



# 2025 DYNAMICS CON

# Canvas Apps vs. Model Driven Apps

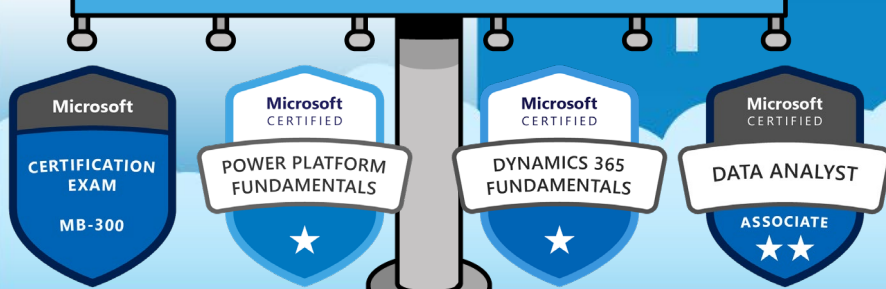


# Dan Edwards, CPA

Managing Director @Crowe LLP  
Adjunct Professor @ Vanguard University



- 35+ years specializing in technology solutions
- Focused on financial and operational solutions
- Experienced with many ERP, Reporting and BI solutions
- Active with many D365/Power Platform user groups



# Kent Nielsen

Senior Manager @Crowe LLP

- Over 12 years providing implementation and technology strategy & support
- Specializes in manufacturing, supply chain management, and digital transformation
- Experienced with ERP, WMS, Power Platform, and D365 CE applications
- Loves wakeboarding and snowboarding



# Agenda

- Overview of Power Platform
- Canvas app
- Model-driven app
- Canvas vs. Model-Driven App
- Comparison of Power Apps Dev Experience
- Guidance on selecting your Power Apps approach
- Demo
- Q&A





# Session Objectives



Describe the conceptual differences between Canvas Apps and Model-Driven Apps

Identify key business requirements that differentiate between Canvas Apps and Model-Driven Apps in PowerApps

Highlight the advantages and disadvantage of both Canvas Apps or Model-Driven Apps



# Power Platform Overview

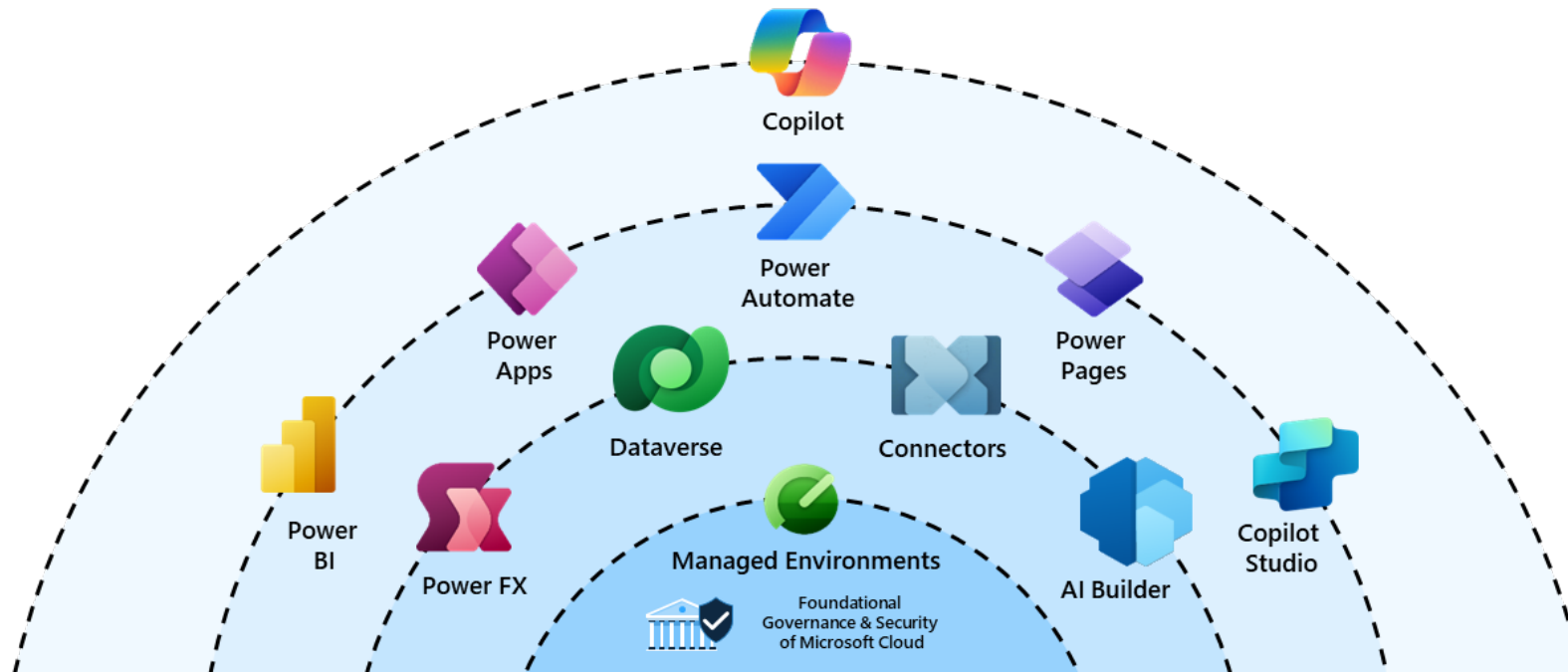


Build Biz Apps



# Microsoft Power Platform

The world's **most complete** platform for developer productivity, spanning no-code to pro code

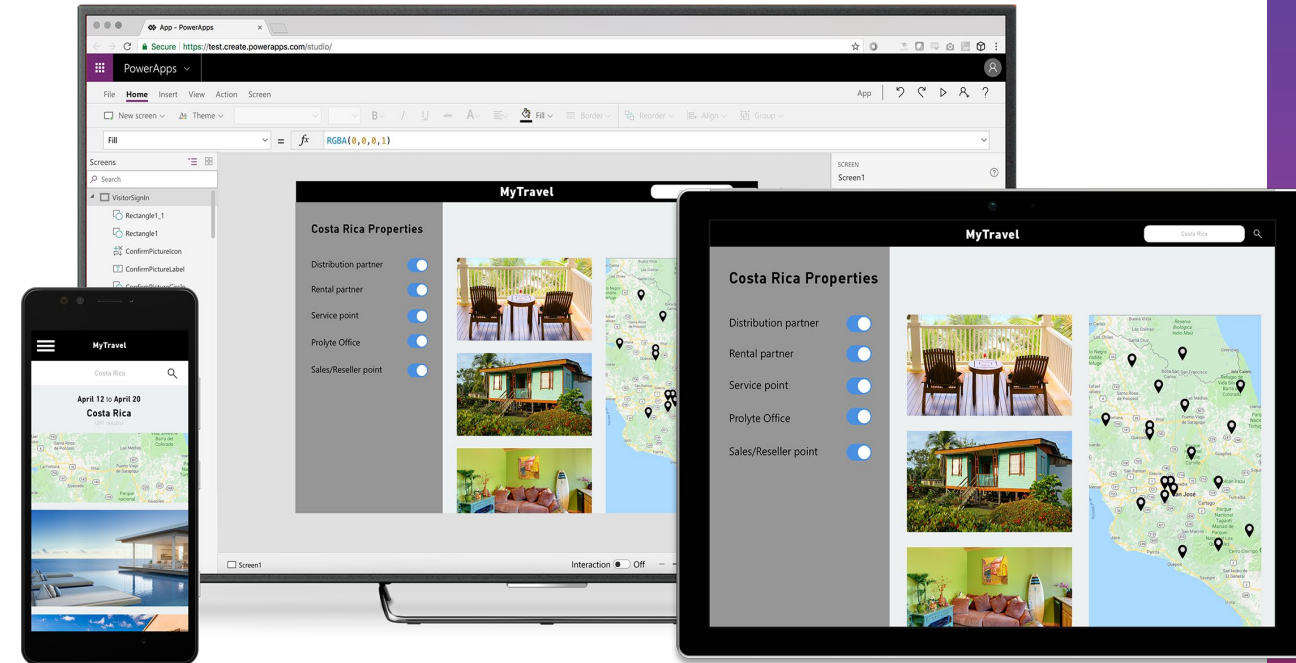




# Power Apps



- Easily build web & mobile apps with a full featured low-code/no-code development experience
- Empower business users to solve their own problems and easily share apps while maintaining security & governance at scale
- Pro developer extensibility enables a “no limits” platform that spans business users to professional developers



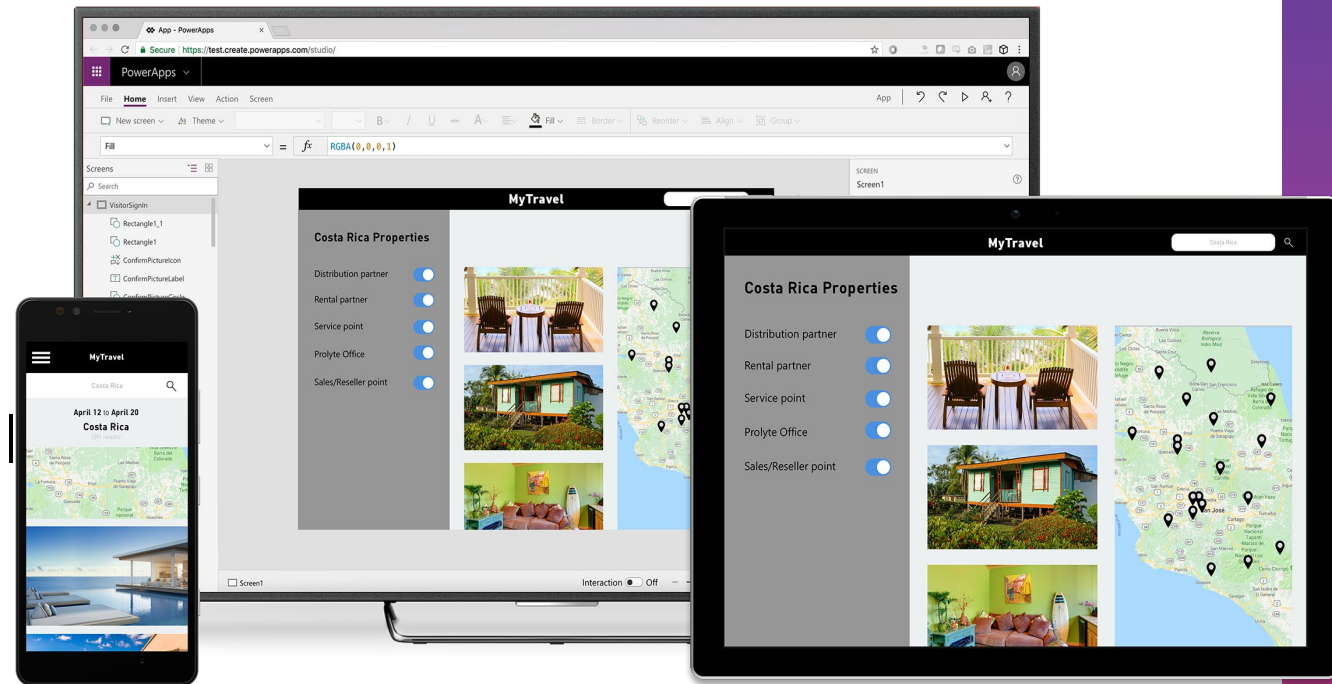
**Responsive Design = One app multiple devices**



# Power Apps



- **Reduce time & cost** building business applications
- **Extend your system of record** to simplify processes and remove silos
- **Reduce errors** by automating manual processes
- **Consolidate** siloed LoB application and improve business processes



# Low code approach to building biz apps



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



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



Enrich and extend your data with Dataverse, AI Builder, and Portals



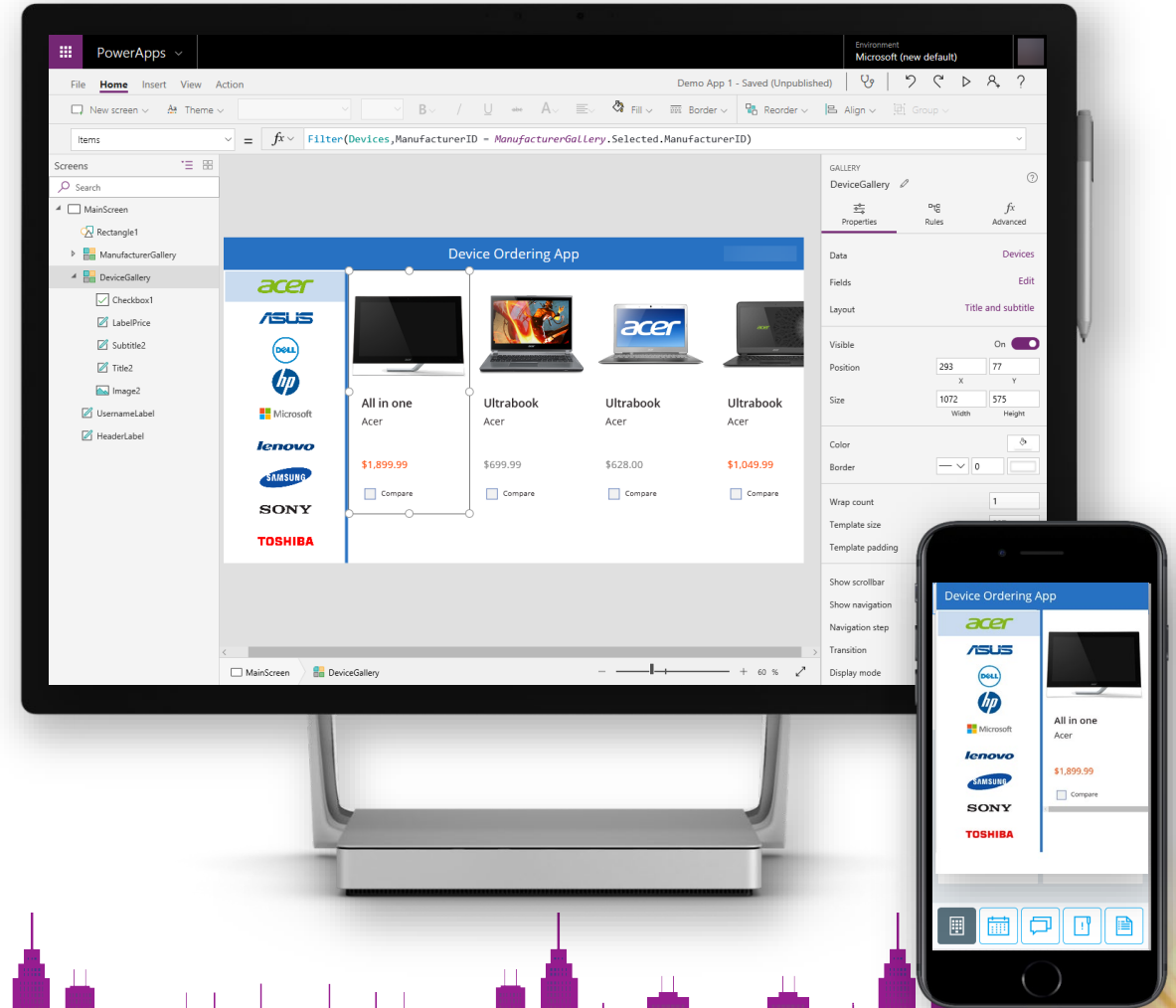
Dynamics 365, Azure, Power BI, Power Automate, and Office 365 integration



Strong enterprise governance and security



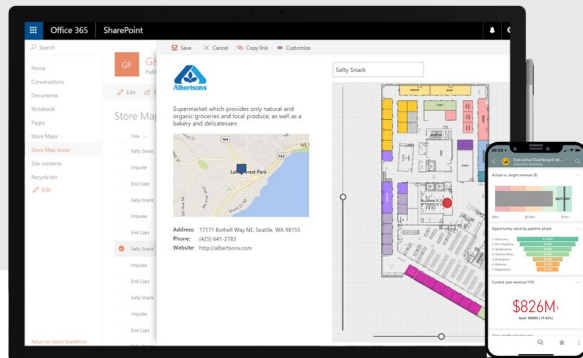
Pro developer extensibility and ALM



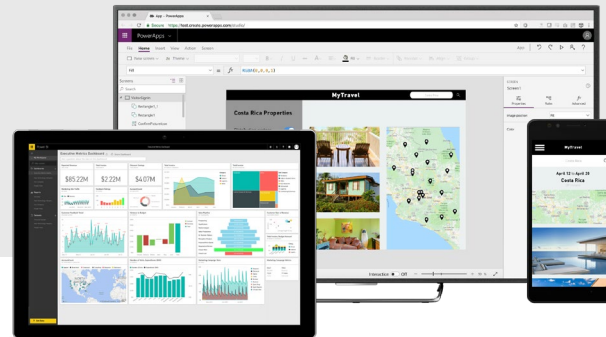
# Customize, Extend, and Build

Seamless Dynamics 365, Office 365, and Azure integration  
plus connectors to 2000+ data sources

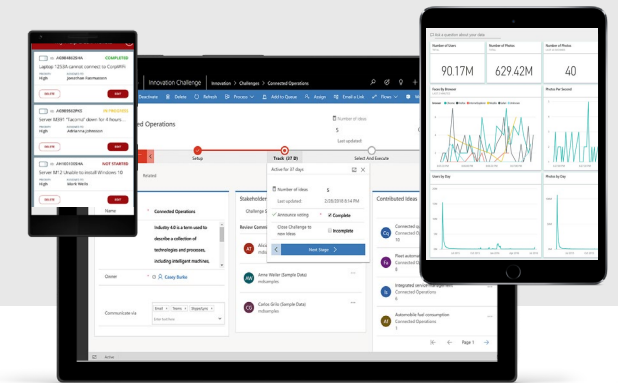
Tailor out-of-the-box  
solutions, embedded  
forms and dashboards



Highly customized task-  
and role-based apps



Immersive, end-to-end  
solutions





# The Power App Dilemma

## Build with Guidance or Go Wild?



Canvas Vs MDA





# Canvas Apps

## Pros

- High flexibility and custom design:
- User-friendly, drag-and-drop development:
- Wide integration capability:
- Fast prototyping and development:
- Templates available – Mobile-friendly:
- Quick innovation and iteration:

## Cons

- Limited scalability:
- Maintenance can become challenging:
- Performance concerns:
- No out-of-the-box standardization:
- Limited reusable components:



# Model Driven Apps

## Pros

- Highly scalable and enterprise-friendly:
- Automatic UI generation:
- Built-in data validation and security:
- Integration with Dynamics 365:
- Powerful out-of-the-box capabilities:
- Easier to maintain:

## Cons

- Limited UI customization:
- Heavily data-driven:
- Steeper initial learning curve:
- Less ideal for rapid prototyping:
- Limited external integration (without Dataverse):



# Model-Driven vs. Canvas App

Category	Model-driven apps	Canvas apps
Data platform	Dataverse only + virtual tables (limitations)	Dataverse + many others using connections
Design experience	No-code component focused design	Manipulation of control properties using Power Fx expressions
UI control	Limited, predominantly customization	Full control
App consistency	High-differs predominantly based on the tables & views chosen	Often low, given the significant control the designers have of the user experience
Migration between environments	Simple	Potentially complex given that the data sources may need to be updated
Speed of creation	Rapid	Relative to the complexity of the design
Responsive	Automatically responsive	Only responsive if designed in this way
Navigation through relationships	Automatic, provided relationships exist	Only where designed and applied using Power Fx formulas
Accessibility features	Built in	Designed into the app



# Canvas App Developer Experience

**Power Apps | Sheet Metal Calculator (Editing)**

Search

Environment: crowe

Editing

Fill:  $\text{RGBA}(219, 219, 219, 1)$

**Tree view**

Screens Components

Search

+ New screen

App

- SheetCalc\_Imperial
  - Icon1
  - SteelTypeLabel\_9
  - GaugeButton\_1
  - SheetButton\_1
  - CoilButton\_1
  - Image4
  - Select\_Thickness\_UnCoated
  - Select\_Gauge\_UnCoated
  - SteelTypeDDL
  - Label5\_3
  - Select\_Thickness\_Coated
  - Label22\_1
  - Label22
  - Select\_Gauge\_Coated
  - Label10\_1
  - Label9\_1
  - Label8\_1
  - Label7\_1
  - Label6
  - Label5

**Metal Sheet Calculator**

Sheet Calculator

Coil Calculator

Gauge Reference

Measurement: ☒ Imperial ☐ Metric

Operation:

Gauge:  Thickness Level:

Width:  INCH

Length:  INCH

Thickness:  INCH

Weight:  LBS

CALCULATE RESET

Formula:  $\text{Sheet Width} \times \text{Length} \times \text{Thickness} \times 0.2833$

WIDTH: LENGTH: THICKNESS:

SCREEN ?

SheetCalc\_Imperial

Properties Advanced Ideas

Fill:

Background image:

Image position:



# Power App Maker Portal Dev Experience

Power Apps | Vendor On Boarding

Search

Environment crowe

Notifications

Settings

Help

User Profile

Back

Add page

Settings

Edit view

More

Comments

Save

Publish

Play

Pages

Search

Navigation

Requests

Vendor Requests view

Vendor Requests form

Vendor Information

All Approved Vendors view

All Approved Vendors form

All other pages

Dynamics 365 | Vendor On Boarding

SANDBOX

Try the new look

Search

Lightbulb

Plus

Settings

Help

DE

Home

Recent

Pinned

Requests

Vendor Requests

Vendor Information

All Approved Vendors

Focused view

Show Chart

New

Delete

Refresh

Visualize this view

Share

All Active Vendor Requests

Edit columns

Edit filters

Quick find

Company	Vendor Name	Vendor Group	Status Reason	Created By	Created ...
USMF	Crowe LLP	10	In Process	Dan Edwards	1/26/2024 9:...

1 - 1 of 1

Page 1

Responsive (1243 x 844)

100%

Vendor Requests

Views

Charts

Settings

In this app

New view

All Active Vendor Requests

All Closed Vendor Requests

Approved Vendor Requests

In Process Vendor Requests

New Vendor Requests

Rejected Vendor Requests

Vendor Requests Awaiting...

Vendor Requests In Review

Show more

Include all views in the app





# Power App Maker Portal Dev Experience

Home

Learn

Apps

Create

Dataverse

**Tables**

Choices

Dataflows

Azure Synapse Link

Connections

Custom Connectors

Gateways

Flows

Chatbots

AI Builder

Solutions

New

Edit

Create an app

Using this table

Import

Export

Delete

Tables > **Contact**

Table properties

Properties

Tools

Name

Contact

Type

Standard

Primary column

Full Name

Last modified

5 months ago

Schema

Columns

Relationships

Keys

Data experiences

Forms

Views

Charts

Dashboards

Customizations

Business rules

Commands

Contact columns and data

Edit

	Company Name	Full Name	Email	
	Coho Winery (sample)	Jim Glynn (sample)	ilovetables@powerapps.com	+190 more
	Fabrikam, Inc. (sample)	Maria Campbell (sample)	someone_d@example.com	
	Adventure Works (sample)	Nancy Anderson (sample)	someone_c@example.com	
	Alpine Ski House (sample)	Patrick Sands (sample)	someone_k@example.com	
	Alpine Ski House (sample)	Paul Cannon (sample)	someone_h@example.com	
	A. Datum Corporation (sample)	Rene Valdes (sample)	someone_i@example.com	
	Contoso Pharmaceuticals (sample)	Robert Lyon (sample)	someone_g@example.com	

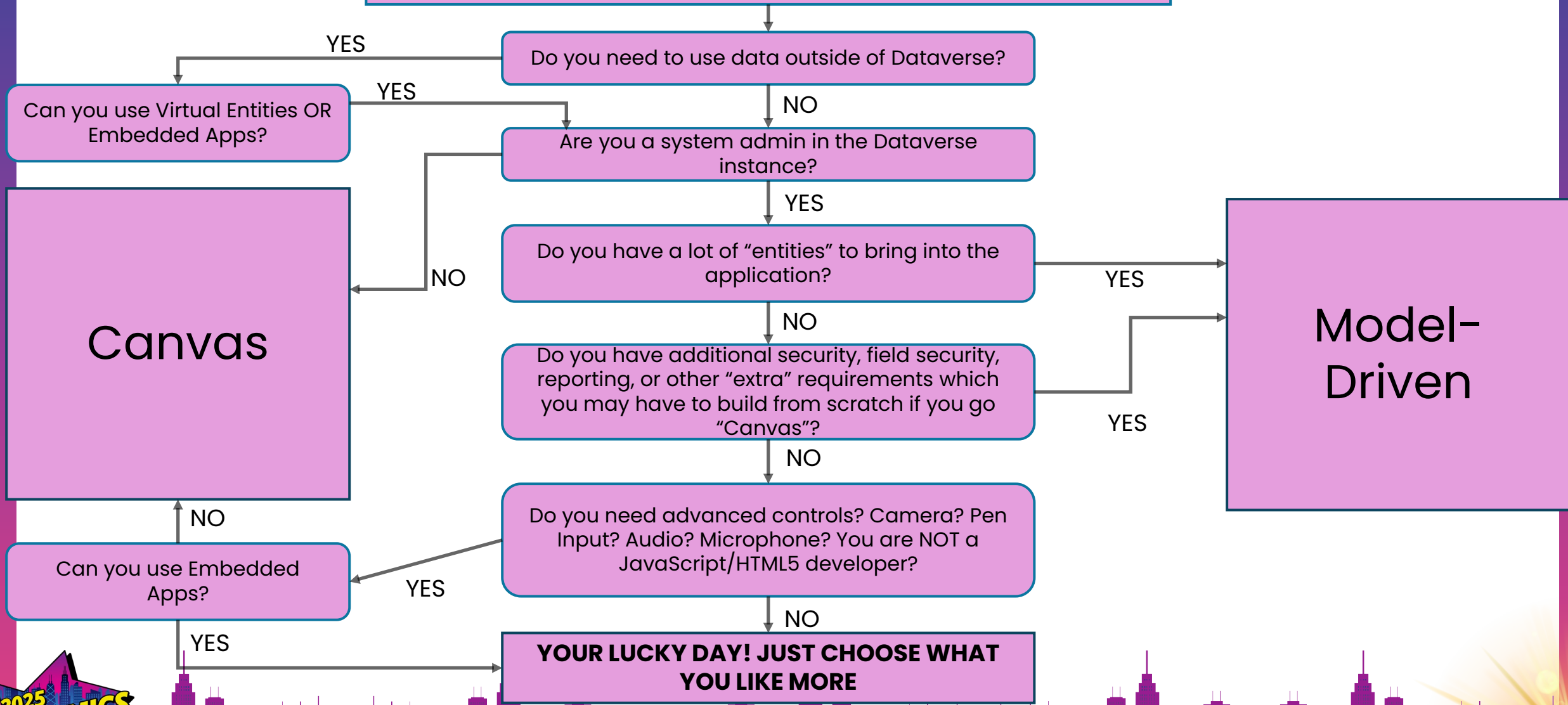
# Which Power App is right for you?



Canvas Vs MDA



# Canvas or Model-Driven?



Canvas

Model-Driven

**YOUR LUCKY DAY! JUST CHOOSE WHAT YOU LIKE MORE**



Q&A

2025  
**DYNAMICS**  
**CON**

# THANK YOU

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