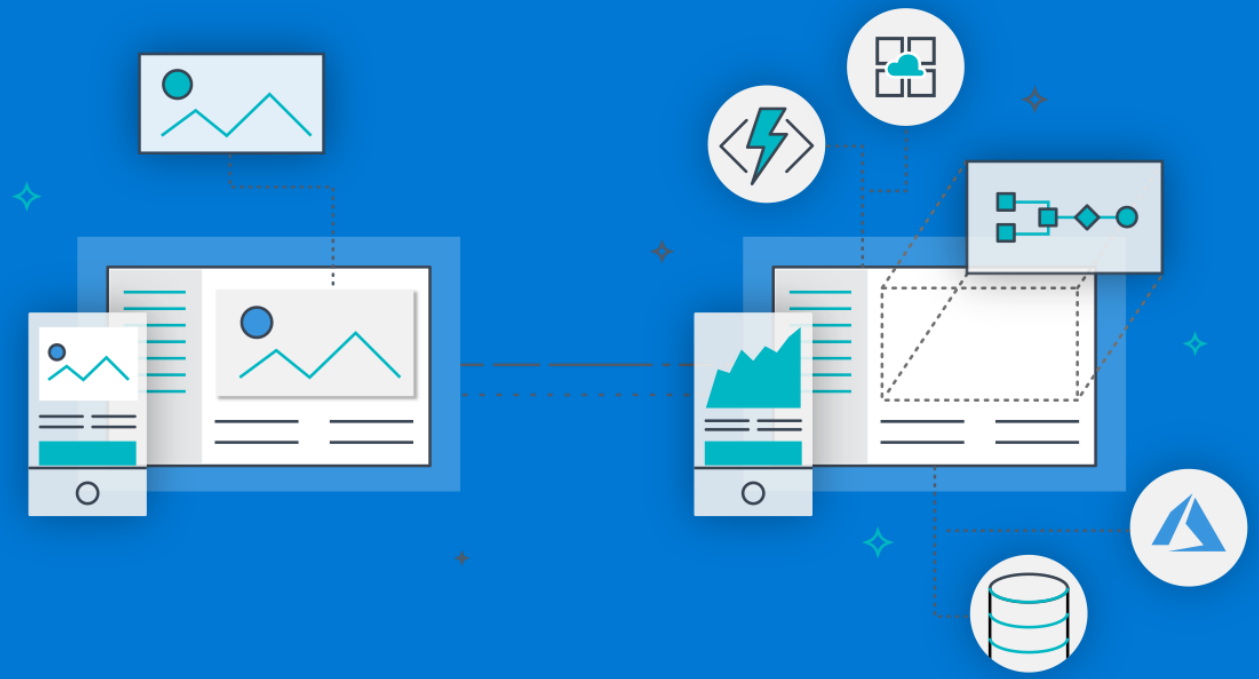
Microsoft

App in a Day

Business Application Platform

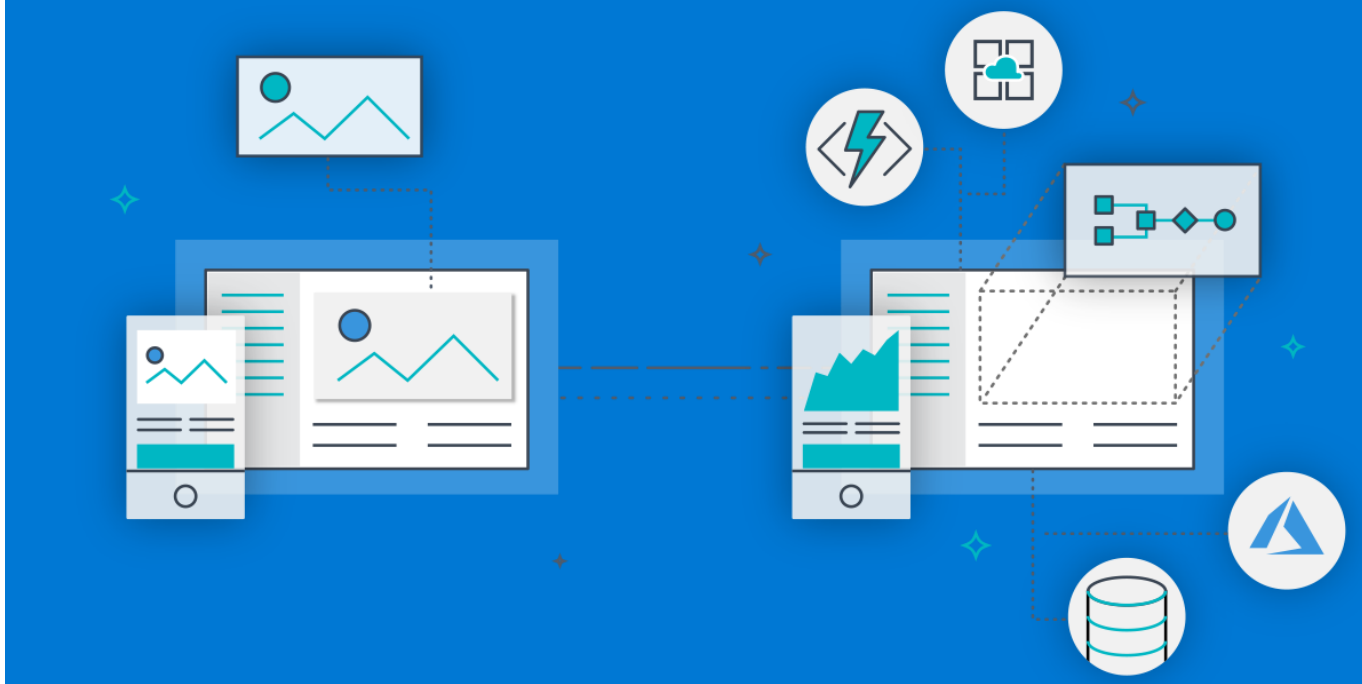
Power Apps, Power Automate & Common Data Service (CDS)

Eric Sauvé, XRM Vision

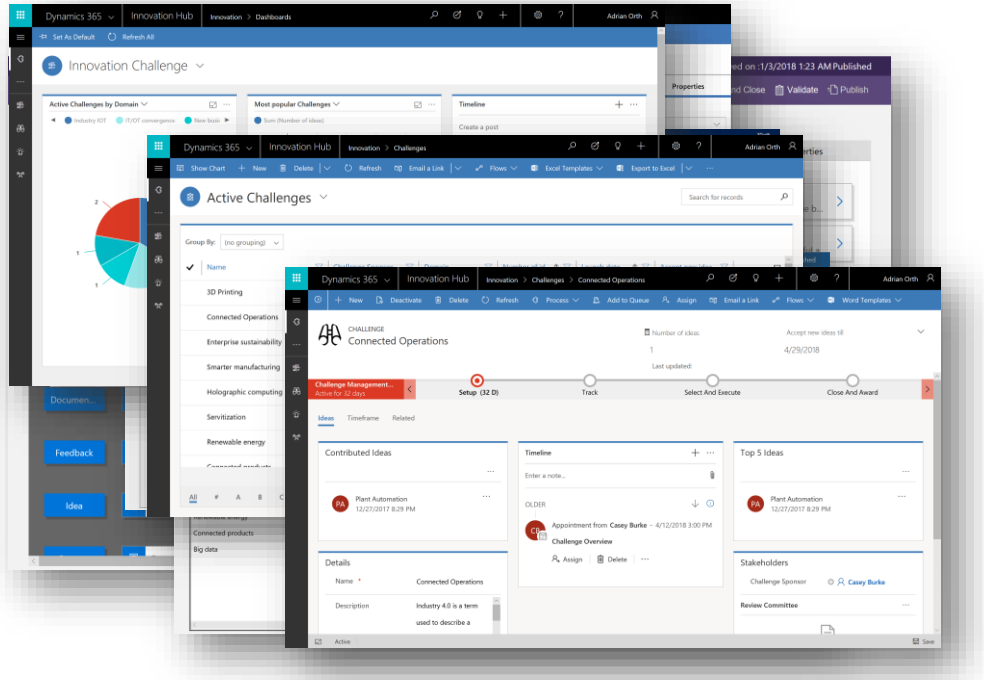


Microsoft

Model-driven apps in Power Apps

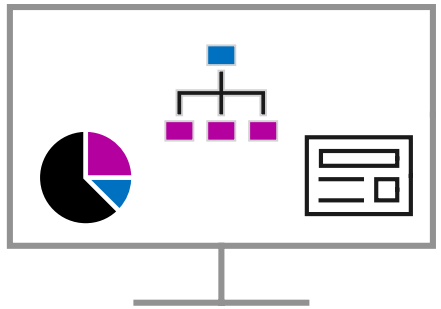


Canvas apps start with user experience, with pixel-perfect control to build highly customized task- and role-based apps that mash up data from 250+ sources

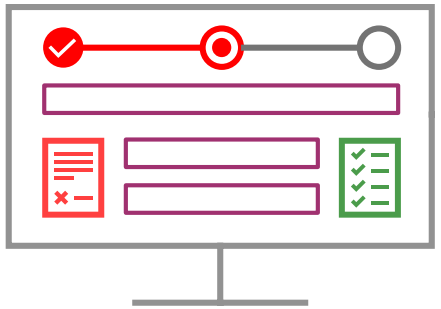


Model-driven apps leverage your data model, relationships, and business processes to automatically generate immersive, responsive applications

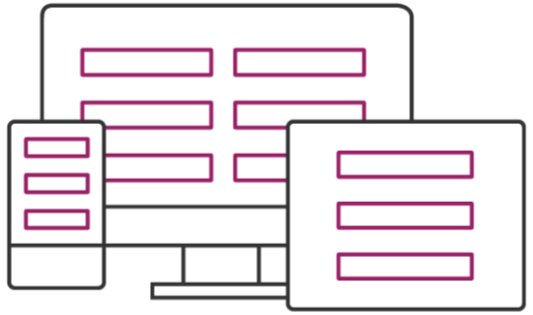
Power Apps Model-driven apps provides a metadata-driven architecture for creating and customizing apps without writing code



Rich ***component-focused*** no-code design environments



Easily add ***Business rules*** and ***Business process flows*** to model your business processes



Complex ***responsive apps*** on web and mobile

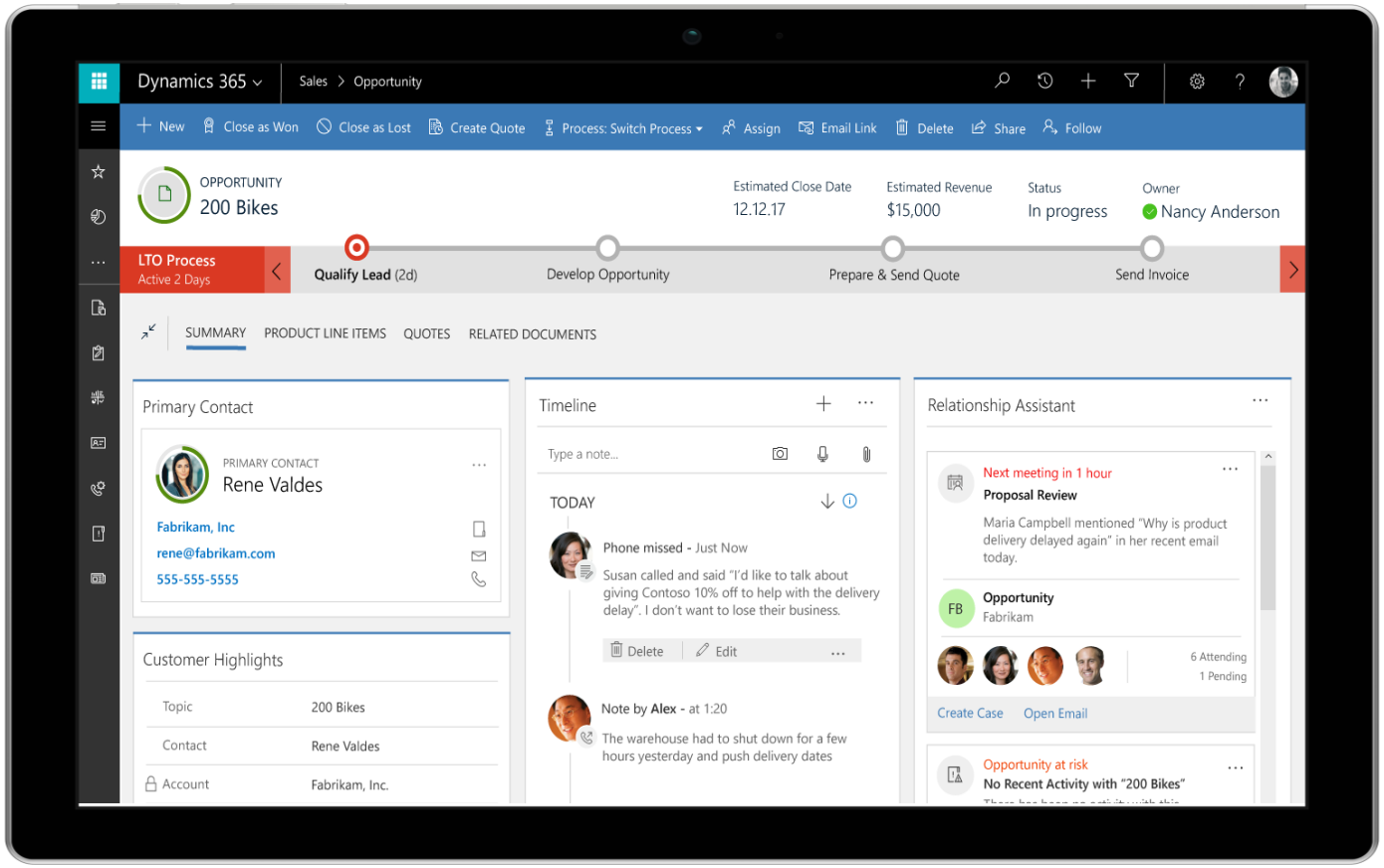
Component-focused approach to app development

Create apps around forms and processes
A new way of app development using entities, forms and business processes.

Design sophisticated entity forms quickly
Drag and drop fields and controls in a visual designer. Forms can span multiple columns, multiple steps, and collapsible sections.

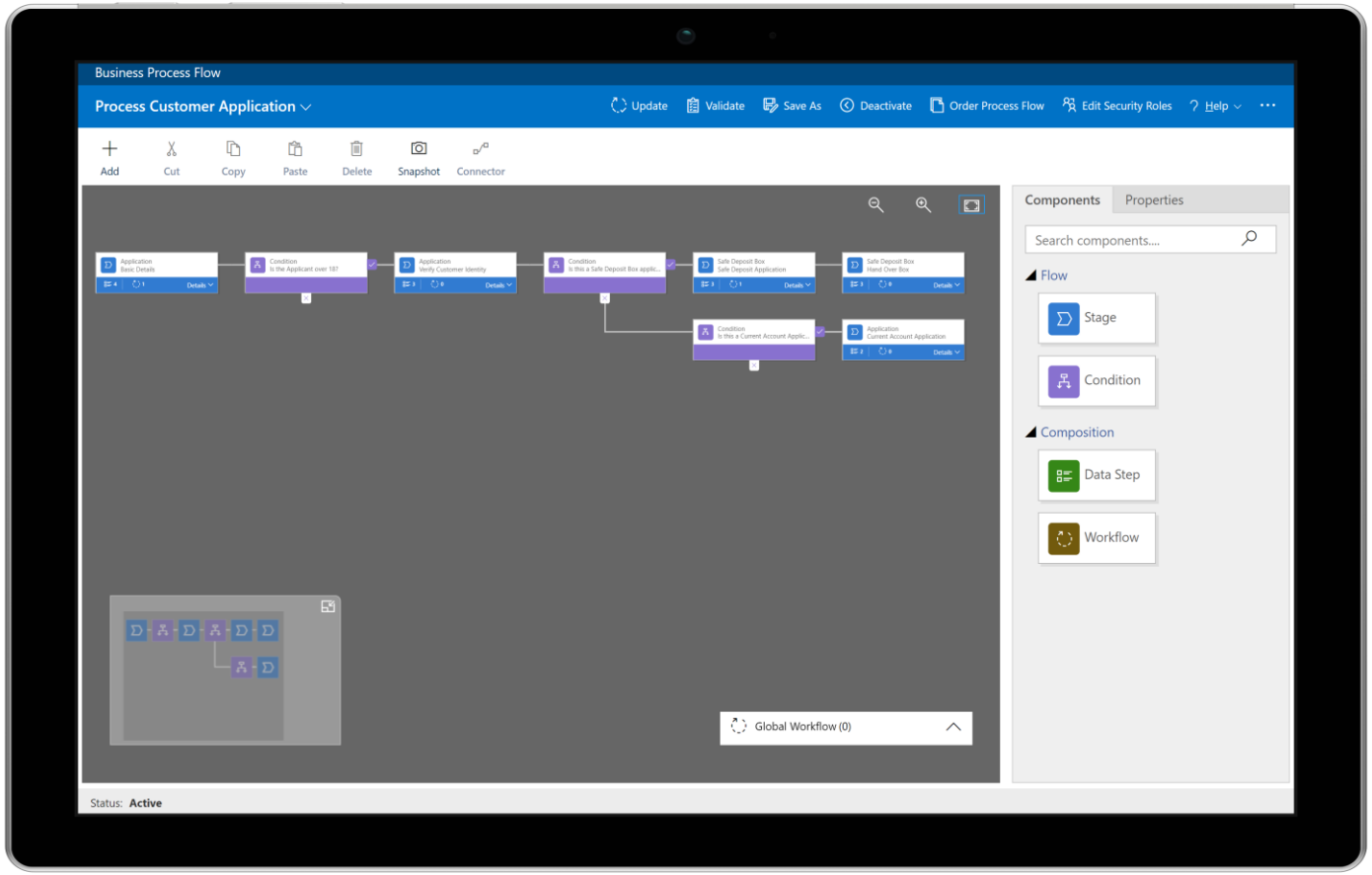
Rich, responsive client experiences
Responsive UI automatically reflows across devices based on the space available.

Enables easy reuse across multiple apps
Easily share forms, dashboards, flows, and more across multiple apps.



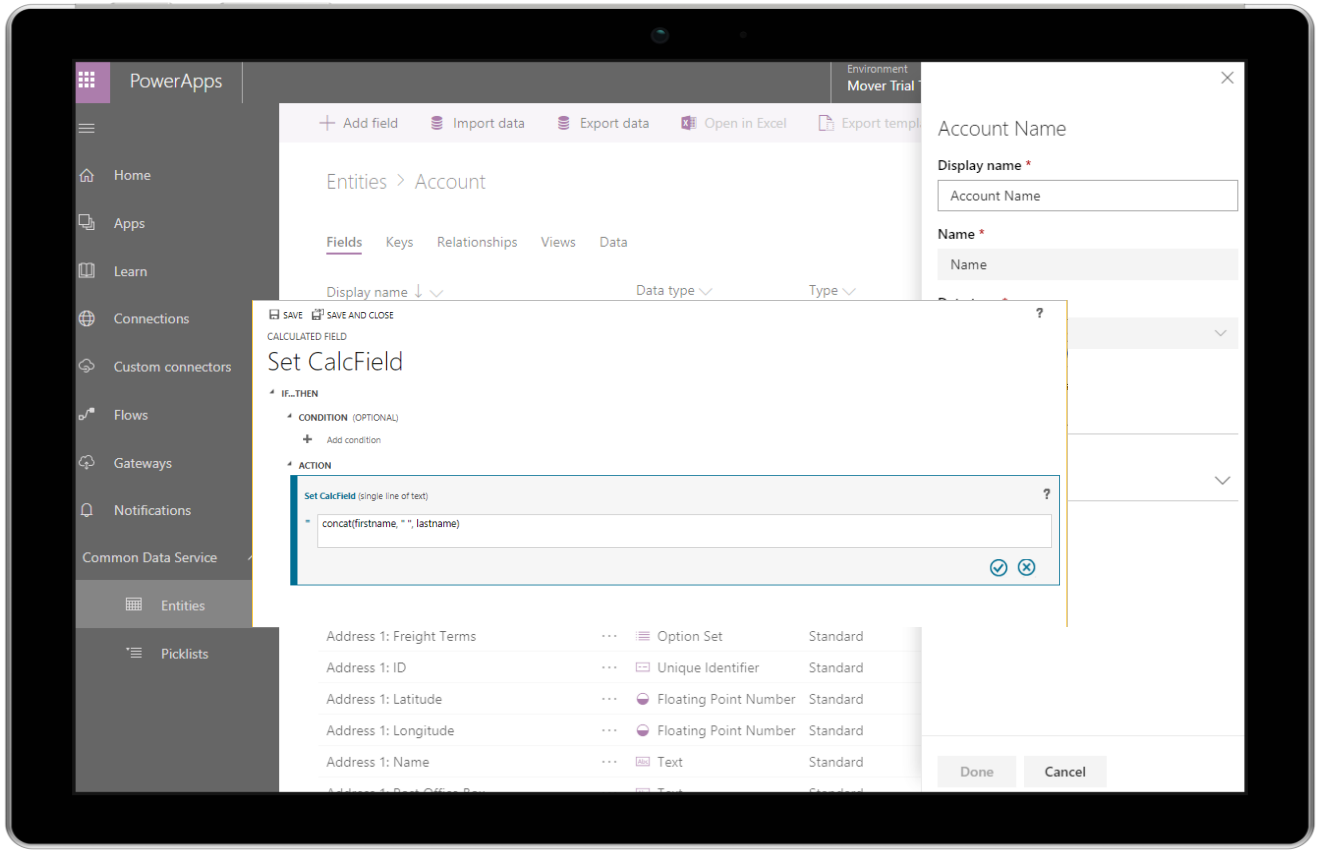
Business Process Flow

- 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



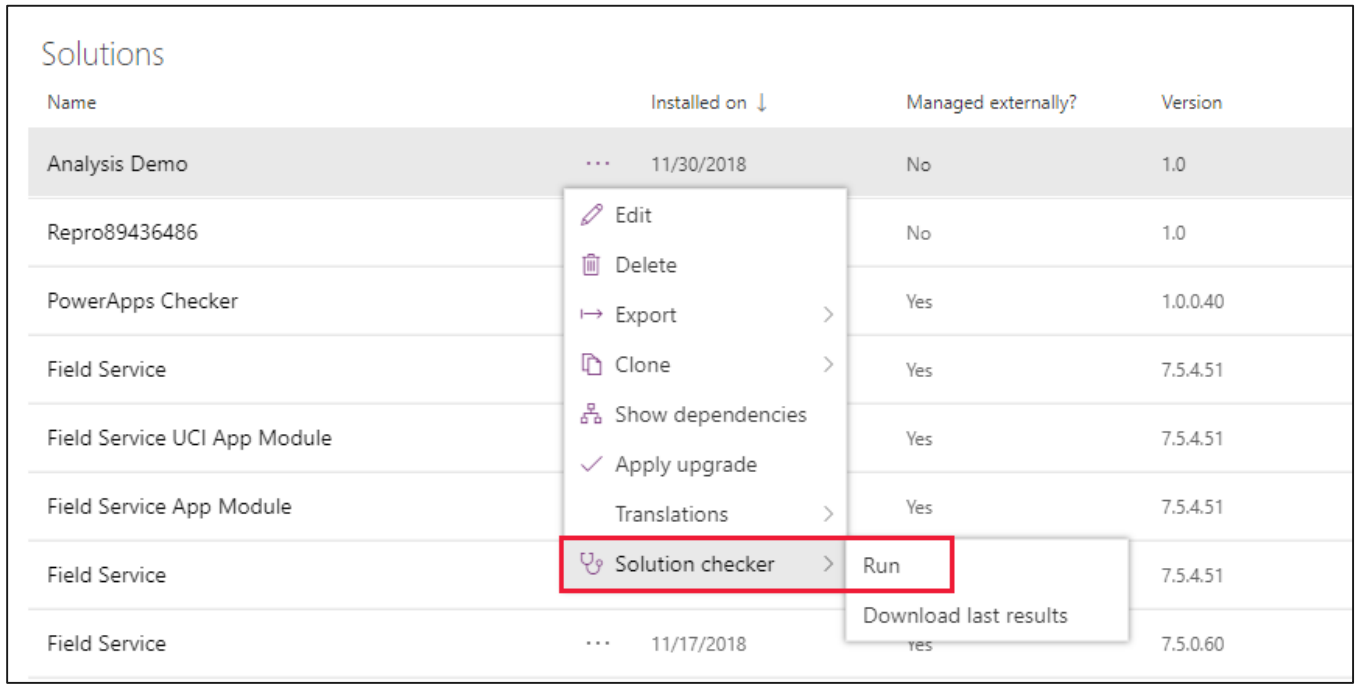
Server-Side Logic

- 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



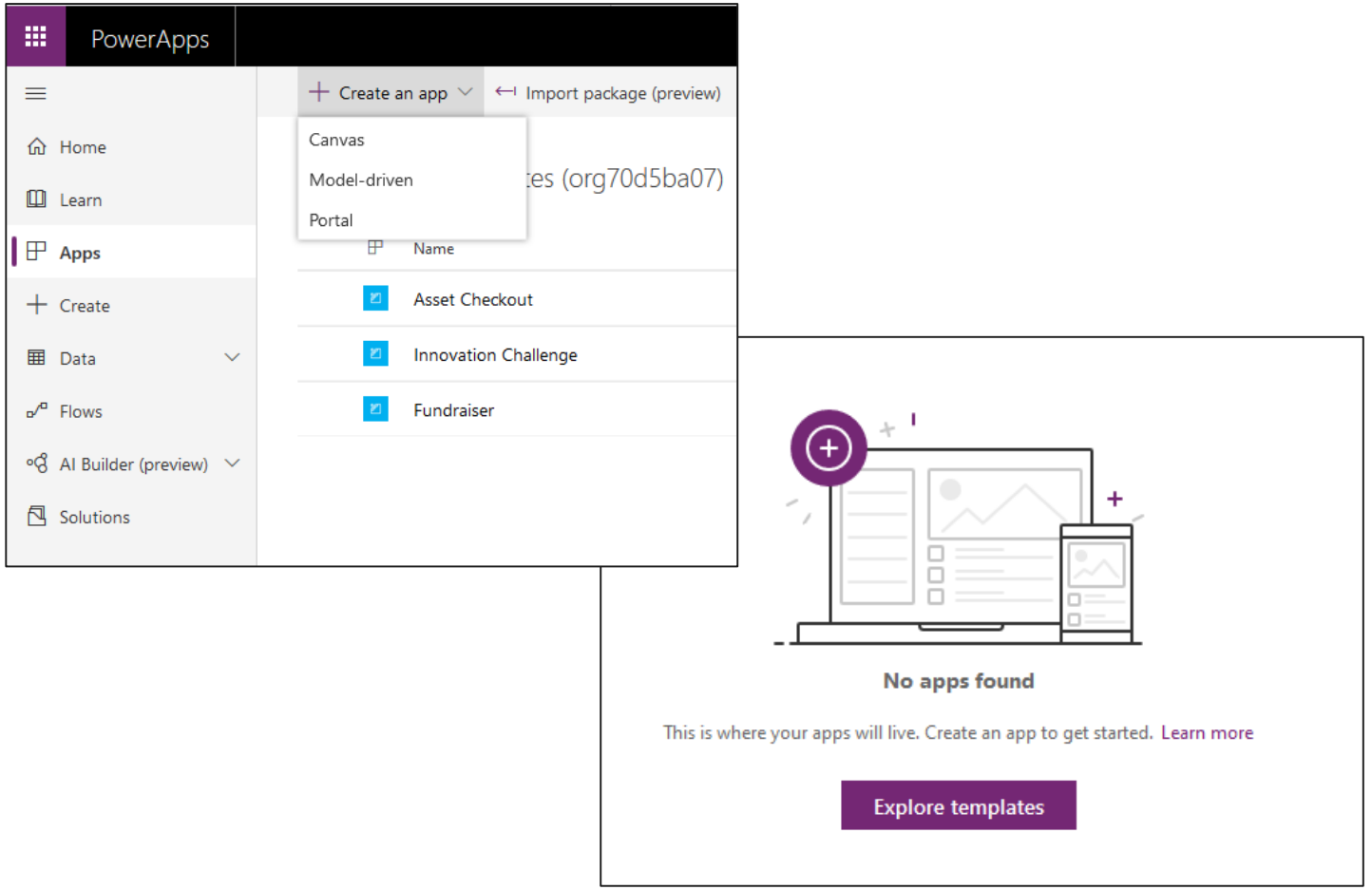
Developer Capabilities

- Robust solution framework for application install and updates
- Integrated solution checker to identify potential issues and accessibility concerns
- oData web API
- .Net SDK
- Sandbox instances for ALM operations



Power Apps Maker Portal [https://make.powerapps.com/]

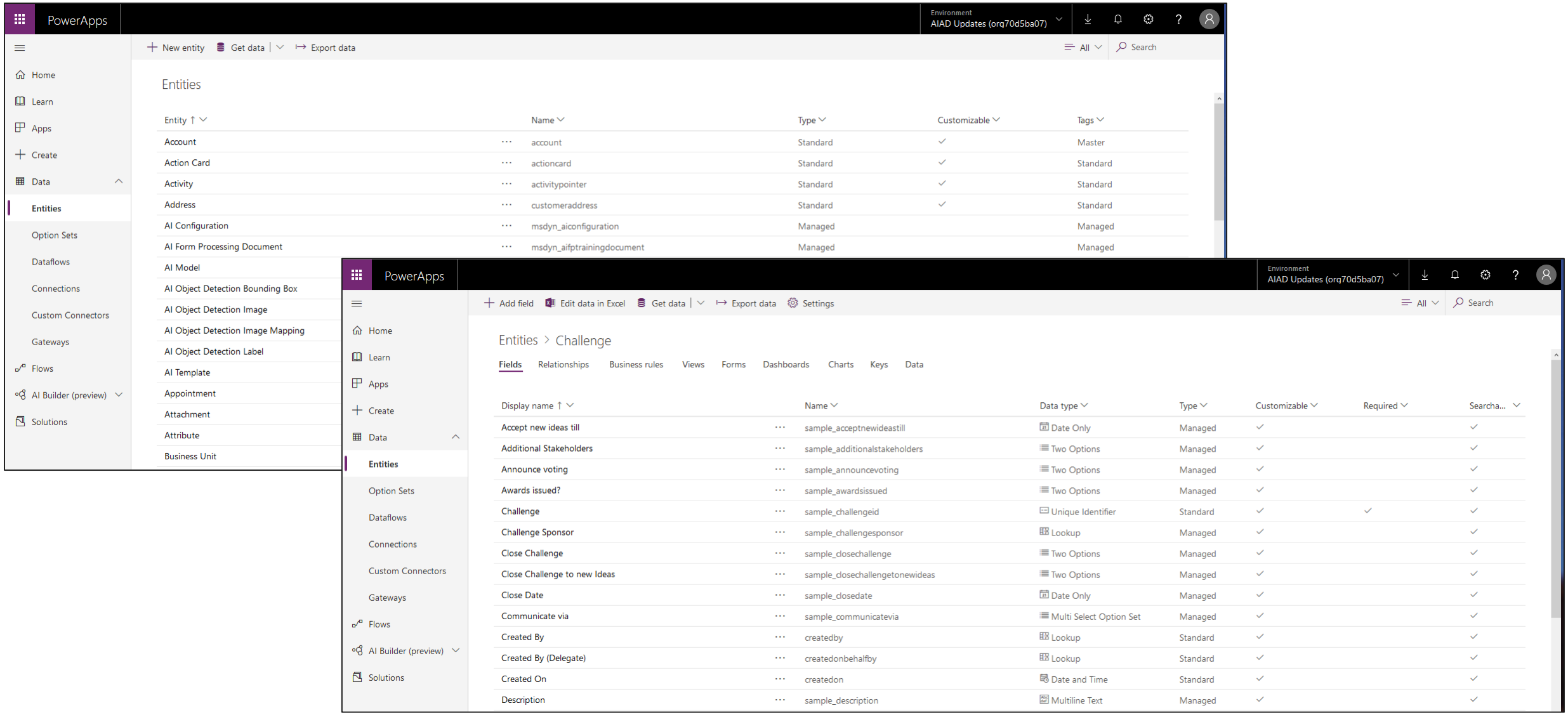
- Create new apps
- Explore sample apps and templates
- Manage and configure your apps



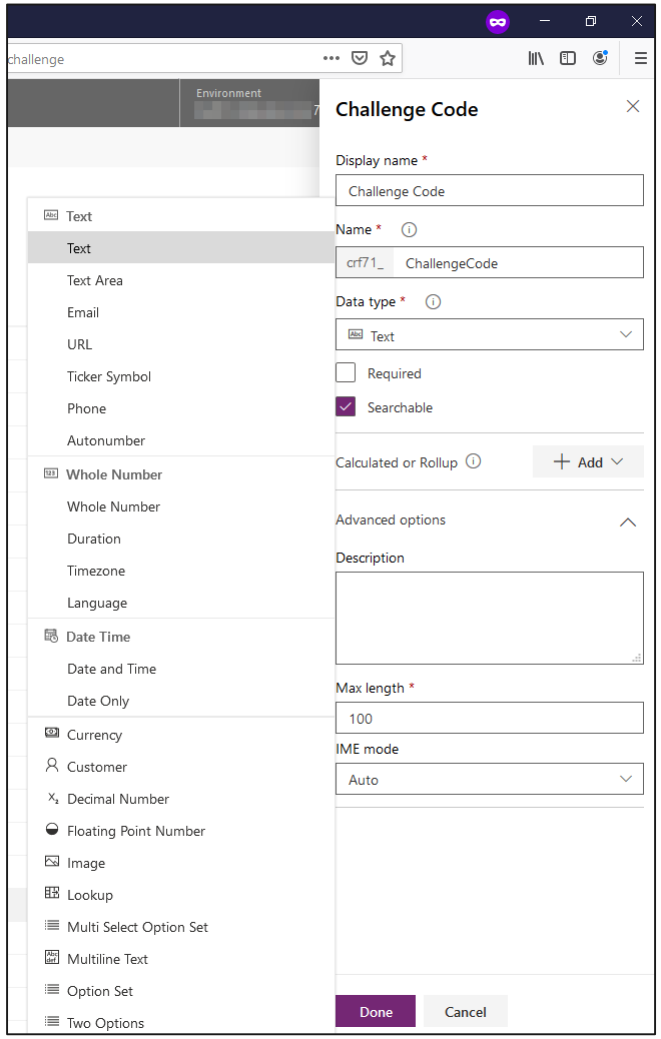
Model-driven app components - Data

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.	Power Apps 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.	Power Apps 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.	Power Apps 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.	Power Apps option set designer

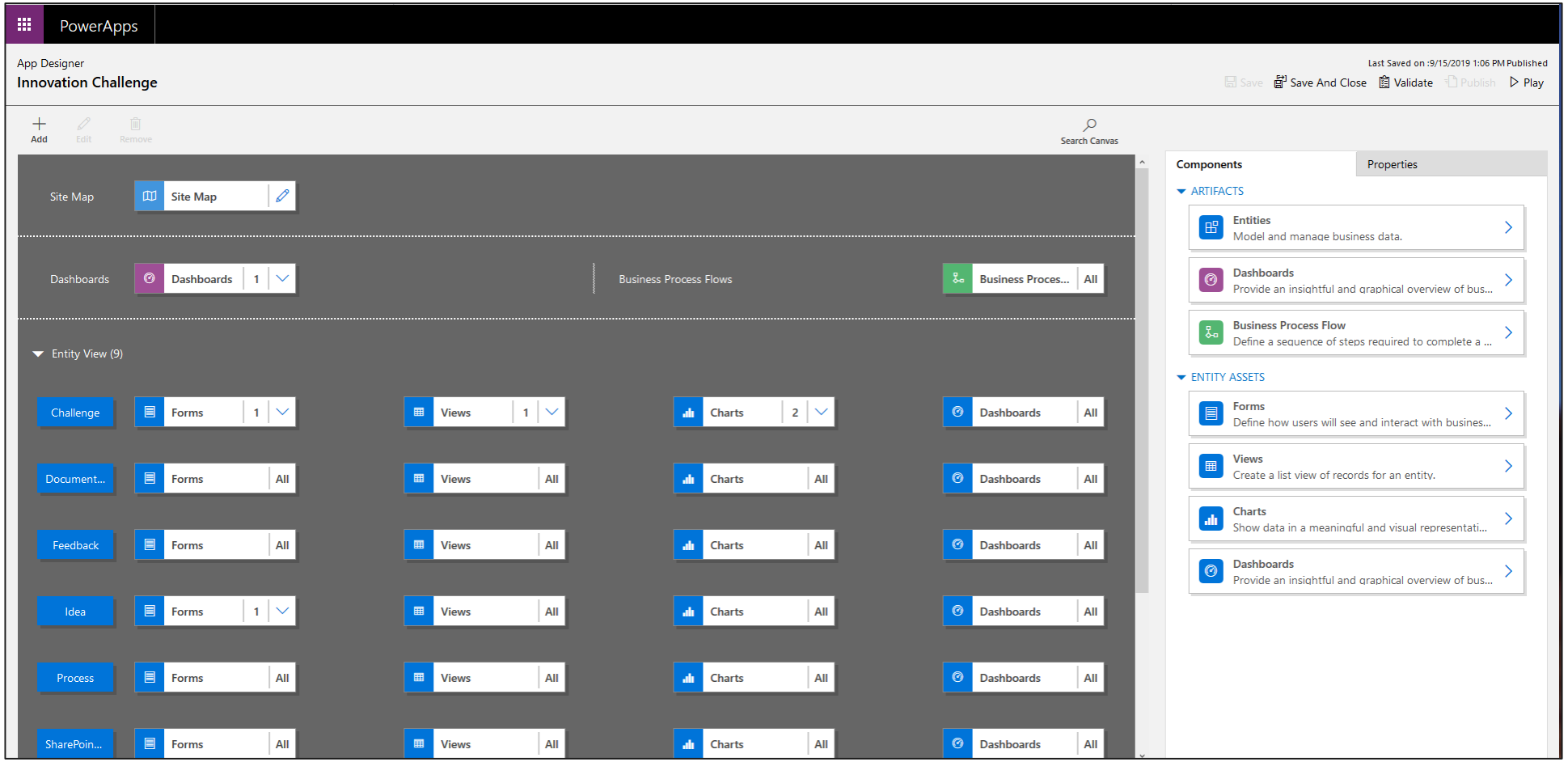
Entities and fields



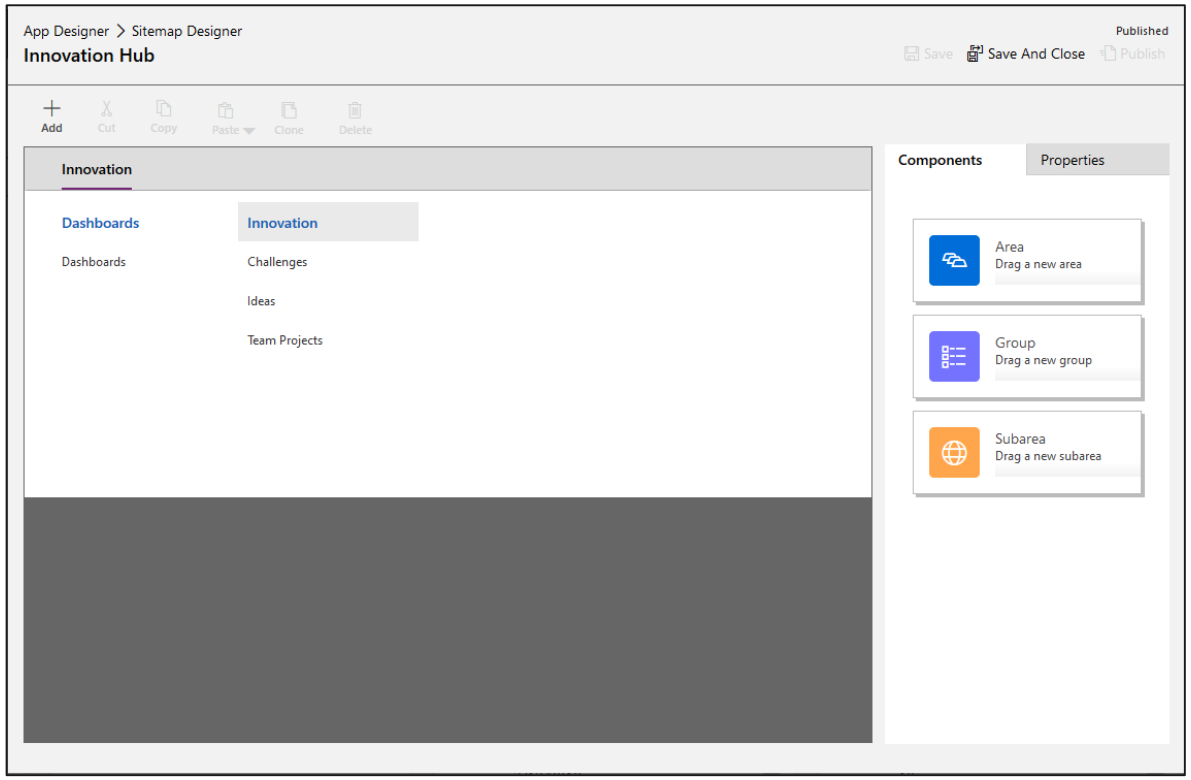
Configurable your fields with data types

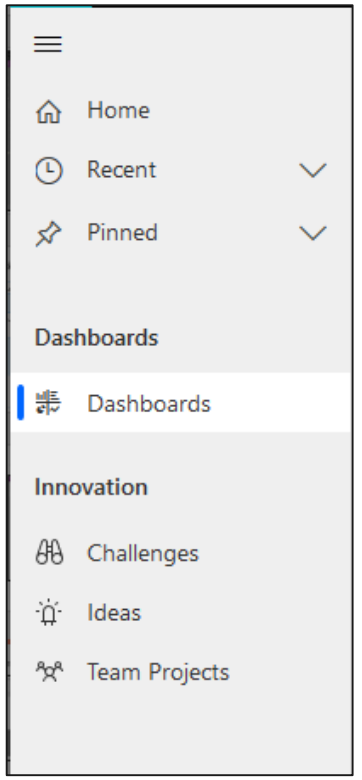


App designer

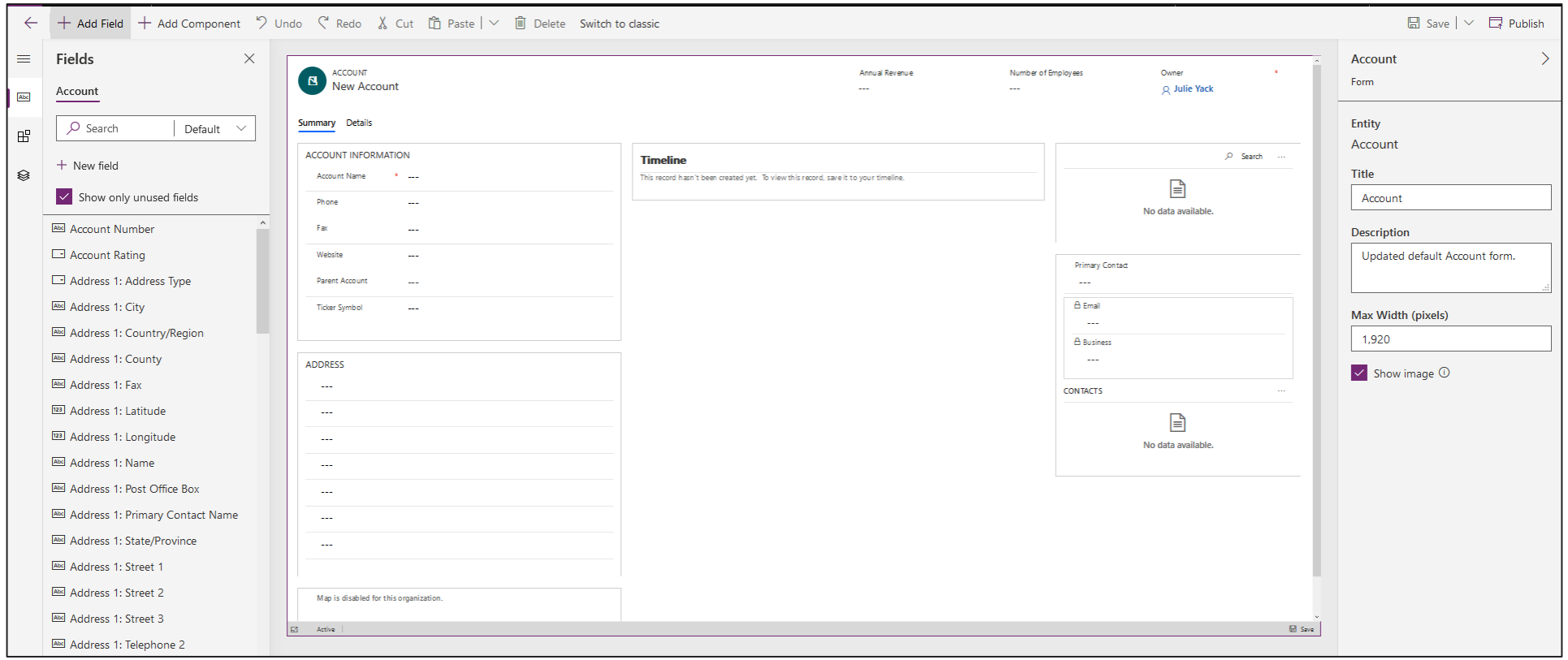


Sitemap designer

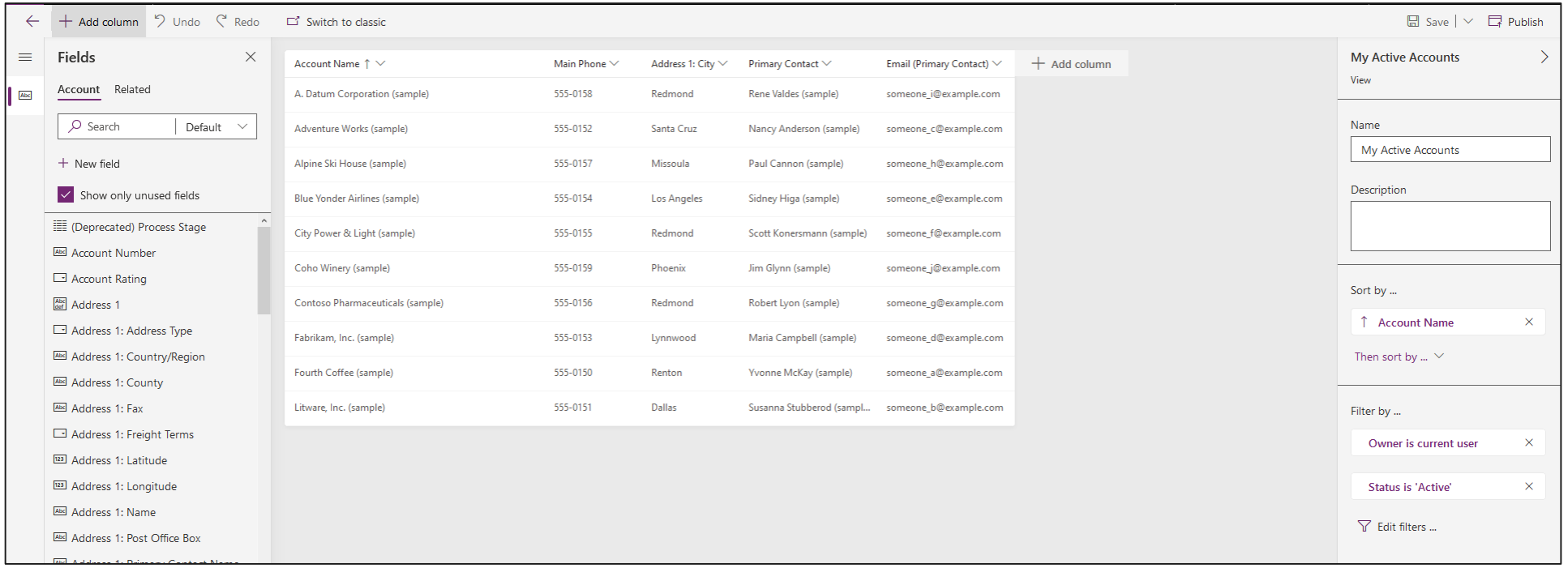




Form designer

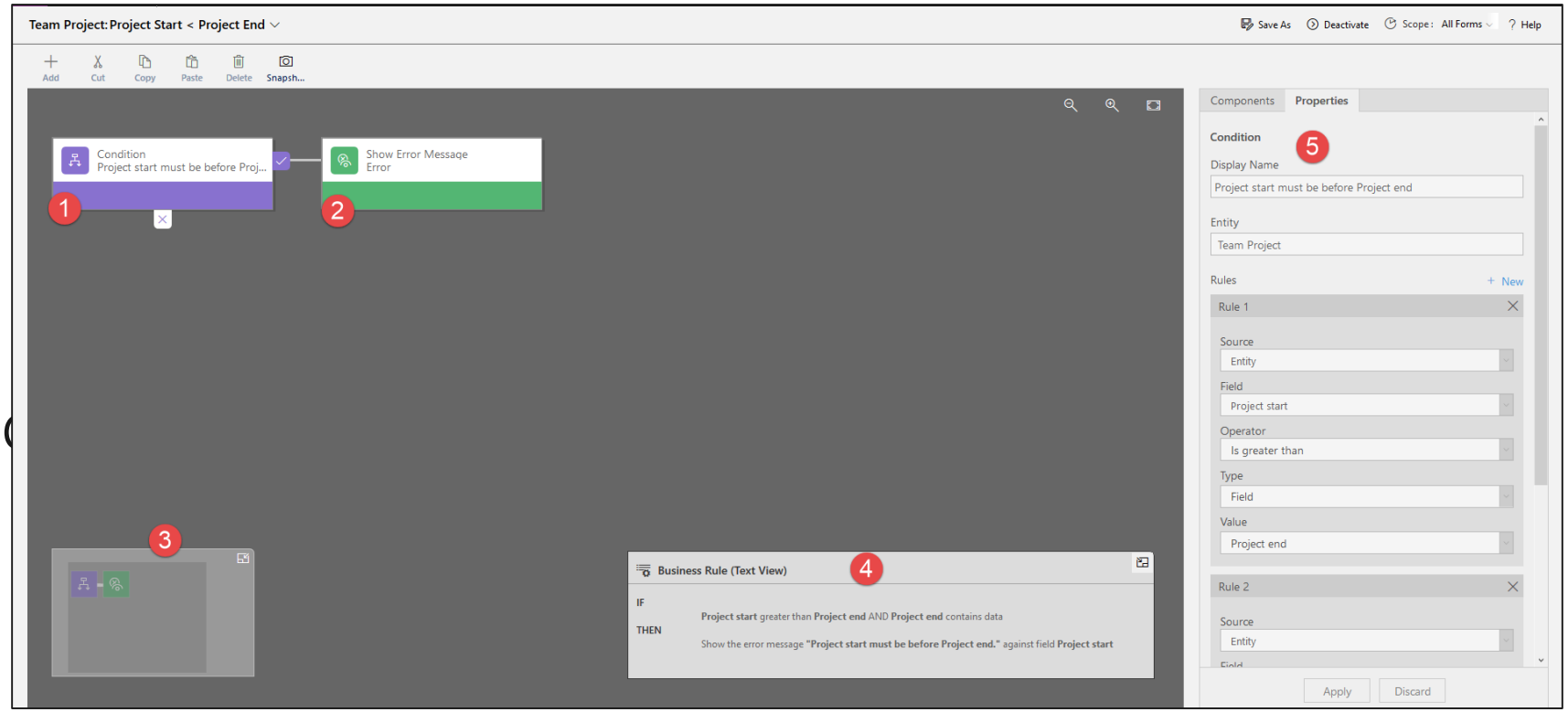


View designer

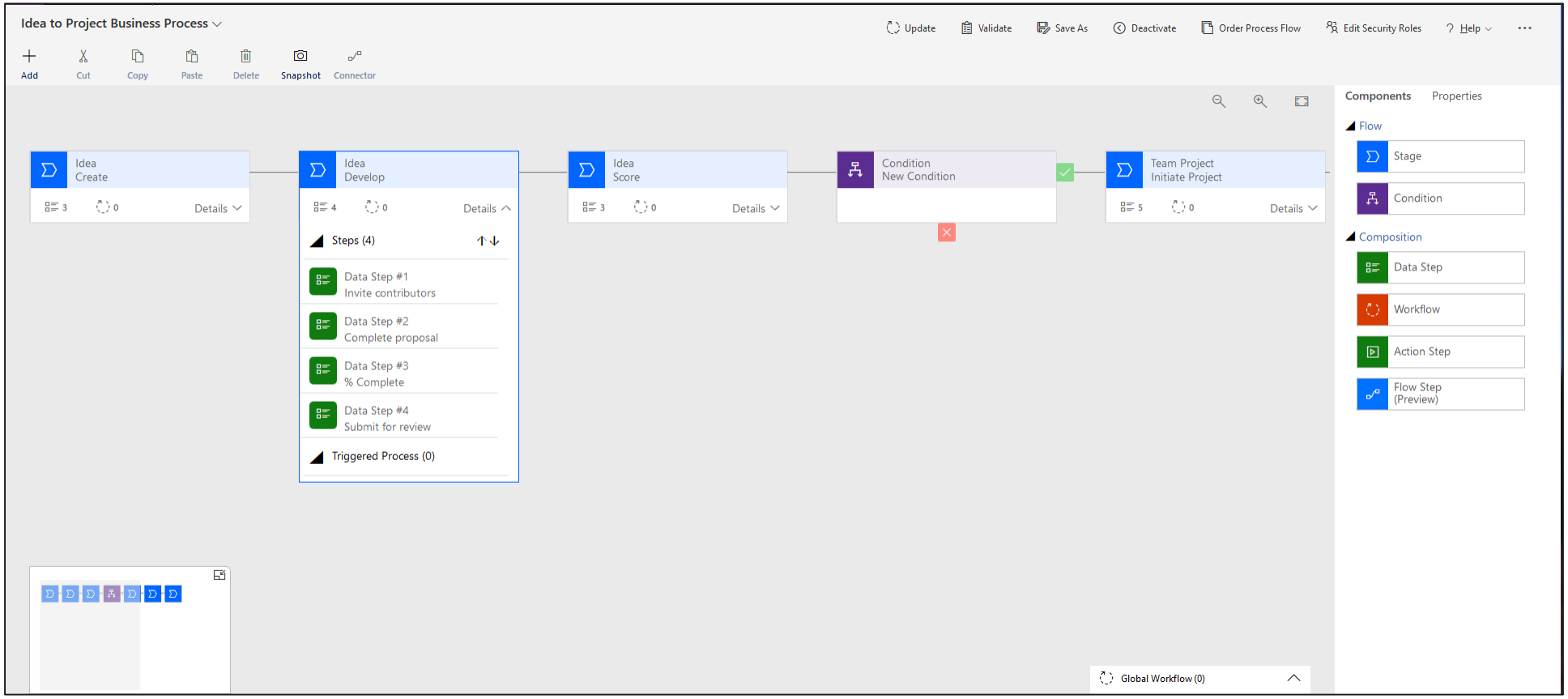


Business Rule designer

1. Condition (if this)
2. Action (do this)
3. Visualize
4. See the “code”
5. Define the rules and add more components



Business Process Flow designer



SAVE CLOSE PROPERTIES EDIT COMPONENT REMOVE UNDO CHART LIST WEB RESOURCE ...

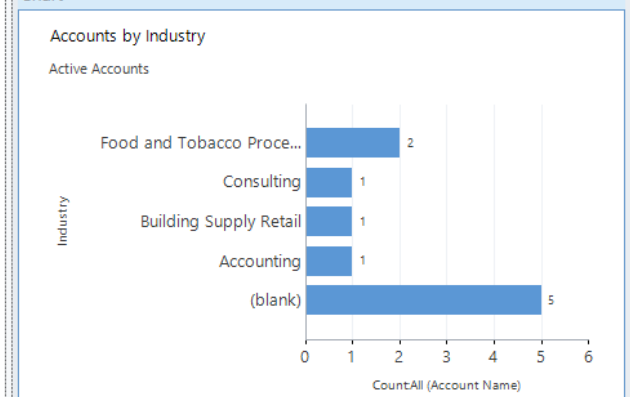
Solution: Default Solution

Dashboard : Sample dashboard

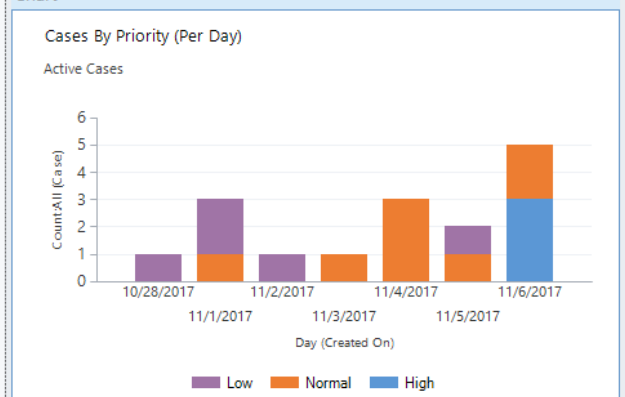
Name: * Sample dashboard

Section

Chart



Chart



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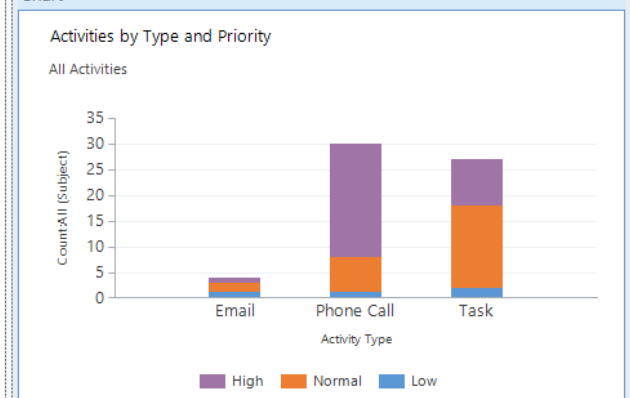

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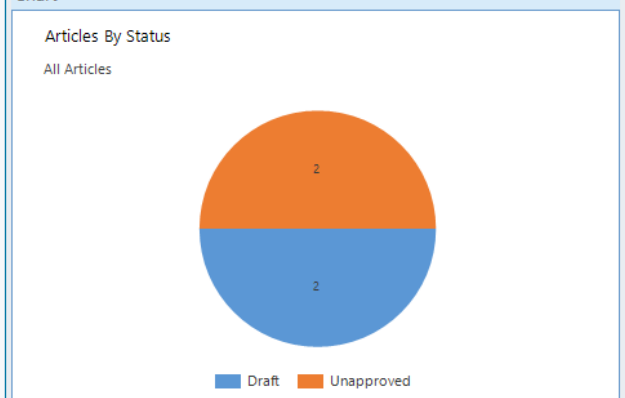
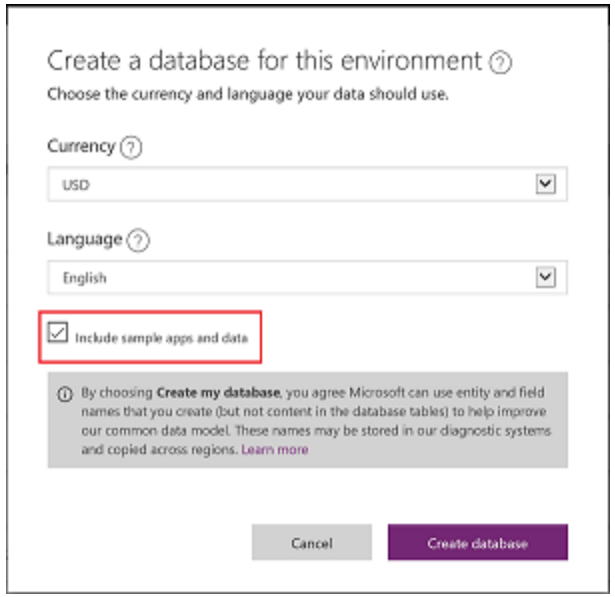
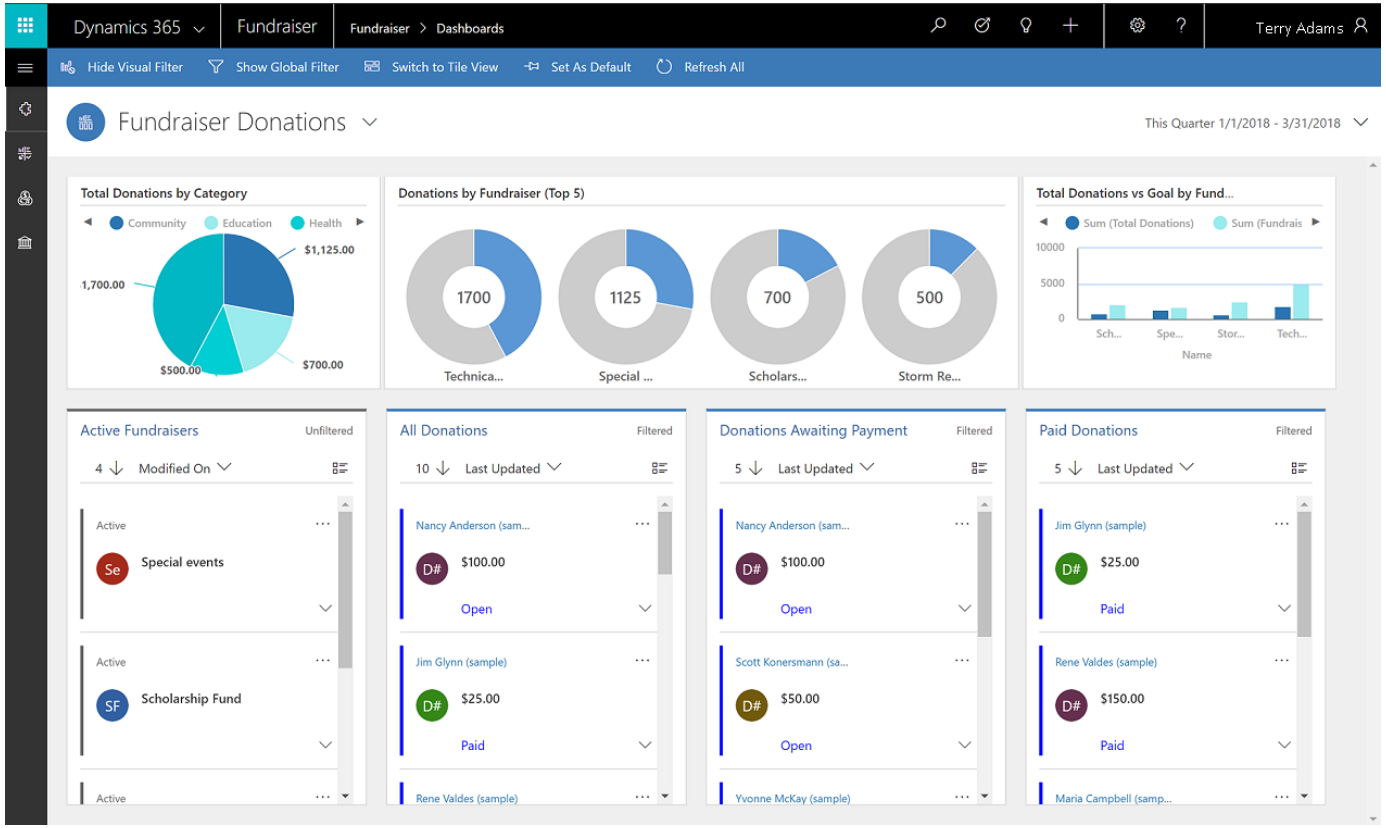


Model-driven sample apps

In order to explore or edit model-driven sample apps, the apps must first be provisioned in a Common Data Service database. First create a trial environment and database and be sure to check **Include sample apps and data**.

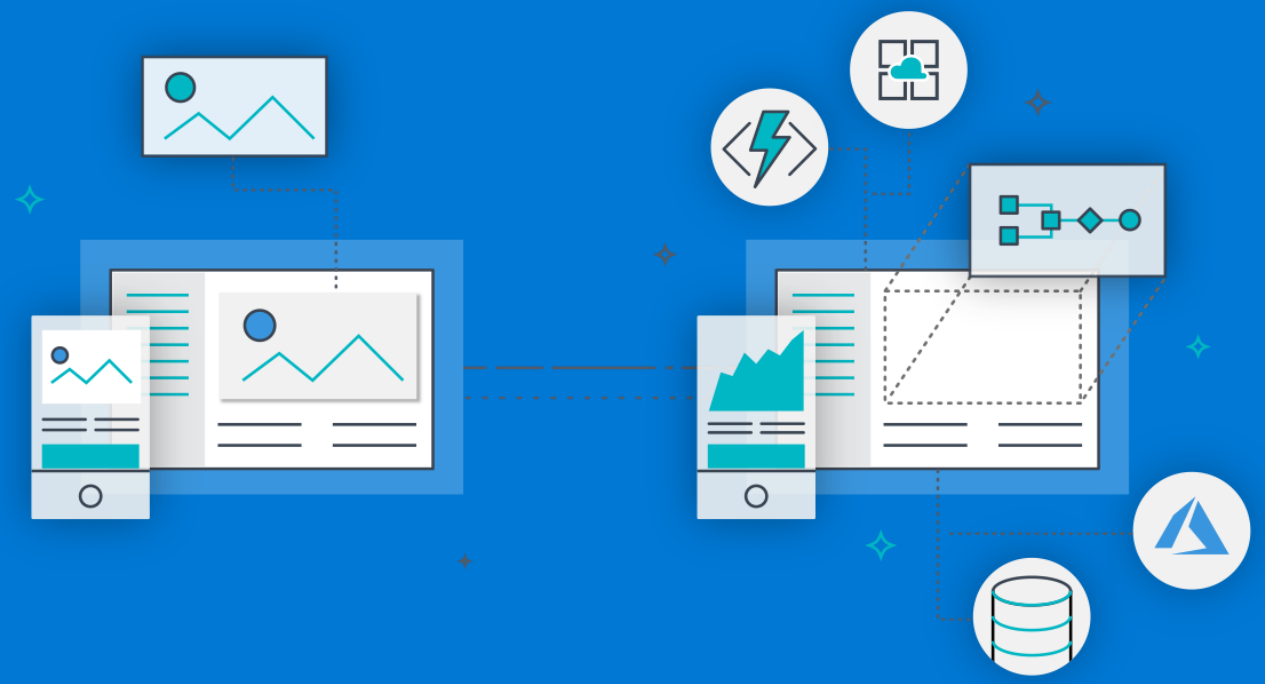




Microsoft

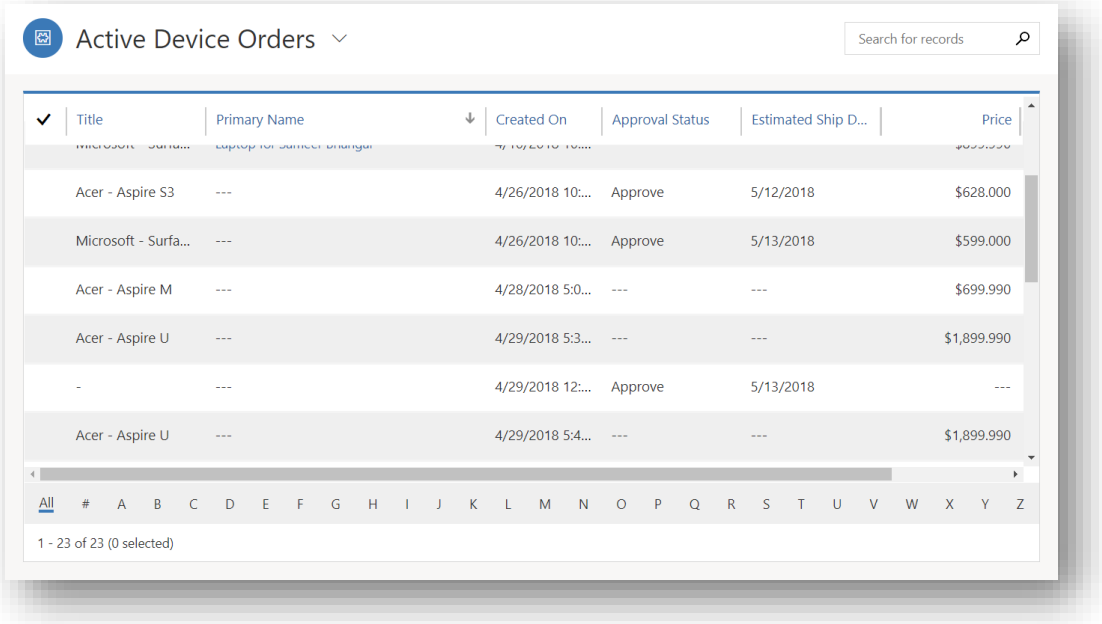
Hands-on-lab

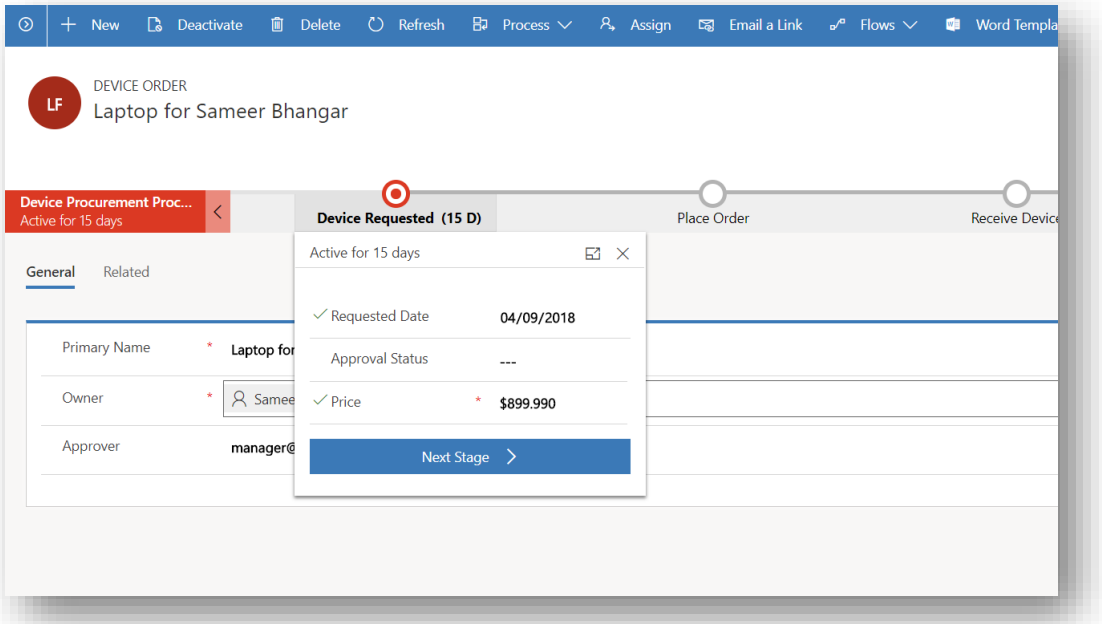
Module 3: Power Apps Model-driven App



Lab objectives

- Create a standalone Model-driven app
- Customize a form for the Model-driven app
- Create a Business Process Flow





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