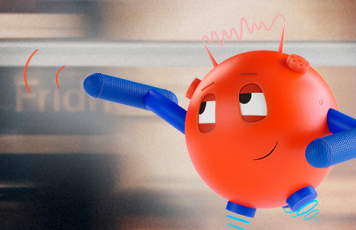UiPath | Reboot Work.™

2022 TRENDS

Automation Accelerates

Automation is expanding faster and further than ever—see how you can take advantage.

Automation's momentum only keeps growing and growing.

Make sure you're up to speed.

Automation is progressing like never before—in terms both of the technology itself and in the ways it's delivering new growth and profit.

To take a look at what's ahead, we've gathered insights from analysts, partners, customers, and our own marketing, sales, product, partnership, and customer success teams—honing all this info down to 10 key trends in automation. Together, they present a picture of the years to come, the many possibilities automation presents, and the steps you need to take to take advantage.

Where automation is heading—in 2022 and beyond.

It's coming into its own as essential enterprise technology—with robotic process automation (RPA) at the center.

It's expanding its role in the stack—and in the way people work.

It's winning over new champions in the C-suite.

It's introducing innovations that will transform the technology and the industry.

It's laying the foundation of a booming ecosystem.

Across every dimension—by every measurement—automation is accelerating.

CIOs take the reins on automation.

With automation now the top tech trend, CIOs will step up to raise its technology, strategy, and governance to the enterprise level.

More and more, automation has become a top priority in the C-suite and the boardroom. But enterprise leaders want to automate the right way, ensuring that automation investments fully deliver on their potential to drive digital transformation, agility, efficiency, and revenue.

To that end, many boards are now handing down "automation mandates" to properly plan the organization's automation strategy—and CIOs are the ones being asked to take the lead in determining how the technology will be introduced across the enterprise.

To develop (and execute) this strategy, CIOs will first need to wrap their heads around the many disparate, disconnected automation initiatives that may already exist within the organization— and how they can best be centralized and secured.

56% of large enterprises currently have **4 or more simultaneous automation initiatives.**

15% have 10 or more.[1]

With these new mandates, the role of the CIO has expanded: beyond driving efficiencies, CIOs will now be expected to drive revenue—from sales and marketing, to online ordering and customer call centers.

OUR ADVICE TO CIOs

Get started on your enterprise automation strategy now.

Automation will likely be a critical item on your 2022 agenda, so get ahead of the game. Some of your key tasks:

- Choosing an automation platform that provides enterprise-grade scale, governance, and security

- Identifying and prioritizing the biggest opportunities automation can deliver to your organization

- Building out automation skills and capabilities across the enterprise

- Connecting islands of automation within your organization

OUR ADVICE TO CIOs & AUTOMATION COEs

Choose a foundation that will best serve your needs.

Deciding on a core automation technology is critical, but that doesn't make it easy. As you start to make your decision:

- Map out all the automation technologies currently used in your enterprise—both where and why.

- Devise a strategy for reducing fragmentation across initiatives, centralizing around a core platform.

- Make sure your chosen platform can meet as many of your automation initiatives as possible.

In the automation platform convergence battle, RPA wins.

'RPA-plus' platforms will push to become the go-to in automation, integrating capabilities from adjacent business process technologies.

RPA. BPA. iPaaS. LCAP. AI. There are plenty of types of automation out there. Each has something different to offer—and each would like to be the primary automation platform around which all others are centered.

The battle is fiercer than ever, but when the dust clears, we predict that robot process automation (RPA) will come out on top—and not just because it's what we do at UiPath! According to Gartner, RPA was the fastest-growing enterprise software in both 2019 and 2020, with revenues increasing 38.9% between those years.[2]

And it's no wonder why. Modern end-to-end RPA platforms offer crucial features like integrated management and execution, enterprise-grade governance, low-code/no-code build environments, and support for rapid scaling. Plus, RPA has led the way in UI automation—a critical technology most other platforms are still playing catch-up on.

78% **of surveyed organizations have chosen RPA platforms for their intelligent automation efforts.[3]**

This isn't to say that RPA can do everything every other platform can. But give it time. "RPA-plus" platforms are already coming into play, rapidly introducing the capabilities of adjacent platforms and making it easier for organizations to integrate existing technologies. With more use cases and more tools and capabilities for developers, organizations can increase automation's impact across their enterprise. This should only cement RPA's position as the core automation technology moving forward.

Automation moves to the top of the enterprise stack and powers a new engagement layer.

Robots, not people, will weave together applications, systems, and software—allowing us to totally reimagine processes in the process.

Today, the average large enterprise uses more than 170 different applications. These applications may work beautifully on their own—but they don't necessarily play well with others. As a result, employees spend far too much of their time bridging the gap: moving information between applications, for instance, and ensuring the consistency of that data.

In 2022 and beyond, we'll see leading-edge enterprises address this problem by adding an automation layer to the top of their application stack. This new automation layer will contain connections and reusable components that can link applications and systems of records—along with key governance, maintenance, and developer capabilities.

By reusing components from this layer, teams can build, test, and execute automations faster—while ensuring fast connections, reliable communication, and dependable data consistency across systems. This not only frees employees from boring, burdensome work—it also frees the organization to establish new processes built on a foundation of automation.

By reusing automation components across applications and QA/testing teams, a UiPath customer was able to:

Cut business application deployment by 90%

Complete test automations 3-5x faster

OUR ADVICE TO CIOs & CTOs

Think automations, not applications.

The automation layer is a wholly new animal. What do you need to do to bring it to life?

- Build out robust, reusable automation object libraries for frequently used actions in your core systems of record.

- Establish a new step in the process development lifecycle to determine whether a process can be driven by an automation rather than an application.

- Back your automation layer with technology that allows for centralized governance, management, and testing.

Just-in-time, task-based workflows emerge as alternatives to business-application-based workflows.

The first virtual assembly lines will deliver "work-as-needed" to employees' desktops.

Today, work happens in applications. A whole bunch of separate applications. A user might pull data from Salesforce, dump it into Excel, then process it in Workday. It's a workflow, all right, but not a very efficient one. Now, though, we're beginning to see the rise of an entirely new type of work. Instead of employees going to all those applications, tasks now come to the employees—a virtual assembly line of just-in-time tasks, brought to you by robots.

By removing apps from the equation, work is less complex and fragmented, so less time is wasted. No more opening, closing, and navigating a slew of applications. No more trying to work across applications—and making sure that that work actually worked. No more struggling to learn new or updated applications. Instead, employees have exactly what they need to do the work they need, when they need to, all in one place.

The manufacturing assembly line revolutionized the way physical work was performed and what it could produce. We believe that virtual assembly lines could have the same impact on digital work.

By 2024, it's predicted that

25% of employee-facing app development will be replaced by the codeless development of just-in-time tasks.[4]

OUR ADVICE TO CIOs & AUTOMATION COEs

Get comfortable with task-based workflows.

It's not time to totally abandon application-based workflows, but you should start thinking about what task-focused work will look like.

▪ Set a goal for piloting at least 5 just-in-time, task-centric workflows by the end of this year.

Automation Centers of Excellence step in to solve the AI deployment problem.

CoEs will help organizations get AI over the hump—driving greater success rates and better ROI.

Investments in artificial intelligence (AI) are growing by leaps and bounds. The return on those investments? Not so much yet. One major roadblock: actually getting AI models out of labs and into the workplace.

64% **of IT and AI practitioners say it takes at least a month to implement a new AI model.[5]**

1/5 have **90%** **of their AI models going unused.[5]**

Now, though, more and more organizations are realizing automation can help them cross the last mile with AI. Ready-made workflows can easily bring models into front-line decision-making and analysis, and new capabilities like drag-and-drop model insertion and continuous automated model improvement can make AI deployment simpler than ever.

As automation's AI track record gets better and better, it's encouraging AI and analytics groups to team up with automation CoEs to get AI in employees' hands faster. In fact, in some enterprises, automation CoEs are taking over AI deployment completely.

OUR ADVICE TO CIOs, AI & ANALYTICS COEs, & AUTOMATION COEs

Centers of Excellence—unite!

To make the most of AI, you need to make the most of automation. That's why it's critical for automation and AI/analytics CoEs to put their heads together on how best to deploy the two technologies in tandem.

- To encourage collaboration, identify opportunities where you have powerful, but undeployed, AI models that could deliver big business impact—in customer service, the supply chain, wherever.

- Give automation CoEs the freedom to use modern, advanced automation platforms to rapidly deploy and manage AI-enriched workflows.

Semantic automation revolutionizes RPA.

The industry will make major strides in bringing "AI inside" to make automation faster, easier, and more resilient.

Today, even with drag-and-drop, low-code platforms, building a complex automation can be a drawn-out process. That's because developers have to tell the robot every single step to take and every rule to follow. "Move this here, open this, extract that…" It's a lot.

But with semantic automation, the robot will already know the rules and the context, the patterns and the relationships. "Oh, I've seen this process, so I know how to complete it." "Hmm, I need this specific info—OK, I know where to find it." With this sort of contextual understanding, developers— or even business users—will be able to ask a robot to complete a task and let it figure out how.

Pattern-based models are
2x as effective
at finding credit card fraud anomalies as rules-based models.[6]

We believe that semantic automation will be a quantum leap forward in the industry, freeing up more time and putting automation in more people's hands. At UiPath, we've already surmounted some of the first hurdles in realizing the technology, with advances in AI, document processing, and computer vision that will help form the foundation of semantic automation.

OUR ADVICE TO CEOs, CIOs, & AUTOMATION COEs

Set yourself up to be an early adopter.

Semantic automation is still an emerging technology, but it's one you should keep on your radar, so you can get on board early when the time comes.

- Closely monitor advances and improvements in the technology—what's possible and who's leading the charge.

- Check out early use cases, like UiPath Forms AI, which can process forms and documents that have similar formats, even if the robot has never seen them before.

The desire for flexibility in delivery options spurs cloud-based architectural innovation.

Containerization and cloud-native will become the new standard for the delivery of both SaaS and non-SaaS automation.

Part of embracing automation is deciding how you'll actually get your hands on the technology. On-premises, cloud, hybrid—today's market demands flexibility; no one wants to be locked into a particular delivery model.

So, automation providers are increasingly embracing cloud-native architectures that leverage containerization and microservices to deliver various platform capabilities however and wherever the customer wants them. Customers get the automation they want today—and can easily swap approaches tomorrow—without having to change procedures or reeducate employees. And with these architectures, even on-premises customers now have access to cloud-like flexibility, timeliness, and easy updates.

In 2022, expect additional delivery innovations focused on making it even easier to install, manage, and upgrade on-premises automation platforms—and reducing total cost of ownership (TCO) for every delivery method.

OUR ADVICE TO CTOs & CIOs

Keep tracking that delivery.

New delivery innovations can reduce costs—and make it easier to keep your platform up-to-date and operating at peak performance. So, make sure you keep up with the industry advances!

- Find a platform that will continue to innovate across every delivery method. You might be using SaaS today, but new requirements could bring you back on-premises—and you want tech with the flexibility to do both well.

OUR ADVICE TO CSOs & CIOs

Team up to tackle sustainability.

Technology like automation can help you do the greatest good smarter, faster, and more effectively. But that means getting a real handle on that technology and its potential.

- CSOs: Develop a close partnership with your CIO and IT heads; they'll be critical in helping you identify and implement the right solutions.

- CIOs: Stay informed! Make sure you're aware of emerging opportunities and best practices for using technology to address social and environmental issues.

Automation finds a new C-suite champion: the Chief Sustainability Officer.

CSOs will team up with CIOs to use automation for the greater good.

Sustainability has never been a greater concern—which is giving it a much greater role in the workplace. We're now experiencing the rise of the Chief Sustainability Officer, who works across the organization to improve the company's environmental impact. And as these CSOs endeavor to achieve their crucial goals, they're discovering an ally in the CIO—also increasingly tasked with sustainability initiatives—and a useful tool in automation.

Today, there are over 95 CSOs in the Fortune 500.[7]

24% of CIOs say they're responsible for implementing sustainability programs.[8]

Automation can support mission-critical fact-gathering, monitoring, and measurement—making them simpler, faster, and more accurate—so initiatives start (and progress) the right way. But automation can also have a more direct impact: for instance, automating data centers to power down during periods of inactivity can significantly reduce electricity use. (We ourselves cut cloud compute usage by 65%![9]) Or it can create efficiencies that reduce paper consumption. Or uncover new opportunities to reduce environmental impact across the supply chain.

HR teams prepare for their next big challenge: managing a human-digital workforce.

Chief Human Resource Officers (CHROs) will start planning for a workplace where people and robots work as one.

Within the next 5 years, hybrid human-digital workforces will be the new normal. People will work side-by-side with virtual robotic assistants—sharing tasks, passing work back and forth, collaborating. But getting there isn't simply a matter of dropping in the technology. It's going to take real change management—changing the hearts, minds, skills, behavior, and even roles of employees.

Forward-thinking HR executives have already recognized this looming challenge and have begun to put together multi-year plans for the transition: Which jobs will be sunsetting? What new jobs will take their place? How can they best train employees to work with the new technology? What skills will teams need to learn or improve or replace? Who should they hire, and who should they redeploy?

Business leaders now predict they'll have to retrain one-third of their workforce in the face of the changes automation will bring.[3] HR will be the ones driving this transformation—if your HR leaders haven't started planning for it already, they likely will soon.

Up to
85M lower-value jobs will be lost by 2025…

…only to be replaced by
97M higher-value jobs.[10]

OUR ADVICE TO CHROs & HR TEAMS

**Start planning.
(Or at least start planning to plan.)**

The shift to human-digital work is happening—get out in front of it by envisioning and preparing for it right now.

- Map out which jobs are likely to change, emerge, and phase out.

- Identify and define the skills needed for tomorrow, and the means you'll need to develop them across your organization.

- Develop a robust change management plan to smooth automation adoption and maximize its impact.

Growth explodes across the automation ecosystem.

It's not just automation that's booming—it's all the technologies and work around it.

The automation market is larger and growing faster than you might realize. And that's because it's not just about automation platform providers alone—it's about an entire ecosystem of all the other elements that make automation possible. Those delivering the hardware and software. IT integration services. Custom app developers. Consultants to help businesses get more out of the technology.

And, of course, with a bigger market comes bigger opportunities. Take UiPath's ecosystem. In 2022, IDC predicts that our ecosystem will increase by $2.3B—46% growth over where we were in 2021. By 2025, they predict it will value at $16.4B—that's a total cumulative opportunity of $51.2B.[11]

With opportunities like these, it's no wonder everyone's trying to get in on the action. Accenture recently announced it will add 10,000 automation specialists by 2023. Consulting firm PwC recently integrated UiPath into PwC Perform, their proprietary operational improvement methodology and management system, so it can quickly and easily deliver automation to clients. And our own UiPath partner network now tops 4,700 (and growing). The automation ecosystem is primed and full of potential—all you have to do is jump on board.

The biggest revenue opportunities in the automation ecosystem?[11]

Business Services
to support organizational change, functional training, and strategy development

Add-on Software
including apps for specific departments and processes; security software and operating systems; and app development tools

IT Services
including systems integration, custom app development, training, and end-user support

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OUR ADVICE TO WOULD-BE ECOSYSTEM CONTRIBUTORS

Stake your claim boldly and early.

There's no better time to enter the automation ecosystem—automation is on the rise, and businesses are ready to make the leap, but they need support on their journey. How can you help?

- Be prepared for a lot of competition and a lot of noise in the market. Make sure you hone your products and services to address real needs—then carefully target your audience with clear messaging about what it is you have to offer.

- Build strong relationships with automation platforms, so that you're the one they want to work with and recommend.

ABOUT UIPATH

UiPath (NYSE: PATH) has a vision to deliver the fully automated enterprise™, one where companies use automation to unlock their greatest potential. UiPath offers an end-to-end platform for automation, combining the leading robotic process automation (RPA) solution with a full suite of capabilities that enable every organization to rapidly scale digital business operations.

For more information, visit **uipath.com**

Ui|Path Reboot™ Work.

Gartner®

A leader in the 2021 Gartner® Magic Quadrant™ for RPA

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FORRESTER®

A Forrester Wave Leader for Robotic Process Automation, Q1 2021

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IDC

A Leader in the IDC MarketScape for Worldwide Robotic Process Automation Software 2021-2022

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Everest Group®

Everest Group Robotic Process Automation Products PEAK Matrix® 2021

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1. Gartner, *Top Strategic Technology Trends for 2022*, 2021. 2. Gartner, *Market Share Analysis: Robotic Process Automation, Worldwide, 2020*, May 2021. 3. Deloitte, *Automation with intelligence: Pursuing organisation-wide reimagination*, 2020.
4. IDC, *FutureScape: Worldwide Developer and DevOps 2022 Predictions*, October 2021. 5. RunAI, *State of Infrastructure Survey*, 2021. 6. Brighterion, *How do AI models compare to rules-based decisioning?*, September 2020. 7. Weinreb Group,
The Chief Sustainability Officer 10 Years Later: The rise of ESG in the C-Suite, March 2021. 8. Gartner, *The Role of the CIO and Technology in the Enterprise Sustainability and ESG Endeavor*, 2021. 9. UiPath, *It's Time to Automate Your IT Ecosystem*,
2021. 10. World Economic Forum, *How intelligent automation can power sustainable economies*, September 2021. 11. IDC, *The Economic Impact of UiPath Robotic Process Automation*, September 2021.