

Summer 2024

# How to Grow With Own: Recommended Practices for Use with Microsoft Power Apps and Dataverse

Maximize business potential  
with secure data management



# Introduction

Microsoft's Power Platform is a low-code environment that allows users to build customized end-to-end business solutions. These custom applications can enhance existing, larger solutions or function independently. The suite includes Power Apps, Power Automate, Power BI, Power Pages, and more. Business data from these applications can be stored in Microsoft's Dataverse. Globally, tens of thousands of companies utilize Power Apps for application development, many of which (17%) are poised for growth with between 1000-5000 employees. However, [ventures of all sizes](#)—from commercial titans like Coca-Cola to municipal governments like the City of Everett, Washington—are advancing their operations through the Power Platform.

Power Apps' functionality can fuel growth. However, like with any SaaS application, anchoring data in Dataverse can present data risks. Integrating smart processes and next-level solutions like Own to manage cloud application data enables businesses to achieve their desired outcomes and grow securely and sustainably.

# The Possibilities—and Limitations—of Power Apps and the Dataverse

Microsoft Power Platform unlocks the possibility of streamlining business processes and increasing the productivity of applications and users who rely on them. In the modern business landscape, companies continually search for ways to optimize, improve efficiency, and reduce costs. With Power Platform's robust set of tools, flexible architecture, and ease of development, businesses can adapt to changing requirements while sharpening end-to-end processes.



## Tap Into the Advantages of the Power Platform

Noteworthy Power Platform products include:

### POWER APPS

Power Apps lets users leverage a suite of apps, services, connectors, and business data to develop custom apps for a range of business needs. It easily connects to the Dataverse or other common data sources, including SharePoint, Microsoft 365, Dynamics 365, Azure SQL, and more.

With a Power Apps low-code environment, users can easily leverage agile approaches such as model-driven app design, which emphasizes quickly adding components to apps. Similarly, businesses can take advantage of canvas apps to build apps with drag-and-drop features and link the designs to data sources with relevant information.

### POWER AUTOMATE

Based in the cloud and utilizing little to no code, Power Automate was developed to help organizations automate tasks across the entire business environment by syncing with various systems, desktop apps, and websites. Users enjoy a tremendous amount of freedom and ease in Power Automate while minimizing manual processes and the headaches that come with them.



## Tap Into the Advantages of the Power Platform

### POWER BI

Power BI unlocks data's full potential by making it visual. Used as a business intelligence tool, it transforms raw data into accessible and actionable information. Power BI combines data from across cloud, on-premises, and hybrid data warehouses, following best practices to synthesize that data into legible, interactive visualizations, reports, and dashboards.

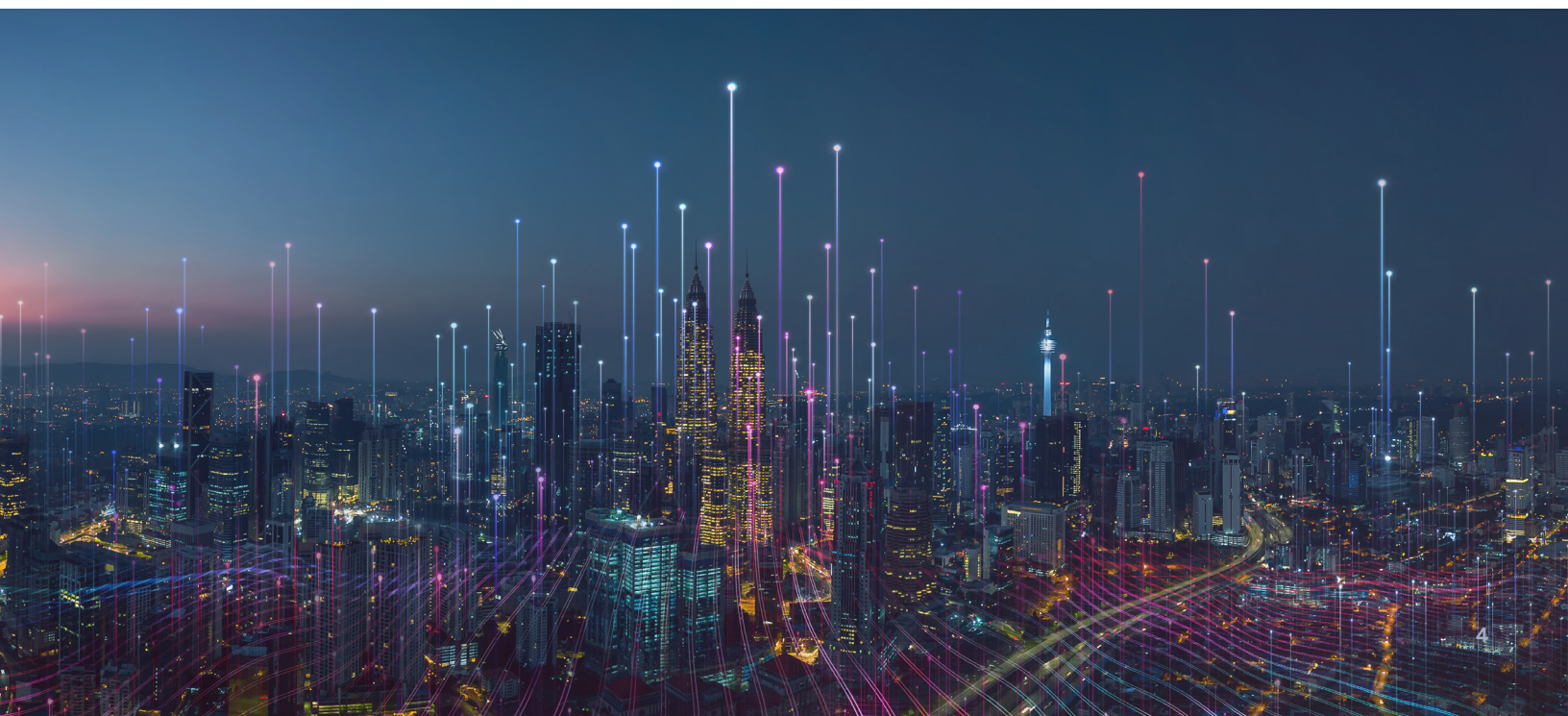
### COPILOT

Microsoft Copilot is a generative AI engine that can handle repetitive tasks, including writing emails, summarizing meetings, suggesting action items, digesting long documents, and developing streamlined outlines for easier, faster reading.

This tool can be embedded in any Microsoft 365 application and uses large language models to understand then execute tasks that empower teams to be more creative and productive.

### CENTER OF EXCELLENCE TOOLKIT

The Center of Excellence (CoE) toolkit is a repository of resources designed to help organizations adopt, manage, and use the Power Platform to meet their goals. It includes a set of templates to help develop a strategy for adopting, maintaining, and supporting the Power Platform with particular emphasis on Power Apps and Power Automate. The toolkit also suggests patterns and processes for implementing CoE efforts to improve governance.





## Power Apps Constraints to Consider

Although leveraging the Microsoft product suite has advantages, it also has limitations that can stymie momentum and cause hiccups, data loss, and downtime. These limitations are fundamental to consider for organizations focused on scaling operations and growing holistically.

Businesses may run into issues in the following areas:

### LICENSING

Power Apps can only operate within the licensed business domain, which can create collaboration barriers. There are options for connectors and third-party access options, though these may require different licensing models. These models can become complicated, creating undue stress for users who need help understanding their work. Certain connectors are limited to the product's highest tiers, which can incur additional costs.

Licensing directly correlates with everything from budget and user experience to development actions and tenant storage—a requirement for restores, and often for compliance. Under some licenses, certain operations, tables, and controls are restricted, which can force organizations to renegotiate their terms as they grow, incurring extra costs along the way.

### COMPLEXITY

Power Apps is designed to minimize complexity for users as they develop business applications in the suite. The simple forms and low-code environment allow non-experts to develop and implement solutions quickly. However, the low barriers to access create opportunities for corruption and human error. At the same time, complex business needs and logic can be difficult to execute in Power Apps due to limited capability.

As such, complexity—whether it's users struggling to understand the technology's functionality or the platform stretching to meet complicated business needs—opens up the potential for errors and data loss.

# Power Apps Constraints to Consider

## THROUGHPUT LIMITS

Throughput varies throughout the Power Apps and Dataverse ecosystem, so trying to interact with a large number of items can exceed allowed thresholds due to licensing limitations or Dataverse API service protection limits. API limits are implemented so users running applications can't interfere with each other due to resource constraints. Although they are designed to optimize performance and availability in Dataverse, limits can hamstring developers and users when they need to engage in a high volume of data operations.

## STORAGE

Dataverse has default storage capacities for databases, files, and logs based on licensing tier. Power Apps necessitates unused available tenant storage for database restores, which, depending on industry or legal requirements, may then need significant tenant storage available at all times to allow the restores to succeed.

Storage capacity is pooled across the organization's tenant, with additional storage for every per app license. Storage is divided by environments, with each sandbox and production environment created reserving 1-10 GB. Organizations working with complex scenarios or through periods of expansion frequently find Dataverse storage insufficient. If a business intends to grow, storage must also be expanded to accommodate planned additional data and remain current with backups. As such, momentum can be paralyzed as licensing is renegotiated or alternative storage solutions are pursued.



Microsoft Power Platform unlocks the possibility of streamlining business processes and increasing the productivity of applications and users who rely on them.

# Break Through Barriers With Own



# Break Through Barriers With Own

Businesses can overcome the limitations of Power Apps and grow successfully with the right protocols, safeguards, and solutions. They can leverage the best of Microsoft's product suite while integrating solutions that don't just address their limitations but also amplify their impact.

Own can effectively fill gaps in the Microsoft Power Apps and Dataverse ecosystem by working with a defined set of recommended practices.

## RECOMMENDED PRACTICES:

### CONDUCT DATA AND PROCESS AUDITS

Data audits—and audits of processes related to data management—involve a thorough review and analysis of a company's data to ensure its accuracy, consistency, and security. Regular audits ensure data quality and compliance while enhancing security, informing decision-making, and maximizing resource use.

#### How Own Helps

Dataverse auditing has limits and boundaries, which can feel like an interruption to normal business operations. Own can smooth the process by comprehensively and automatically monitoring data activity.

Own's Smart Alerts feature monitors data by alerting users to specific objects whenever the software detects an outlier or other defined rule for records that have been added, removed, or changed. This commonly indicates a data loss or corruption event, and a rapid response helps allay their worst impacts.

### DEFINE DATA RETENTION NEEDS

At its core, a data retention policy can help inform your organization's needs for data backup. A defined and well-maintained policy ensures that your company always has the correct data on hand and the correct data backed up.

The Dataverse has native options that allow organizations to access read-only data for limited inquiry processes and to reduce database capacity consumed to save money on inactive data. These options include [long-term retention](#) for Dataverse. Yet, several limitations can make retrieving retained data challenging, including restrictions on the number of daily queries or users who can simultaneously query and retrieve data. Since queries are allowed on only one table at a time, joint and aggregation functions aren't allowed.

Adding additional licensing complexity, Microsoft recommends integrating Fabric, a platform that unifies data ingestion, transformation, event routing, and report-building processes. While Fabric can facilitate data retrieval, manipulation, and processing, this may create a heavier lift for IT teams that must build and oversee an additional platform with a small army of Data Engineers, Data Scientists, and other key specialist roles.

#### How Own Helps

By empowering organizations to own their data outside of the Dataverse, Own supports robust and easy data retention. With Own Recover, businesses can automate backups according to the unique parameters of their data retention policy. These backups can be performed at a high frequency to reduce recovery point objectives and create optimal data loss targets across different programs, building resiliency and minimizing downtime during any data loss and recovery scenario.





# Break Through Barriers With Own

## ENABLE DATA MONITORING

To create the best possible outcomes within the Power Apps environment, investing in user training as well as automated, ongoing data monitoring is essential. In tandem, these two efforts create fewer risks to data while upping the speed and proficiency of development.

Automated data monitoring to flag any anomalies doesn't just make data management easier, it simultaneously empowers teams to build applications across the Power Apps ecosystem without fear of committing an error that creates a domino effect. This peace of mind paves the way for greater innovation.

### How Own Helps

Monitoring end-user adoption and use is a critical yet overlooked piece of the development puzzle. There is an inherent ebb and flow of users in any business, and the Power Platform is no different. Since the user base is never static, it's important to build safeguards into a low-code environment that protect data and operations from unintentional corruption and loss due to human error.

Smart Alerts provide protection by sending alerts to specific users if the system detects unusual activity in the distribution of added, removed, or changed records. Outliers, or significant deviations, can indicate a threat. With Smart Alerts locked in, it is easy to identify mistakes and build in more education—without the major stress of data loss and corruption remediation efforts.

## ADDRESS DATAVERSE BACKUP AND RECOVERY LIMITATIONS

Microsoft's native backup and recovery option lives within the Power Platform Admin Center. Certain apps, such as Microsoft Dynamics 365 and Power Platform, store data indefinitely in the live systems, forcing businesses to continually buy more Dataverse storage to support business growth (and corresponding data proliferation resulting from new apps and features - especially generative AI). Without configurable retention policies for backups and long term retention, organizations have no viable way to truncate data from live systems.

Built-in backups are limited in their retention policies, with default settings set at 28 days for production environments and 7 days for sandboxes. Depending on industry regulations, this may not be sufficient and, in the case of catastrophic data loss, will likely not provide sufficient continuity. Additionally, when businesses aim to expand, historical analysis and knowledge management over a longer period are essential to support employee engagement, streamlined operations, improved customer satisfaction, and business insights that guide planning.

The native features lack important operational details. For instance, there is no way to check the contents of a backup before restoring it. This makes the restoration process time-consuming and error-prone. The system also doesn't display the completion time, duration, or size for manually created backups. As a result, it's impossible to choose the correct backup for restoration, and the duration of the recovery process is unknown.

After initiating a restore, there is no indication of the remaining time for the process. During the restore process, the system goes into Admin Mode, kicking all users out of the system. Additionally, during the restore event, the metadata and solutions in the environment are reverted to the state of the backup, including the history of metadata events. System warnings are not generated, so administrators must republish all solutions with the correct versions/builds before taking the system out of Admin Mode. This poses a risk to proper system functionality, and delays end users from accessing the live system.

### How Own Helps

Own Recover is a cost-effective solution that won't slow down the Microsoft development environment. It allows organizations to keep a robust data record to inform operations while avoiding the headaches associated with storing it in Dataverse.

Since Own allows businesses to customize backup and retention policies without Microsoft license and storage upgrades, leaders can rest assured that they always have the data they need for as long as they want. The Own Recover solution exceeds Microsoft's default of 28 days for full backups and seven days for sandbox environments, allowing users to retain this data for up to 99 years. Additionally, Own allows users to restore the results of specific queries, tables, select rows, and fields as needed—which brings peace of mind to every development scenario and recovery process.



# Scale Smarter With Power Apps + Own Together

Shopping for supplemental solutions to facilitate your organization's use of the Power Platform can feel overwhelming. Yet since the responsibility to protect and manage data doesn't just fall on the cloud service provider but also on your organization, it is crucial to partner with others who can make the process a breeze—so your teams can get back to mission-critical work and application design.





Own products are easy to deploy, automate, and expand. Each product works seamlessly with the Power Platform while amplifying its effect through several key benefits:

1

### **ROBUST RESTORATION**

Restoration of hierarchical records up to 10 levels deep allows for efficient data storage and retrieval at a great hierarchical depth. A usable copy of all data can replace lost or damaged data at any time, ensuring continuity.

2

### **UNLIMITED STORAGE**

Many Dataverse devotees may consider the ability to store unlimited timelines, queries, and backups without financial impact a luxury. Deploying an outside solution like Own makes this possible, enhancing an organization's data security, mitigating data loss recovery efforts, and ensuring quick and accurate recovery without a growing and unpredictable price tag.

3

### **HASSLE-FREE COMPLIANCE**

Protecting sensitive data from loss, theft, and fraud isn't just the work of individual businesses—it is also part of industry and legal compliance. Meeting these obligations for how data is stored, processed, and shared can be confusing and time-consuming, but failing to do so can be devastating. Own Recover allows users to edit backup retention periods and frequency so protection efforts stay consistent. While compliance isn't optional, you can make it effortless with the right tools.



**Own proactively works to ensure the loss or corruption of mission-critical data doesn't impede operations with automated backups and rapid recovery solutions designed for ease.**

Own and Microsoft's Power Platform teams work together by design to ensure the availability and compliance of SaaS business data, enabling new insights. Used in concert, Microsoft's Power Platform and Own multiply and streamline business efforts so growth is attainable without sacrificing data management. By harnessing a single solution to protect SaaS data in Microsoft and beyond, businesses can focus on strategy—not licensing, backup, and compliance. Smart data management allows organizations to recenter their mission while responding to market disruptions and opportunities and sustaining profitable growth.



Own and Microsoft's Power Platform teams work together by design to ensure the availability and compliance of SaaS business data.





OWN YOUR OWN DATA

## About Own

Own is the leading data platform trusted by thousands of organizations to protect and activate SaaS data to transform their businesses. Own empowers customers to ensure the availability, security and compliance of mission-critical data, while unlocking new ways to gain deeper insights faster. By partnering with some of the world's largest SaaS ecosystems such as Salesforce, ServiceNow and Microsoft Dynamics 365, Own enables customers around the world to truly own the data that powers their business.

It's their platform. It's your data. Own it.

Learn more at [owndata.com](https://owndata.com)