

UiPath Process Mining

Accelerating RPA with end-toend process understanding and monitoring



Contents

Section 1	03	Executive summary
Section 2	05	Business challenges – and how automation addresses them
Section 3	06	RPA and hyperautomation: accelerating automation in the enterprise
Section 4	07	UiPath Process Mining: an 'x-ray' of your processes
Section 5	08	UiPath Process Mining – a broad set of enterprise capabilities
Section 6	09	Accelerating RPA with end-to-end process understanding
Section 7	11	UiPath Process Mining at work
Section 8	12	Conclusion

Executive summary

Automating core business processes is critical for organizations looking to succeed in today's highly competitive global market. McKinsey and Company, the global management consulting firm, estimates that about half of all work can be automated—and not just in manufacturing or in lowwage, low-skill roles. Even "the highest-paid occupations in the economy, such as financial managers, physicians, and senior executives, including CEOs, have a significant amount of activity that can be automated."¹

Companies that want to build and grow need automation to squeeze more performance and business insights out of operations that historically have been managed by people. But organizations often lack the tools to understand their processes—including the inefficiencies and bottlenecks that adversely affect business growth. Lacking that insight, they will struggle to understand what they are automating and why, and they won't be able to fully leverage the power of automation solutions.

UiPath, the leading vendor of Robotic Process Automation (RPA) products, is the industry leader in helping businesses automate tasks and gain insights into the performance of their operations. One of its newest products to assist organizations is UiPath Process Mining, which gives companies deep insights into their existing processes. It allows companies to scale their automation with end-to-end understanding

of processes so they can identify problems, redesign processes when necessary, and establish a cycle of continuous monitoring and improvement. UiPath Process Mining is another in a series of powerful UiPath offerings that enable "hyperautomation" the combination of process automation components, integration tools, and technologies such as artificial intelligence (AI) and machine learning (ML) that help standardize and accelerate automation in the enterprise.

This paper provides an overview of UiPath Process Mining and its place within hyperautomation. It looks at key business challenges and how automation addresses them; how UiPath Process Mining accelerates RPA; and examples of how UiPath helps companies in specific industries.



Use UiPath Process Mining to x-ray every process and scale automation.





Understanding your processes is the key to automating them

Organizations often lack the tools to understand their processes. They often think they have an idea of the steps and flow of a certain process, but they aren't aware of all possible deviations and bottlenecks.

How can you make sure you know exactly what's going on in your processes? Better yet, how can you leverage existing data to do this? Process Mining can show you.

Process expectation vs. process reality



Business challenges – and how automation addresses them

Successful businesses are always looking for ways to improve their growth through leaner, more efficient operations. For example, excessive operational expenses can hamper new business initiatives and reduce the bottom line. Customer service problems affect loyalty and can threaten a company's reputation. Routine internal tasks can absorb countless employee hours that could be better spent on new innovations and more productive business activities. Governance procedures and guidelines that aren't properly enforced can lead to costly and legally problematic mistakes.

Business process automation can address all of these challenges with technology to manage processes and workflows that, in the past, were paper-based and handled by people. Automation can be applied to almost any process that is repetitive and doesn't require logic or human intervention to complete. And it can be deployed for consistent results and quality control, helping to eliminate humancaused errors that interfere with business functions and create money-wasting corrections.

Operational expenses can be reduced, for example, by automating the receipt and payment of invoices or by automatically routing contracts through approvals instead of using manually intensive paper processes. Customer service can be improved by automating responses to routine customer queries, or through technologies that help employees find emerging customer trouble spots. Companies can improve internal processes

like automatically generating routine team reports or paying recurring bills, freeing up employees to focus on more important valuable work. Today's automation solutions can also provide an excellent means of implementing and enforcing governance across business operations.

> Automation can be applied to almost any process that is repetitive and doesn't require logic or human intervention to complete.

RPA and hyperautomation: accelerating automation in the enterprise

Business automation saves valuable time for employees and enables them to focus on higher-value work initiatives. RPA is an integral part of business automation. It provides software robots and AI that watch users perform tasks within an application's graphical user interface (GUI), and then creates automations by repeating the tasks within the GUI. RPA helps organizations increase business efficiency, drive quality improvements, and lower costs.

Now organizations are recognizing that they can take automation to a new level in what **Gartner calls a top strategic business trend: hyperautomation.** Gartner predicts that by 2024, organizations will, on average, reduce operational costs by 30% by combining hyperautomation technologies with redesigned operational processes using a "combination of multiple machine learning, packaged software, and automation tools to deliver work."²

Hyperautomation builds on the momentum of RPA. It encompasses a combination of RPA and disruptive technologies such as machine learning, decision management, and natural language processing Process mining is an integral part of hyperautomation. It helps companies **identify and fully understand existing processes so they can fix or eliminate** the ones that are poorly designed or unnecessary, and implement new ones to improve business performance.

UiPath Process Mining is the ideal fit for companies seeking to take

"Gartner predicts that by 2024, organizations will reduce operational costs by 30% by combining hyperautomation technologies with redesigned operational processes."

for comprehensive automation solutions. It also fosters democratization of automation, enabling not just technical employees but business users across the enterprise. With easyto-use tools, employees become participants in identifying and automating mundane, repetitive tasks—and in the process, redefining their jobs and improving the business. advantage of hyperautomation. It accelerates RPA, providing an important driver of successful digital transformation for companies in the coming era of hyperautomation. Let's look at how UiPath Process Mining scales RPA with end-to-end process understanding and monitoring.

> Hyperautomation is #1 in Gartner Top 10 Strategic Technology Trends



With RPA at it's core, Hyperautomation brings together multiple technologies, including AI, machine learning, and process mining.

• •

.

UiPath Process Mining: an 'x-ray' of your processes

As noted earlier, process mining gives companies a way to identify, analyze, correct, and monitor their processes across the enterprise. It complements businessintelligence (BI) tools while helping organizations extract information from enterprise systems such as SAP, Oracle, or Salesforce, using that data to identify process deviations and implement improvements.

Historically, process mapping techniques were manually intensive and time consuming. Process models were typically drawn by hand and often there was not enough precise data to fill in, or the input was biased. A lot of effort and cost was required by business analysts and managers to extract the right data, organize workshops, and write down desired processes.

This changed when data scientists at academic institutions proposed using existing system data to identify, monitor, and improve business processes. Instead of relying on drawings of idealistic business processes that could potentially overlook dozens or even hundreds of different scenarios, this new technique uses actual data for every scenario and every event.

To perform process mining, a minimal initial data set is

needed—the event log. This event log contains every step that is performed (the Activity) during the process, it records the moment at which the event happened (the Timestamp), and it provides an instance of the process (the Case ID). Based on this event-log data, process mining algorithms generate a model that shows the process as it really is, not as it is perceived. Analysis can be enhanced by adding other concepts to the minimal initial data set. The result is then used for process discovery, conformance checking, and process enhancement.

UiPath Process Mining benefits

Native ETL (Extract, Transform, and Load) capabilities: Connect to any database and transform data without third-party tools

Easy to connect: Unlock process data from your line of business applications

Out-of-the-box: Versatile AppOne kickstarts process mining with minimal effort

Enterprise-grade data management: Provide scalability across large organizations

Secure: Data can be anonymized in GDPR environments

TRACY process graph (patent-pending):

Unique, proprietary process visualization technology designed for the business user

Process comparison: Compare processes over time to understand impact of optimization and automation

Business rules: Apply KPIs and tags to stay on track with key business goals

UiPath Process Mining – a broad set of enterprise capabilities

UiPath Process Mining incorporates this technology and then propels RPA into the era of hyperautomation. It provides a broad set of capabilities to facilitate sophisticated end-toend process automation and delivers functionality that helps turn insights into action using the UiPath Enterprise RPA Platform.

With UiPath, organizations can:

Achieve a holistic view of end-to-end processes. This starts with task mining—which identifies, monitors, and analyzes user actions at the desktop level—and moves to process mining, which analyzes data from IT systems. Process mining helps surface high-value, high-impact

automations, and aligns and

goals with KPIs and tags.

optimizes processes to business

Use continuous process insights and process

visualization to understand how RPA performs in the context of end-to-end processes. This information helps businesses optimize how robots, systems, and humans interact, with robots handling repetitive tasks and enabling people to perform creative, value-added work. As part of this process, UiPath Process Mining connects IT system data using built-in ETL functionality to create a digital visualization of processes, which shows where deviations and bottlenecks exist and how they occur. The resulting automations deliver a high

return on investment because

they focus on important

deviations and bottlenecks.

Optimize automations not

only in end-to-end processes, but also in surrounding environments. This includes other systems and the people who execute the manual steps in the process. UiPath Process Mining identifies where the greatest improvements can be made with the least amount of effort.

Achieve broad employee support for automations

by providing intuitive visualizations and democratized insights. With user-friendly visualizations, users are more engaged and become active participants in process optimization, becoming stakeholders who are focused on a single source of truth that helps achieve desired business outcomes.

Task Mining

Analyzes the work people do to find everyday, repetitive tasks to automate

Process Mining

.

Analyzes data from your line of business applications to continuously understand and optimize end-to-end processes

Accelerating RPA with end-toend process understanding

UiPath Process Mining creates an automation flywheel with a holistic view of processes, continuous innovation, and crowdsourced employee involvement that leads to even more improvements.

Let's briefly look at what makes UiPath Process Mining an integral part of enterprise hyperautomation.

Integrating insights

and action: Most RPA solutions have a limited view of how their robots operate within a larger process, and most process mining solutions lack the features needed to act on the insights derived from process mining activities. UiPath Process Mining is the only end-to-end solution that tightly integrates process understanding and monitoring with the ability to act on insights with automation. This combination of powerful understanding and resulting automation activities provides immense value to businesses.

Continuous monitoring and improvement: UiPath Process Mining provides monitoring functionality that is fast and easy to use, with a rich graphical interface. The combination of business intelligence and process mining techniques helps business users become process-aware so they can identify the exact cause when their KPI's are out of bounds. Through continuous monitoring, organizations can find the necessary process improvements to achieve operational efficiency and excellence.

Governed self-service:

Providing end users with a self-service software tool can lead to analytic sprawl as each user builds a dashboard for each new question. This results in a proliferation of dashboards and inconsistent or even conflicting results. UiPath Process Mining addresses this issue by enabling a centralized data model, controlled accessibility for business users, security functions to ensure that people can only access the data they are allowed to see, and userfriendly reporting tools that help employees leverage their own business knowledge and respond to issues quickly.

Enterprise capabilities:

UiPath Process Mining delivers enterprise-grade capabilities. These include server-based processing on-premises or private cloud servers, with data connections available to multiple and/or different databases; adherence to enterprise security policies and procedures; and broad access from modern browsers and operating systems, with authorization mechanisms to allow for controlled access to data. It also allows administrators to establish user roles for broad or very specific functions for groups or individuals.

Process Mining allows you to see your end-to-end processes

UiPath Process Mining combines the best features of RPA and process mining to deliver business process context and the impact of automation, so insights can be transformed into action.



Task Mining: UiPath Process Mining complements and enhances task mining. Task mining is used to understand processes performed by end users, including the number of keystrokes or clicks required to perform a task. It's the most effective way to discover and prioritize easily automated,

repetitive tasks that leave a footprint on backend systems such as SAP. Combined with Task Mining, UiPath Process Mining offers the most comprehensive process understanding solution. Now let's look at a few examples of how UiPath Process Mining helps business with their operations. **UiPath Process** Mining's out-ofthe-box template, AppOne, kickstarts process mining with minimal effort. The product ensures a single source of truth by centralizing data and dashboard management, so that business users are presented with easyto-use dashboards in the right business context.

See which parts of the process are automated and whether automation is progressing as expected



Add business logic to processes using smart tags that continuously monitor performance



UiPath Process Mining at work

Many companies have realized huge leaps in efficiency as a result of process mining. Here are a few success stories from UiPath Process Mining.

Insurance

Contact center automation

A large pension, insurance and asset management firm in the Netherlands needed more insight into their contact center automation to understand the impact of automation on the end-to-end process. It deployed **UiPath Process Mining to** reconstruct the entire contact center process and identified issues that resulted in extra work and longer waiting times for customers. Based on UiPath Process Mining insights, they adjusted the contact center automation. This resulted in increased accuracy and speed of communication to customers and a drastic reduction in customer waiting time. Overall, 80% of work could be standardized, and 568K in cost savings were realized just within the contact center.

Manufacturing

Purchase-to-pay

One of the largest automotive suppliers in the world—a manufacturer of convertible roof systems, thermal systems, and charging and battery solutions for cars—was looking for ways to improve internal operations. After consulting with UiPath, the company decided to use UiPath Process Mining to streamline its purchase-topay (P2P) process with the goal of identifying control risks, double entries by suppliers, and delays across multiple plants in different locations globally. After implementing UiPath Process Mining, it achieved full transparency into purchasing processes—including new insights into the root causes of delays, inefficiencies, and potential audit risks. It found new ways to improve purchasing performance outcomes at multiple plants, and identified the true costs of certain management choices, which led leadership teams to evaluate possible reorganizations to increase efficiency.

Telecommunications

Purchase-to-pay

A large landline and mobile telecommunications company in the Netherlands needed better transparency of its purchase-to-pay (P2P) process. With 6.3 million fixed-line telephone customers, more than 33 million mobile subscribers, and more than 2 million internet customers in five countries, they wanted a solution to flag control risks and identify ways to reduce cost. It deployed UiPath Process Mining to gain insights and eliminate "gut feelings" and manual handoffs of data. It used UiPath Process Mining to evaluate more than 200,000 items, including purchase orders and invoices. The benefits included a 20% reduction in labor costs, a 29% improvement in the time needed to handle invoices, as well as better predictability on costs and improved relationships with suppliers.

Conclusion

An "automation-first" mindset helps organizations and their employees imagine a future that prioritizes human engagement, creativity, and productivity while using advanced technology solutions to handle mundane but important business processes.

UiPath Process Mining can enhance a company's longterm, stable growth by improving process efficiency and customer experience as it reduces labor-intensive manual tasks. It unlocks datadriven insights and unveils optimization opportunities, providing a holistic overview of company processes while delivering greater transparency and continuous improvement.

UiPath Process Mining is another advanced offering in the UiPath suite of products. It integrates seamlessly with other UiPath offerings as well as the most widely used enterprise systems to deliver comprehensive automation functionality, helping businesses improve their operations and compete more successfully in the global market.

Get more information on Process Mining



References

¹ Four Fundamentals of Workplace Automation. https://www.mckinsey.com/ business-functions/mckinsey-digital/our-insights/four-fundamentals-ofworkplace-automation

² Gartner: "Top 10 Strategic Technology Trends for 2020". https://www.gartner.com/ en/doc/432920-top-10-strategic-technology-trends-for-2020