

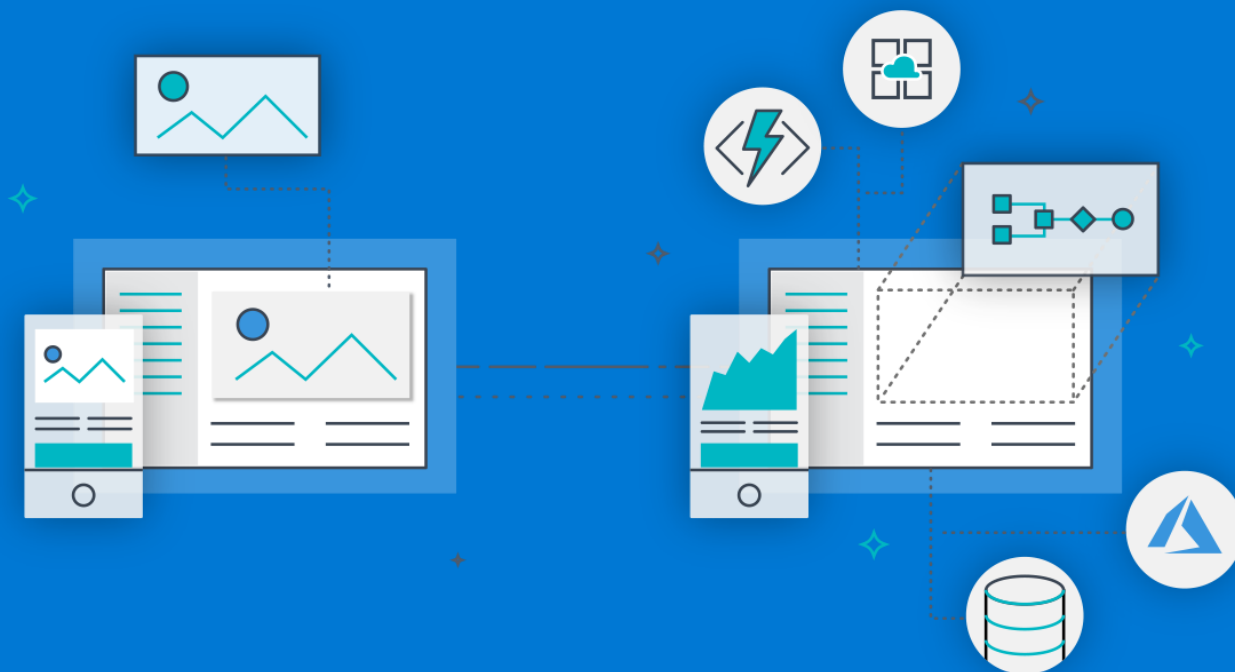


# App in a Day

## Business Application Platform

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

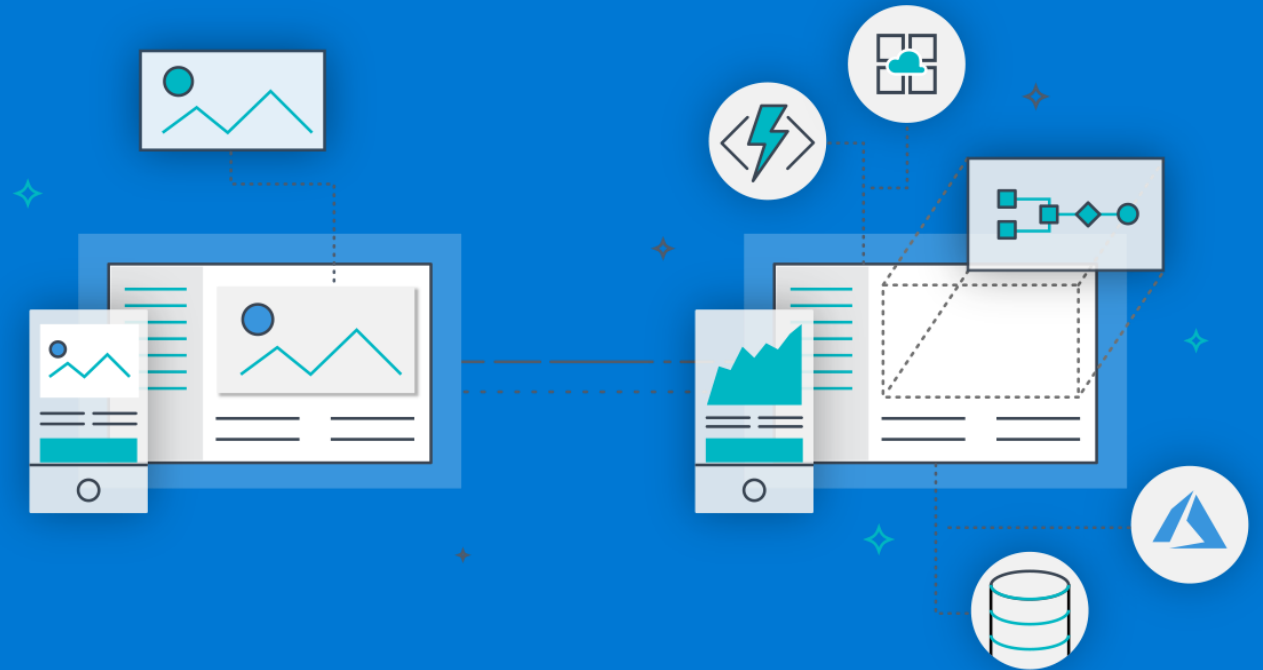
Eric Sauv , XRM Vision



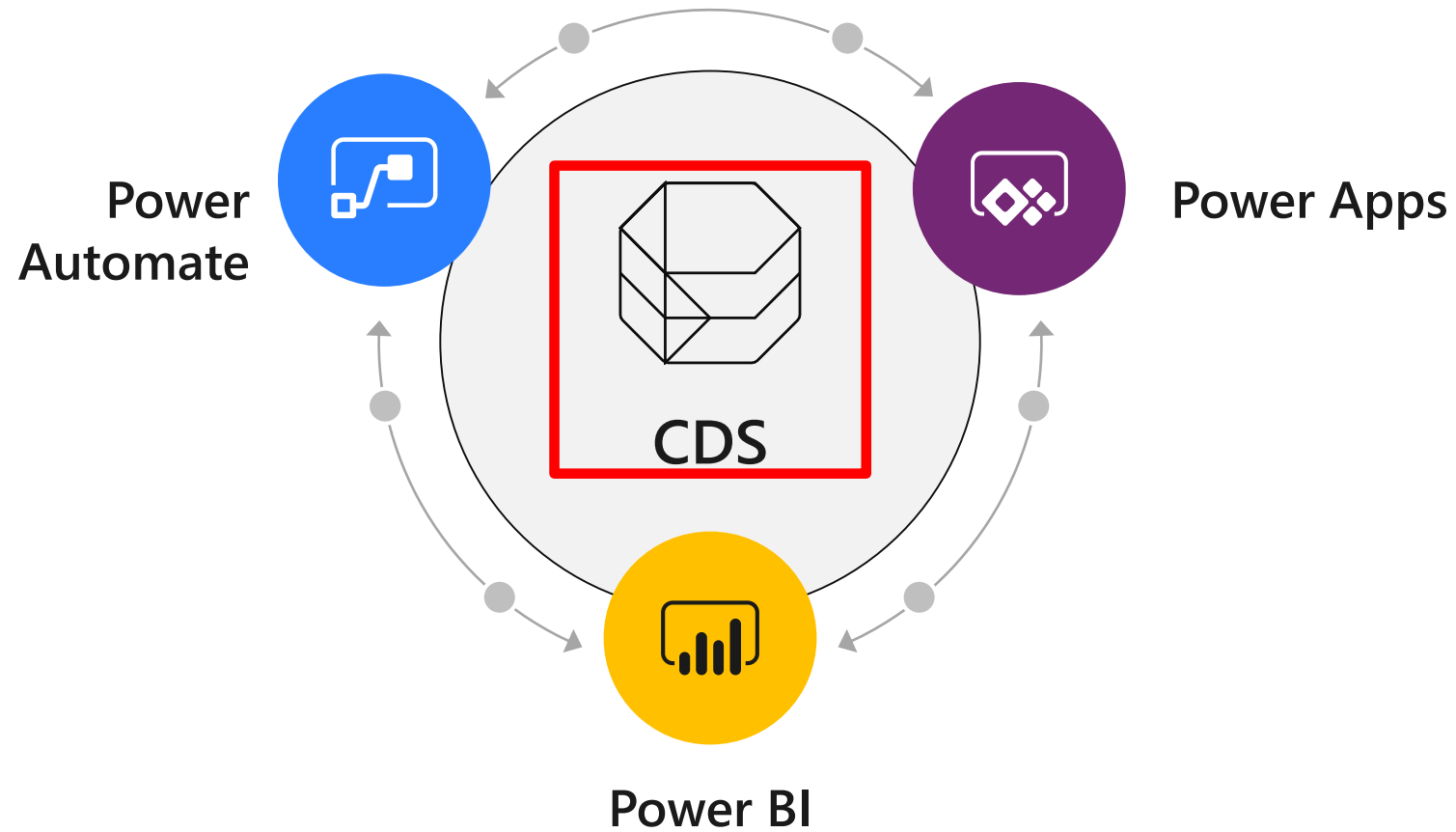


# Common Data Service

Eric Sauv , XRM Vision



# Common Data Service



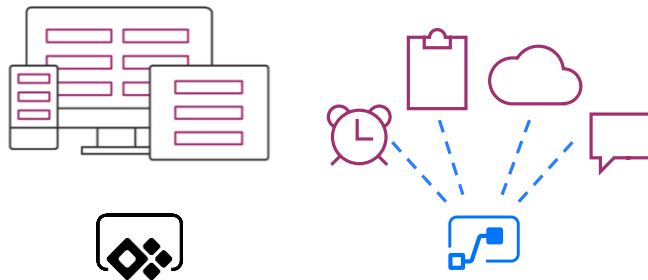
# Common Data Service (CDS)

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

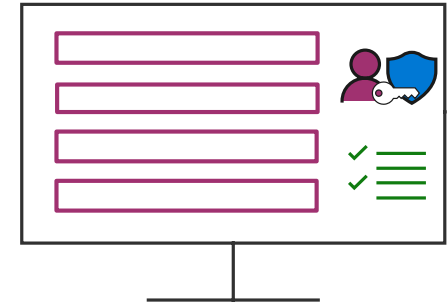
CDS is how Power Apps, Office, and the Dynamics suite of products integrate with a single system of record for business data



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

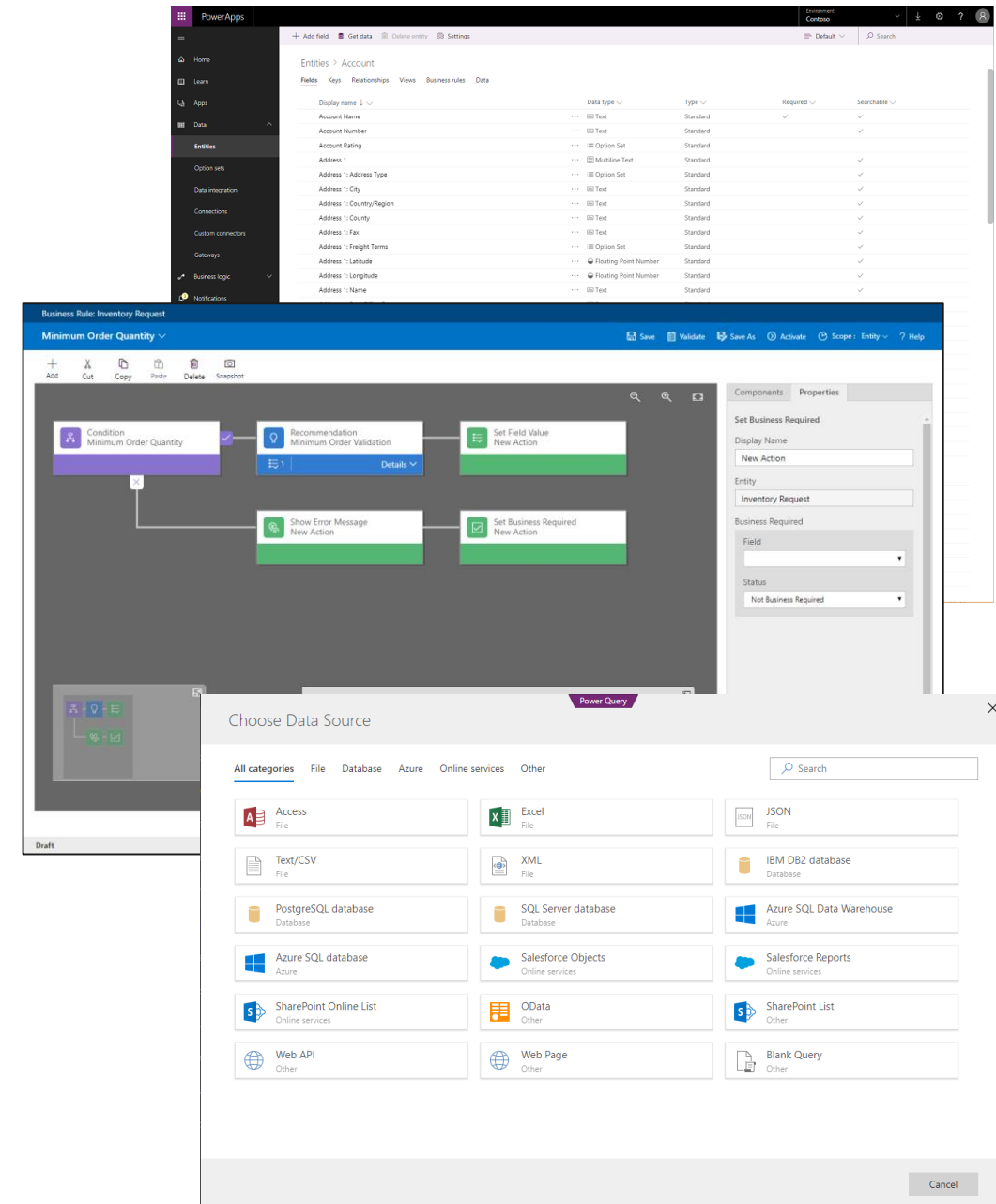
Create **calculated and roll up fields** to provide consistent calculations across apps

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

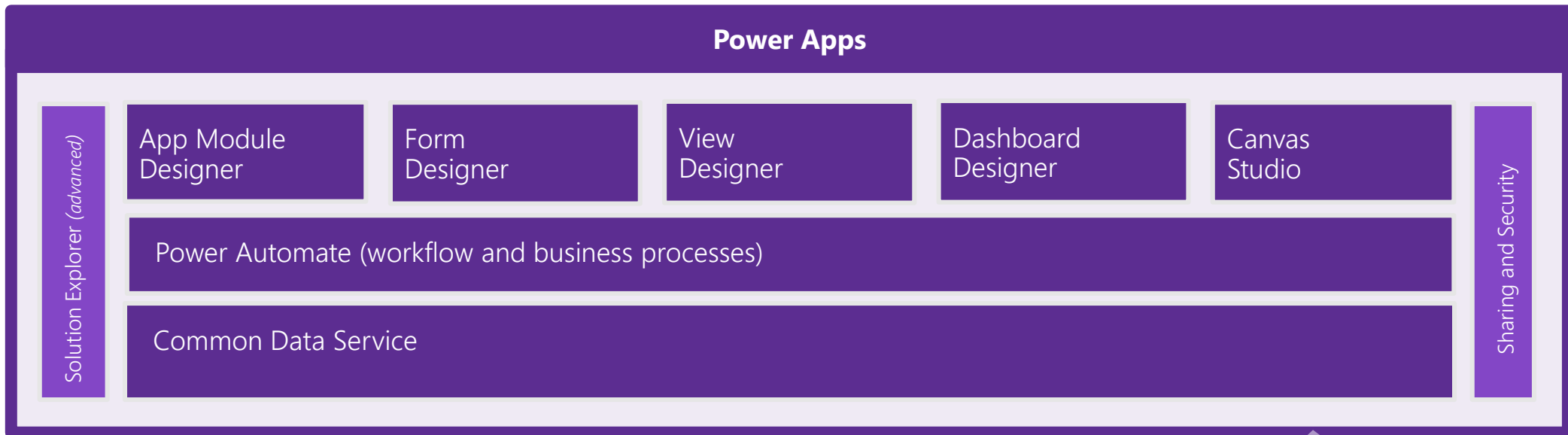
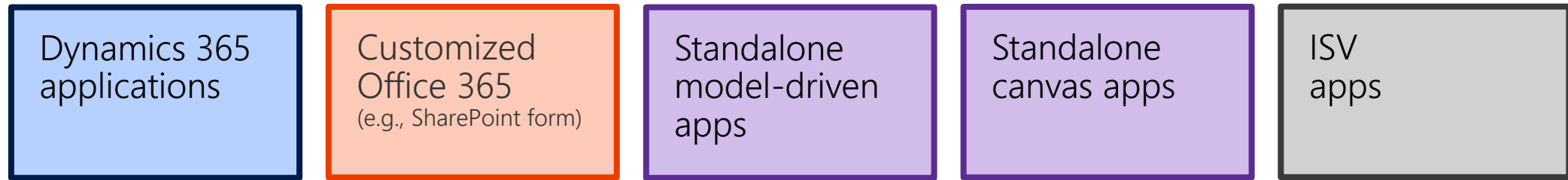
Easily **import and synchronize** your data using **Power Query**

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

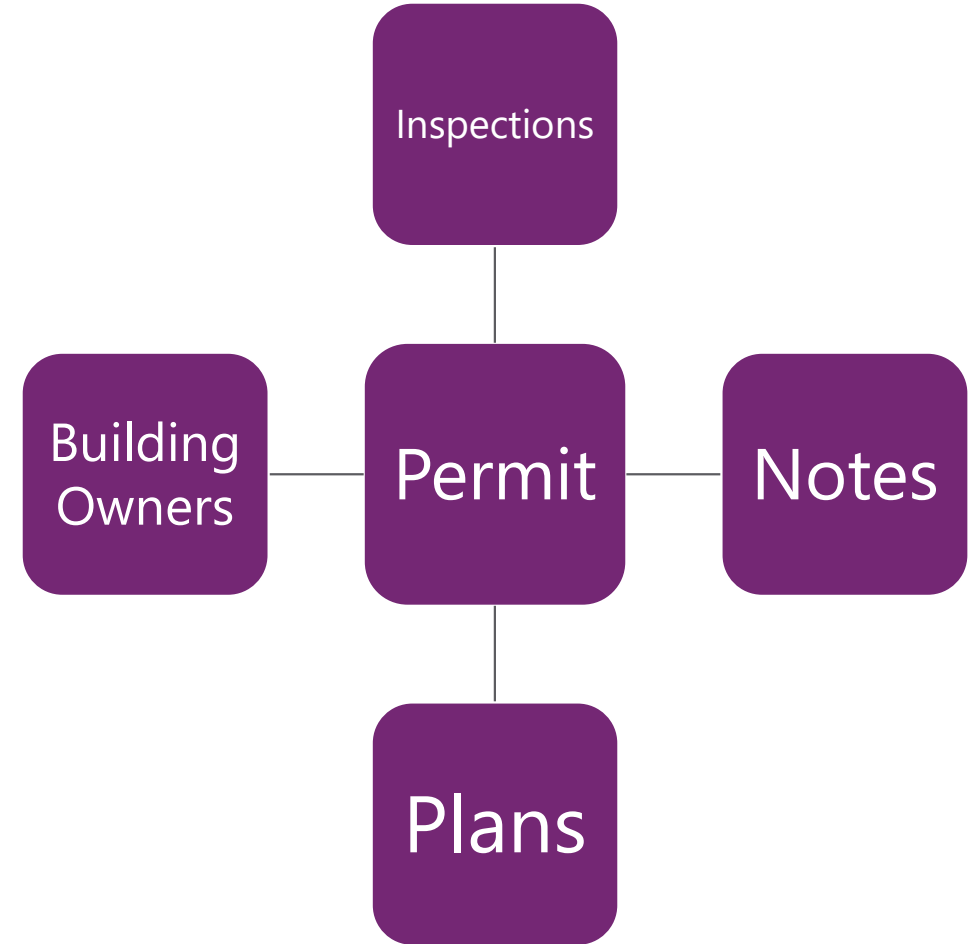
Securely store and manage business data

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

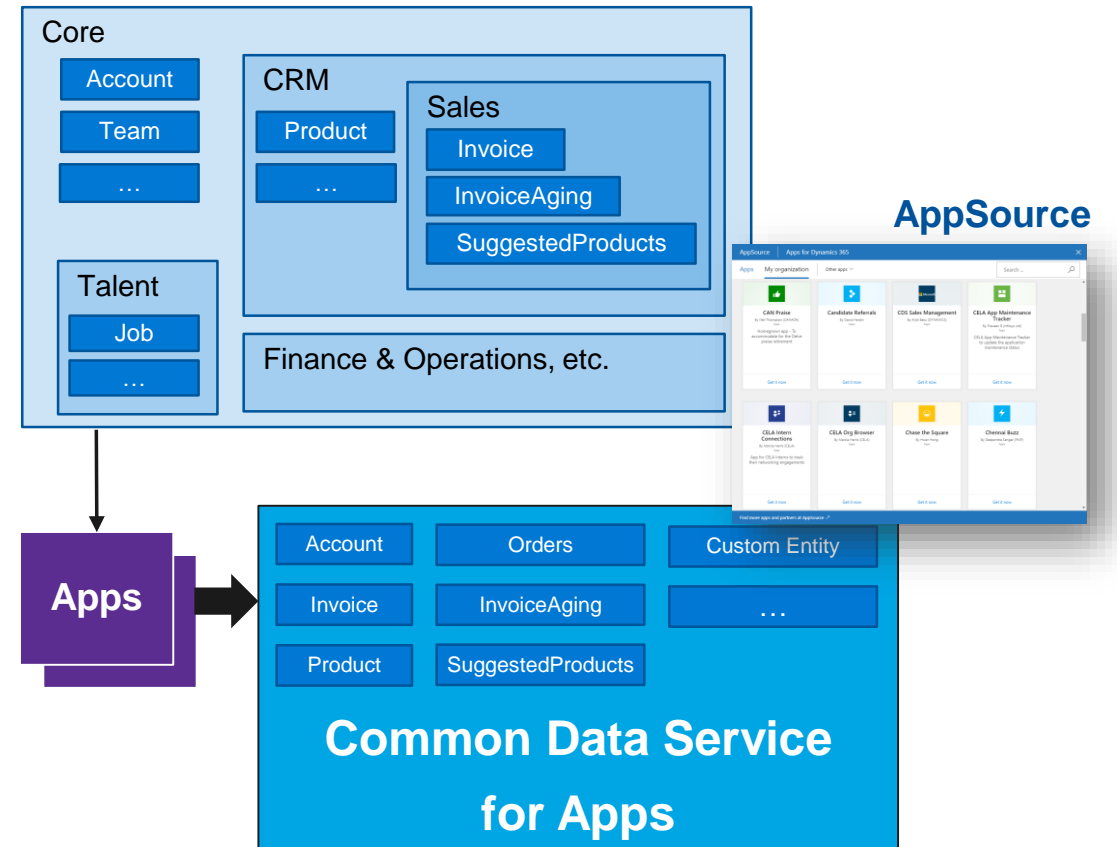
The **Common Data Model** (CDM) is a standard and extensible collection of schemas (entities, attributes, relationships) that represent business concepts and activities within well-defined semantics.

**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>

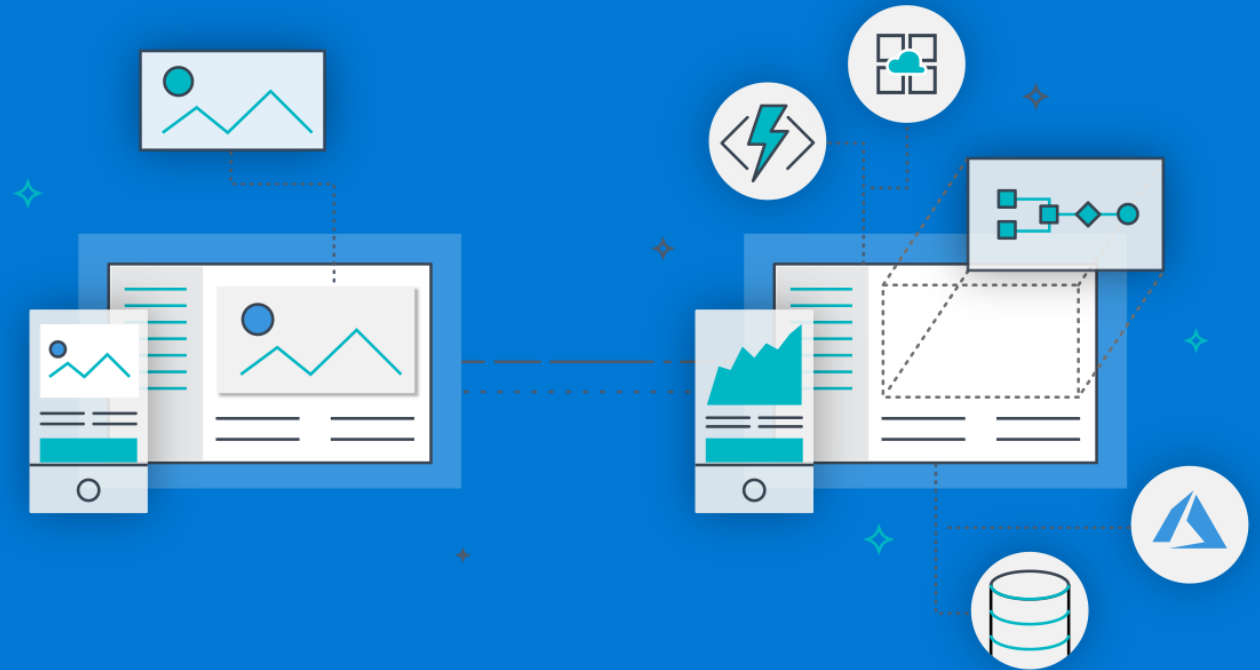
## Common Data Model - Definitions





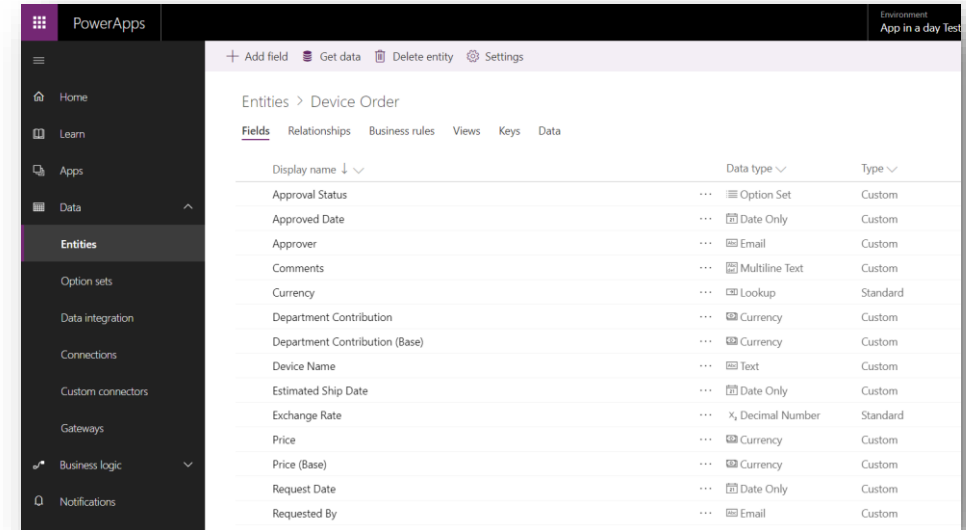
# Hands-on-lab

## Module 2: Common Data Service



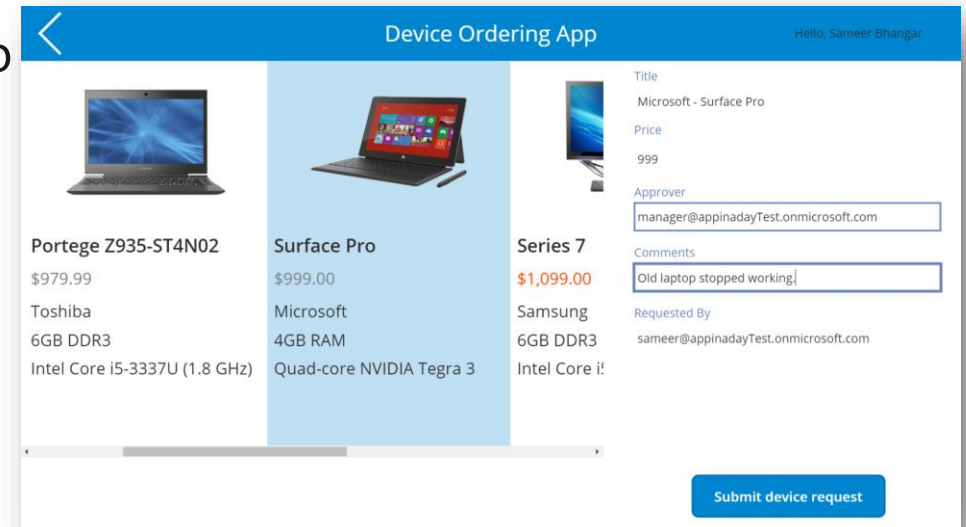
# Lab objectives

- 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 PowerApps interface for the 'Device Order' entity. 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 the 'Entities > Device Order' view with tabs for Fields, Relationships, Business rules, Views, Keys, and Data. The 'Fields' tab is active, showing a list of fields with their display names, data types, and types.

| 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, \$979.99), 'Surface Pro' (Microsoft, \$999.00), and 'Series 7' (Samsung, \$1,099.00). The 'Surface Pro' card is highlighted. To the right of the product cards is a form for submitting a device request. The form includes 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.



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