automate desktop application interface. On the left, there's a sidebar with options like Home, Action items, My flows, Create, Template, Connectors, Data, and Monitor. The main area has a blue header bar with a search bar. Below it, there's a section titled "Three ways to make a flow" with a "Start from blank" button. A prominent blue modal window is overlaid on the screen, containing the text: "We've got some new names! Cloud flows are the instant, automated, and scheduled flows you create using connectors. Desktop flows were previously UI flows—make them using Power Automate Desktop." At the bottom right of the modal is a "Got it" button. The entire modal is highlighted with a yellow rectangular border.

The screenshot shows the Microsoft Flow blade within the Power BI service. At the top, it displays the environment name "arohmvp365 (default)". Below the header, there's a purple banner with the text "Entity terminology changes". The main content area contains the message: "Entity is now table and field is now column. [Learn more](#)". At the bottom right of this message area is a purple "Got it" button. This message area is also highlighted with a yellow rectangular border.

Power Apps – Naming Conventions

[PowerApps Canvas App Coding Standards and Guidelines](#)

<https://aka.ms/powerappscanvasguidelines>

Here is a good example. To choose names

The following table shows the abbreviations for common controls.

Control name	Abbreviation
button	btn
camera control	cam
canvas	can
card	crd

6

collection	col
combo box	cmb
dates	dte
drop down	drp
form	frm
gallery	gal
group	grp
header page shape	hdr
html text	htm
icon	ico
image	img
label	lbl
page section shape	sec
shapes (rectangle, circle, and so on)	shp
table data	tbl
text input	txt
timer	tim

Delegation



Helps improves
performance



Limit amount of data
movement over network



Delegates as much data
processing down to **data**
layer.



Instead retrieving all data
and process **locally for**
better performance

[PowerApps – Delegation with example \(500 records limit\) – App's Performance – Bansal Blogs – Dynamics 365, PowerApps, Microsoft Flows, Power BI \(sachinbansal.blog\)](#)

Delegation



Power Apps is **designed for the Mobile devices.**



Common data processing operations such as **sorting, filtering, transforming** handled by delegation

Understand delegation in a canvas app



Minimize the **amount of data** that must be brought to your **device**



Only the **first set of records** can be retrieving



Dramatically reduce the **processing power, memory, and network bandwidth** that your app need



Snappier response times for your users, **even on phones connected via a cellular network.**



PowerApps formulas meets the need to **minimize data** moving over the network



Power Apps will delegate processing of **data to the data source (CDS, SharePoint, SQL Server)**



Rather than moving the data to the app for processing locally.

Understand delegation in a canvas app



Working with **large data sets** requires using **data sources** and **formulas** that can be delegated



only way to keep your app performing well.



Small data sets (fewer than 500 records), you can use any data source and formula



app can process data locally, if the formula can't be delegated

Delegation

SharePoint - Connectors | Microsoft Docs

https://docs.microsoft.com/en-us/connectors/sharepointonline/

Filter by title

- Cloudmiserive NLP
- Cloudmiserive PDF
- Cloudmiserive Video and Media
- Cloudmiserive Virus Scan
- Cognito Forms
- Commerciant
- Common Data Service
- Common Data Service (current environment)
- Company Connect
- Computer Vision API
- Connect2All
- Connective eSignatures
- Content Conversion
- Content Moderator
- Corda Blockchain [DEPRECATED]
- COSMO Bot
- CPQSync
- CRM Bot
- Custom Vision

① Note

SharePoint types that map to Power Apps as complex often have subfields that map to basic types such as text and number.

Power Apps delegable functions and operations for SharePoint

The following Power Apps operations, for a given data type, may be delegated to SharePoint for processing (rather than processing locally within Power Apps).

Item	Number	Text	Boolean	DateTime	Complex [1]
Filter	Yes	Yes	Yes	Yes	Yes
Sort	Yes	Yes	Yes	Yes	No
SortByColumns	Yes	Yes	Yes	Yes	No
Lookup	Yes	Yes	Yes	Yes	Yes
=	Yes	Yes	Yes	Yes	Yes
<, <=, >, >=	Yes [2]	No	No	Yes	Yes
StartsWith	-	Yes	-	-	Yes
IsBlank	-	No [3]	-	-	No

Is this page helpful?

Yes No

In this article

- Known issues and limitations
- Power Apps data type mappings
- Power Apps delegable functions and operations for SharePoint**
- Connector in-depth
- Creating a connection
- Throttling Limits
- Actions
- Triggers
- Definitions

Delegation

[Power Apps delegable functions and operations for Dataverse](#)

Power Apps delegable functions and operations for Dataverse

These Power Apps operations, for a given data type, may be delegated to Dataverse for processing (rather than processing locally within Power Apps).

Item	Number [1]	Text [2]	Choice	DatTime [3]	Guid
Filter	Yes	Yes	Yes	Yes	Yes
Sort	Yes	Yes	No	Yes	-
SortByColumns	Yes	Yes	No	Yes	-
Lookup	Yes	Yes	Yes	Yes	Yes
=, <>	Yes	Yes	Yes	Yes	Yes
<, <=, >, >=	Yes	Yes	No	Yes	-
And/Or/Not	Yes	Yes	Yes	Yes	Yes
StartsWith	-	Yes	-	-	-
IsBlank	Yes [4]	Yes [4]	No [4]	Yes [4]	Yes
Sum, Min, Max, Avg	Yes [5]	-	-	No	-

Transforming your business is challenging



Budget
constraints



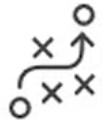
Time & Resource
constraints



Business
expectations



Paper
processes



Complex
processes



IT/Business
partnership



No BI
integration



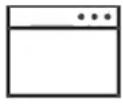
“Shadow IT”
governance



Tools to create
the right culture



Security &
Compliance



Legacy system
maintenance



Difficult to find
insights



Track & measure
performance



Leverage existing
technology



Integrate data from
the right sources

What is Line of Business Application?



Built **specifically** to serve
an organization's
business needs



Built **specifically** for an
industry.



Expensive to maintain



Does not keep up with
organization's need for
change

Challenges



Line of business Apps are **complicated**



Users struggle with vast number of systems in an organization



Lack of **visibility**



Users are looking for **mobile first**



Easy to use



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

The Dilemma



Buy off-the-shelf

Will this app solve all your problems?

What do you do when the software does not
solve all your problems?



Building a custom application

How much time do you have?

Who is going to *Maintain in long term*?

Microsoft Power Platform

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

Innovation anywhere. Unlocks value everywhere.



Power BI
Business analytics



Power Apps
Application development



Power Automate
Process automation



Power Virtual Agents
Intelligent virtual agents



Data connectors



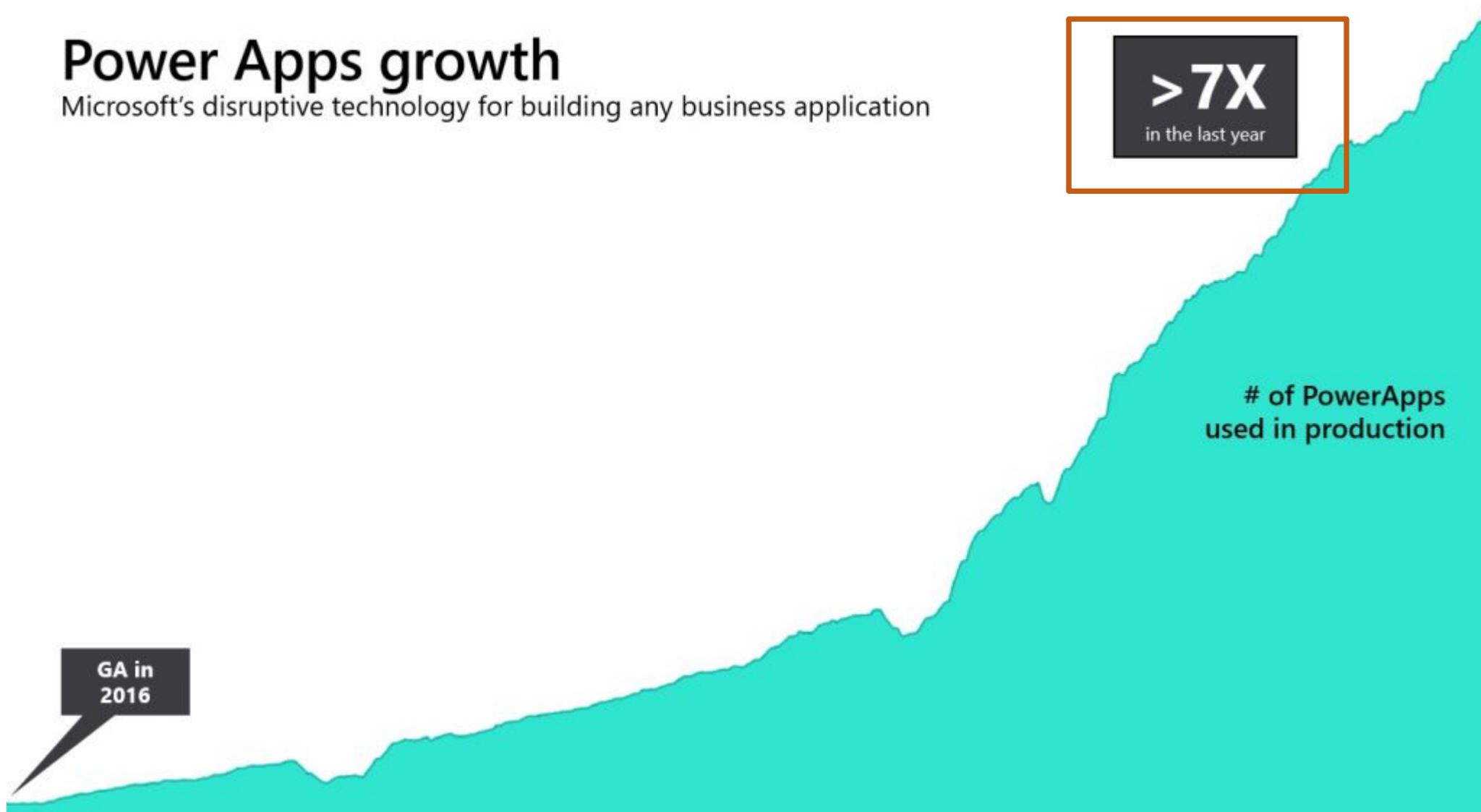
AI Builder

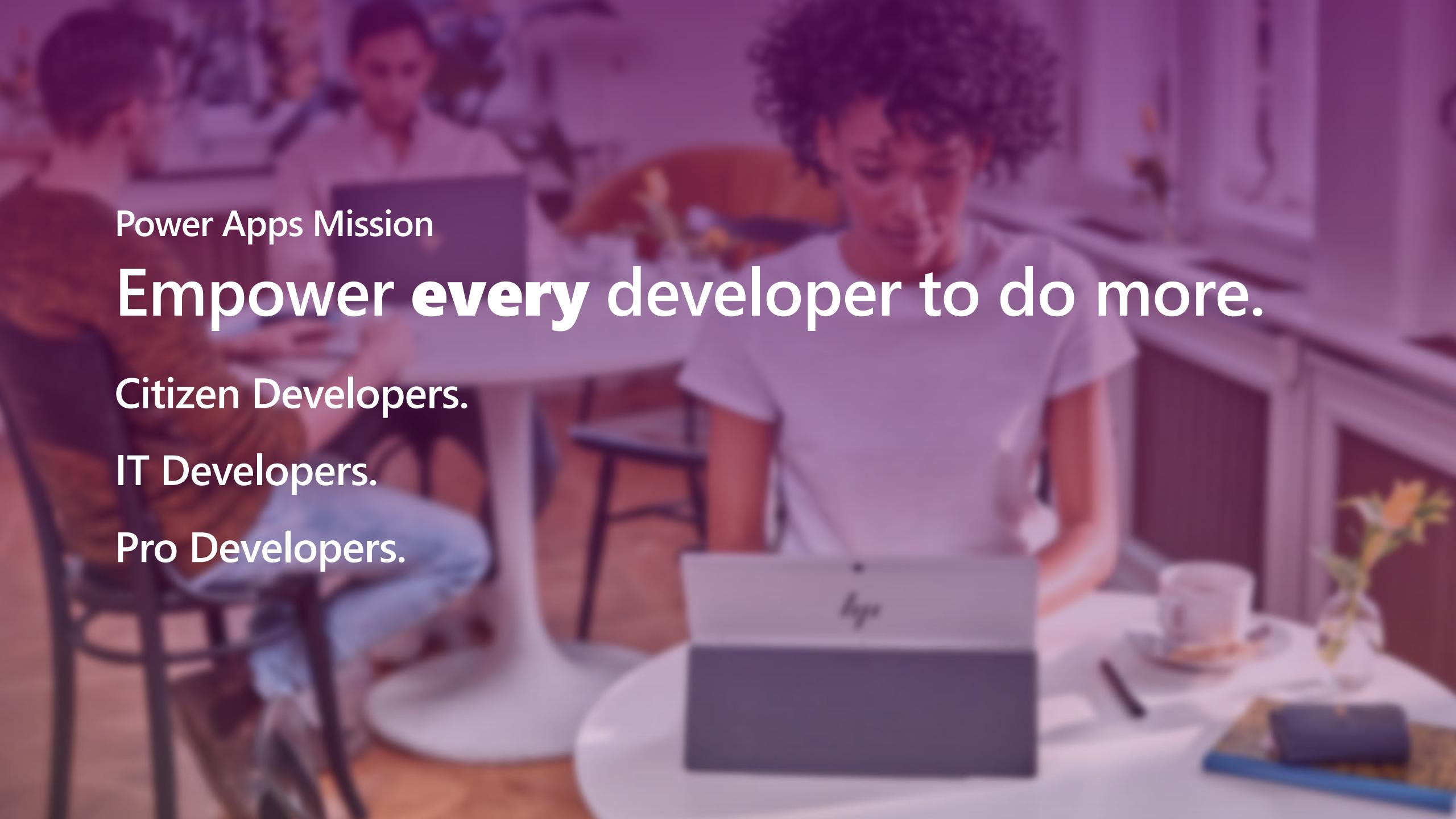


Common Data Service

Power Apps growth

Microsoft's disruptive technology for building any business application



A blurred background image showing a group of diverse people in an office environment. Some are standing and talking, while others are seated at desks working on laptops. The scene conveys a sense of collaboration and technology use.

Power Apps Mission

Empower **every developer to do more.**

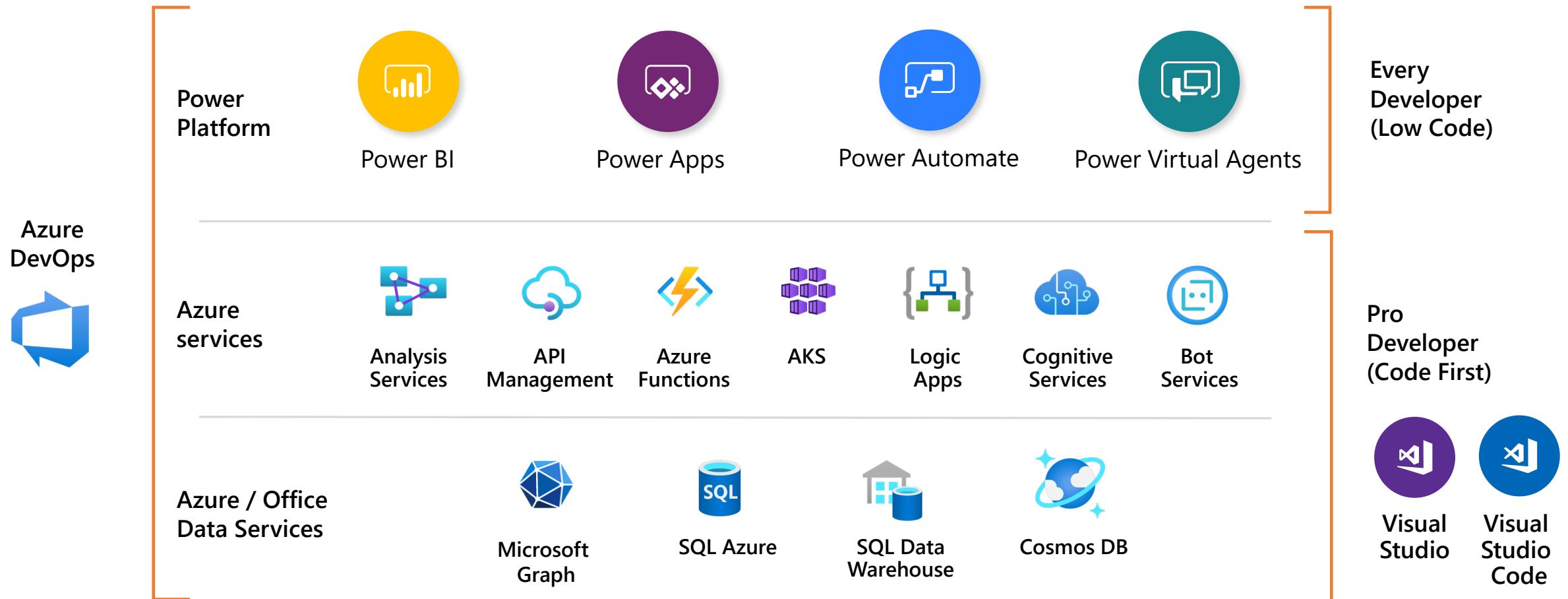
Citizen Developers.

IT Developers.

Pro Developers.

Develop faster than ever before with the Microsoft Platform

Pro Developers + Power Platform = No Limits

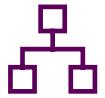




Power Apps: a low-code approach to building apps



Easily build apps with a full featured low-code / no-code platform



Connect to your existing data with **300+** pre-built connectors and custom connectors



Store your data in the **Dataverse** (formerly Common Data Service)



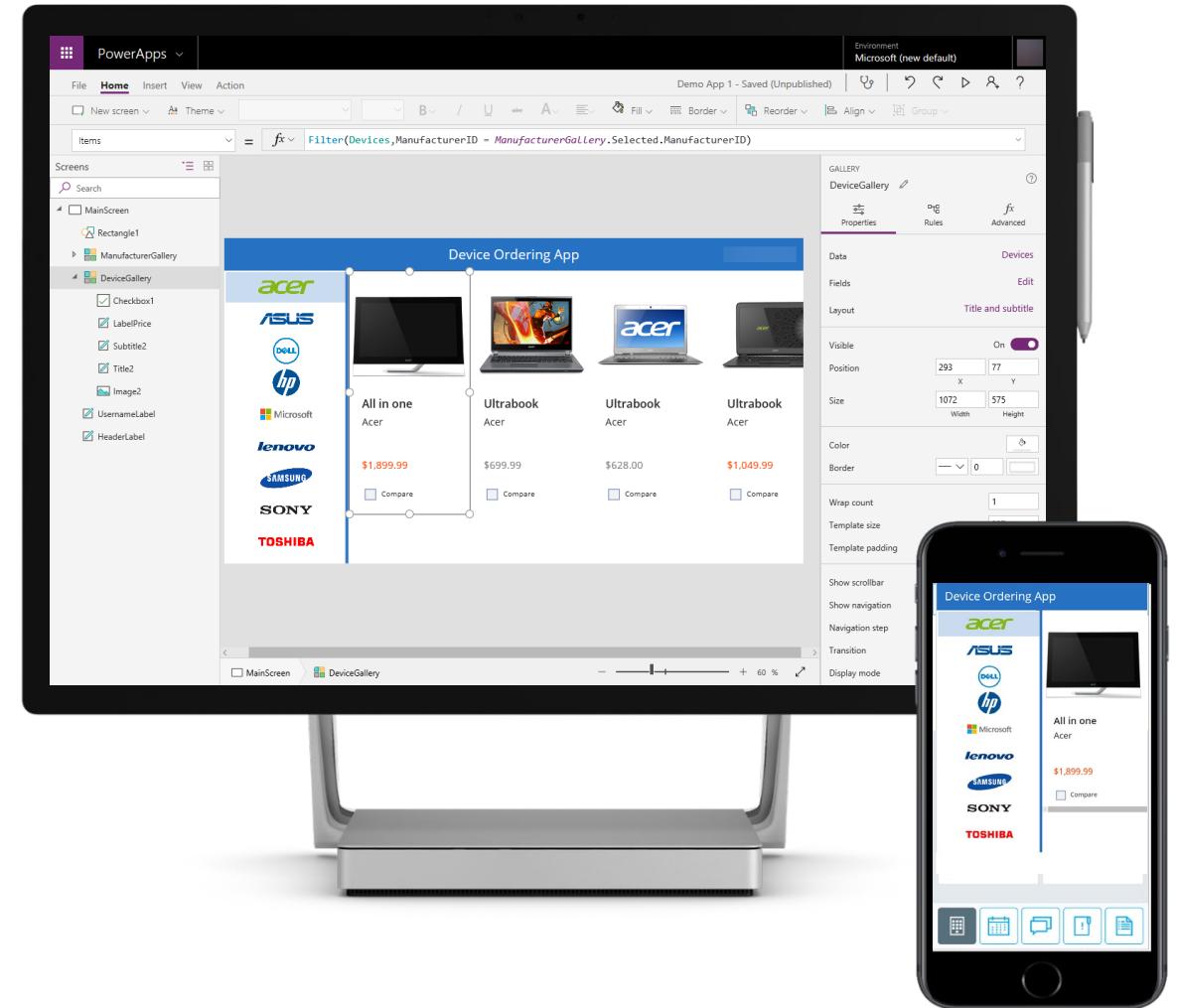
Integrated with **Office 365, Azure, Dynamics 365, and Power BI**



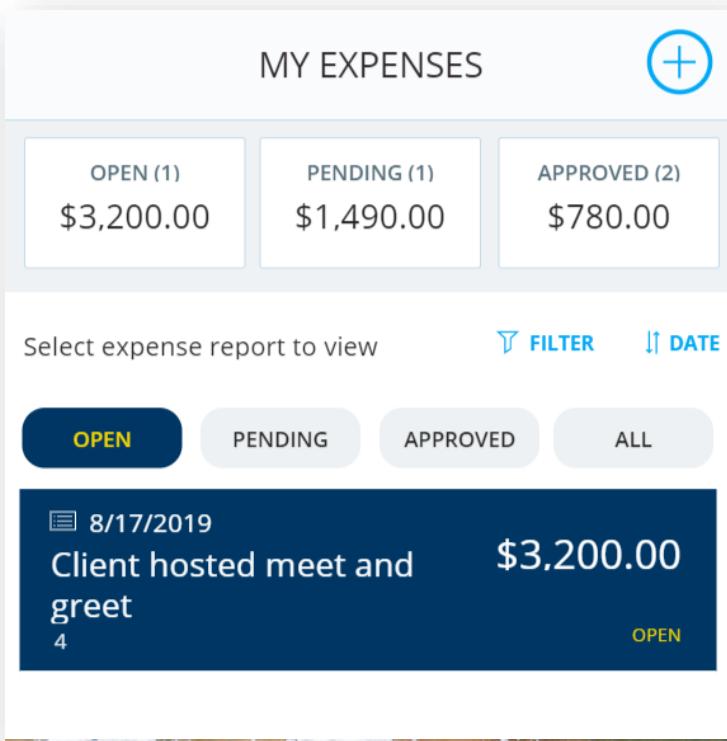
Strong **enterprise governance & security**



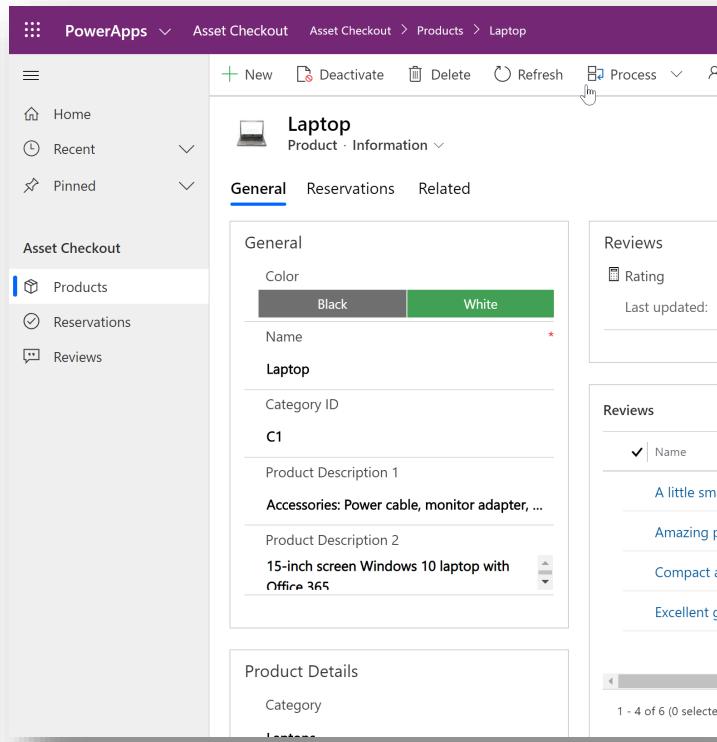
Pro-dev extensibility



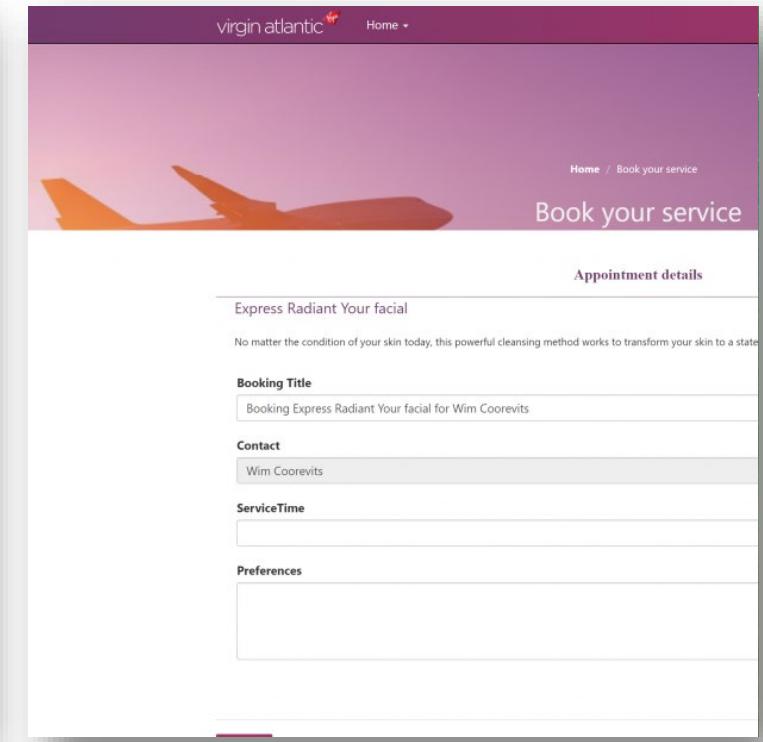
Type of Power Apps



Canvas Apps



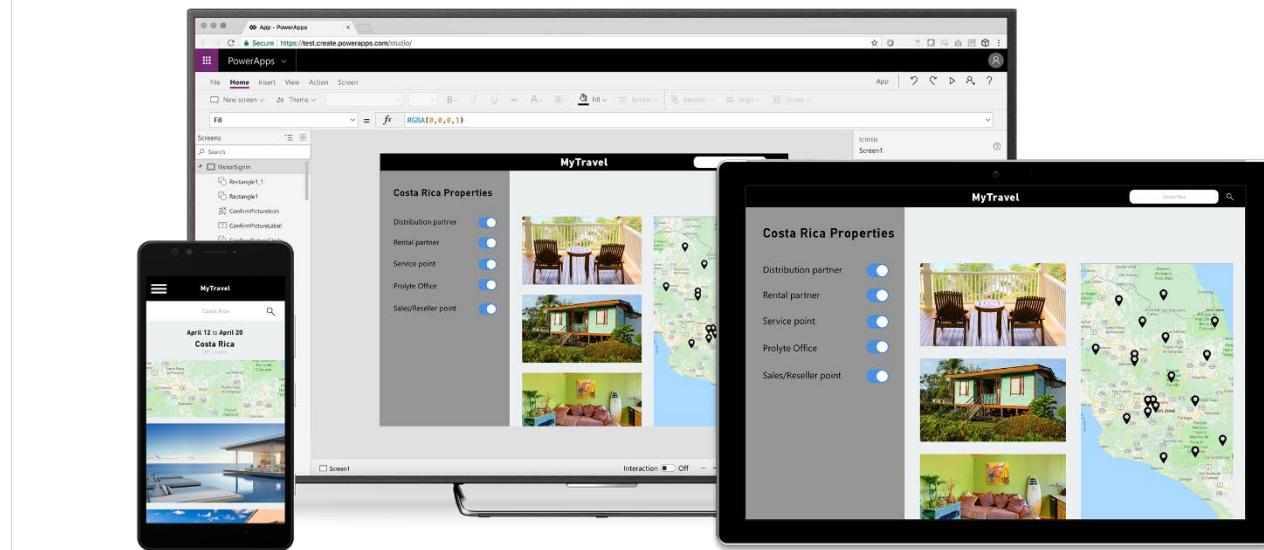
Model Driven Apps



Portals

Put your data to work with the **Dataverse**

- “Out-of-the-box” data store for your apps
- Advanced security, business logic and rules
- Jumpstart apps with the **Common Data Model**
- Dynamics 365, Office 365, and Azure data is available, augmented by industry partners
- Extend to your own needs and integrate across your apps and services



AI Builder: intelligent apps and processes



Low code AI solutions for **Power Platform** leveraging the power of **Microsoft AI**



Bring your data from **Dataverse**, **ADLSv2** or 300+ pre-built connectors and custom connectors



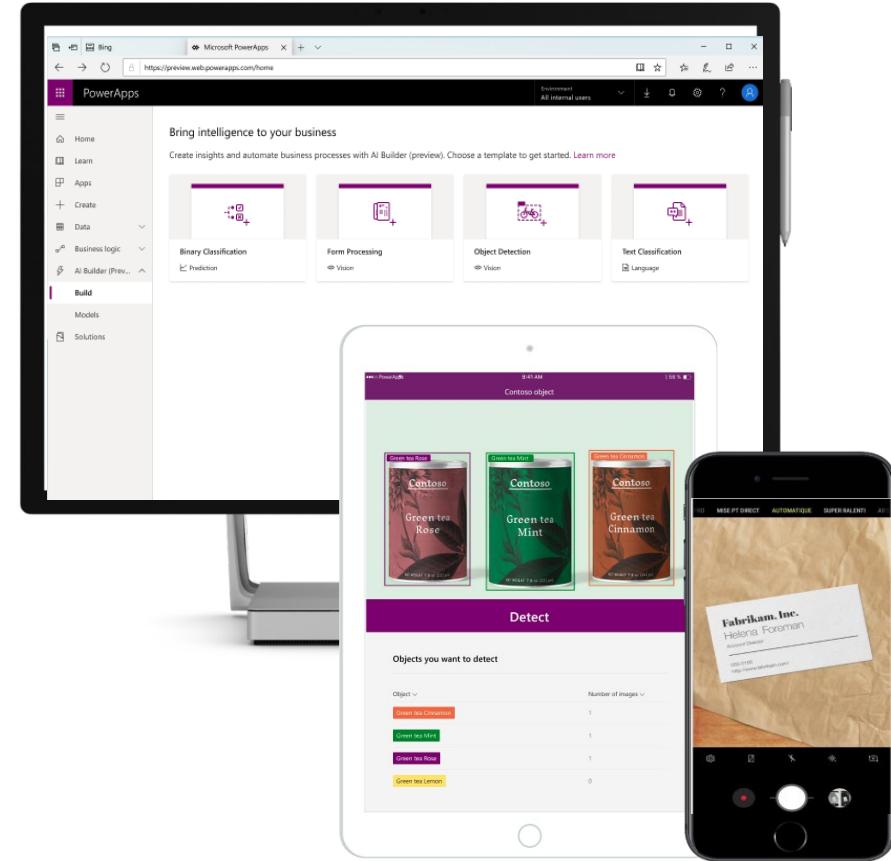
Customize Dynamics 365 **AI offerings to specific schema and processes** with AI Builder



Predictions available in **Dataverse** for Power Platform and Dynamics



Pro-Dev extensibility and governance



Mixed Reality

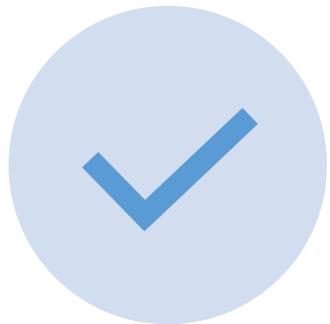
Take measurements



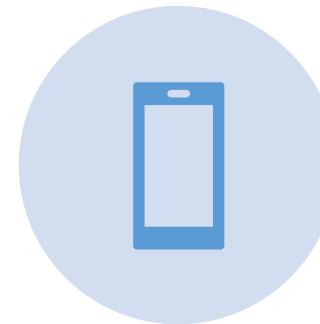
Validate fit before work begins



Power Platform License is COMPLEX



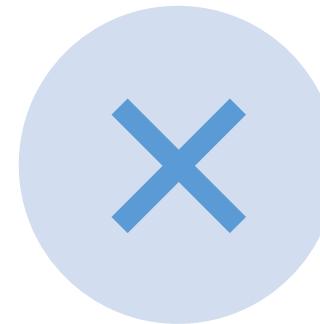
Frequent changes



Newer products with
existing Power Platform



Office 365 and Dynamics
365 and Azure



Standard Connector &
Premium Connector

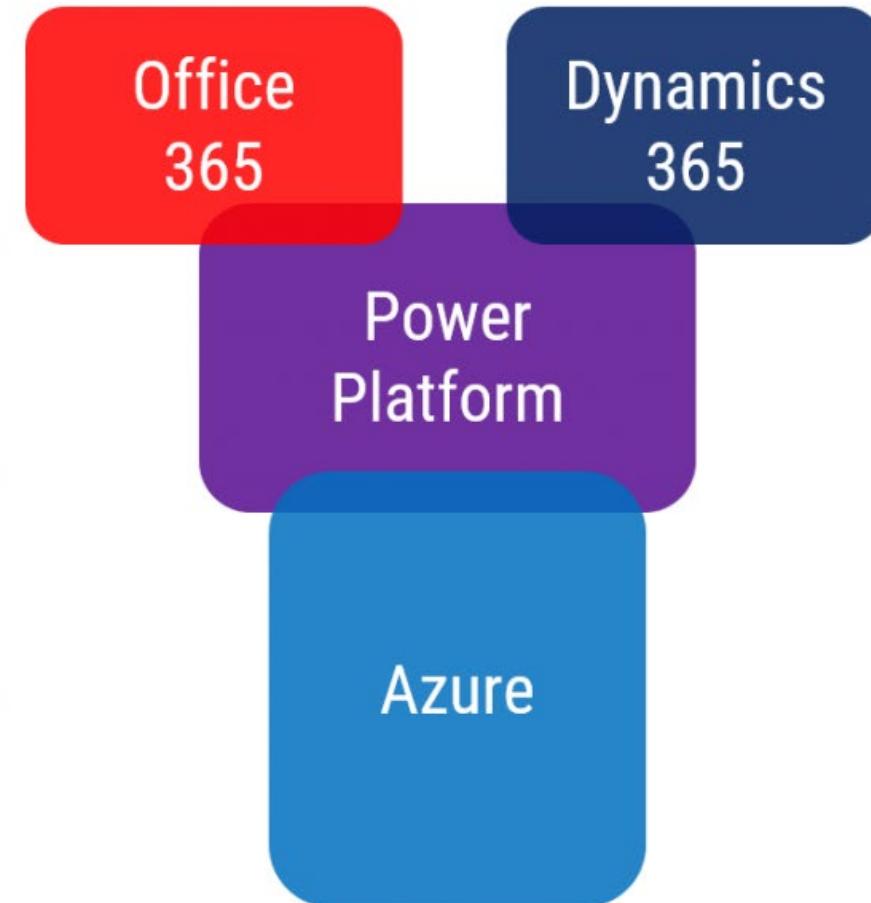
Power Platform License is COMPLEX

SaaS
(Software as a Service)

aPaaS
(Application Platform as a Service)

PaaS
(Platform as a Service)

IaaS
(Infrastructure as a Service)

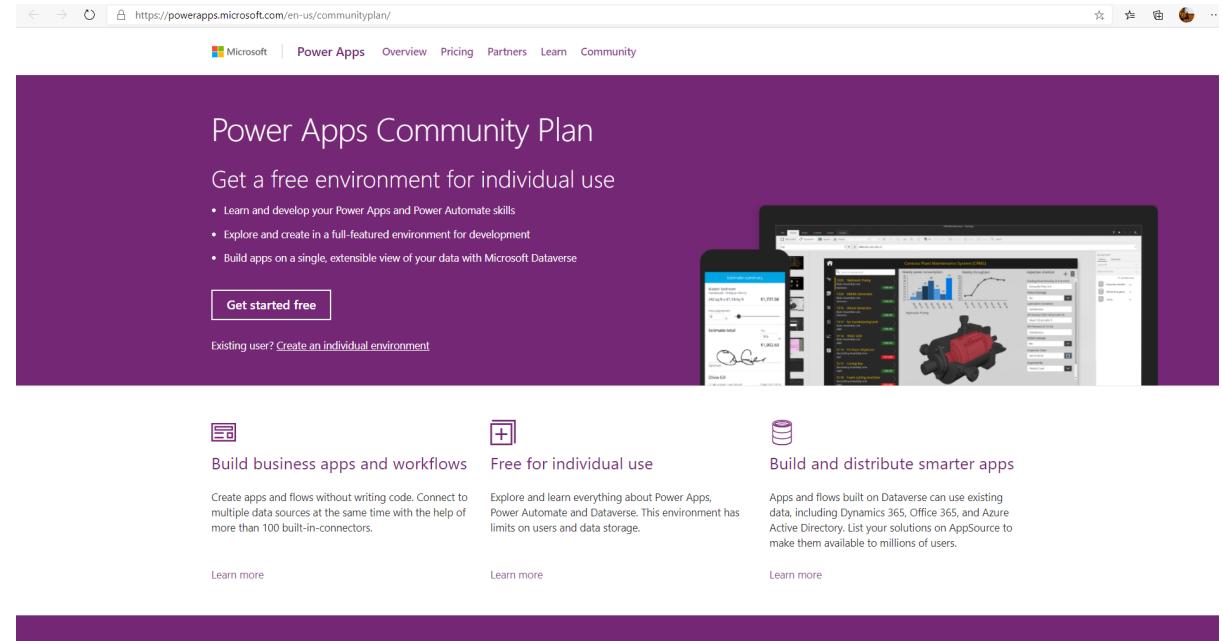


Power Apps / Power Platform – Free For Office 365 Plans

- Power Apps per **app plan**: **US\$ 10** per user/app/month
 - Allows you to access **two** custom Power Apps (**Canvas app** or **Model-driven app**) and **one Portal app**
 - All apps must be in the same Dataverse environment.
- Power Apps per **user plan**: **US\$ 40** per user/month
 - Allows you to access an **unlimited number of Power Apps** (Canvas/Model-driven/Portal) in your tenant.
 - Can also be used for accessing Canvas apps shared to guests in another tenant
- Power Apps **portal**
 - Power Apps portals login capacity add-on, 100 logins per month: **US\$200**
 - Power Apps portals page view capacity add-on, 100,000 page views per month: **US\$100**
 - **Internal users** must be licensed separately, either via **Power Apps** or **Dynamics 365** **licenses**.
- References
 - [Official Microsoft Power Apps pricing](#)
 - [Official Power Portals FAQ](#)
 - [Blog: Price points of Power Platform](#)

Power Apps / Power Automate – Community Plan

- Get a free environment for individual use
 - Learn and develop your **Power Apps and Power Automate** skills
 - Explore and create in a **full-featured** environment for development
 - Build apps on a **single**, extensible view of your data with **Microsoft Dataverse**



[Power Apps Community Plan | Microsoft Power Apps](#)

“Low Code” Development With Power Apps and Power Automate

Low Code Concepts



Declarative &
Imperative Logic



Formulas



Variables and
Collections



Data Sources



Controls &
Bindings



Navigation

1. Declarative and Imperative Logic

- **Declarative logic (Excel, Power Apps)**
 - Define data flow dependencies between values.
 - Pull Changes
 - Logic automatically performed as value changes called as **recalculations**
 - For e.g., *Screen.Background = if (IsBlank(Name), Red, Green)*
- **Imperative logic (Visual Basic , C#, JavaScript)**
 - Defined Steps
 - Push Changes
 - Logic is event driven, executed once for each event
 - For e.g.,
private static void button_Click(object sender, EventArgs eventArgs)
{
 Screen.Background = if (IsBlank(Name), Red, Green)
}

2. Reference Access Sheets / Screen

A screenshot of Microsoft Excel. The formula bar at the top shows the cell reference "B2" and the formula "=Sheet1!A1". The main grid shows a 4x4 table. Row 1 has columns A, B, C, D. Row 2 has columns A, B, C, D. Cell B2 contains the value "12". The ribbon at the bottom shows tabs for "Sheet1" and "Sheet2", with "Sheet2" being the active tab.

Excel

- Formulas can reference **any cell** in the workbook.
- Entire workbook is **recalculating** all the time, even if we can't see in screenshot

Power Apps

- Formulas can reference **any control** property.
- The entire app is **recalculating** all the time, even if we can't see in screenshot

A screenshot of the Power Apps Studio interface. On the left, a navigation pane titled "Screens" shows two screens: "Screen1" containing a "TextInput1" control, and "Screen2" containing a "Label1" control. On the right, the main area shows a formula bar with the expression "Text" followed by an equals sign and "fx", and the formula "TextInput1.Text". Below the formula bar is a preview area showing a wireframe of a screen with a single label containing the value "12".

Excel Function in Power Apps

Abs	Collect	DateValue	ForAll	LookUp	Proper	Set	TimeValue
Acceleration	Color	Day	GroupBy	Lower	Radians	ShowColumns	TimeZoneOffset
Acos	ColorFade	Defaults	HashTags	Max	Rand	Shuffle	Today
Acot	ColorValue	Degrees	Hour	Mid	Refresh	Sin	Trim
AddColumns	Compass	Disable	If	Min	Remove	Sort	TrimEnds
And	Concat	Distinct	IsBlank	Minute	Removelf	SortByColumns	Ungroup
App	Concatenate	Download	IsEmpty	Mod	RenameColumns	Split	Update
Asin	Connection	DropColumns	IsMatch	Month	Replace	Sqrt	UpdateContext
Atan	Count	EditForm	IsNumeric	Navigate	Reset	StartsWith	UpdateIf
Atan2	Cos	Enable	IsToday	NewForm	ResetForm	StdevP	Upper
Average	Cot	EndsWith	Language	Not	Revert	Substitute	User
Back	CountA	Errors	Last	Now	RGB	SubmitForm	Validate
Blank	CountIf	EncodeUrl	LastN	Or	Right	Sum	Value
Calendar	CountRows	Exit	Launch	Param	Round	Switch	VarP
Char	DataSourceInfo	Exp	Left	Parent	RoundDown	Table	ViewForm
Clear	Date	Filter	Len	Patch	RoundUp	Tan	Weekday
ClearCollect	DateAdd	Find	Ln	Pi	SaveData	Text	
Clock	DateDiff	First	LoadData	PlainText	Search	ThisItem	
Coalesce	DateTimeValue	FirstN	Location	Power	Second	Time	

Imperative Functions

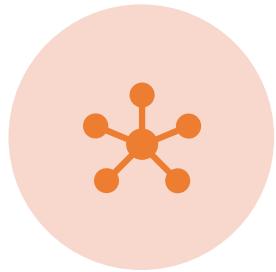
(Declarative and Imperative function)

Abs	Collect	DateValue	ForAll	LookUp	Proper	Set	TimeValue
Acceleration	Color	Day	GroupBy	Lower	Radians	ShowColumns	TimeZoneOffset
Acos	ColorFade	Defaults	HashTags	Max	Rand	Shuffle	Today
Acot	ColorValue	Degrees	Hour	Mid	Refresh	Sin	Trim
AddColumns	Compass	Disable	If	Min	Remove	Sort	TrimEnds
And	Concat	Distinct	IsBlank	Minute	Removelf	SortByColumns	Ungroup
App	Concatenate	Download	IsEmpty	Mod	RenameColumns	Split	Update
Asin	Connection	DropColumns	IsMatch	Month	Replace	Sqrt	UpdateContext
Atan	Count	EditForm	IsNumeric	Navigate	Reset	StartsWith	Updatelf
Atan2	Cos	Enable	IsToday	NewForm	ResetForm	StdevP	Upper
Average	Cot	EndsWith	Language	Not	Revert	Substitute	User
Back	CountA	Errors	Last	Now	RGBA	SubmitForm	Validate
Blank	CountIf	EncodeUrl	LastN	Or	Right	Sum	Value
Calendar	CountRows	Exit	Launch	Param	Round	Switch	VarP
Char	DataSourcesInfo	Exp	Left	Parent	RoundDown	Table	ViewForm
Clear	Date	Filter	Len	Patch	RoundUp	Tan	Weekday
ClearCollect	DateAdd	Find	Ln	Pi	SaveData	Text	
Clock	DateDiff	First	LoadData	PlainText	Search	ThisItem	
Coalesce	DateTimeValue	FirstN	Location	Power	Second	Time	

Benefits of Power Apps



SPEED



STREAMLINE
DEVELOPMENT



EASIER APP
CREATION

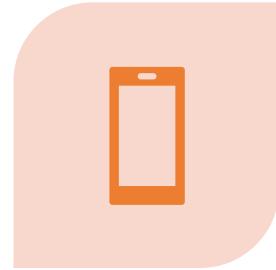


EASY TO USE
CONNECTORS

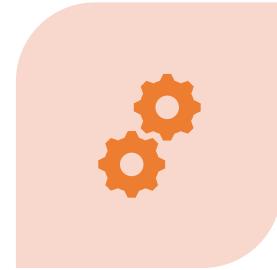
Benefits of Power Apps



DEEP OFFICE 365
INTEGRATION



MOBILE READY



INTEGRATION WITH
POWER AUTOMATE



LOW COST

Demo

Maker Portal Power Apps

| YOU HELD THROUGH ! |



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