



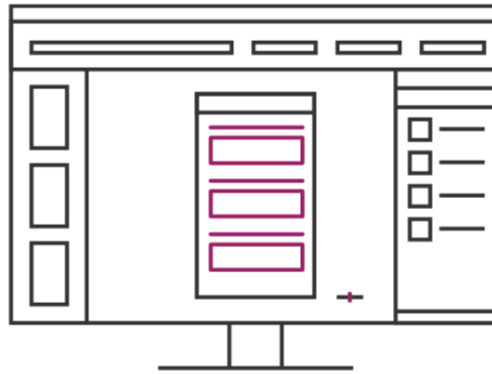
Building Your First Model-driven Application in PowerApps



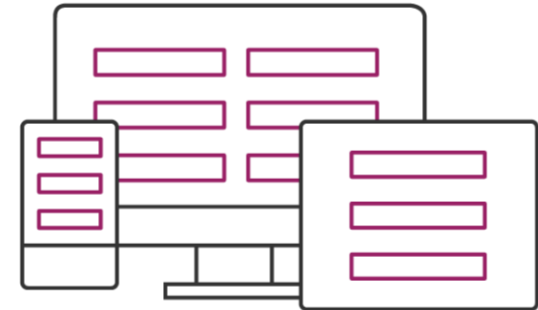
Canvas Apps help business-power-users to create and use custom business apps across platforms using Excel and PowerPoint skills



Connect to data & systems you're already using *easily*

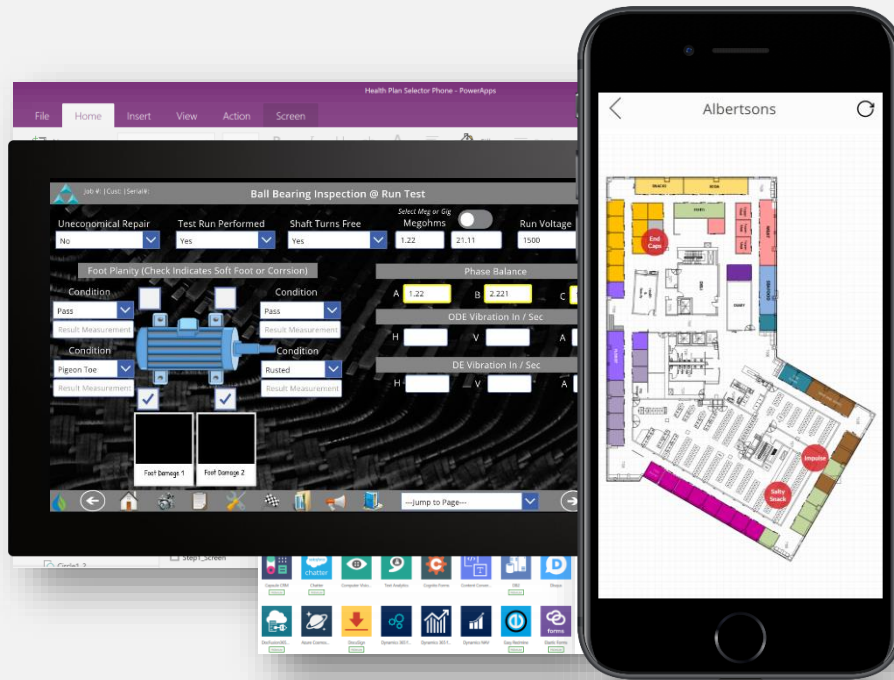


Create apps, forms, and workflows *without writing code*



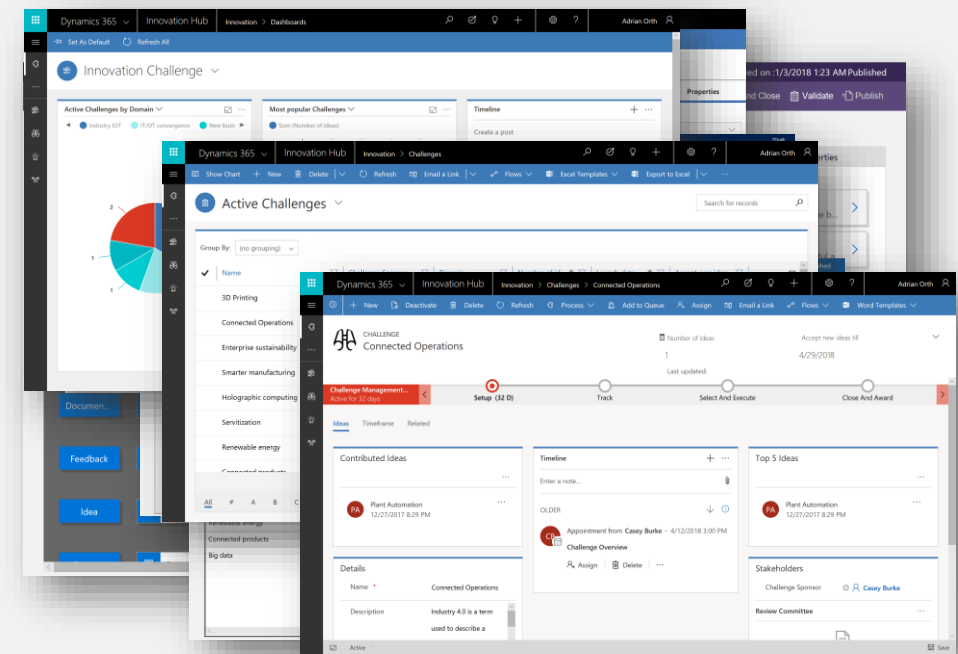
Use apps *on any device* – both web and mobile

Focus on Canvas Apps



Canvas apps

Start with user experience
WYSIWYG designer
Task- and role-based apps
Mash up data from 200+ sources
Plan 1, PowerApps for Office



Model-driven apps

Built on the Common Data Service for Apps
Start with a data model, relationships, and
business processes
Build End-to-End business applications
Plan 2

Common Data Service for Apps

Standard entities that represent commonly used concepts and activities across a variety of business & app domains

Ability to **extend** the standard entities by adding **custom fields** and **relationships**

Add **custom entities** to support your scenario and application

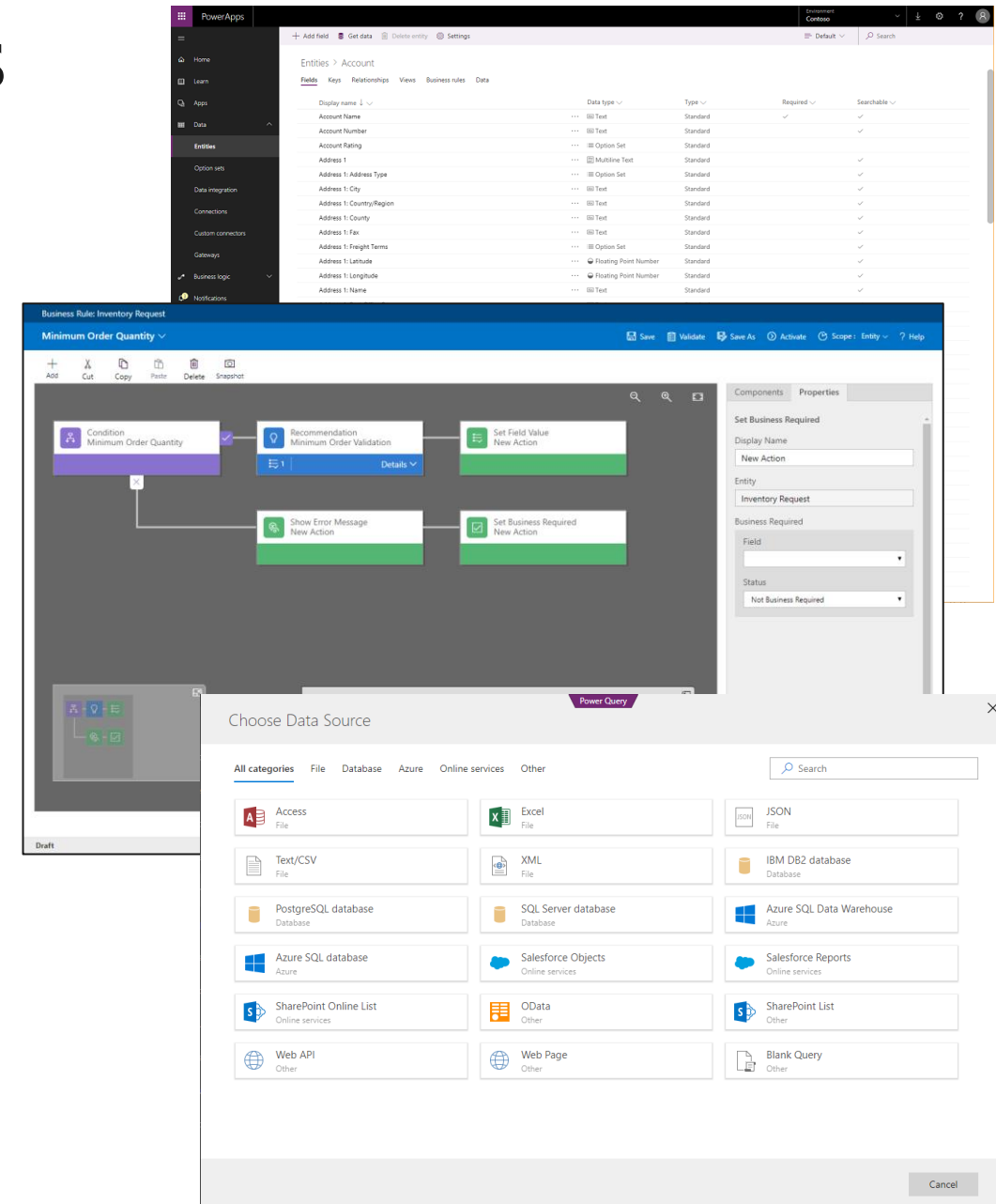
Create **calculated and roll up fields** to provide consistent calculations across apps

Define **business rules and validation** to ensure data quality

Easily **import and synchronize** your data using **Power Query**

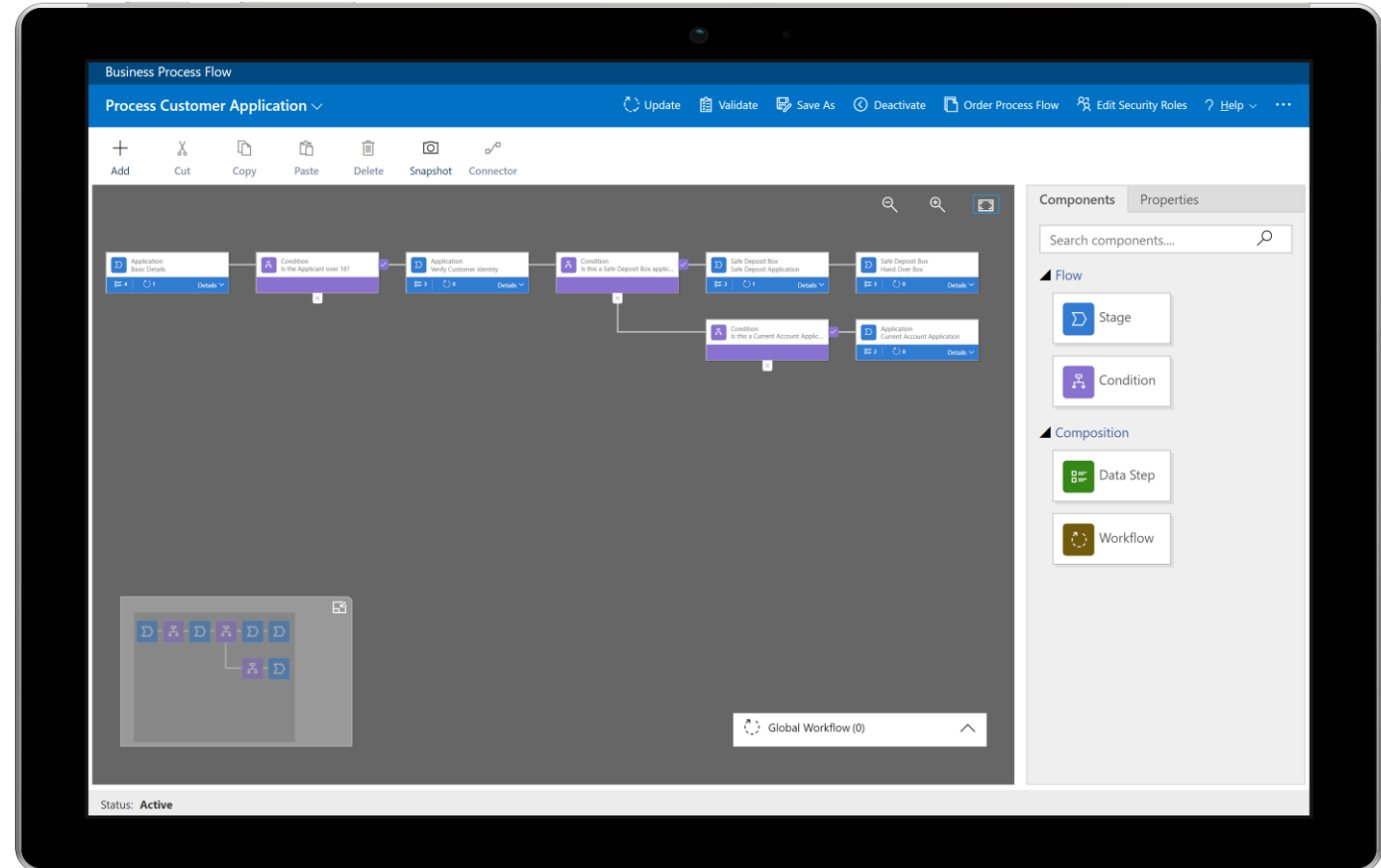
Sophisticated **security model** providing row level security and even models hierarchies.

Production ready **pro developer SDK** allowing CDS for Apps access from any pro-dev application



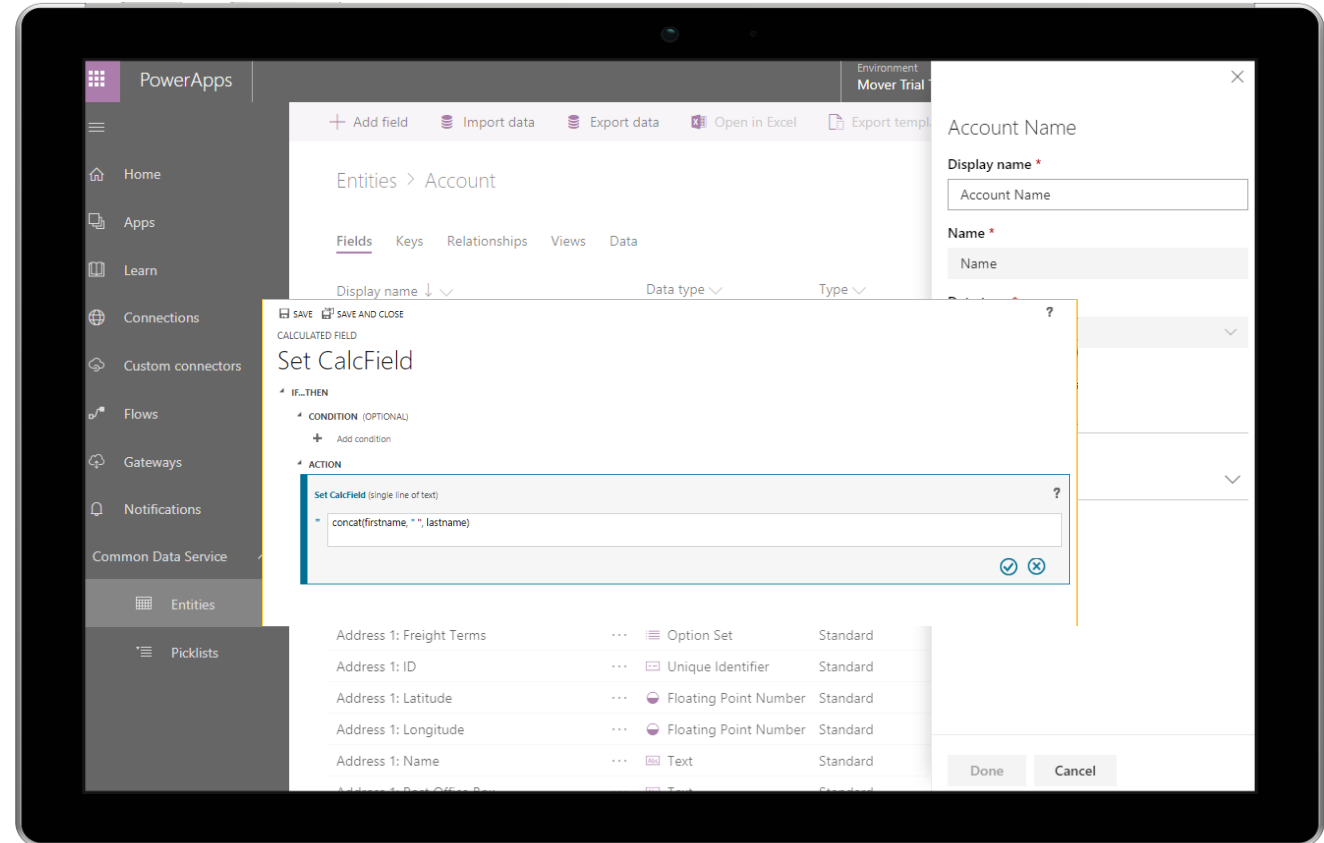
Business Process Flow

- Visual indicators that tell users where they are in the business process
- Reduce the need for training
- Configurable to support common line of business methodologies



Server Side Logic

- Server-side logic bound to entities, works across all apps
- Create calculated and roll up fields
- Easily create validation and set field defaults
- Update related entities with synchronous workflows



Model-driven app components - Data

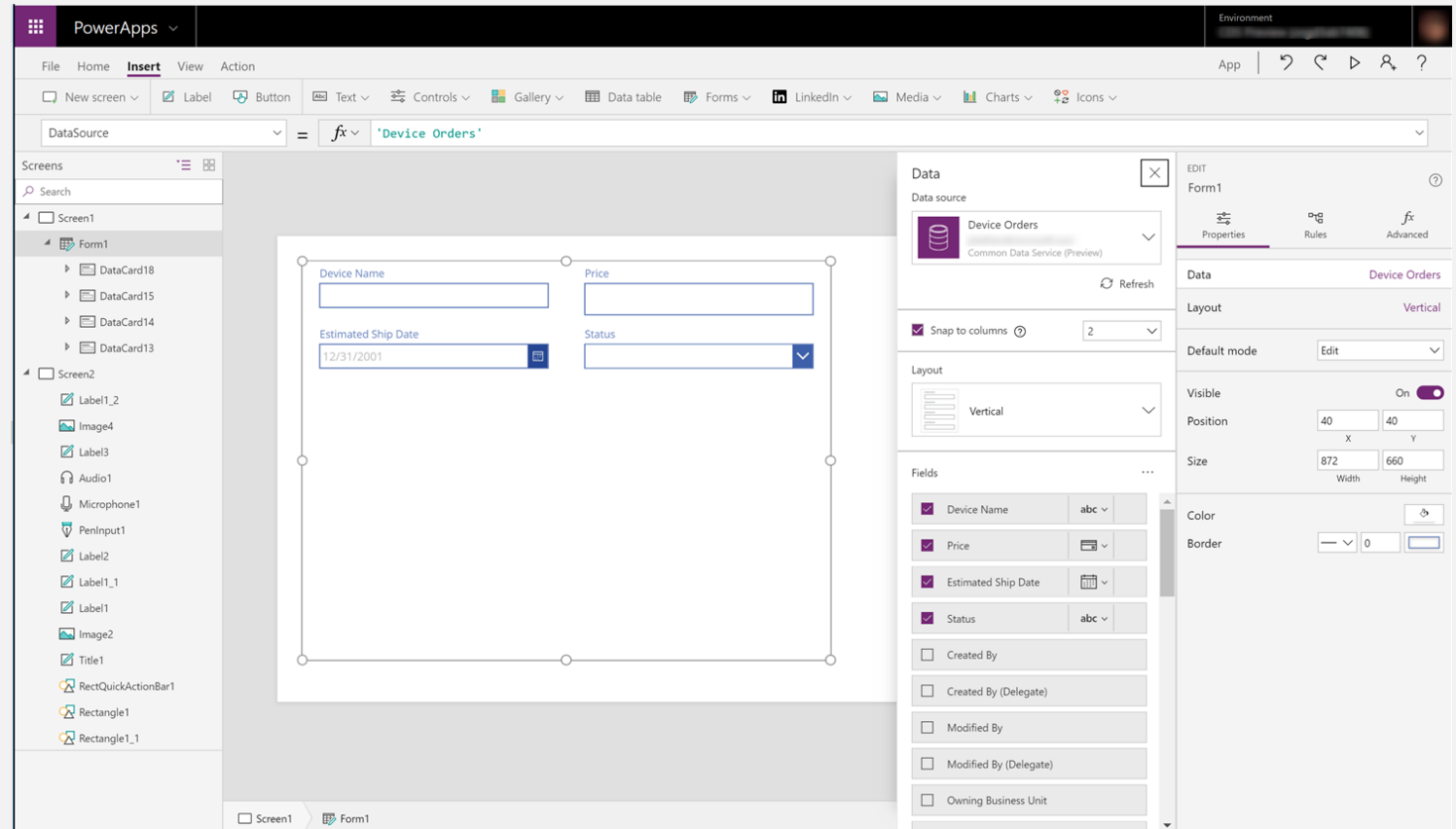
Component	Description	Designer
Entity	An item with properties that you track, such as a contact or account. Many standard entities are available. You can customize a non-system standard entity (production entity) or create a custom entity from scratch.	PowerApps entity designer
Field	A property that is associated with an entity. A field is defined by a data type, which determines the type of data that can be entered or selected. Examples include text, number, date and time, currency, or lookup (creates a relationship with another entity). Fields typically are used with forms, views, and searches.	PowerApps entity designer
Relationship	Entity relationships define how entities can be related to each other. There are 1:N (one-to-many), N:1 (many-to-one), and N:N (many-to-many) types of relationships . For example, adding a lookup field to an entity creates a new 1:N relationship between the two entities and lets you put that lookup field on a form.	PowerApps entity designer
Option set field	This is a special type of field, which provides the user a set of predetermined options. Each option has a number value and label. When added to a form, this field displays a control for the user to select an option. There are two kinds of option sets; option sets, where the user can only select one option, and multi-select options sets, which allow more than one selection.	PowerApps option set designer

Model-driven app components - UI

Component	Description	Designer
App	Determines the application fundamentals such as components, properties, client type, and URL for your app.	App designer
Site map	Specifies the navigation for your app.	Site map designer
Form	A set of data-entry fields for a given entity that matches the items that your organization tracks for the entity. For example, a set of data-entry fields that where user's input relevant information to track a customer's previous orders along with specific requested reorder dates.	Form designer
View	Views define how a list of records for a specific entity is displayed in your application. A view defines the columns to display, width of each column, sort behavior, and the default filters.	View designer

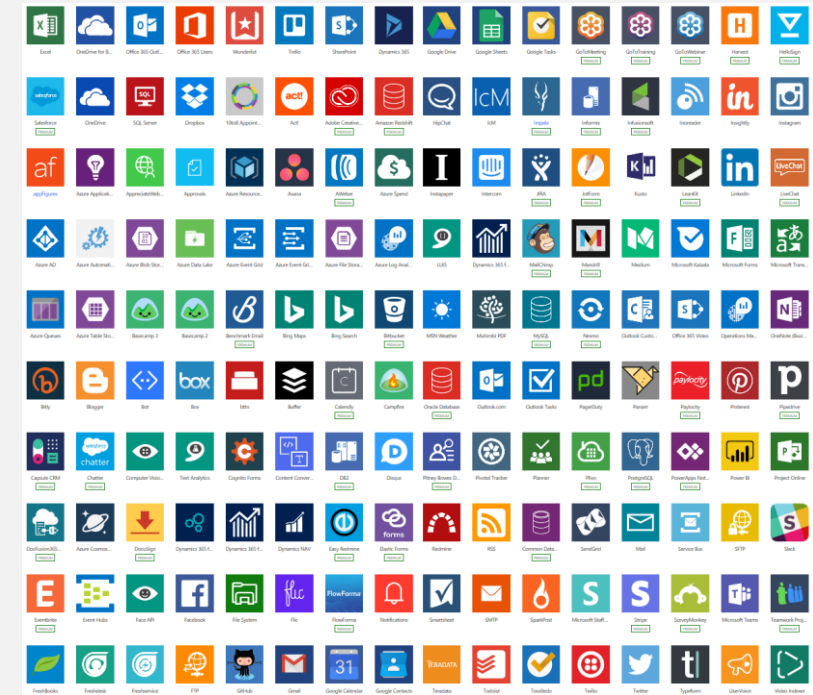
Easy Authoring

- Truly WYSIWYG – full control over user experience, use it as you build it
- Create app logic with familiar Excel-like expressions
- Mash up data from multiple sources right at the app level



Cloud and on-premises connectivity

- Built-in connectivity to 200+ cloud services, files, databases, web APIs, etc.
- Seamless hybrid connectivity to on-premises systems via the On-Premises Data Gateway
- Build custom connectors for everyone to leverage



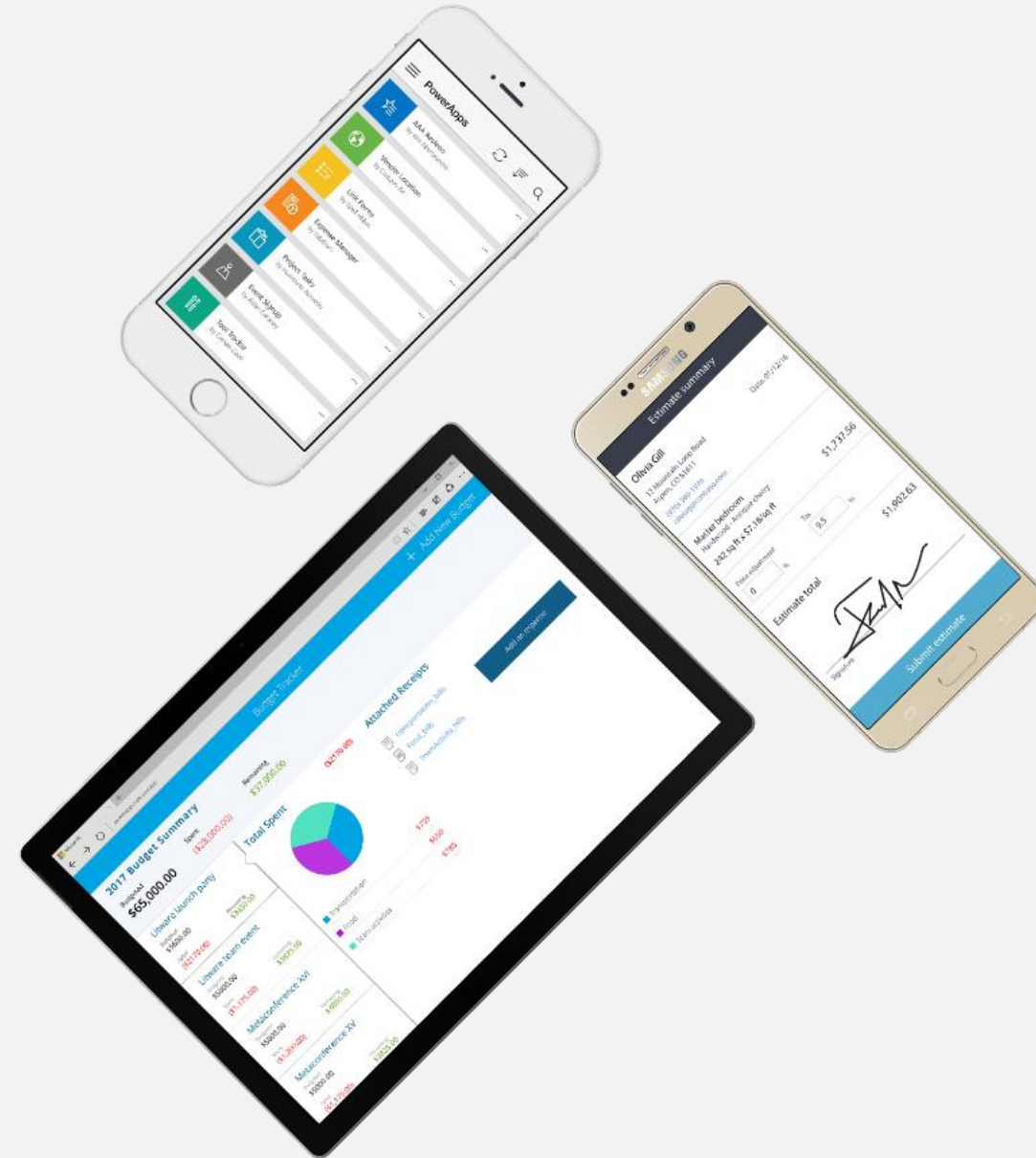
Enterprise-grade

Cloud and on-premises connectivity

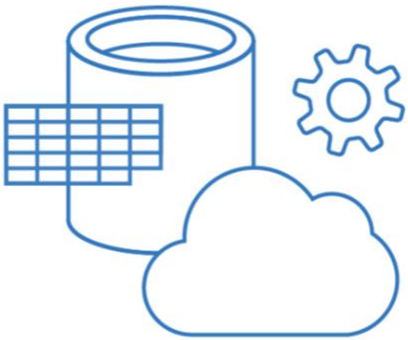
Pro-developer extensibility

Cross-platform

- Publish instantly to iOS, Android, Windows, and the web
- Sharing apps is like sharing documents
- Manage across environments



Microsoft Flow is a service for automating workflows across apps and services



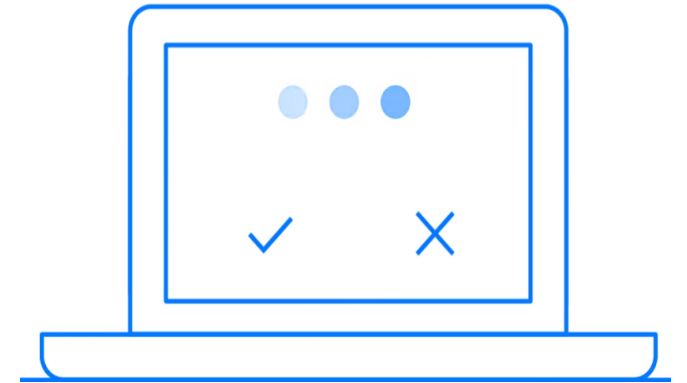
Connect to data & systems you're already using; create the data you need



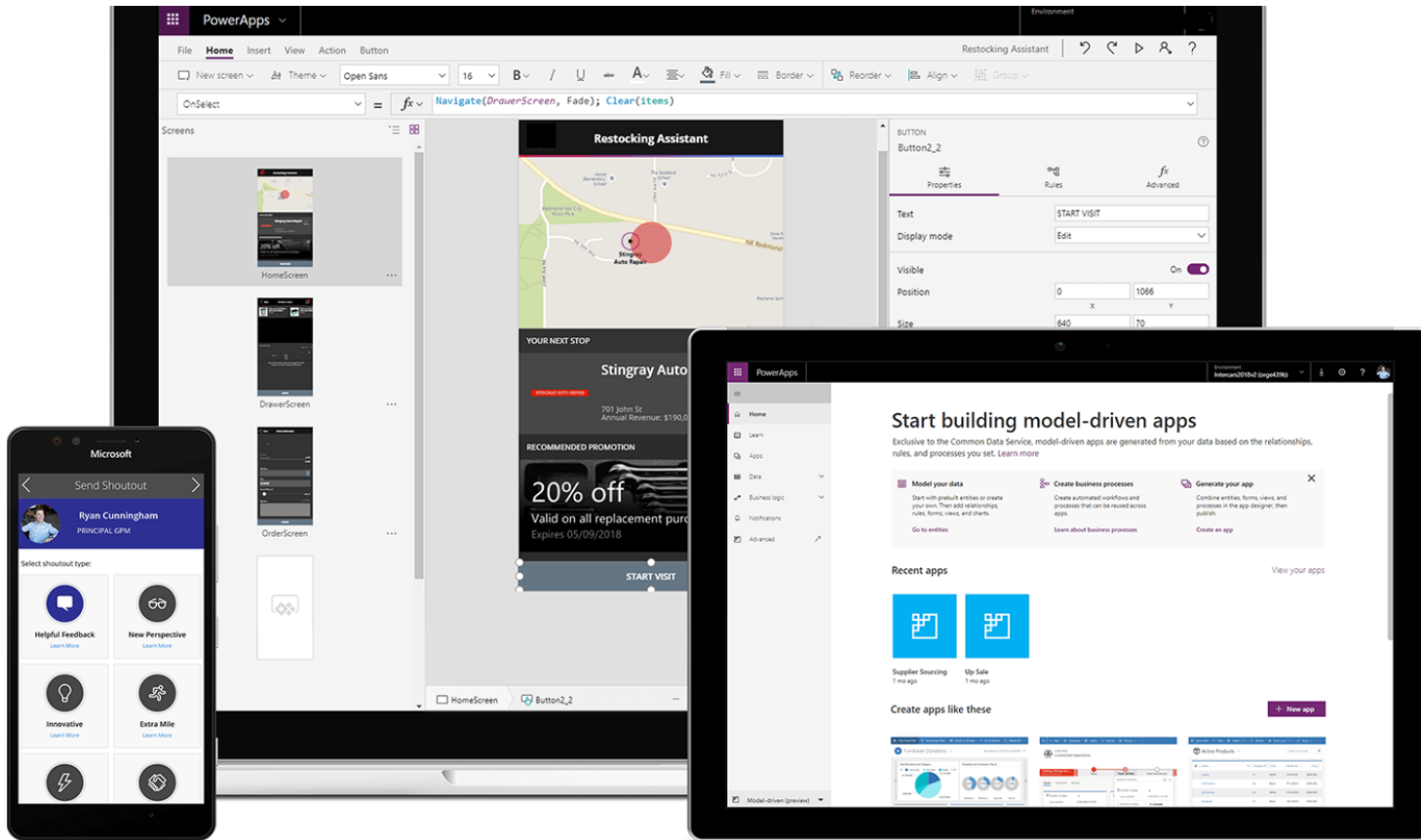
Create workflows using triggers & actions without code or scripts



Edit flows on web and mobile



Approve requests or manage them on web and mobile



PowerApps with Flow Best Fits

- Internal applications
- Replace manual workflows
- When digital transformation to your company means PDFs being emailed
- Need to create mobile internal apps for field crew

Weekly Time Card

Week Ending _____

Name	Department	Shift	File #
Employee #	Social Security #	Payroll Class	

	Morning Hours		Afternoon Hours		Overtime Hours		Office Use Only	
	Time In	Time Out	Time In	Time Out	Time In	Time Out	Regular	Overtime
Monday								
Tuesday								
Wednesday								
Thursday								
Friday								
Saturday								
Sunday								
Totals								

Signatures			
Employee	Date	Department Supervisor	Date
Supervisor	Date	Payroll Department	Date

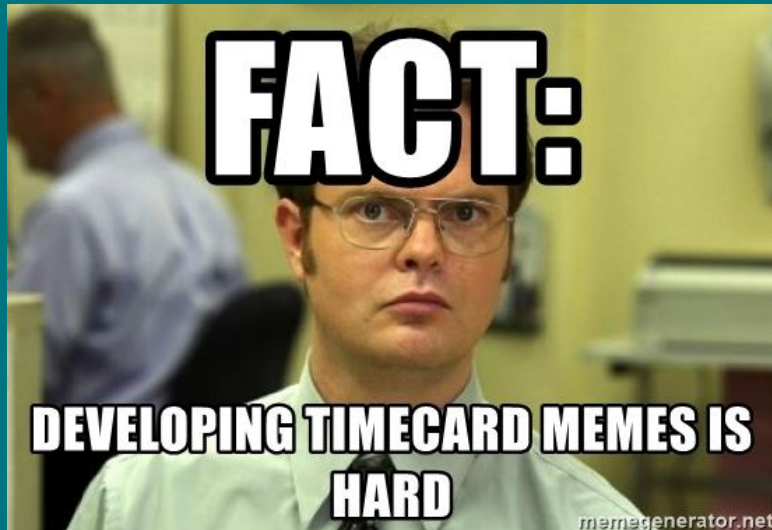
Time Card Demo

Requirements:

1. Bill by project
2. Project manager approves timecards

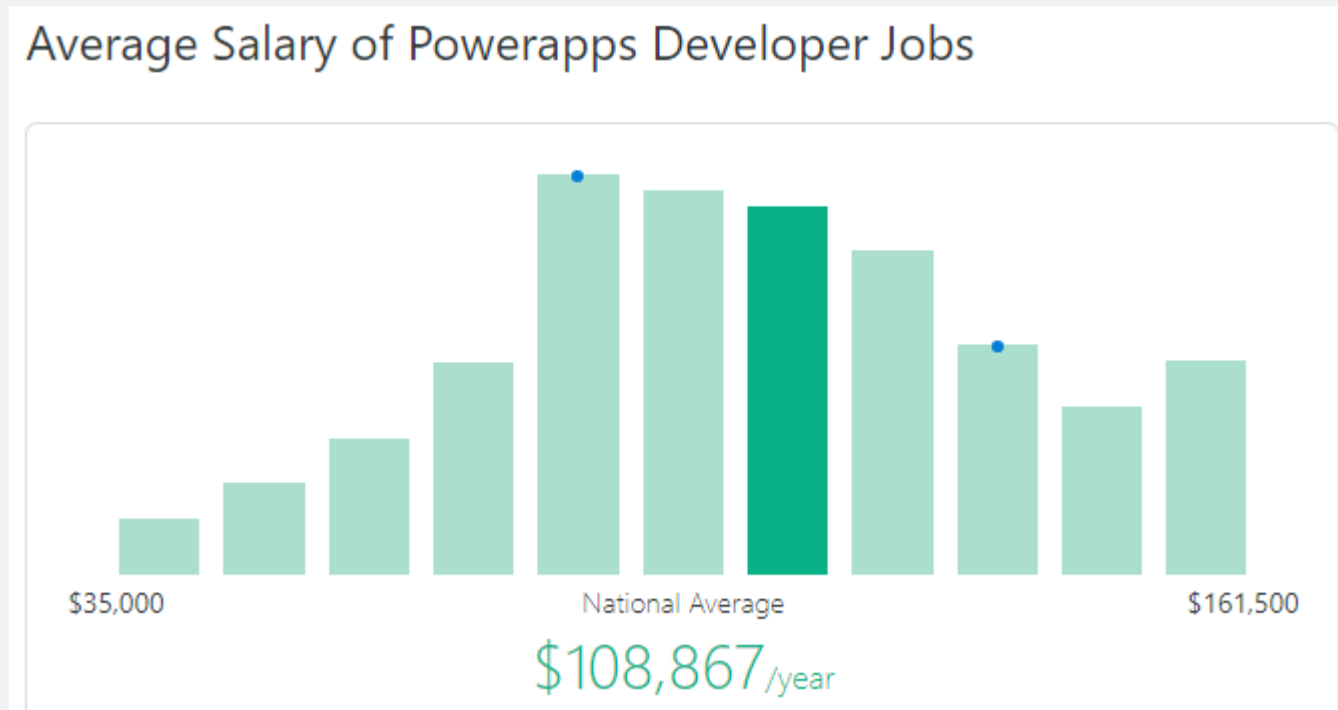
Ingredients

1. PowerApps for app
2. Microsoft Flow for approvals



PowerApps Developers Are Expensive

- Chances are, you may not need a full-time developer help
- Ramping up existing talent is equally expensive



* ZipRecruiter National Average



With Pragmatic Works, pay a fraction of what you would pay for a full-time resource and get a developer-on-demand.

Expert Shared Development

Pragmatic
Works

Power Platform Pros Shared Development

- No onboarding or setup free
- Each Month:
 - 32 hours of new expert development from same developer
 - 8 hours of support on-demand (<2-hour response SLA during business hours)
- Bring on the scope creep!

Power Platform Pros

