![Microsoft Power Platform]

Microsoft Dataverse

Mighty South TSP Team

David Hathaway

Daniel Borrelli

Jeffrey Bennett

John Straumann

Agenda

What is Dataverse?

Why Dataverse?

When to use Dataverse
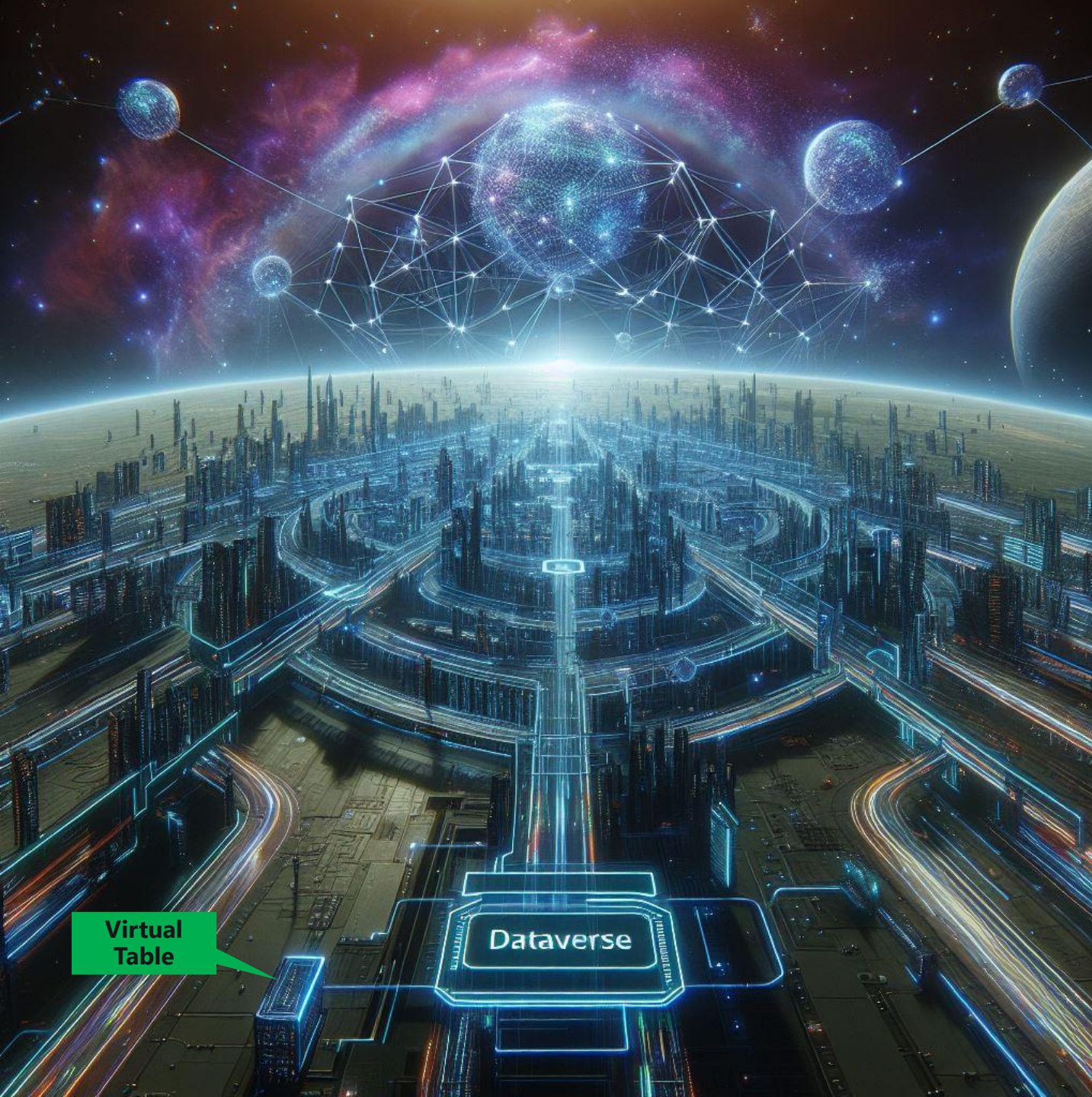
Demo!

Customer Success Stories

Q&A

The old way

The new way

All Roads Lead to Dataverse

Virtual Table

Opportunity - Let's talk data

1. Your business' growing enterprise data, which does not reside in a single location.

2. Your increasing need to **activate operational data** wherever it lives (on-prem, cloud native, on the edge..)

3. Your increasing need to **deliver analytics** on data and **drive action on those insights**.

4. Your increasing need to **secure & govern** your enterprise data.
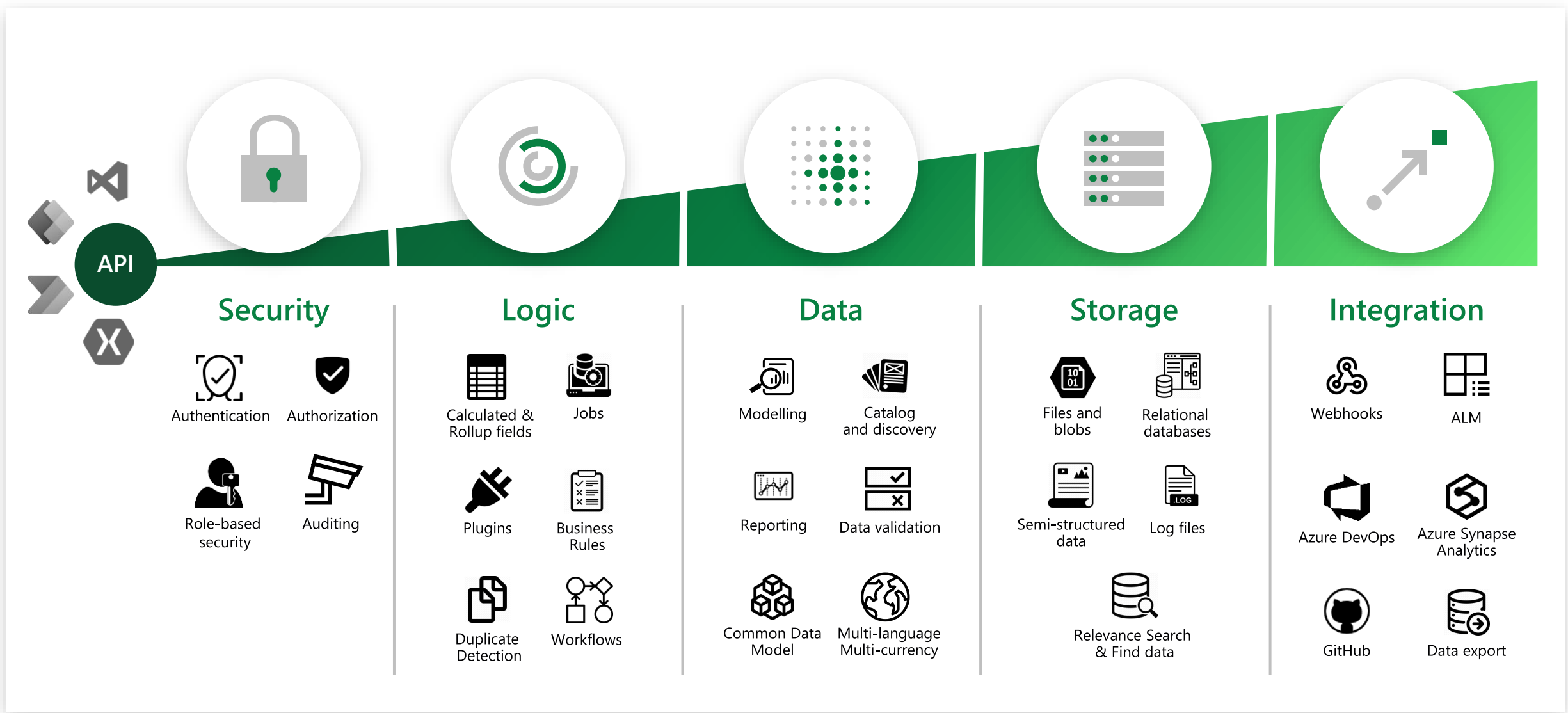
What is Dataverse?

Dataverse **easily structures** a **variety of data** and **business logic** to support **interconnected applications and processes in a secure and compliant** manner

Why Dataverse?

Dataverse offers **powerful, scalable solutions** for your data, leveraging the security and connectivity across Microsoft and the Power Platform so that you can **fully control, automate, and strengthen your business**.

Microsoft Dataverse – what´s in the box?

API

Security
- Authentication
- Authorization
- Role-based security
- Auditing

Logic
- Calculated & Rollup fields
- Jobs
- Plugins
- Business Rules
- Duplicate Detection
- Workflows

Data
- Modelling
- Catalog and discovery
- Reporting
- Data validation
- Common Data Model
- Multi-language Multi-currency

Storage
- Files and blobs
- Relational databases
- Semi-structured data
- Log files
- Relevance Search & Find data

Integration
- Webhooks
- ALM
- Azure DevOps
- Azure Synapse Analytics
- GitHub
- Data export

Microsoft Dataverse

Dataverse is an easy, scalable solution for your data across a range of Microsoft services

Microsoft Dataverse is the data platform for Microsoft Power Platform that allows you to store and manage business data.

Dataverse is also the platform on which Dynamics 365 apps are built, so if you're a Dynamics 365 customer, your data is already in Dataverse.

Dataverse provides support for SharePoint, OneDrive, and OneNote integration.

Microsoft Dataverse for Teams is an essential subset of Dataverse capabilities included as a powerful, built-in data platform for millions of Teams users at no additional cost.
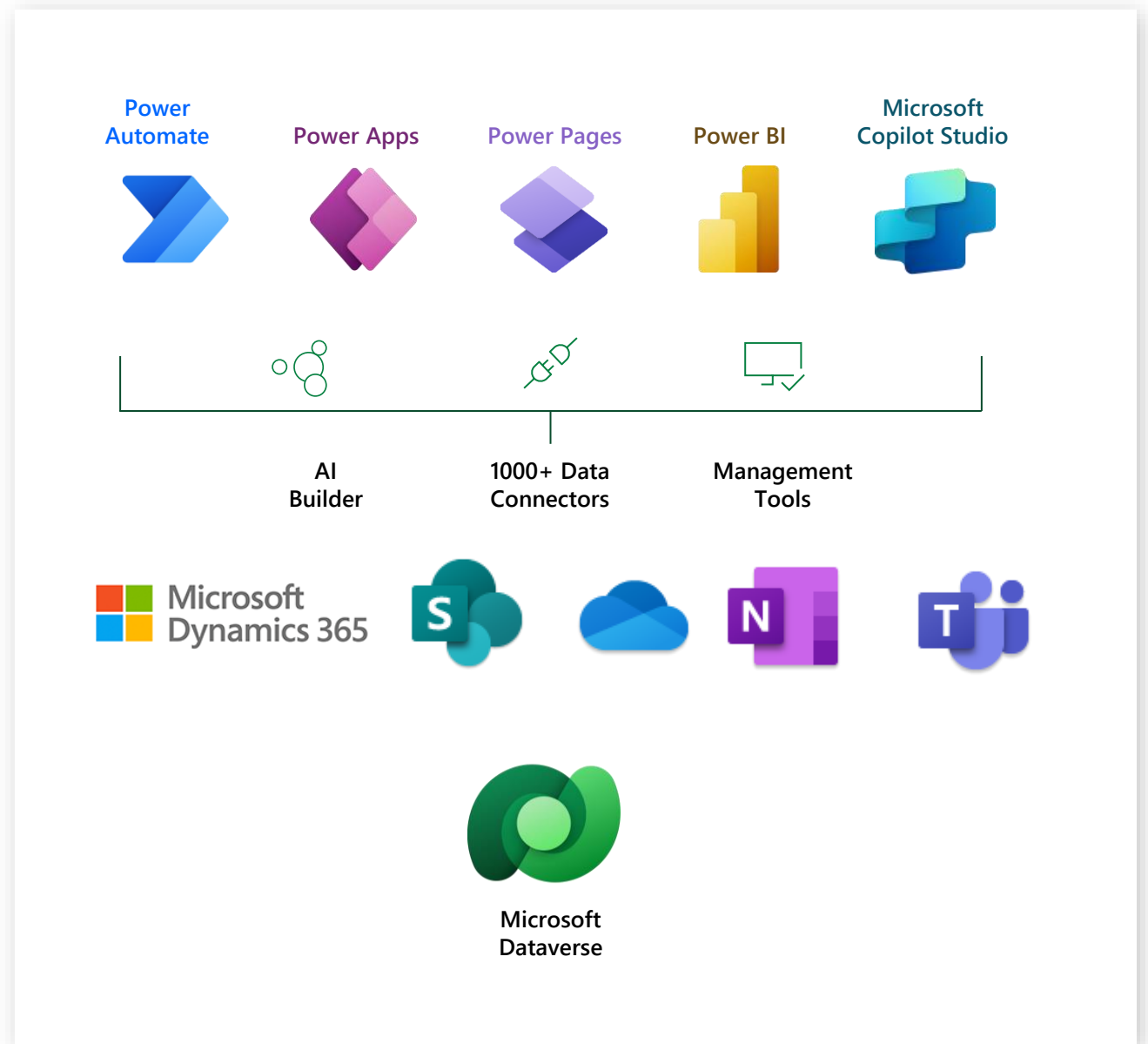
Low-code backend with Microsoft Dataverse

**Integrate directly** with Dataverse using the Excel Power Query features.

Jumpstart apps using an extensible data model with business logic, security and integration built in.

Support all your data: relational data, file and blob storage, logs and search indexing.

Built-in management features like CDM entity mapping UX, environments, and scheduled refresh.
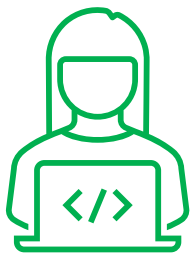
300+ transformations to clean and reshape data.

Reuse data models across end-user experiences for Power Apps and other frontends.
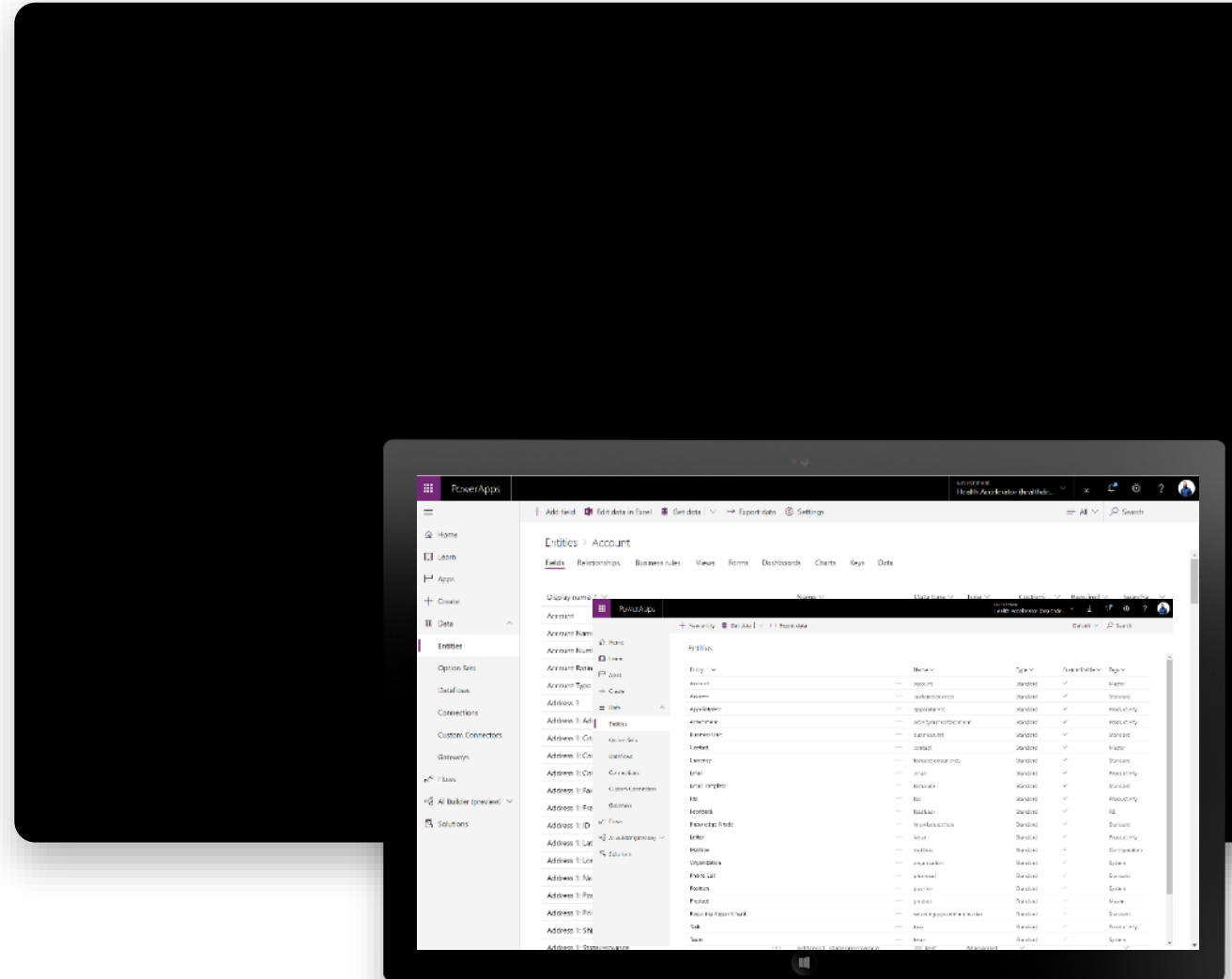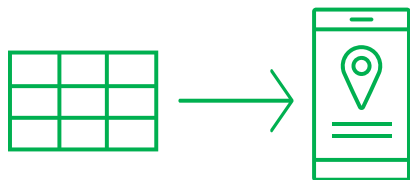
Approachable Data: Easy as Excel!

Instantly get up to **3 Personal Environments** to get started in your **Dataverse Data Workspace**
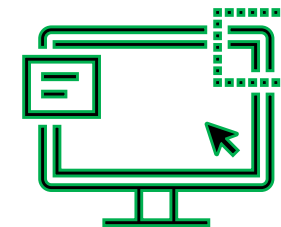
aka.ms/ DeveloperPlan

Turn **Excel files** into **Dataverse tables** instantly using drag and drop with **Maker CoPilot** including immediate app creation

https://aka.ms/ PowerPlatformExcelToApp

Quickly and easily integrate existing data into Dataverse with **Dataflows** (aka Power Query)

aka.ms/ DataverseDataflows

Leave the data where it is and leverage it from Dataverse using **Virtual Tables** for SQL, including **Synapse** and **Stored Procedures**

aka.ms/ VirtualTableProviders

https://aka.ms/Dataverse

Approachable Data : Data ingestion from excel
Excel to App under 1 minute

**1** **Drag-and-drop your Excel file** or upload to import your data into Dataverse instantly

2 **AI-assisted table creation** – auto-suggestions on table schema gets it done faster and right

3 Extend to harness **built-in business logic**, **security**, and integration capabilities.

4 **Enterprise-ready, robust and scalable** platform with Dataverse, making it easier to **share** and **collaborate** with others.
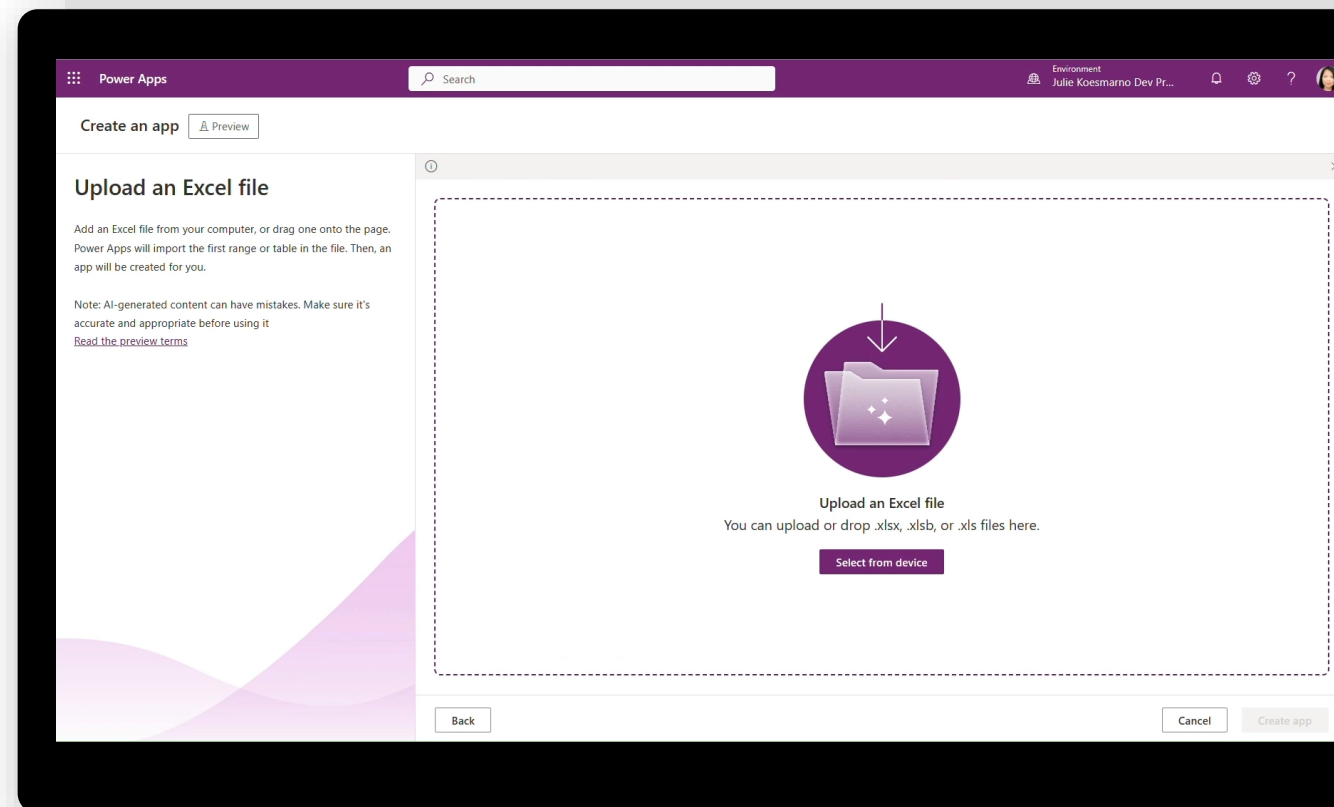
Just In Time Developer environment for free

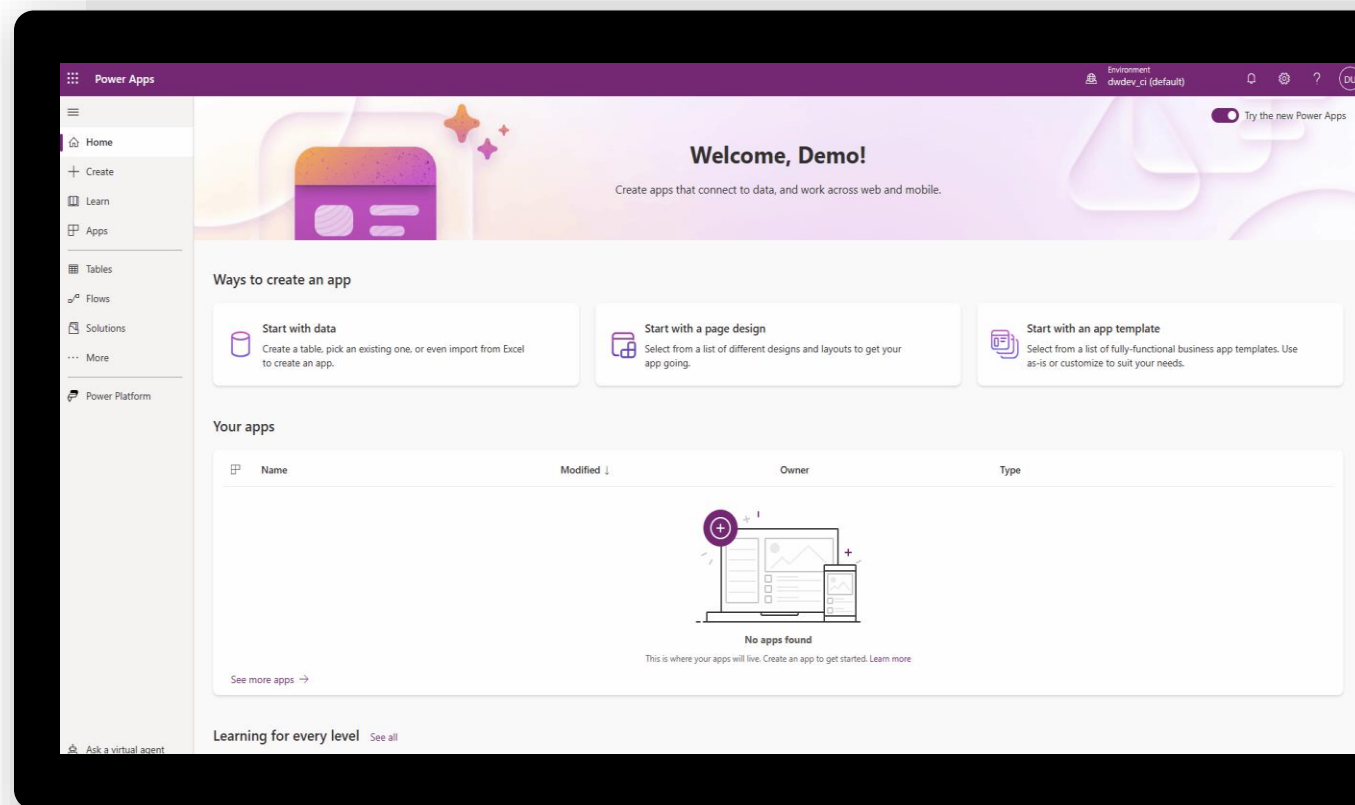**1**   Try the new **Home Page**

2   Get **Developer environmen**t if you do not have sufficient Dataverse permissions in the current environment.

3   **Just in Time** Developer environment provisioning without additional cost with single click.

4   **Switch** to Developer environment with single if you already have one.

Use Power Platform Dataflows

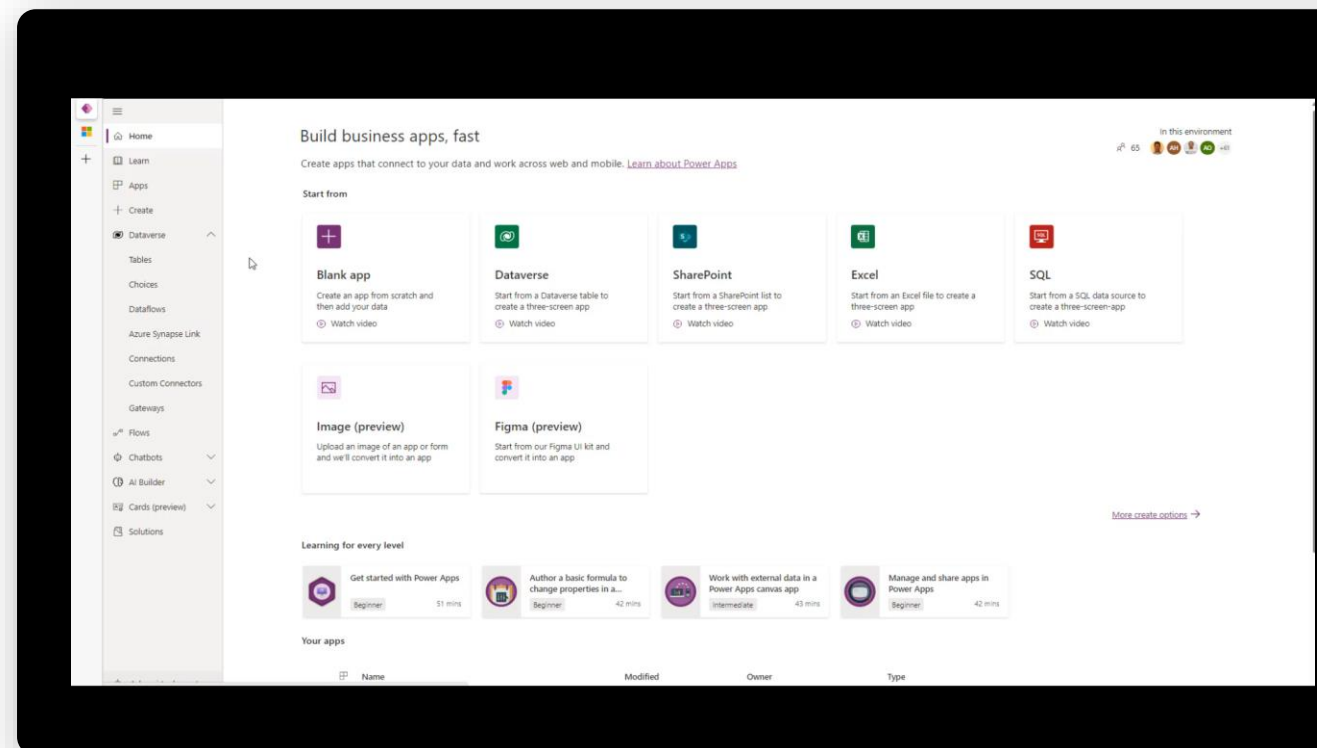① Access diverse data with **multitude of out of the box** connectors.

② Use robust capabilities of popular Power Query to **transform, clean, reshape and prep data** to fit your business needs

③ Load data into **new or existing** Dataverse tables

④ Trigger dataflows to run either **on demand or automatically** on a schedule; data is always kept up to date

Approachable Data : Meet your data where it is…

Data Virtualization

1 Your existing OData, SQL or SharePoint data sources extends to Dataverse. No data is copied.
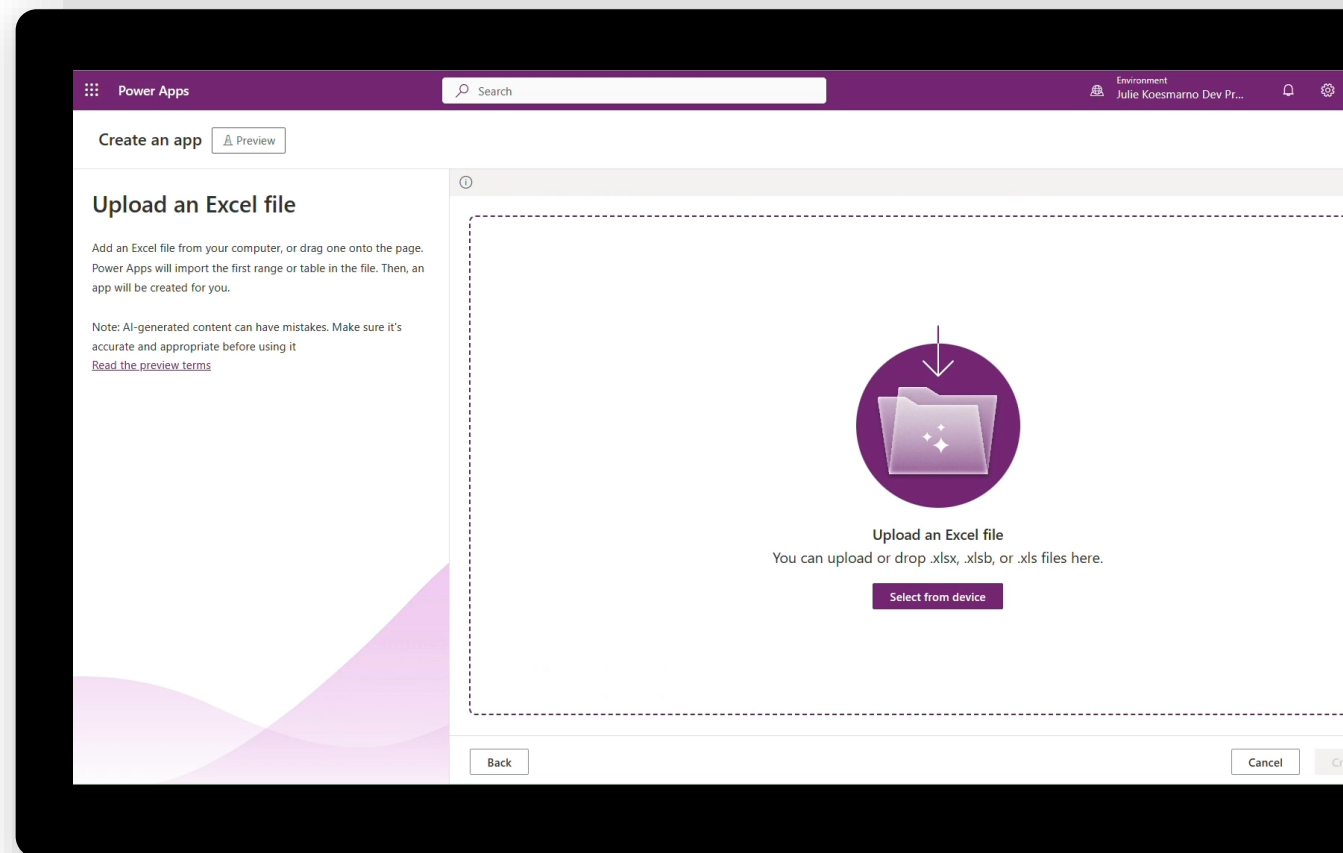
2 Business logic is also virtualized for SQL. Invoke store procs virtually.

3 Custom data sources can be virtualized.

4 Virtualized data & logic is available to Power Platform (Power Apps, Power Automate, Power Pages etc.)

Accelerated Delivery: Low code reusable business logic

Customizations are easy

1 Write column level business logic in a table using low code
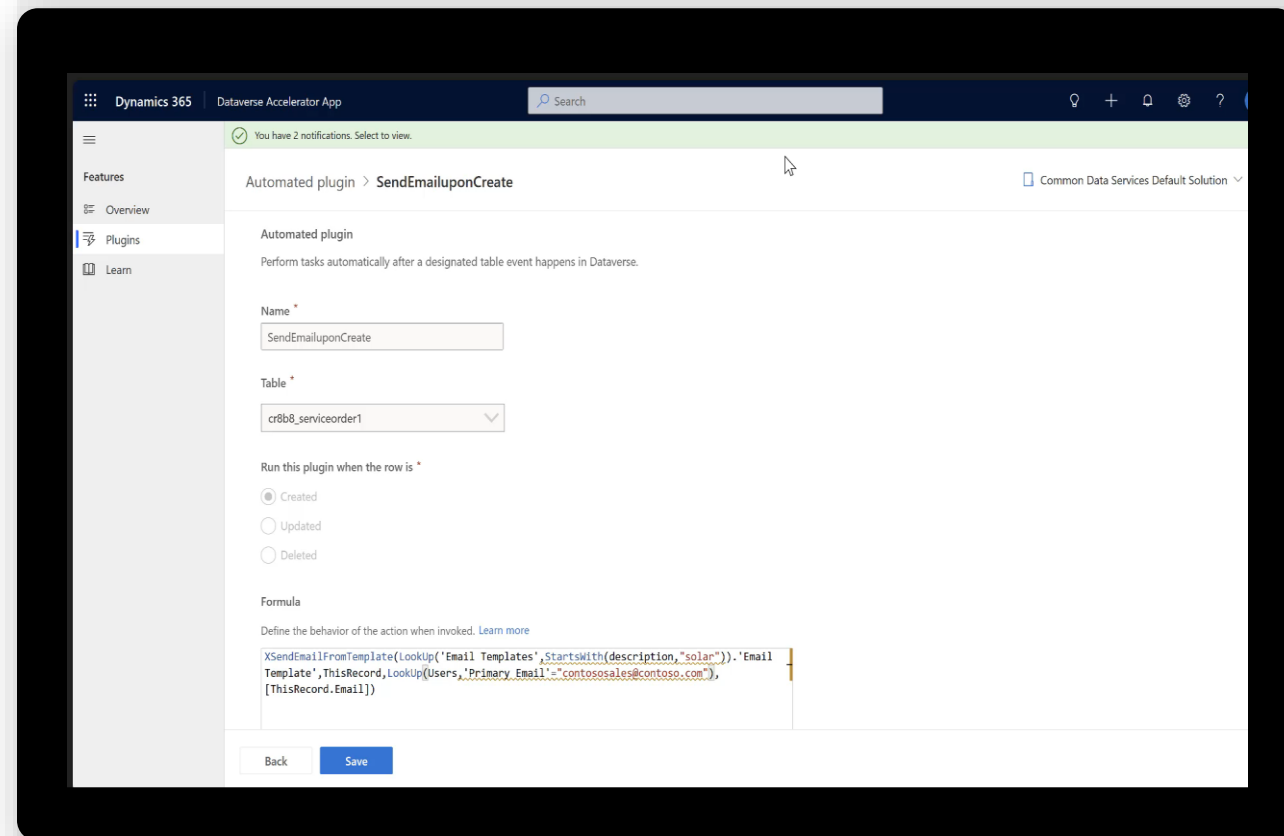
2 Write a library of low code business logic plugins that can be reused across your organization with other makers.

3 The plugins are also available across Power Platform and to external systems.

4 The plugins can also call into the 1000+ connectors to expand the outreach of possible integrations.

Power Apps Copilot with Enterprise Data

① Empower your **end-users** to **interact with your enterprise data in natural language**, and get **summarized insights**

② Applications that work across **many form factors: deploy once, use everywhere**

③ **Connect** to your **enterprise data quickly and securely** in Dataverse

④ **Natively integrated** into Canvas Apps and Model Driven Apps
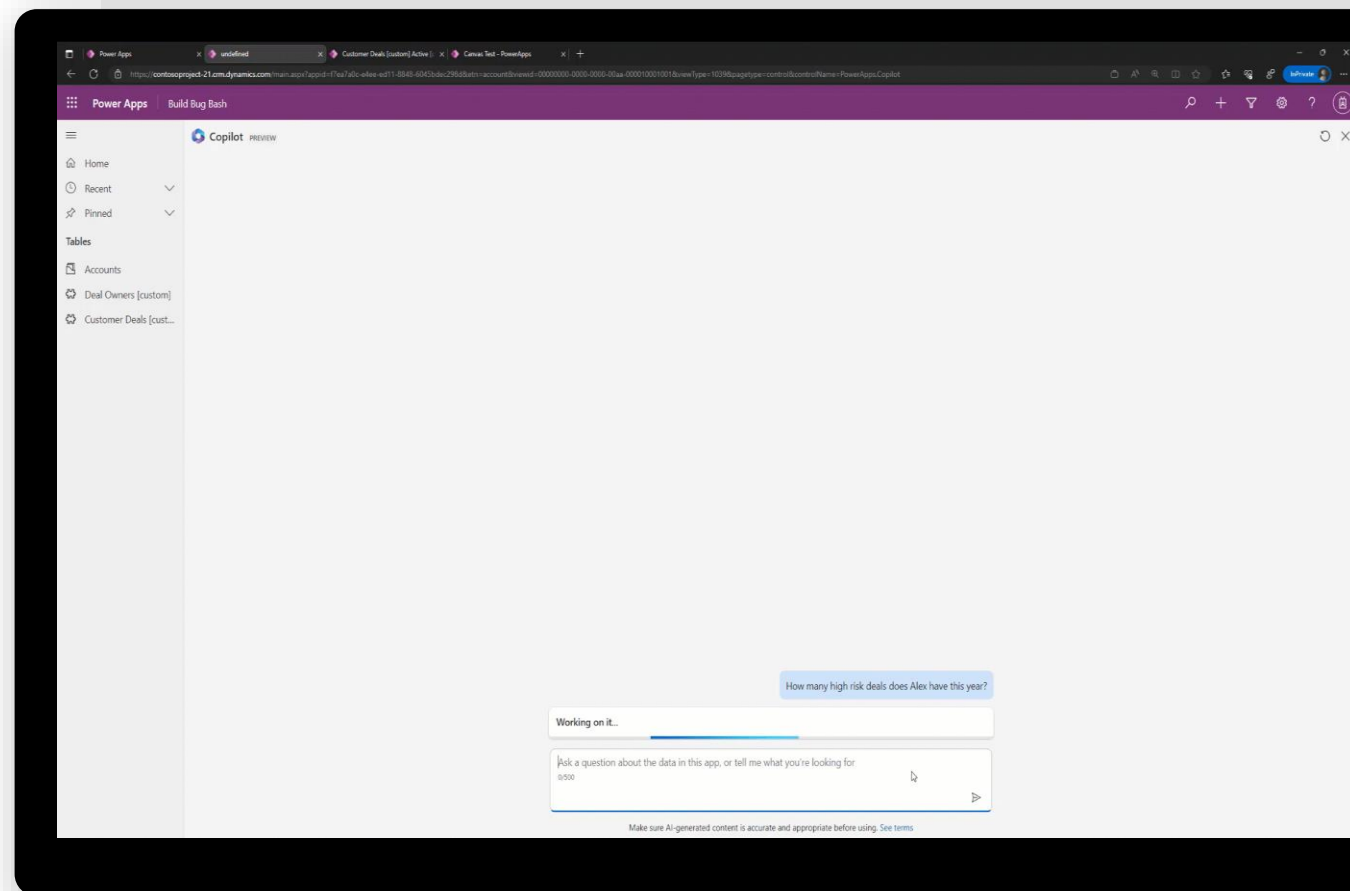
Auto-generated Power BI Reports in your Apps

1 **Data exploration is built into every App** saving you hours, days of effort building reports

2 No need to bring Power BI licenses, **all your users get to explore data** and build rich visualizations

3 **AI generated reports** provide a great starting point for your journey

4 Optionally, **save insights into Power BI** and share with your team

A Data Platform for Any Data
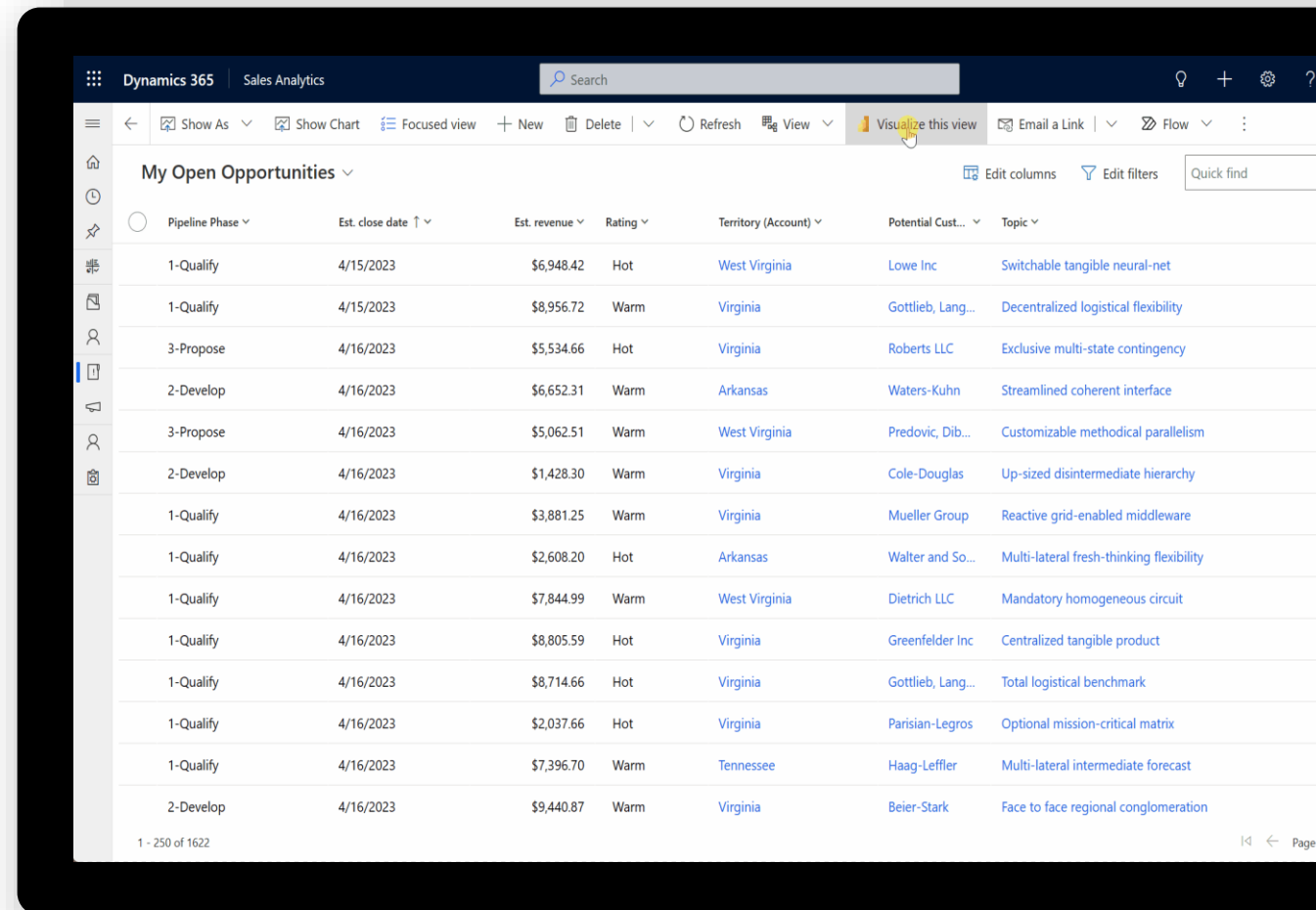
Relational	Activities	Files	Elastic	Analytical	Virtual
Open Data relational schema (CDM) with easy-as-Excel customizations	Easily track relevant activities such as email and appointments contextually in timelines	Store relevant files and images with other business data and processes	Speed up your data load with Azure-in a-Box Integrations	Process data for AI and Business Intelligence	Connect to data at the source and leverage runtime services

Enterprise-grade governance

Identity management and multi-factor authentication for enhanced identity protection and secure guest access.

Built-in information protection and usage analytics with full audit logs, data loss prevention policies and more.

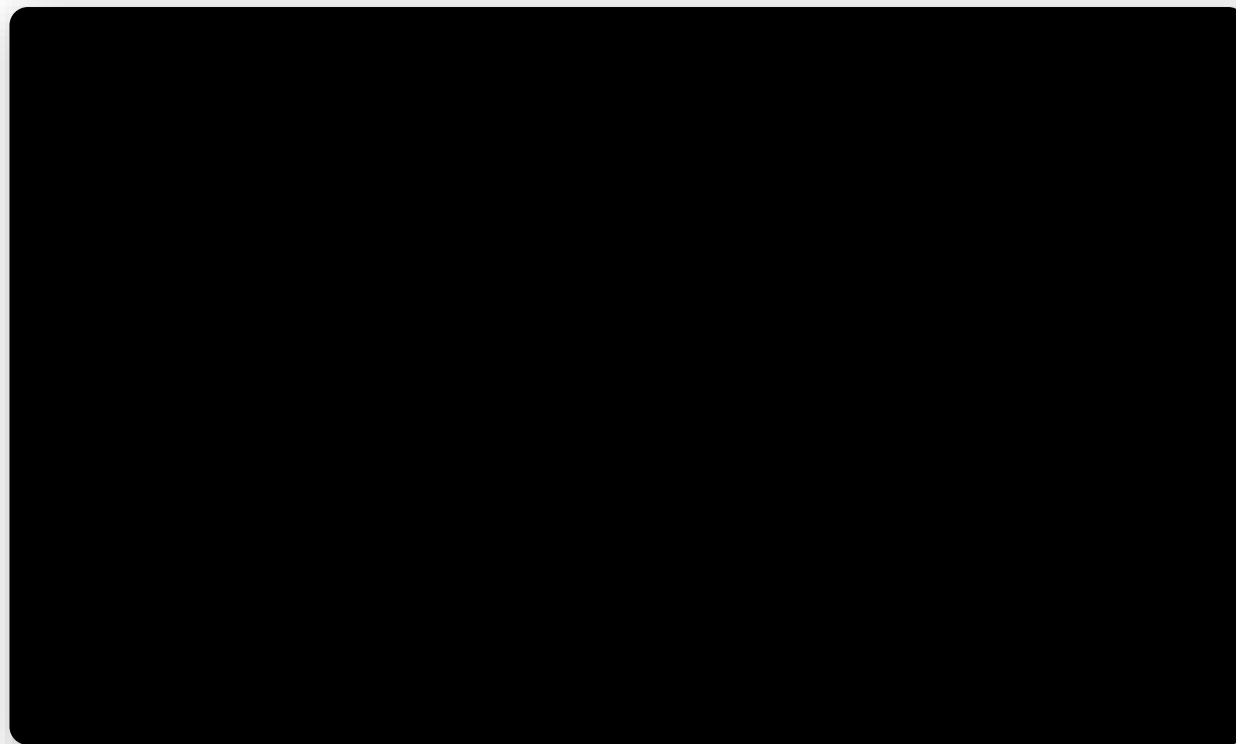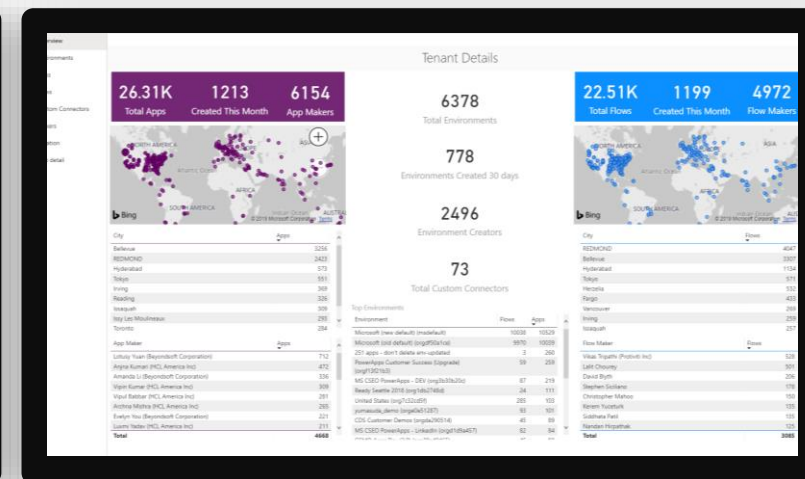**Secure and control data** on mobile devices with Intune mobile application management.

Compliance leadership with 13+ standards including FedRAMP high, HIPAA, EU model clauses, SOC and GDPR.

Manage all aspects—users, apps, usage and settings—in a single admin experience.

Admin reporting and analytics in the Power Platform admin center
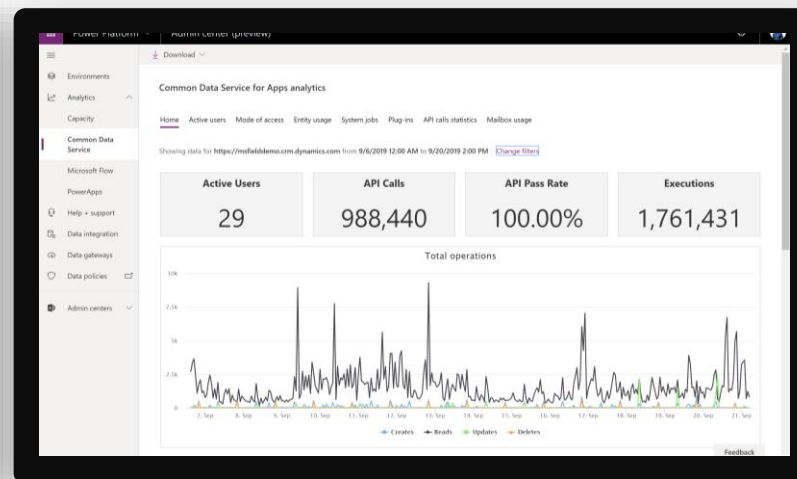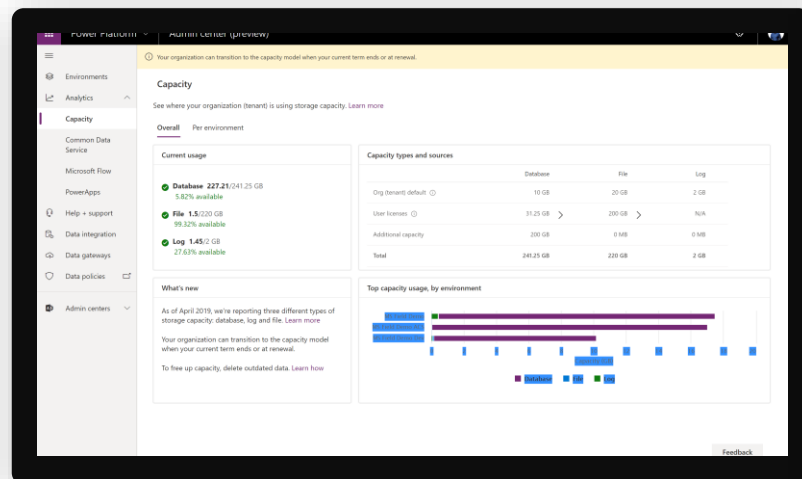
Admin insights provide deep visibility into usage and performance of applications

Users
Locations
Capacity

Analytics track health and implementation metrics and help keep users on track

Service performance
Error reporting
App usage

Personalize insights and drive action with custom Power BI reports and Power Automate

All up view of what's being created
Discover your champions
Trigger automated actions

Dataverse:
If you need…

Integration

Storage

Data

Logic

Security

API

Relational databases

Eventing

Catalog and discovery

Files and blobs

Modelling

Log files

Jobs

Webhooks

Calculated & Rollup fields

Business Rules

Reporting

Semi-structured data

Authentication

Duplicate Detection

Data validation

Search and Find data

Authorization

Plugins

Common Data Model

Data export

Auditing

Workflows

Data lake

Primary Use Cases

Collaboration

Collaborative / productivity scenarios

Broad data scope

Collaboration on unstructured content

Heavy write – Unstructured data

Read operations - Structured data

Transactional Records

Capture business data

Role-based access control to data

Highly structured content

Unstructured - File or Image data types

Heavy write - Structured data

Mostly read - Unstructured data

Volume

Large volume for latent storage, but low volume for high CRUD operations

Create, Read, Update, Delete

Very large volume with auto-scale

Data Model

Limited lookups

- 12 Look-up Limit Per List

- Limited query operations

Full relational model support

- Open Data Model

- Supports simple to complex relationships

- Powerful query operations

Business Rules & Validations

Event Receivers and Calculated Columns

- CAML formula runs in the front-end

- Pro Dev coding required for Back-end validation

- No native support for roll-up aggregations

Configurable Business Rules

- Business Rule editor interface.

- Calculated columns and roll-up columns with aggregation functions for related records.

- Full back-end data eventing

Data & Access

Via any SharePoint tools or interface

- SharePoint native interface, or SP tools

- Excel as an end-user function

Through Power Platform

- Power Apps Maker portal or Rest API

- Data export to Excel via Power Automate/Admin functions

- Read access via SQL Management Studio and others

Data Ingestion & Migration

Via scripts and 3rd party tools

- Use of third-party tools to import data from other sources

Full Power Query capability in Data Flow

- Data ingestion via Power Query

Intelligent Processing

No native capability

- Data export requires scripting or Power Automate

- No Direct Query support

AI capability available

- Native AI capabilities

- Links to Azure Data Lake

- Direct Query Power BI support

Roles & Permissions

Limited permission controls

- Limited row-level permissions.

- Supports item-level permissions <5,000 items

- Row-level permissions = performance penalties

- No support for permission scoping.

- Some roles through hierarchical scope

- No field/column-level permissions
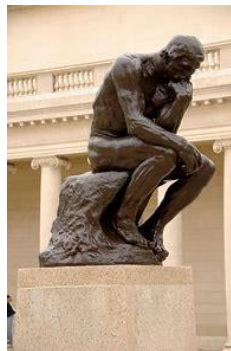
Full role-based access control

- RBAC -Individual users (own record), Peers (business unit), Parent (parent of business unit) and organization-wide.

- Scopes set to individual rights – Create, Read, Update, Delete, Re-assign, Append.

- Roles = unnecessary exposure of permissions.

- Field-level permissions is supported.

Comparison Summary

Use SharePoint if:

1. **Collaborative need for the data** – e.g. Documents need to go through co-authoring.

2. **Small Data volume** (less than 2000 items), no requirement for highly normalized data models.

3. **No item-level permissions** across all items. Item-level permission should be exceptions (not norm).

4. Data Access is **not exclusive to the app** and can be accessed via SharePoint's native UI as well.

5. **No requirement for intelligent processing** (e.g. Prediction, duplicate detection, etc.)

6. **Basic analytics requirement** (report and visuals on tabular data structure).

Use Dataverse if:

1. There is a need for data to be **created and updated frequently**.

2. Data volume can grow **beyond 5,000 records**, and solution can benefit from normalized data models.

3. **Role-based access** control is required.

4. **Data Access is limited** to only the required application interfaces.

5. Solution can benefit from **Artificial Intelligence** capabilities.

6. Solution can benefit from **analytic reporting** through Azure Data Lake.

Kelly helix ux

Customer:
Kelly

Industry:
Staffing

Size:
Corporate (10,000+ employees)

Country:
United States

Products and services:
Microsoft Power Platform
Microsoft Power Pages
Microsoft Dataverse
Microsoft Power Automate

Microsoft

"When we first began, it took us nearly a month to go through the entire process of getting a portal provisioned, getting access, configuring all the components, and building the actual site. Today, using Power Pages, we have cut that process down to a week or less in some cases."

—Hope Bradford, Senior Director of IT, Kelly

Situation:

Workforce solutions provider, Kelly, realized its online customer experience was unnecessarily circuitous and time-consuming. They didn't have a process in place for clients to easily navigate its global network of teams.

Solution:

By using Microsoft Power Pages to create Helix UX, Kelly can build bespoke, branded portals for each client to source their candidates. The low-code solution is easily and quickly managed by a small team, improving customer experience.

Impact:

Kelly is now able to serve over 38,500 inquiries each day for more than 7,700 clients. The ease and utility of Helix UX is expanding and retaining business, while raising the standards of the staffing industry itself.

Microsoft

Customer:
Microsoft

Industry:
Partner Professional Services

Size:
Corporate (10,000+ employees)

Country:
United States

Products and services:
Power Platform
Dynamics 365
Power Automate
Azure DevOps

[Read full story here](#)

Microsoft

"With increasing competition and demand for Microsoft Cloud capacity, the Power Platform-based system enables the team to quickly assess optionality to deliver faster and more efficiently with automation focused on customer centricity, resiliency, efficiency, and performance at scale."

—Thiru Appadurai, Site Acquisition Business Lead at Microsoft

Situation:

The Lease Acquisition business team at Microsoft manages an increasingly complex multi-billion-dollar leased datacenter portfolio, and heavily relied on manual processes and a decentralized, unscalable legacy system.

Solution:

The Lease team partnered with the CO+I Engineering organization within Microsoft to build a feature-rich system using Power Platform, Dynamics 365, and Azure with centralized lease data management, template drafting, task management, and process automation.

Impact:

The CO+I Lease Management Platform has helped improve data accuracy, visibility, and accountability, and drastically improved the lease due diligence cycle by over 3x times.

Building custom apps on Microsoft Dataverse

"Microsoft Dataverse is the data backbone that enables people to store their data in a scalable and secure environment dynamically. It enables [us] to look at **data as a service** spun up on-demand to meet ever-changing business needs."

"Microsoft Dataverse allows my team to provide business value faster through **low-code solutions while still having pro-code as a safety net** for more complex requirements."

"Getting security and compliance right across many services is hard. **Dataverse gives me one security and auditing model across all my data.**"

Microsoft Dataverse Resources

[Analyst Reports, Case Studies, and White Papers](#)

[Dataverse Documentation](#)

[Dataverse Training](#)
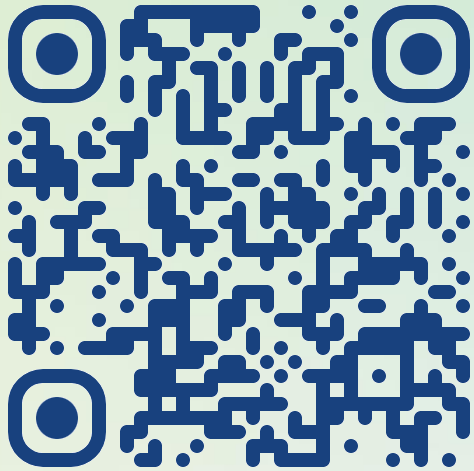
[Microsoft Dataverse Power Apps documentation](#)

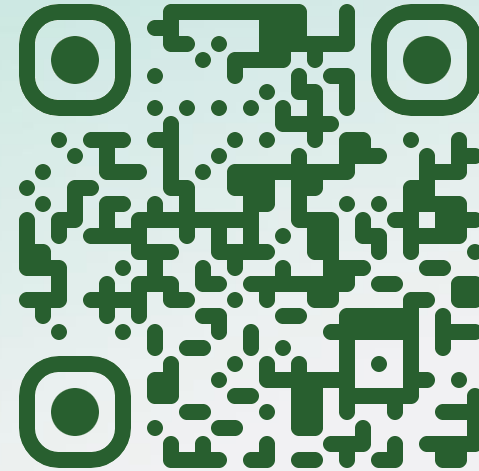[Get started with Power Apps](#)

[Get Started with Power Pages](#)

Register for Microsoft Build

Microsoft Build

https://register.build.microsoft.com/

Power Platform Master Series Microsoft Build Recap

https://aka.ms/PPMS-BuildRecap

Thank you