

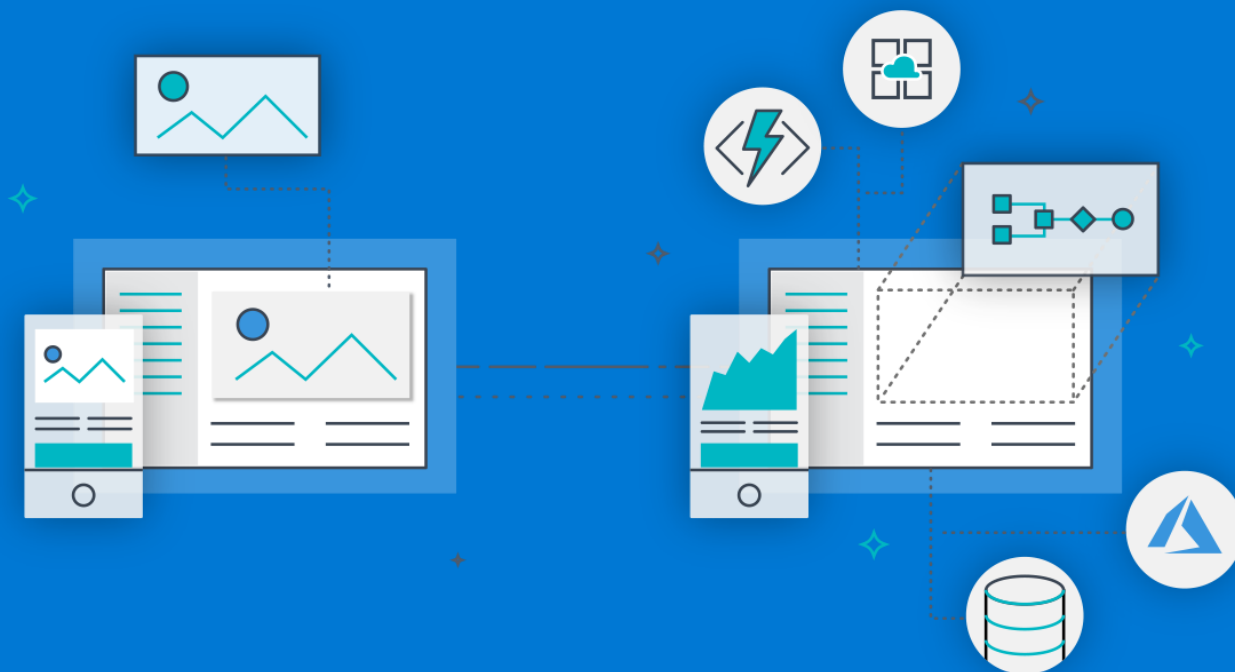


App in a Day

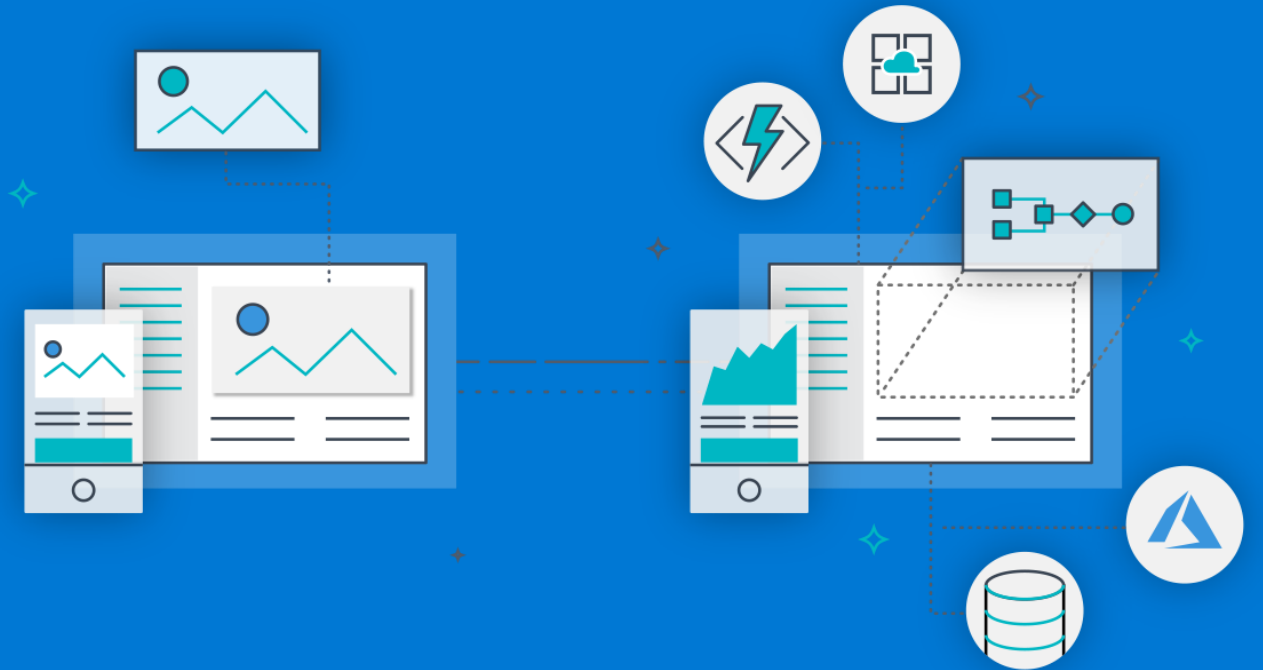
Business Application Platform

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

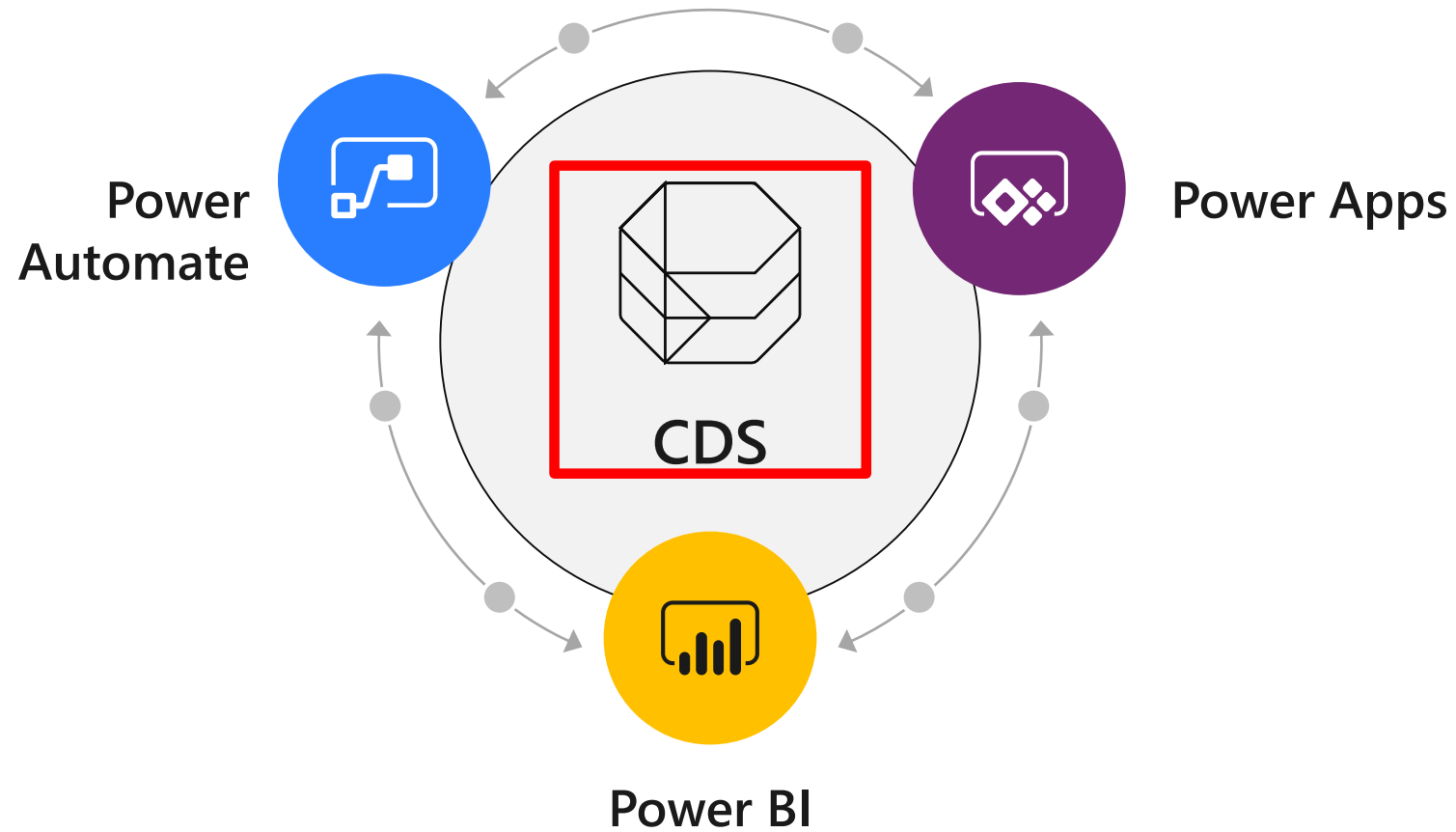
Eric Sauv , XRM Vision



Common Data Service



Common Data Service



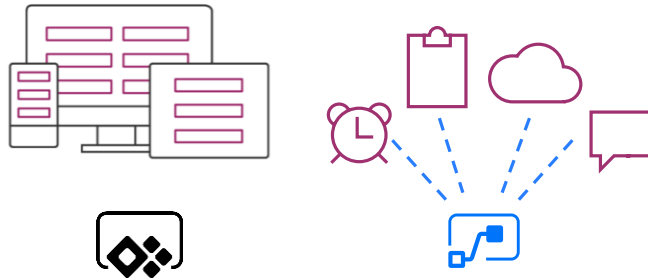
Common Data Service (CDS)

Allows you to securely store and manage the data used in apps

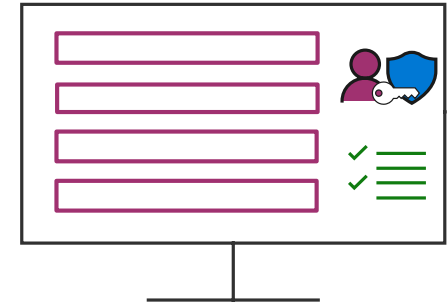
CDS is how Power Apps, Office, and the Dynamics suite of products integrate with a single system of record for business data



Store data in standard and custom entities with rich metadata



Build Power Apps apps and automate workflows against the data stored in CDS



Add business rules & validation
Define role-based security

Common Data Service

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

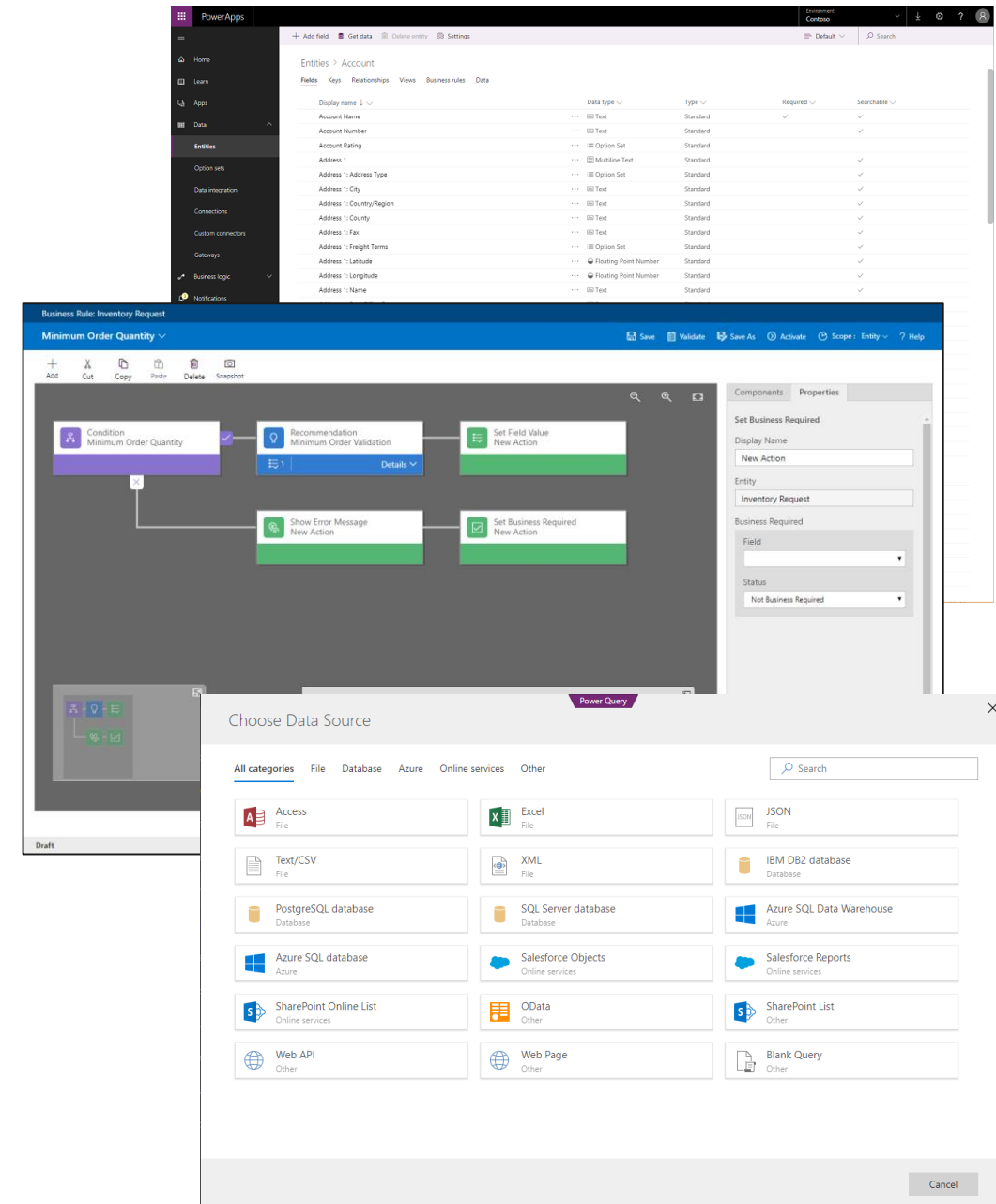
Create **calculated and roll up fields** to provide consistent calculations across apps

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

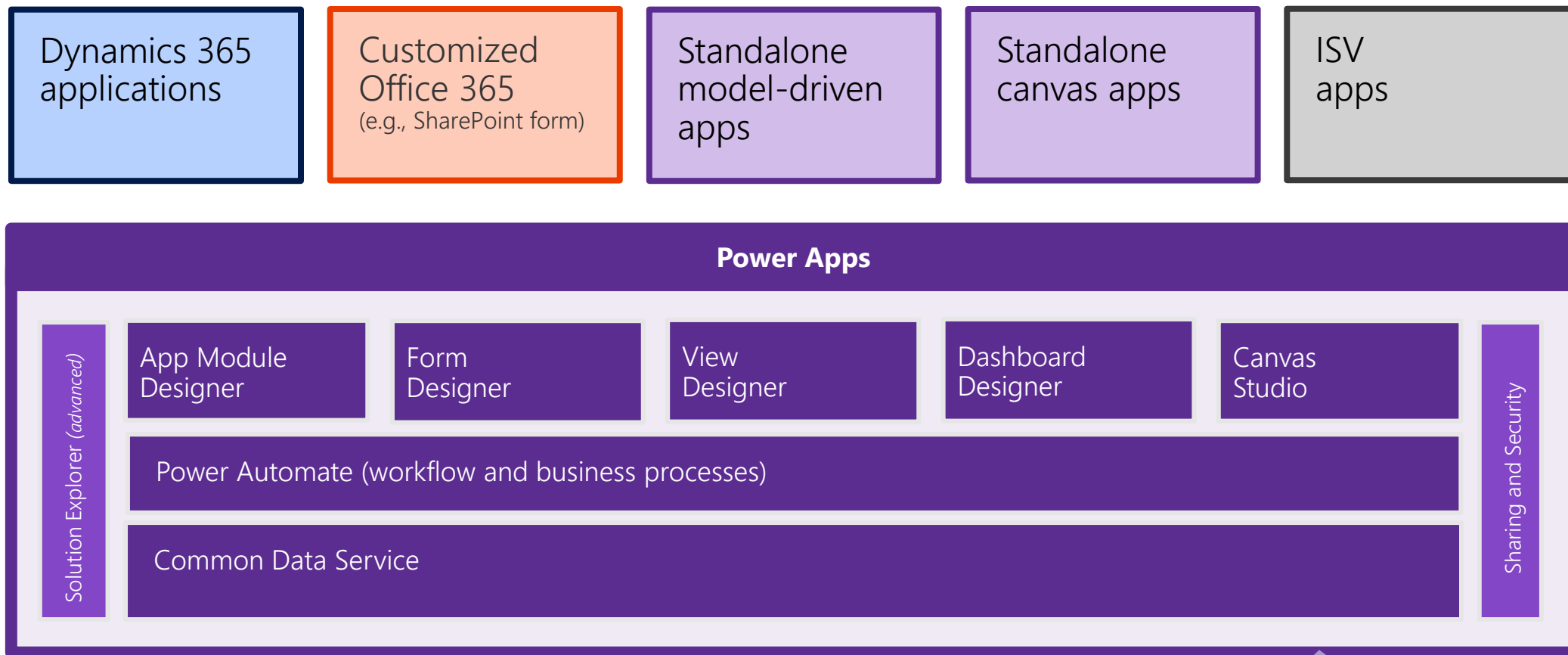
Easily **import and synchronize** your data using **Power Query**

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

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



Unifying to one high-productivity application platform



Dynamics 365 data natively on the platform – no integration required

Enterprise-grade Application Lifecycle Management

Server-side business logic for validation, defaulting, calculated fields and more

Common Data Service

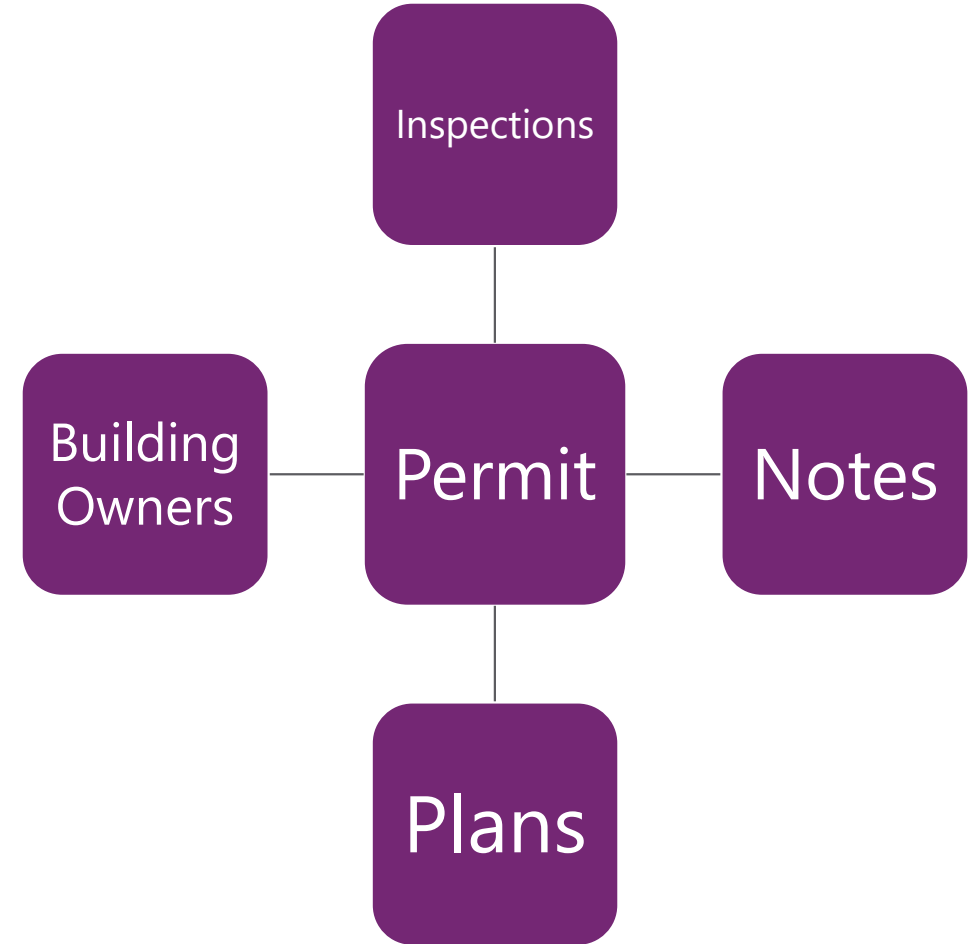
Securely store and manage business data

Model real world data with entities and relationships

Implements the Common Data Model

Role based security down to the field level

Logic and validation at the data level enforced across all consuming applications



Common Data Model

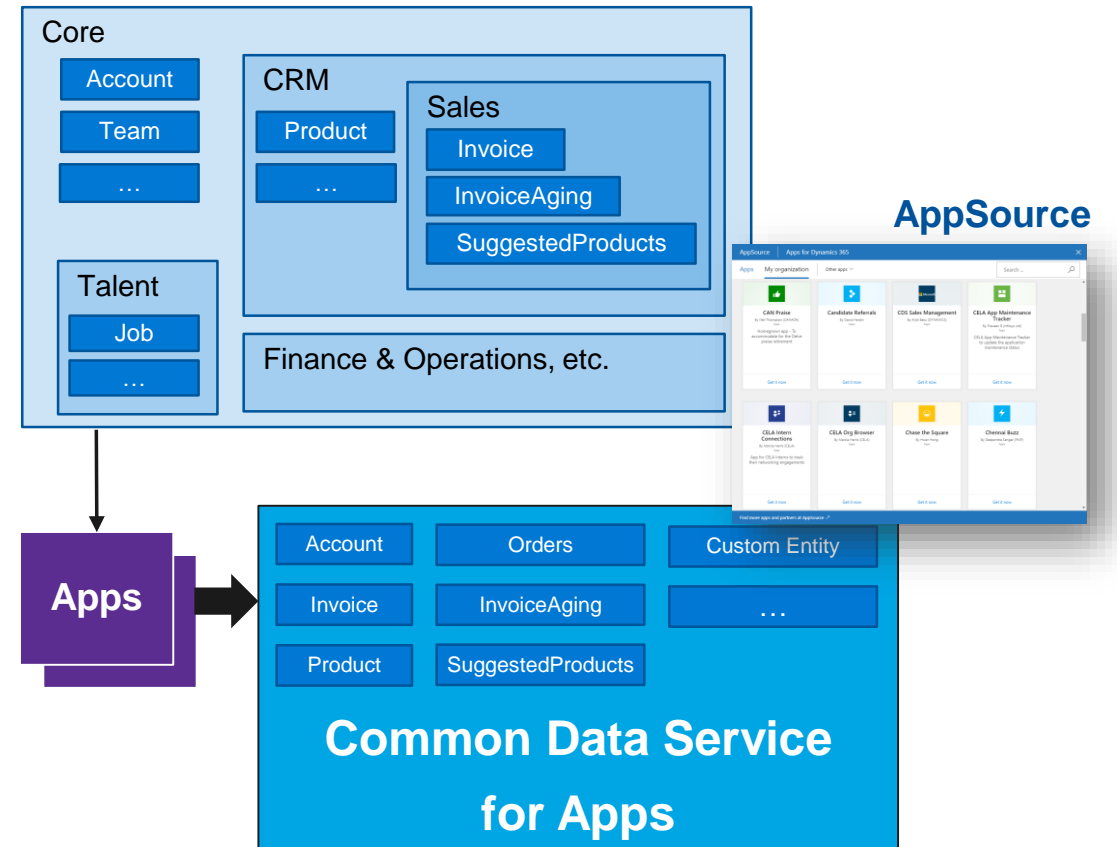
The **Common Data Model** (CDM) is a standard and extensible collection of schemas (entities, attributes, relationships) that represent business concepts and activities within well-defined semantics.

Customers, system integrators, and ISVs can build on and depend on these standard CDM definitions, and extend them to capture additional business-specific ideas.

Open Sourced at

<https://github.com/microsoft/cdm>

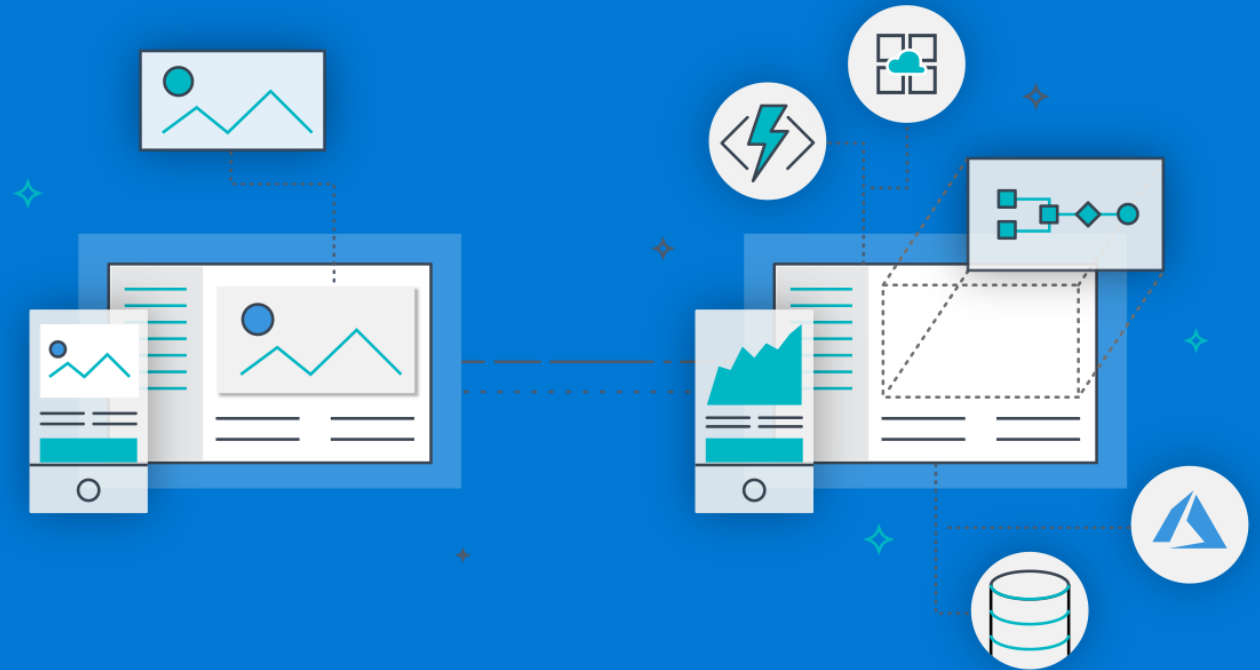
Common Data Model - Definitions





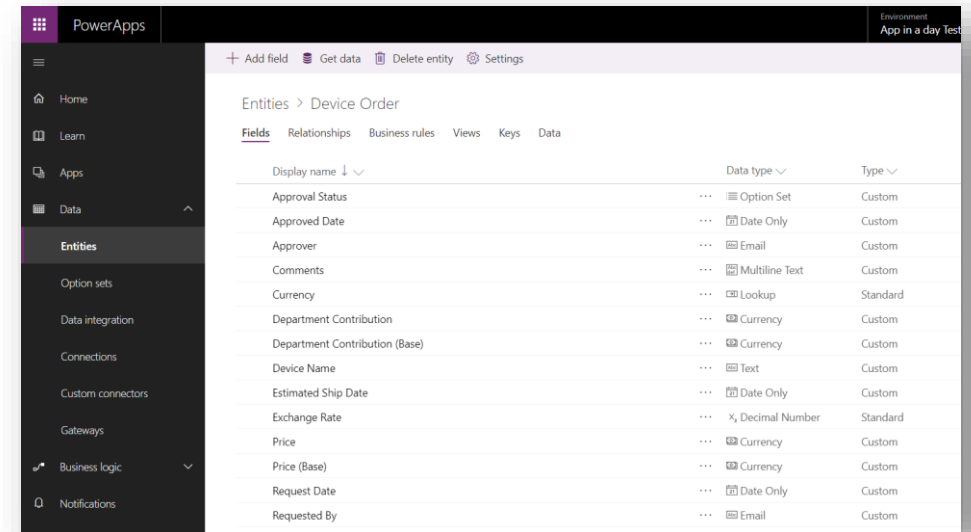
Hands-on-lab

Module 2: Common Data Service



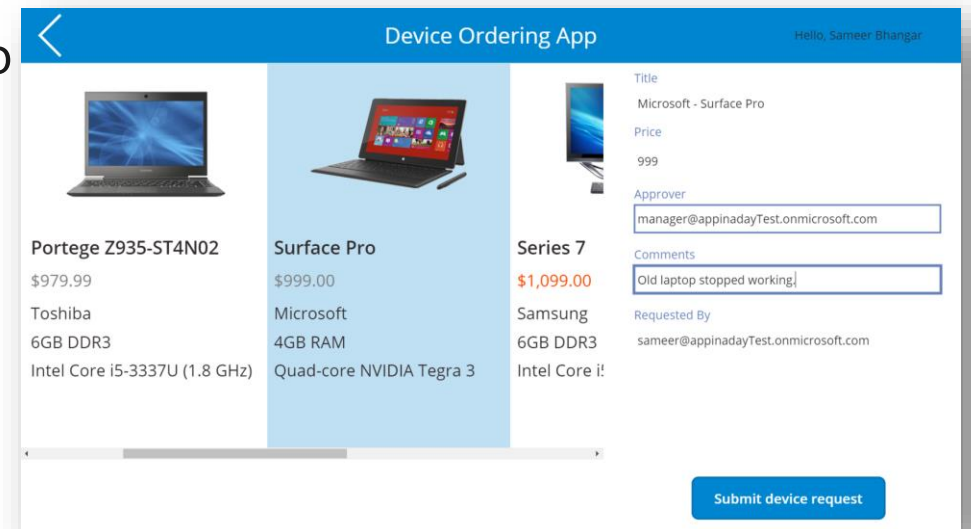
Lab objectives

- Provisioning a CDS database
- Getting familiar with standard entities
- Creating a custom entity
- Customizing entity fields and option sets
- Creating calculated fields
- Using the Canvas app form control to save data to CDS
- Using the Office365 connector to get user's manager info
- Configuring Canvas app settings
- Saving and sharing a Canvas app
- Running a Canvas app on a mobile device



The screenshot shows the 'Entities' view for a 'Device Order' entity in PowerApps. The left sidebar contains navigation options: Home, Learn, Apps, Data, Entities (selected), Option sets, Data integration, Connections, Custom connectors, Gateways, Business logic, and Notifications. The main area displays a table of fields for the 'Device Order' entity. The table has columns for 'Display name', 'Data type', and 'Type'. The fields listed are: Approval Status (Option Set, Custom), Approved Date (Date Only, Custom), Approver (Email, Custom), Comments (Multiline Text, Custom), Currency (Lookup, Standard), Department Contribution (Currency, Custom), Department Contribution (Base) (Currency, Custom), Device Name (Text, Custom), Estimated Ship Date (Date Only, Custom), Exchange Rate (Decimal Number, Standard), Price (Currency, Custom), Price (Base) (Currency, Custom), Request Date (Date Only, Custom), and Requested By (Email, Custom).

Display name	Data type	Type
Approval Status	Option Set	Custom
Approved Date	Date Only	Custom
Approver	Email	Custom
Comments	Multiline Text	Custom
Currency	Lookup	Standard
Department Contribution	Currency	Custom
Department Contribution (Base)	Currency	Custom
Device Name	Text	Custom
Estimated Ship Date	Date Only	Custom
Exchange Rate	Decimal Number	Standard
Price	Currency	Custom
Price (Base)	Currency	Custom
Request Date	Date Only	Custom
Requested By	Email	Custom



The screenshot shows the 'Device Ordering App' Canvas app interface. The app has a blue header with a back arrow, the title 'Device Ordering App', and the user's name 'Hello, Sameer Bhargava'. The main content area displays three product cards: 'Portege Z935-ST4N02' (Toshiba, 6GB DDR3, Intel Core i5-3337U, \$979.99), 'Surface Pro' (Microsoft, 4GB RAM, Quad-core NVIDIA Tegra 3, \$999.00), and 'Series 7' (Samsung, 6GB DDR3, Intel Core i7, \$1,099.00). The 'Surface Pro' card is highlighted. To the right of the product cards is a form with fields for 'Title' (Microsoft - Surface Pro), 'Price' (999), 'Approver' (manager@appinadayTest.onmicrosoft.com), 'Comments' (Old laptop stopped working), and 'Requested By' (sameer@appinadayTest.onmicrosoft.com). A blue 'Submit device request' button is at the bottom right.

Product	Brand	Specs	Price
Portege Z935-ST4N02	Toshiba	6GB DDR3, Intel Core i5-3337U (1.8 GHz)	\$979.99
Surface Pro	Microsoft	4GB RAM, Quad-core NVIDIA Tegra 3	\$999.00
Series 7	Samsung	6GB DDR3, Intel Core i7	\$1,099.00



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