Optimize your organization with hyperautomation

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Why automate?

With the rapid advancement of the current tech landscape, organizations are finding immense value in business process automation using innovative tools like artificial intelligence (AI). In fact, the average number of AI capabilities that organizations use, such as natural-language generation and process automation, has doubled from 1.9 in 2018 to 3.8 in 2022.[1]
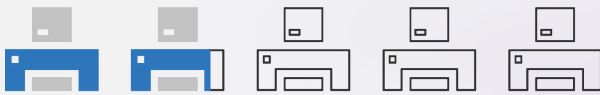
It's estimated that up to 37% of organizations still use paper to manage critical business processes[2], therefore requiring significant time and attention that could be directed towards more valuable, impactful activities.

The increasing prevalence of automation and AI in the tech sector is quickly becoming a game-changer for organizations when it comes to time-consuming tasks. Automation can improve the accuracy of business processes while enabling employees to excel in other areas. IT departments are trying to streamline and consolidate their vendors while still ensuring key business processes remain automated, secure, and compliant.

Automation alleviates some of the most common business challenges organizations currently face, including the new burdens caused by increased remote work in the business world. With employees scattered across the world, disparate systems and tools need to be streamlined and easily accessible more than ever. And numerous disjointed systems and applications that must be run manually mean an employee's typical workday can quickly become overtaken by completing menial tasks. Additionally, a remote workforce means there's a greater need for company-wide information sharing and less standardization of business processes. Fortunately, automation allows IT to remain in control of these processes while also encouraging innovation and employee productivity.

Leveraging automation also serves a valuable purpose when it comes to increasing customer demands. When customers have high expectations and there's an increased urgency to produce quality results for them, automation tools and low-code solutions can save the day by improving efficiency and alleviating the challenge of time constraints.

The automation journey

Consolidating all automation into a singular platform is something many organizations are looking for as they begin automating more broadly across their business operations. As the automation journey progresses from simple automation tools to all-inclusive hyperautomation, a central platform becomes a necessity. Hyperautomation requires the collaborative use of multiple technologies, tools, and platforms, including low-code platforms and process mining tools.

Why automate with Microsoft?

Microsoft Power Platform is Microsoft's automation solution that embraces the ever-evolving tech landscape and enables IT to supercharge their automations in a scalable, centralized platform—all while remaining secure with Microsoft's enterprise-grade security. Power Platform functions with the future in mind and keeps pace with the new innovations that continue to develop. Instead of switching between multiple systems and tools, Microsoft provides organizations with the ability to access all automation tools in one place and simplify their processes with low-code solutions. With low-code development, even those with minimal coding knowledge can build solutions through drag-and-drop functionality and visual guidance. The unified admin center in Power Platform helps streamline the tools and components needed to begin your journey to automation and provides an efficient interface for administrators to manage and govern their Power Platform environments and low-code assets.
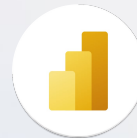
Power Platform is made up of multiple components

Microsoft Power Automate

Focuses on workflow automation and provides a visual interface for building and managing workflows

Microsoft Copilot Studio

Create and customize copilots that interact with users and suit your specific needs for internal or external scenarios

Microsoft Power BI

Specifically designed for data analysis, visualization, and reporting, and allows you to connect to multiple data sources, create interactive reports and dashboards, and share insights with others

Microsoft Power Apps

Empowers you to design, build, and deploy applications tailored to your specific business needs with low-code/no-code development

Microsoft Power Pages

Allows you to rapidly build and launch secure, customized, low-code business websites, unifying your data and connecting customers to vital information and services

Managed Environments, a feature set within the Power Platform admin center, allows IT admins to govern their Power Platform environments proactively and at scale with a collection of tools that provide more control and more visibility, all with less effort. You can create new or upgrade existing environments with Managed Environments to enforce app sharing and gain visibility in what third-party connectors are used in your automated solutions. Managed Environments also helps with automated application lifecycle management (ALM) that easily helps solution developers follow DevOps best practices.

You can also migrate flows and resources across different environments. Once your flows are ready to move beyond the development phase, you can smoothly transition them to other phases like production and testing. Maintaining this isolation and stability across the different stages of your automation processes makes it easier to prioritize the safe and efficient development, testing, and deployment of your workflows.

The Microsoft Automation Kit for Power Platform is a set of tools to help you use Power Automate for automation projects. The kit is ideal for anyone who wants extra guidance when it comes to managing, governing, and scaling automation platform adoption. It includes a collection of best practices and was built based on feedback from customers using Power Automate to implement hyperautomation into their organization.

“

We are continually upgrading equipment, processes, and apps. Because Microsoft Power Platform solutions are so easy to build, it's also easier to justify replacing these solutions more frequently to meet changing needs.”

Jared Simmons | System Analyst
**Coca-Cola Bottling Company United**

Hyperautomation with Power Platform

User experience

Process automation
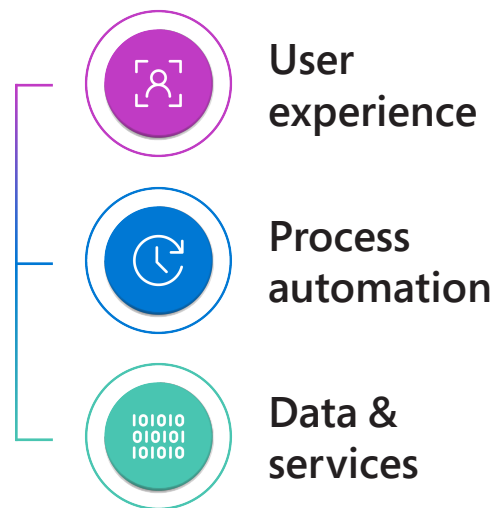
Data & services

Hyperautomation can optimize organizations and help with user experience, process automation, and data and services, all of which are conveniently accessible in Power Platform.

The user experience is one of the most important aspects of an organization that can be improved and enhanced with several automation tools, like low-code applications. These tools allow you to build and deploy applications with minimal coding knowledge by providing a visual interface and drag-and-drop functionality, so you can automate your tasks and workflows while increasing efficiency and productivity.

Secured web portals with authentication and authorization features also create a secure platform for you to access and interact with data, applications, and workflows. You can then securely submit forms, access personalized information, and participate in automated processes, ensuring data privacy and protection.
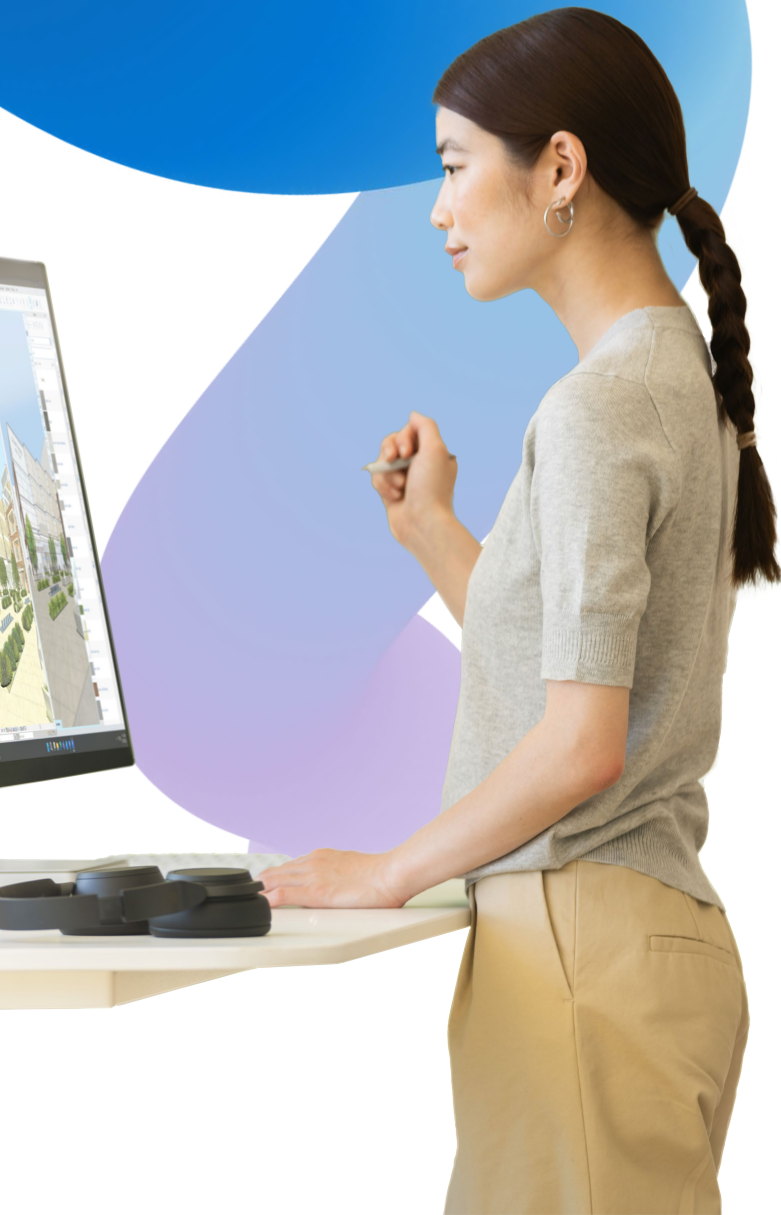
Power Platform also offers several integration opportunities to help you improve user experience for your organization, including integration with:

Power BI, Microsoft's business intelligence platform, which enables the automation of data flows and allows you to create **self-service analytics** solutions. This integration enhances the user experience by enabling users to easily extract, transform, and load data into Power BI, visualize insights, and automate report generation. Users can make data-driven decisions, access real-time analytics, and gain actionable insights.

Various **communication tools** like Microsoft Teams and Outlook, which support the automation of communication processes like sending notifications, scheduling meetings, and managing emails. You can easily stay connected, collaborate seamlessly, and streamline your communication workflows to boost efficiency and productivity.

A variety of **collaboration tools** available in Power Platform. Integration with these tools, like SharePoint and OneDrive, enables you to automate document management, version control, and collaboration workflows. This integration provides seamless collaboration, document sharing, and real-time updates. Users can work together more efficiently, track changes, and automate repetitive tasks, which helps to boost team collaboration.

Azure data and AI services to create more intelligent Power Platform solutions with your existing Azure services. For example, you can connect Azure data storage like SQL data warehouse and data factories, cognitive services for natural language and translation, or even for security and development like Microsoft Entra and Azure DevOps.

A wide range of **core business applications**, like Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) systems, and Microsoft 365. By automating workflows between these applications, you can streamline data exchange, automate business processes, and eliminate manual tasks. This creates a connective environment that makes it easier to access and manage critical business information efficiently.

Drive digital transformation with process automation

When it comes to process automation, Power Automate provides a range of tools and techniques to automate, optimize, and analyze processes within your organization to drive digital transformation.

Power Automate offers **process and task mining** tools to take the guesswork out of what you should automate within your organization and leverages **robotic process automation (RPA)**, **digital process automation (DPA)**, and **artificial intelligence (AI)** to enable you to create automation solutions.

Process and task mining

Process and task mining can be thought of as the prework to automating processes. Prior to creating automation solutions, it's essential to spend time figuring out exactly which processes and tasks could benefit your organization by being automated. Process mining allows you to gain insights into your organization's processes by analyzing event logs and data and visualizing process flows, identifying bottlenecks, measuring cycle times, and detecting inefficiencies, allowing you to identify the most valuable opportunities for automation.

Task mining is like process mining, but instead focuses on understanding user interactions with applications and systems to understand how various tasks are performed. This highlights areas that would benefit from automation to boost efficiency.

RPA

RPA is UI automation and automates the UI of a desktop as a software robot. By automating repetitive, rule-based tasks, these bots can interact with applications and systems just like a human user and are able to perform tasks like data entry, form filling, and data extraction.

T-Mobile leveraged the RPA capability in Power Automate to integrate systems during their merge with Sprint and was able to launch their RPA solution in just weeks. This allowed them to receive 11x more requests in real-time and reduced human data entry errors from seven percent to zero, showcasing how RPA can enable organizations to streamline processes, reduce human error, and free up human resources for more valuable work.

DPA

DPA enables the design, automation, and optimization of end-to-end workflows and processes with APIs. DPA is unique and distinct from RPA because it can automate apps, services, and data with API. And with DPA, you can incorporate complex business rules, approvals, decision-making, and collaboration into your workflows. The result? Dynamic and adaptable processes that span across multiple systems and users, resulting in more efficient and streamlined operations.

AI

Power Automate also uses AI to enhance automation workflows and allows you to incorporate machine learning, natural language processing (NLP), computer vision, and other cognitive services into your automation solutions. This allows you to automate decision-making processes, analyze data, extract insights, and interact intelligently with users. Copilot in Power Automate is a feature powered by AI with GPT that helps you create workflow automations through quick and easy natural language expressions. By describing what you need, Copilot can help you create a flow for any business process.

BPM

In addition to the tools that aid in preparing and creating automation solutions, Power Automate also offers business process management (BPM) capabilities to support process automation by providing a visual designer and workflow engine to model, automate, and monitor business processes.

Data and services

Use productivity suite and core business data to build powerful solutions

Create scalable and secure solutions with cloud services

Integration with Microsoft's productivity suite, including Microsoft 365, allows you to work with data from applications like Excel, SharePoint, Outlook, and Teams. You can then incorporate this data into your Power Platform solutions, enabling seamless collaboration and data management.

You can also connect and interact with core business data from various sources, like enterprise resource planning (ERP) systems, customer relationship management (CRM) systems, and other line-of-business applications. The connectors and integration capabilities in Power Platform allow you to connect and interact with core business data from systems like Dynamics 365, Salesforce, SAP, and Oracle. Using this data, you can create unified views of your core business data and build powerful solutions around it.

Power Platform leverages cloud services and storage to provide scalable and secure solutions. It utilizes Microsoft Azure services, such as Azure SQL Database, Azure Blob Storage, and Azure Cognitive Services, to store data, perform advanced analytics, enable machine learning capabilities, and enhance the functionality of Power Platform solutions. By leveraging cloud services, Power Platform ensures high availability, scalability, and data security for your applications and workflows.

Automate processes involving on-premises databases, file shares, and applications

Power Platform offers connectors and gateways that enable you to connect to and work with data residing in on-premises systems. The on-premises data gateway facilitates secure communication between Power Platform and your on-premises data sources, such as databases, file shares, and applications. This capability allows you to integrate and automate processes involving legacy on-premises systems within your Power Platform solutions.

Access a standardized and scalable data model with Dataverse

Microsoft Dataverse is a modern and secure data storage and management platform within Power Platform that provides a standardized and scalable data model, enabling you to create and manage business entities, relationships, and business logic. It allows you to build custom applications, automate workflows, and generate insights using a unified data schema. Dataverse ensures data consistency, data governance, and seamless integration with other Power Platform components.

Steps to automation

Powered by low-code and AI, Power Automate empowers you to do more with less by streamlining repetitive tasks and business processes, leading to increased efficiency and reduced costs for your organization. There are four stages to the automation journey—Discover, Automate, Orchestrate, and Extend.

Discover

Power Automate Process Mining allows you to use process and task mining to identify inefficiencies and areas for improvement in your organization's workflows, as well as discover possibilities for automation for individual workflows. Visualizing process flows and analyzing key performance indicators (KPIs) can further help with making informed decisions about which processes to automate and prioritize for maximum impact.

Power Automate provides several tools for the process and task mining stage. Out-of-the-box templates are available for rapid deployment from data ingestion to pre-defined custom reports. Features like rework detector, root cause analysis, process compare, and custom metrics help you discover valuable insights about your business processes. The analytics dashboard can also help provide application insights with end-to-end visualization and graphics.

Automate

After deciding on which processes to automate, you can begin creating automated workflows using advanced technologies like RPA, DPA, and AI. RPA enables automation by creating software robots that mimic human actions, and DPA enables automation with APIs. AI capabilities enable you to leverage machine learning, NLP, and cognitive services to automate decision-making, data analysis, and intelligent interactions. The three basic steps for automation are:

1. Create a flow
2. Test your flow and debug
3. Share your flow

Cloud flows are powered by DPA and are used to automate modern apps, services, and data with APIs in the cloud. Power Automate has prebuilt, searchable templates, so you can jump in and get started quickly instead of starting from scratch. You can use API connectors, triggers, logic, AI with generative pre-trained transformer (GPT, and Copilot to create your own cloud flow. There are both prebuilt and custom API connectors to choose from, allowing you to choose between over 1,000 prebuilt connectors or develop your own specifically for your personalized scenarios.

It's estimated that 30 percent of work activities involving the use of technology will be conversationally enabled by 2026[3], and Microsoft can help you get a head start with Copilot Studio. Cloud flows that use conversational AI through Copilot Studio offer your customers a more natural and streamlined way to interact with your automation and feature-rich natural language understanding (NLU and intent understanding. These capabilities help create automations that use generative-AI-based building and responses, as well as AI-infused suggestions and improvements, to create engaging and relevant experiences for your customers.

Desktop flows are powered by RPA and are used to automate legacy systems on a desktop or virtual machine. Power Automate features ready-to-customize desktop flows and has hundreds of drag-and-drop UI actions to choose from. You can also develop your own UI actions for homegrown or legacy apps with the actions SDK.

Copilot in Power Automate allows you to create automations with natural language expressions by describing what you need through multiple steps of conversation. Copilot understands your intent based on a scenario prompt you provide and can create a flow based on that prompt. It can also set up connections on your behalf and apply the necessary parameters in the flow based on your prompt. If you need to make changes to your flow like update or replace actions, Copilot can respond to your requests to do so. You can also ask Copilot questions about your flow to learn more about it.

Orchestrate

This stage of the automation process is when it's time to ensure everything runs smoothly by securely scaling across your organization with governance, data loss protection, and hosted infrastructure. To do this, it's advised to create a Center of Excellence (CoE, implement data loss prevention (DLP, and deploy and monitor with full visibility. One major benefit of Microsoft's solutions when it comes to governance and security is having one unified admin center that provides the most comprehensive features out-of-the-box, including tenant isolation, data policies, control actions, and configure endpoints. You also have access to the CoE starter kit to improve the efficiency of IT admins and drive innovation and improvement.

Power Automate hosted RPA is comprised of Microsoft-hosted virtual machines

powered by Azure that allow you to deploy and scale automation. This helps simplify setup and orchestration and allows you to manage workload peaks with machines that automatically scale, optimizing efficiency. Dynamic load balancing also encourages the optimization of resources between processes, teams, and organizations.

Power Automate's scalable hosted infrastructure enables you to deploy and manage automation solutions within minutes for development, testing, and automation, all while adhering to security and compliance requirements. These features also improve business continuity by seamlessly scaling production workloads according to current demand. Work queues can be used to help prioritize work items effectively across the organization, providing full digital workforce management.

> Knowing that our apps are being built within a platform recognized as having the highest security protocols is the biggest advantage our Microsoft partnership brings us."
>
> **Stuart Hughes | CIO**
> Rolls-Royce

Extend

Power Automate seamlessly integrates with other components of the Microsoft Power Platform, including Power Apps, Power Pages, Power BI, and Copilot Studio. This integration allows you to extend automation to different areas and channels. For example, you can build intelligent copilots that automate customer interactions with Copilot Studio or create custom websites and applications that incorporate automation workflows. By infusing automation into the Power Platform, you can enhance user experiences, increase productivity, and provide end-to-end solutions that integrate data, processes, and user interactions.

Custom apps

After building custom web and mobile apps in Power Apps, they can be extended with custom logic, data integration, and automation by using Power Automate.

Custom connectors

Custom connectors can also extend the functionality of Power Platform. If you need to connect to a custom or specialized system, you can create your own custom connector, which allows you to integrate with external APIs, databases, legacy systems, or cloud services that are not natively supported. This capability bridges the gap between Power Platform and your specific technology landscape.

Custom components

Creating custom components extends the capabilities of Power Apps. These components are reusable elements that encapsulate functionality and visual elements. You can create custom components using code or the Power Apps Component Framework (PCF), which can then be shared across different apps and solutions.

Optimizing your organization for the future

The all-encompassing features provided by Microsoft's Power Platform speak for themselves— everything your organization needs to begin leveraging the power of automation to optimize your business is right here, conveniently protected by enterprise-grade security and governance.

Power Platform enables you to begin transforming your organization with the future in mind by using evolving technologies like Copilot. Microsoft's solutions propel you to become forward-thinking in your approach to your current business processes and work with the immense growth of current technology to take your organization to the next level.

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[1] The state of AI in 2022—and a half decade in review, December 6, 2022
[2] Gippsland Business Connect
[3] Source: Gartner - Forecast Analysis: Hyperautomation Enablement Software, Worldwide, 2022