# **HCLTech** | Supercharging Progress™

# **Best practice guide** to Power Platform success

Downloadable eBook

# What is Microsoft Power Platform?

Microsoft Power Platform, backed by Dataverse, is an intuitive set of tools used by businesses in every imaginable industry. Comprised of Power Apps, Power Automate, Power BI and Power Virtual Agents, Power Platform leverages Artificial Intelligence (AI), Hyper Automation and Mixed Reality to connect systems, automate processes, improve data insight and empower employees to do more.

**In this eBook**, we will explore the different components of Power Platform in greater detail, share best practices related to Power Platform adoption and governance, and discuss the idea of app rationalization, including what it is, why it's so important and how to get started in your own organization.

Whether you are brand new to the platform or are an experienced developer looking for structure and guidance as the platform grows across your business, this resource was made for you.
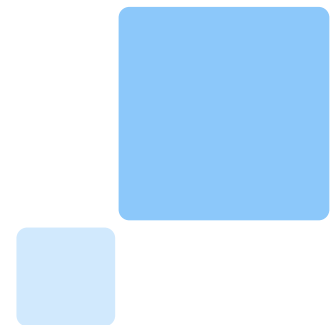
**Power Apps**

**Power Automate**

**Power BI**

**Power Virtual Agents**

## Defining Power Platform
and its most recent advancements

Let's begin by establishing clear definitions of each component of Power Platform. In many ways, the four tools work together to deliver a world-class experience. But each also stands alone, independently full of functionality and capability based on business need.

# Power Apps

Using *Power Fx* – Microsoft's intuitive coding language based on Excel-like logic expressions – Power Apps enables users to build apps that easily connect to data and run on the web, iOS and Android devices. Off-the-shelf apps typically only meet *some* of your needs; custom apps are expensive and time-consuming. But Power Apps makes it easy to quickly create **exactly** what you need in a cost-effective manner with minimal coding.

Year after year, the Power Apps tool keeps getting stronger. The latest version is more feature-rich and user-friendly than ever before, with hundreds of out-of-the-box controls for customizing your applications. For example, with the click of a button you can now drop Mixed Reality functionality into your canvas apps.

Microsoft has made it so intuitive and so simple to create robust solutions that we're seeing a huge spike in citizen-developed apps. Everyday users now have access to technology that can simplify their jobs in ways only they can imagine. It's also why Power Platform Governance has become so important – more on that in a few pages.

## Understanding Citizen Development

**A professional developer** is a traditional IT programmer – someone whose job involves computer programming, writing code and developing new solutions.

**A citizen developer** is an end user who creates new business applications that streamline or automate processes within his/her own job role. This new generation of app developers emerged with the advent of low-code app builder tools like Power Apps.

# Power Automate

Often used hand in hand with Power Apps, Power Automate is all about automation of behind-the-scenes processes. This versatile tool integrates seamlessly with hundreds of apps and services, meaning that practically every possible manual process in your organization can be at least partially automated.

When Power Automate was first launched, Microsoft referred to it as Flow because it was uniquely suited to simplify and automate business workflows. The newest feature of this intuitive and powerful tool is RPA – *robotic process automation*, also known as *Desktop Flows*, which is focused on reducing repetitive manual tasks, thereby increasing efficiency, reducing costs and eliminating human error.

Also relatively new to Power Automate – and the entire Power Platform for that matter – is the fact that Artificial Intelligence (AI) components have been added to the basic out-of-the-box functionality. This makes it so easy to do things like creating prediction models and implementing form extraction tools (extracting information from fields in a PDF, for example). AI was always an available add-on but having it as an included foundational element takes Power Automate and Power Platform to new levels of innovation potential.

## Understanding RPA

In the case of Power Automate's version of RPA, the robots are merely metaphorical. We're not talking about robotic machines that assemble parts on an automobile assembly line, for example – although those robots, too, are a form of RPA.

Here, the "robots" are bits of code that process transactions, manipulate data, trigger responses and so much more.

# Power BI

The business intelligence tool that first launched Microsoft's Power Platform back in 2015 is Power BI, which was designed to bridge the gap between data and decision making. Power BI combines data from nearly every imaginable source – including Dynamics 365, Excel, Azure, SharePoint and even an organization's legacy data warehouse – into a single view to deliver actionable insights into the business. In just minutes, you can build interactive, real-time dashboards that unlock the insights needed to make strategic decisions that drive your business forward.

The fact that Power BI is the oldest and most mature product in the Power Platform portfolio doesn't mean it isn't continuously evolving. In the last year alone, Microsoft has enhanced the suite of avaliable connectors, practically guaranteeing viable connectivity with your business's data source. The data modeling and reporting capabilities are improving each year, as well, making Power BI the most robust business intelligence solution available.

## Understanding Business Intelligence

According to **Microsoft**, "Business Intelligence (BI) helps organizations analyze large sets of historical and current data across multiple sources to quickly uncover a ctionable insights for making strategic decisions."

At HCLTech, we think of Business Intelligence simply as bringing data to life to inform strategy.

# Power Virtual Agents

If Power BI is the veteran component of the Power Platform suite of tools, Power Virtual Agents is certainly the rookie of the group. Launched in 2019, Power Virtual Agents (PVA) is an intelligent, no code chatbot solution that helps you respond to user inquiries in a friendly, wizard-like manner. By automating responses to the most common questions, you free up your staff to focus on high-value interactions.

PVA came out of the gates with robust functionality that empowered businesses – and contact centers in particular – to literally transform their customer service delivery metrics. And yet it, too, continues to get better each year. The incorporation of AI capabilities as a standard component in 2020 has made the bots and virtual agents even more intelligent by default, as they are able to quickly learn to respond more intuitively and effectively.

## Understanding Virtual Service

A common misconception is that the average customer prefers a human customer service agent versus an automated bot. According to Microsoft's 2020 Global State of Customer Service Report, not only do nine out of ten consumers expect online self-service options, but two-thirds always try those self-service options first.

It's true: the majority of consumers actually prefer to avoid talking to a live person to get answers – they want to find it themselves! And the numbers are only going up, making effective and efficient chatbots and virtual agents an absolute requirement for successful customer service delivery.

# Where does the **Dataverse** fit in?

While Power Platform includes plenty of options for integrating with any of your business applications, you will need an enterprise database for data storage. Microsoft Dataverse is just that and so much more, providing extensible security with security roles, hierarchical security and even row/field-level security. You start with 4 TB of storage per environment, but Dataverse can scale to handle whatever number of records your application reaches.

Dataverse seamlessly integrates with other applications to act as the centerpiece for your data integration needs. With dataflows, you can synchronize data to tables in Dataverse from hundreds of other data sources, making it easy to provide users with the information they need – e.g., an updated list of assets or machines from your ERP system.

You can even integrate your data with Azure Synapse in just a few clicks to start analyzing your data and delivering insights to your users. And you can wrap all these features into solutions that are easily deployed between environments, making your journey from Development to Test to Production environments a breeze.

Simply stated, **Dataverse completes Power Platform by giving you a place to store your data** – and it comes natively with all the features you need to deliver an enterprise application to users quickly.

# Power Platform Adoption and Governance
## What it is and why it matters

We've covered the fact that Power Platform is an incredibly intuitive set of tools designed to extend the capabilities of your enterprise business applications. We also mentioned that these tools are so easy to understand and use that they give everyday users – what we call citizen developers – the ability and confidence to build apps and other solutions that can improve productivity and efficiency.

For businesses, the prospect of empowering employees to innovate and create is powerful. After all, it enables an organization to maximize its investments in Microsoft technology by increasing systems usage and user adoption.

We also referenced the fact that Power Platform Governance has become critically important and promised to get into that topic more. And now is the perfect time to explore what exactly we mean by governance and why it matters so much.

Yes, the intuitive nature of Power Platform – and especially Power Apps and Power Automate – give citizen developers great power in terms of influencing their own jobs. But with great power comes great responsibility.

It's important to identify and understand what people are capable of building with Power Platform, as well as to determine how much empowerment they should have. In other words, building a foundation for success within an organization requires a governance structure that ensures these powerful tools are used in compliance with organizational objectives and values.

## Helpful resources

At HCLTech, we offer a suite of courses related to Power Platform Adoption and Governance. We explore the concepts, skills and tools that enable and support organizational excellence in Power Platform, as well as how to create a governance structure that empowers system administrators to balance business productivity with risk management and security.

It should be obvious by now precisely why Power Platform Adoption and Governance matters, but let's reiterate a couple of important points.

### Data loss prevention

When employees have access to data, tools, solutions and systems – as they will when you have a community of citizen developers – your business is at risk. A strong governance structure that has clear boundaries mitigates that risk. With the proper guardrails defined and implemented, you don't need to worry about an employee accidentally posting proprietary code on Twitter! You can rest assured business applications remain completely separate from non-business applications. Not surprisingly, this is a priority for Microsoft – they have already released stronger controls in this area and continue to invest in data loss prevention tools.

### Growth control

On the surface this one may seem counterintuitive – why slow the growth that stems from innovation? Well, things have the potential to spin out of control without the proper controls in place, as the following example illustrates.

*A citizen developer designs an app that automates certain tasks. It gets approved based on the developer's specific responsibilities. Not fully understanding the nuanced differences between job responsibilities, the developer shares the app with a coworker in a similar job function. But it's not approved for that job role because of subtle differences in approval requirements. Uh-oh – now we've got risk that should have been avoidable.*

And that's why growth control is necessary.

# Understanding CoEs

A CoE drives innovation and improvement and brings together like-minded people with similar business goals to share knowledge and success, while at the same time providing standards, consistency and governance to the organization.

Once a Power Platform CoE is in place, the possibilities are endless, as your business will have expertise and the leadership to:

**Configure security policies to prevent data loss and control growth.**

**Administer the Platform with respect to licensing so that you have guardrails in place to govern who is doing what and when.**

**Evangelize Power Platform across the business, onboarding new professional and citizen developers in a way that grows your program organically.**

**Develop and nurture the citizen developer/app-maker community by providing the support and tools that people need, thereby avoiding stagnancy and sustaining momentum.**

**Implement a robust Application Lifecycle Management (ALM) program (more on this in theApplication Rationalization section near the end of this eBook).**

For businesses that are fully invested in tapping into the potential of Power Platform, creating and nurturing a **Power Platform Center of Excellence (CoE)** is critical. Microsoft offers its customers a CoE starter kit designed to help organizations:

**1**    **Define** goals and expected outcomes of the CoE

**2**    **Gain** insights into Power Platform user adoption

**3**    **Establish** audit and compliance processes

**4**    **Accelerate** adoption by developing a community of makers

This starter kit is helpful, but as its name implies, it is only intended to serve as a starting point for collecting data about what's happening within your organization's use of Power Platform.. In other words, it likely won't be tailored to the specific needs of your business. Partnering with the Power Platform experts at HCLTech empowers your business to take your CoE to the next level by applying the specific logic and automation needs of your organization. Most importantly, we help you clearly define the organizational objectives and values that will serve as the very foundation of your governance program.

# Citizen and professional developers

## Why you need both, sometimes alone and sometimes together

Regardless of the industry a business is in or the size of the organization, there is a universal truth about successful Power Platform programs: the likelihood for success increases tremendously when you have both citizen and professional developers. Let's explore why it's so beneficial to have thriving communities of each type of app maker.

First, let's briefly revisit our definitions using a couple of examples:



## Citizen developers

I work in the Accounting Department, and I'm responsible each day for updating the accounts receivable column in the company's ledger system. It requires me to pull data from a legacy system and populate certain fields in our CRM. It's a ten-step process that I know intimately. I've always known that six of the 10 steps could be easily automated, but because this automation would create efficiencies only for me – and I am just one person on one team within a single department of our business – the company can't justify the investment. After all, it would probably take a couple of hours just to explain and demonstrate the process to a professional developer in our IT department.

> **"**
> If I only had access to (and permission to use) low-code tools, I could probably design it myself and free up 2-3 hours of my time each day!"
>
> **Citizen Developer**

Citizen developers are end users who design and build apps that automate processes *within their own job roles*.

## Professional developers

Our company uses a legacy system to facilitate the Paid Time Off (PTO) process for all employees. It tracks balances, accruals, availed and more. It's not the most efficient tool, but we manage. The biggest pain point is getting PTO requests approved by a member of management. It requires emails to be sent outside of the tool – once a request is approved, the employee must copy-paste the approval email into a freeform field within the tool. It could probably be automated – and that would have an efficiency impact for every single employee in the company – but it requires connecting the legacy system to our email exchange. If it did get built, it would need to be thoroughly tested because there are so many potential scenarios and outcomes.

> **"**
> If our company only had a team of experienced IT professionals with deep expertise in APIs and connectors, they could design, test and maintain an application to automate the process!"
>
> **Professional Developer**

Professional developers are traditional IT programmers who design and build apps that bridge gaps and streamline processes for the *benefit of the entire organization*.

# Two communities, one thriving business

Now, those examples and definitions aren't hard and fast rules, but it's the simplest way to understand the difference between the two types of app makers and explain why each is important.

When the **Professional Community** isn't tethered to the collective needs of end users, they are freed up to:

Explore possibilities for scale with enterprise-level apps.

Identify and build high-value innovative solutions.

Lead Proofs of Concept (POCs) for the organization.

Similarly, when the **Citizen Community** isn't reliant on IT for innovation and collaboration, they are freed up to:

Streamline and automate processes that have huge efficiency impacts on the end-user experience.

Continually expand the community and drive wider adoption, helping the business realize a greater return on investment.

Explore multiple initiatives that individually might not even be blips on the company's radar but collectively can impact the business in meaningful and measurable ways.

Yes, it is certainly true that each app-maker community has the potential for tremendous achievement when acting autonomously. Nevertheless, businesses are now tapping into the synergistic power of partnerships across communities. In fact, Microsoft has recently introduced the concept of *Fusion Development (or Fusion Teams)* – the idea that organizations build better applications faster by bringing together professional developers with citizen, or low-code, developers and IT professionals.
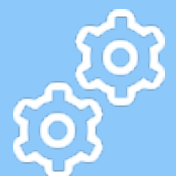
Some reports even suggest that more than 80% of organizations are already using Fusion Teams to build applications and other business solutions more nimbly.

# 80%
of organizations
are using **Fusion Teams**

Source link

# Application Rationalization (*AppRat*)
## What it is and why it matters

If you've been following along on this Power Platform journey, you recognize that at this point we are in really good shape. We've got a Power Platform Center of Excellence, a robust Adoption and Governance program and a thriving community of Professional Developers and Citizen Developers alike. There's just one more leg on this journey: ***AppRat.***

Application Rationalization, or *AppRat* for short, is the process of reviewing all the apps, tools, solutions, programs and systems in place across the organization to determine where opportunities exist to retire, upgrade, incorporate, consolidate and improve them. And with that thriving community of app makers, this won't be a one-time process! Depending on the size of your organization, in fact, you may permanently be in some stage or phase of AppRat.

Another way to define application rationalization is using a term we referenced earlier and promised to come back to: Application Lifecycle Management (ALM). No matter how robust and all-encompassing, no app lasts forever. Technologies advance and innovation is always happening, so every app eventually reaches the point where it lacks usefulness. With that in mind, the lifecycle of every application must be managed – or *application lifecycle management.*

An effective ALM program begins with super clear boundaries between environments:

- **The Dev** environment is where all apps are developed. You have only developers in this environment.

- **The Test** environment is where developed apps are tested before being released. Here, you will have a mix of developers and end users testing the functionality of the app against its specifications.

- **The Prod** environment is where live work is done. No development here! No testing here! Only end users performing production work are in Prod.

These boundaries are essential – there are no gray areas here! And once an app makes it to Prod, it must be managed, monitored, upgraded as necessary and eventually retired. How will you know when an app's lifecycle has reached its natural end? This awareness will surface as part of the AppRat process (see how it all connects?)!

An AppRat best practice is to conduct these periodic audits by *department*, as a CIO looking across the entire business may not have the business unit-level insights into citizen developed apps that a department manager likely has. Remember our example of the citizen developer from the accounting department who built an app to automate part of her process? The company's CIO is unlikely to be aware, but through the AppRat process, her line manager will recognize that the app can be retired based on new functionality added to the legacy accounting system during a recent upgrade.

As each department assesses its application landscape, they will likely see a mix of outdated applications, Excel "apps," Access databases, SharePoint lists and much more. And while many of these should be consolidated into core business applications, what about the rest?

- **How do you give your team a better user experience?**

- **How do you save them the confusion and headache of jumping between multiple apps?**

- **How do you put smarter tools in their hands (or on their heads, as in the case of wearable technology like HoloLens) where they are and when they need them?**

Most importantly . . .

- **How can App Rationalization save your business revenue and hours of manual tasks?**

Whether you oversee rationalizing your entire application portfolio or are just looking to consolidate and improve the way your team works, Power Platform can help. Backed by a scalable enterprise database in Dataverse, **Power Platform gives you all the tools you need to improve mobility, extract data insights and increase productivity.**

# A guided journey is a safe journey

As you begin this Power Platform journey in your own organization, you may soon discover you need help.

Don't worry – across industries, most businesses do end up working with an experienced partner. Sure, a business can dabble in Power Platform without guidance, but to realize the full potential of these amazing and powerful tools, to establish a Center of Excellence, to nurture a community of app makers and to establish an appropriate AppRat cadence, well, that all requires expertise and experience.

## HCLTech can help!

If you are now properly motivated and ready to get started, so are we!

**Get started now**

## Whatever your next move, buckle up!

You won't believe the heights your organization will reach on your Power Platform journey.

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