UiPath | Reboot Work.™
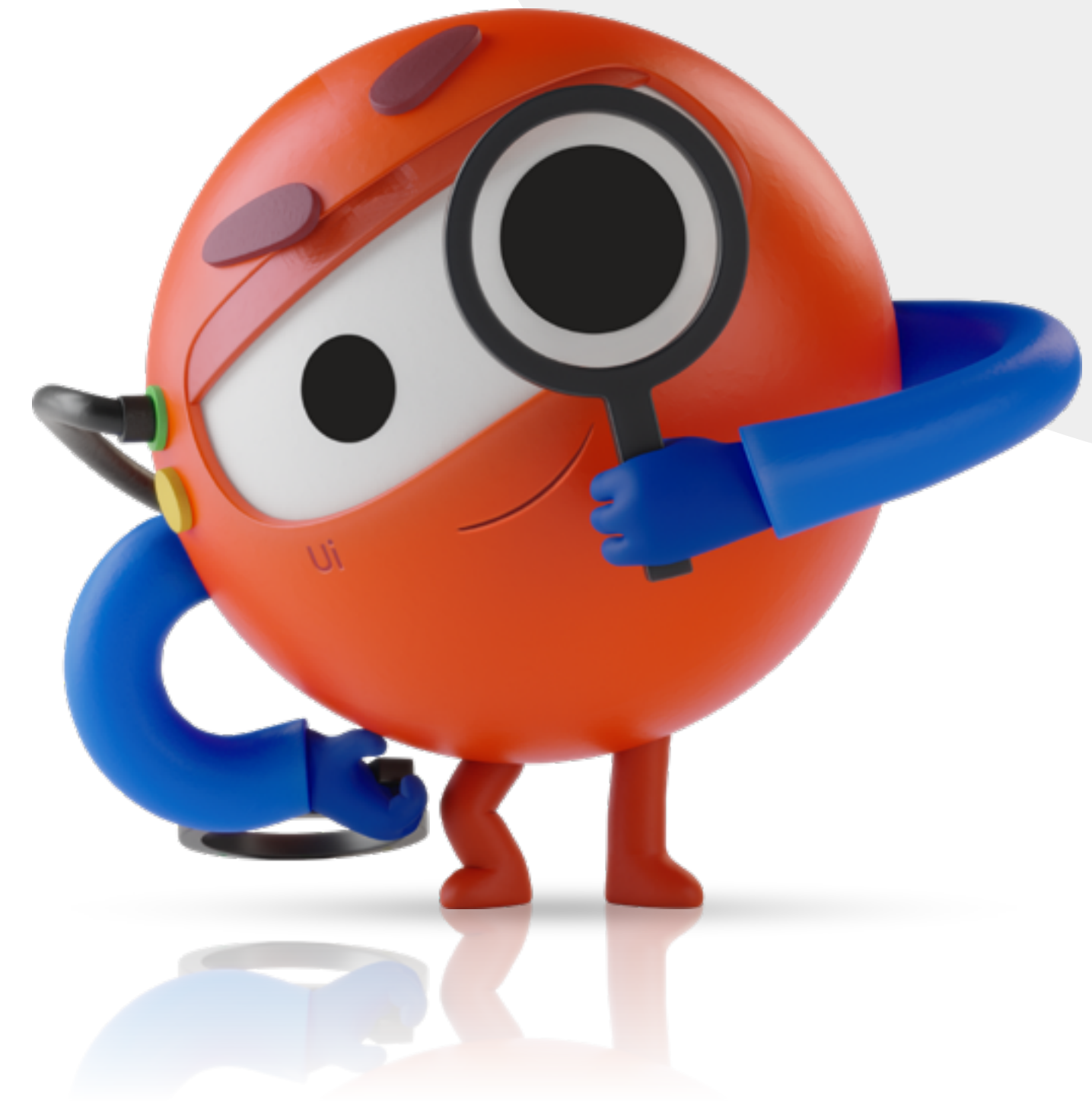
Powering successful automation

How process mining is the key
to realizing the full potential of RPA

Contents

How process mining makes automation even more valuable

We all want the best processes we can possibly have. We want processes that make our business agile, responsive, innovative and, most importantly, better than our competitors.

Today, companies worldwide are realizing they need to apply process automation where it makes the most sense and has the greatest impact on our business. We want to free our people to better serve our customers. That's how real digital transformation happens.

This begs a question: How do you identify weakness in your processes and which parts to automate?

Every day in organizations across the globe, millions of different people work on millions of different processes in millions of slightly different ways. You may think you know how a process works. But, that's often as much gut feel as reality.

The last thing you want to do is automate an inefficient or inaccurate process and simply make a bad thing happen faster and more consistently. When your goal is to automate everything that's automatable then you're going to need certainty about what you're automating.

Replace speculation with fact

Certainty is exactly what process mining delivers. It replaces speculation with fact. It gives you a data-driven approach to deliver transparency and control across all your business processes.
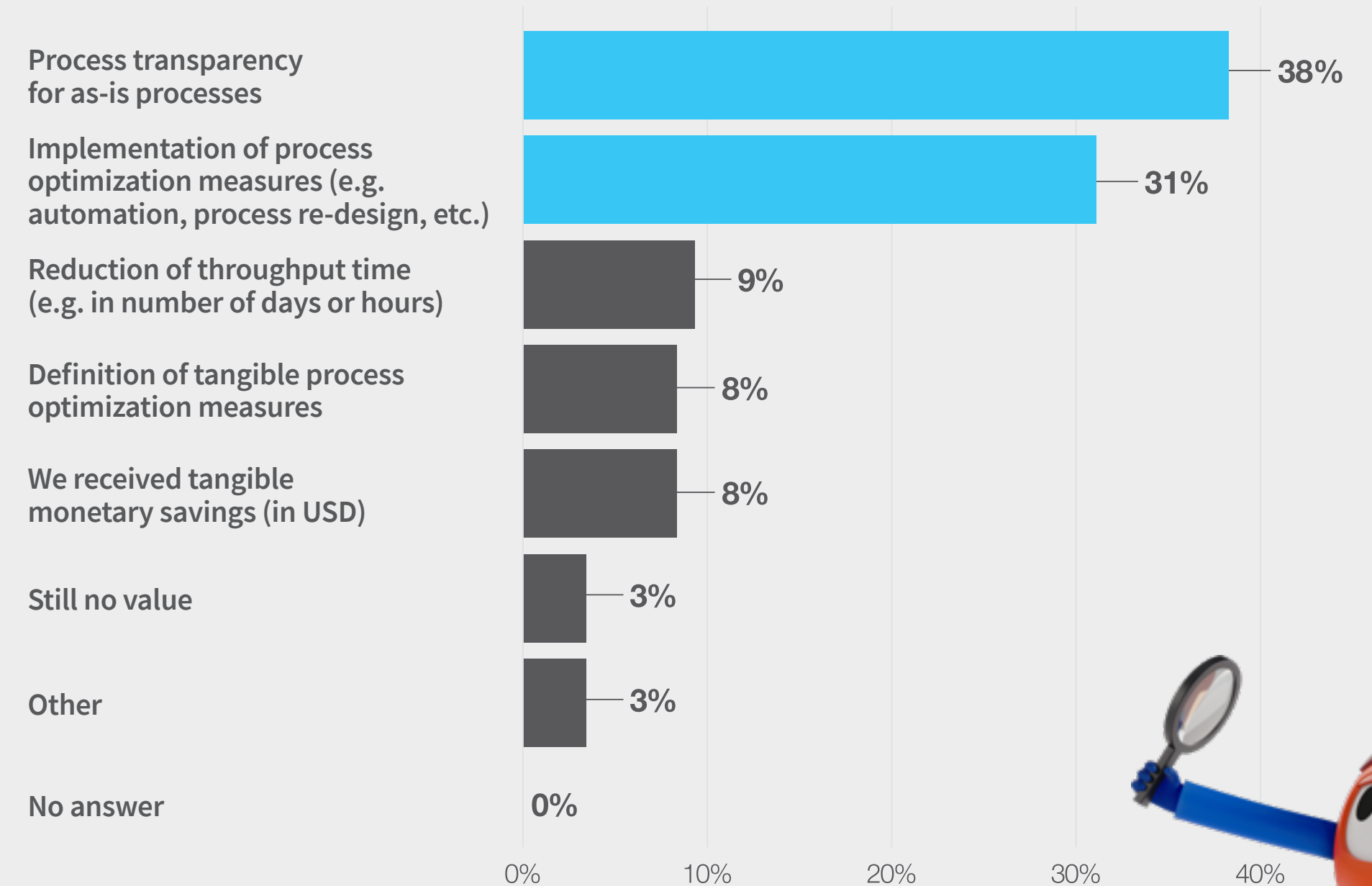
With process mining, you take event data from your business systems to build a precise, accurate and real-time picture of the process. You can instantly see where a process needs to be optimized and which provide the best candidates for automation. You can monitor those processes to assess the success of your automations in achieving your business goals and KPIs.

Armed with that information, you're ready to unleash the potential of the **Fully Automated Enterprise™**. According to Harvard Business Review, that can amount to three times the revenue increase for organizations that implemented intelligent automation compared with those that don't.[1]

You can instantly see where a process needs to be optimized and which provide the best candidates for automation.

Value delivered by Process Mining

When Deloitte asked executives how Process Mining delivers value, the two distinct areas were:

Process transparency for as-is processes	38%
Implementation of process optimization measures (e.g. automation, process re-design, etc.)	31%
Reduction of throughput time (e.g. in number of days or hours)	9%
Definition of tangible process optimization measures	8%
We received tangible monetary savings (in USD)	8%
Still no value	3%
Other	3%
No answer	0%

Source: Deloitte[2]
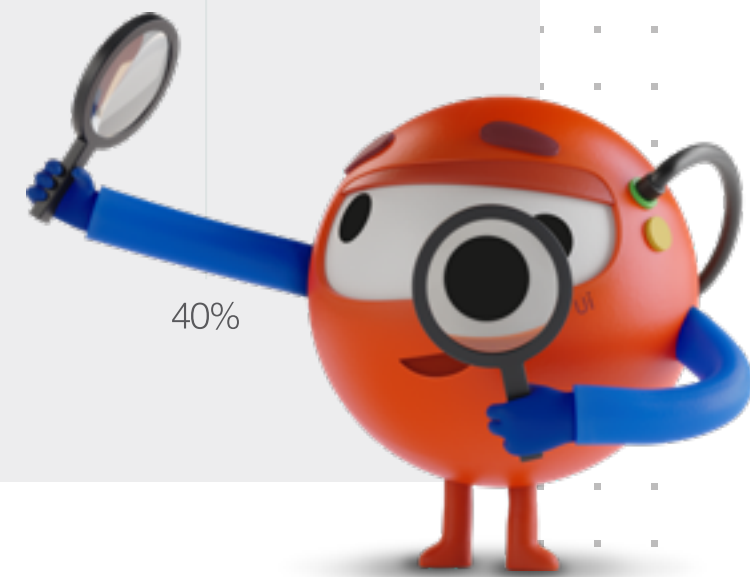
Process mining and integrated process discovery

It's possible to think of process mining as a completely new sensory system for your business. Process steps and workflows that have previously been invisible, unnecessary or repetitive, can be automatically surfaced, interrogated, and improved.

The ways that your employees and customers work is never fixed and can change remarkably quickly. With Process Mining, you now have the power to see how processes actually function and respond rapidly and effectively to changing business and environmental conditions.

The benefits for your automation program are enormous. It's fine to begin the program with simple tasks and processes that represent low hanging fruit. But to maintain and evolve your automation program, you'll need to leverage technology that sees more than you can see - particularly if you want to automate more complex and wide-ranging processes.

Reduce complexity, increase scalability

By showing the 'as is' state of a process as well as providing recommendations for improvement, process mining allows you to more easily tackle process complexity and successfully scale your automations. Scalability is where process mining adds immense value to an automation program.

In addition, process mining can break down silos of data about how different systems and parts of the organization work and interact. While the first generation of automation was focused on a single task or process, process mining aggregates data from all these systems and workflows. You can now relate the candidate process to other tasks or processes to create full visibility into end-to-end processes - such as order management or procurement – that span systems and departments.

While the first generation of automation was focused on a single task or process, process mining aggregates data from all these systems and workflows.

UiPath integrated discovery

While process mining looks at your systems, there are three other complementary discovery technologies that can identify and facilitate automation opportunities in other areas of your business.

Combining Process Mining with Task Mining, Task Capture and Automation Hub in a powerful, centralized integrated discovery solution that provides a comprehensive mix of discovery, analysis, and execution capabilities.

The goal is to fully understand your processes, delivering accurate inputs and prioritization for your automation program and fostering a cycle of continuous improvement that empowers business agility and aids your strategic objectives, such as digital transformation.
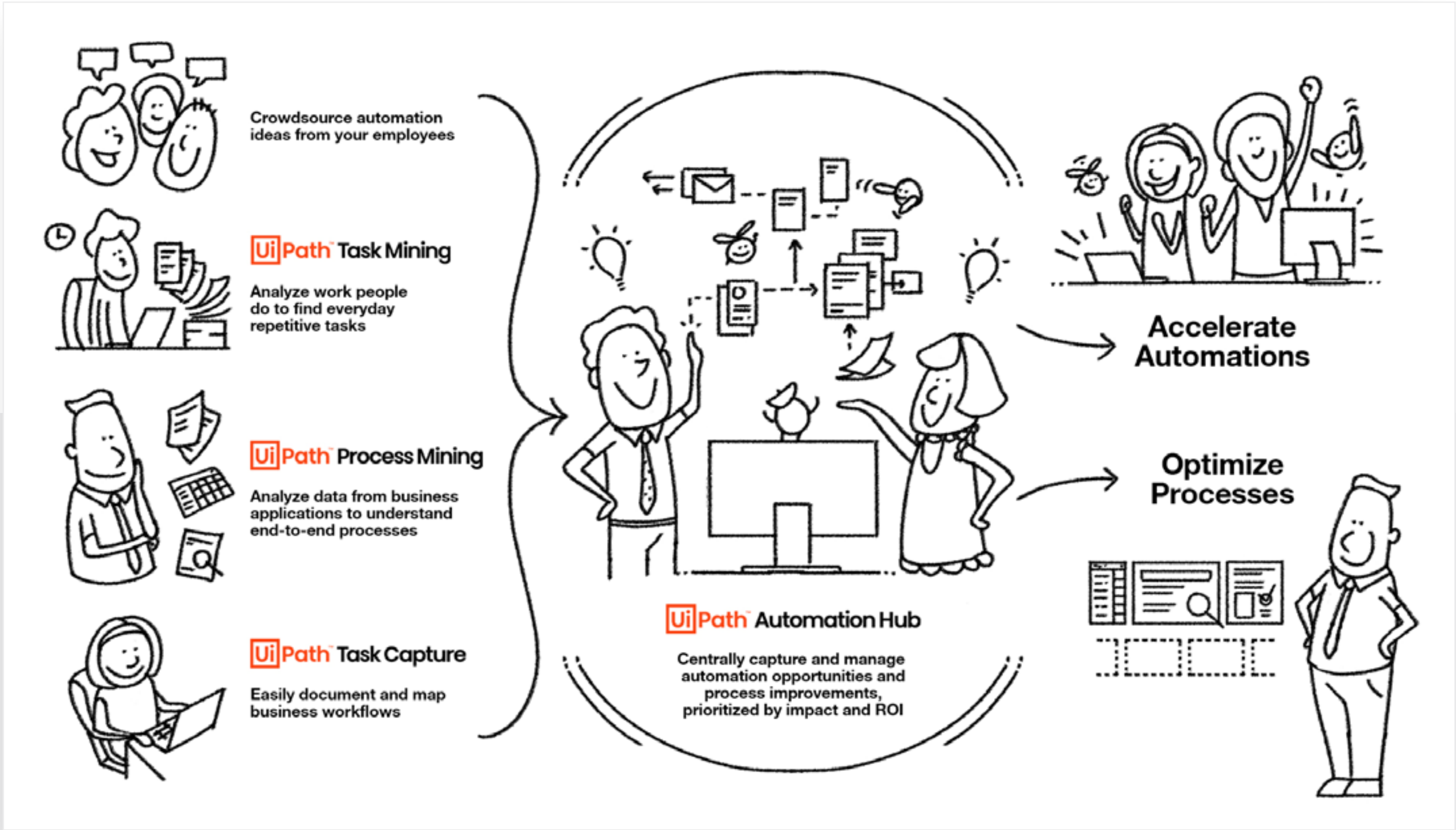

Ui Path™ Process Mining   **Ui Path™ Task Mining**   **Ui Path™ Automation Hub**   **Ui Path™ Task Capture**

WANT TO SEE MORE?
Discover everything to automate and everything worth automating

UiPath discovery overview →

Crowdsource automation ideas from your employees

Ui Path™ Task Mining
Analyze work people do to find everyday repetitive tasks

Ui Path™ Process Mining
Analyze data from business applications to understand end-to-end processes

Ui Path™ Task Capture
Easily document and map business workflows

Ui Path™ Automation Hub
Centrally capture and manage automation opportunities and process improvements, prioritized by impact and ROI

Accelerate Automations

Optimize Processes

Top 10 benefits of integrated process discovery

Process mining enables you to streamline and automate your key business processes by removing inefficiencies and identifying best practice that can be shared across the organization. Its power comes not as a standalone solution but from how its outputs are applied. Combining data from process mining with other process discovery information in an integrated discovery solution provides an incredible kick-start and continuous pipeline of automation candidates for your automation program.

Successfully deploying integrated discovery will let you know:

1. Precisely how the process works in the real world

2. Locations of bottlenecks, deviations, variations and redundant activities

3. Which processes and tasks are perfect for automation, and which aren't

4. How people really do their jobs, and how it affects the process

5. The tasks that people don't like and shouldn't have to do

6. How and where robots and people can best work together

7. What the ideal process looks like and how to get there

8. Automations that are driven by accurate, up-to-date process data

9. Whether your automations are actually improving your business KPIs

10. Where to tweak your automations to optimize your business outcomes

Telecoms company reduces P2P costs and increases efficiency with process mining

A leading European telecommunications provider was faced with increasing price competition, so the company looked to reduce costs across its business. However, gaining transparency into its finance processes, especially its procure-to-pay (P2P) process, was a major challenge.

Using process mining, the company was able to quickly visualize its entire P2P process. It identified the manual hand-offs in the process that were ripe for automation. As well as achieving $3 million in P2P savings, the company has been able to bring back many hours to the business, letting it re-assign employees to higher value, more rewarding activities.

Beyond P2P, process mining is now being applied to more than 30 processes across finance, customer services and the supply chain to drive operational efficiency and business performance.

"As soon as you start being more data-driven, rather than gut-driven, Process Mining is a tool you can't live without."

-Process Mining Lead at the Client

BENEFITS AT A GLANCE

$3M in P2P savings Identified with root-cause analysis

From 5-6 weeks to a few hours reduced gap-analysis time

3-4 FTEs freed up to work on more strategic activities

Putting process mining into practice

Let's take a moment to look at how process mining works. Most enterprise business systems track every transaction and activity that happens at each stage in a process. This event data is recorded in event logs that are, in effect, the digital footprints of the process.

Process mining uses these crucial event logs to identify the specific steps within a process and how they are being executed. Process mining tools analyze these digital footprints to fully understand how processes are conducted, know where problems and bottlenecks lie, and show you where to optimize and automate.

These analytical capabilities help you monitor your key performance indicators (KPIs) to ensure your automation program is always aligned with your business outcomes.

Process Mining integrated within an end-to-end automation platform means you can move seamlessly from Discovery to Automation.

You should note, however, that not all activities are prime for automation. Using process mining, you can identify which are, but also which activities may be better suited for other approaches such as standardization, re-engineering, or even additional employee training.

It's this flexibility that lets you use process mining very widely across your business. It delivers tangible benefits when applied to virtually any business process in any industry sector.

In this section, we'll look at some key use cases for process mining and automation across different roles throughout an organization.

Purchase-to-Pay

Supply Chain Management

Some estimates suggest that the cost per purchase order can be over $700[3]. For many purchasing departments, PO management can be a highly manual process that adds time, cost and error. Staff have to create the PO but also make changes or even cancel it when discrepancies occur.

However, administrative cost isn't the main problem of an inefficient PO process. If the PO is incorrect or delayed, this inevitably leads to downstream supply issues. Purchase departments know it's their responsibility to ensure the business gets the products it needs, when it needs them.

Process mining can highlight where time and cost is being unnecessarily added to PO management.

BENEFITS AT A GLANCE

- **Improved quality and speed of PO management**
- **Reduced downstream supply delays**
- **Improved supplier relationships**

Let's meet Ben and see how process mining can highlight where time and cost is being unnecessarily added to PO management.
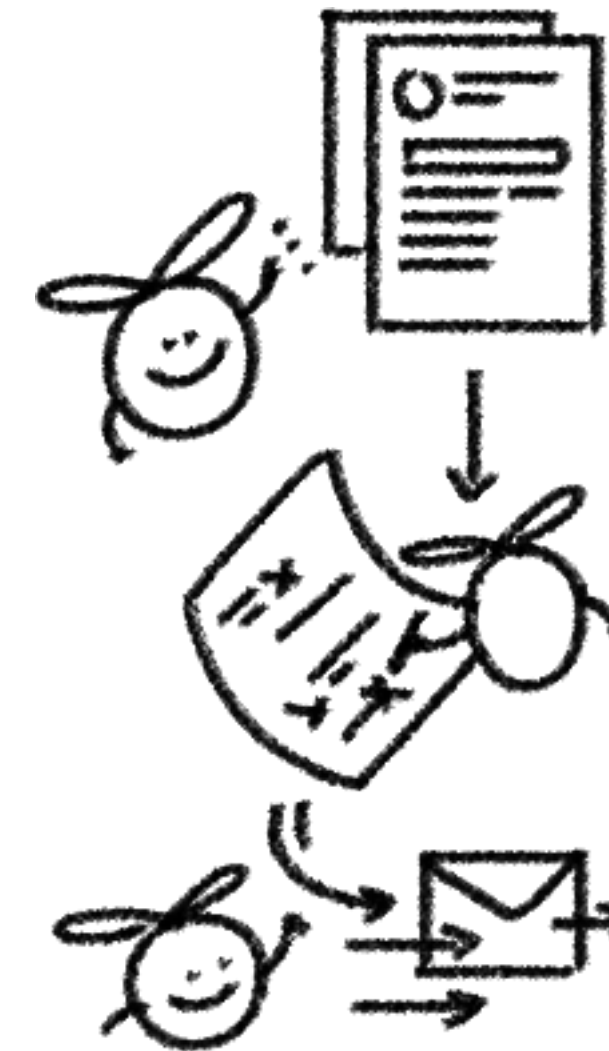
1

Ben is stressed. It's taking two days to prepare and issue a purchase order. Neither the business nor the suppliers are happy.

2

Process mining shows him that having to manually create, change and cancel POs is a massive bottleneck adding time and cost. But, these repetitive tasks are ideal for automation.

3

Now a robot automatically creates the PO, it makes any changes or cancellations required and issues the PO to the supplier. What used to take days is now a matter of minutes.

4

Ben can sit back. He still handles the odd exception but he's more focused on monitoring PO cycle times to see where the automation can be further improved.

Invoice Processing

Finance

The pandemic once more proved the old saying that cash is king. When you need every cent of your cash flow to survive, late payments become a tangible threat to your business.

This is more than just the cash you have available. Across the globe, there are trillions of dollars tied up in late payments. That's money you can't use for onward investment or business expansion.

It often means you'll borrow to cover gaps between invoice and payment, which incurs significant interest payments. A three-day drift in invoice payment can cost over $110,000 for a company with $10 million turnover[4].

You also need to quickly see when late payment turns into bad debt.

Process mining can help highlight the areas to automate in highly repetitive and rules-based invoice processing, by showing you bottlenecks, and which customers represent the biggest risk to your business.

BENEFITS AT A GLANCE

- **Improved working capital**
- **Improved customer experience**
- **Reduced supply chain risk**

Let's meet Akash and see how process mining can highlight the best areas to automate in highly repetitive and rules-based invoice processing.

1

Akash is worried that a large number of customers don't pay their invoices on time, leading to a Days Sales Outstanding rate of 50 days.

2

He turns to process mining to pinpoint which customers consistently pay invoices late. He also looks at the company's escalation procedures and how they are being applied across the accounts receivable department.

3

He works with his process mining team to escalate and notify customer facing team members before invoices pass the payment deadline so they can quickly take any remedial actions required.

4

Akash also gets the automation teams to create a robot to automatically issue email reminders to customers. He uses process mining to continually monitor these new processes to ensure they are reducing the company's DSO rates.

Lead-to-Cash

Sales & Marketing

Believe it or not, research suggests that the optimal web lead response time is five minutes or less. Yet, the average response time is 42 hours. In the case of B2B companies, as many as 58% don't respond to a lead at all[5].

The result? Over $1 trillion is lost each year in low productivity and poorly managed leads processes[6].

One challenge can be the departmental silos between marketing and sales. Each has its own systems and ways of working – often manual. There can be different definitions of what constitutes a qualified lead and when the lead should transition between departments.

An inefficient hand-over can see leads lost or the wrong information provided. Process mining allows you to see across all the tasks and workflows that underpin the process as it moves between marketing and sales. It can reduce cycle times and ensure that no lead becomes trapped in the system.

BENEFITS AT A GLANCE
- **Increased marketing ROI with less wasted leads**
- **Reduced sales cycles**
- **Improved customer and prospect experience**

Let's meet Jan and see how process mining can reduce cycle times and ensure that no lead becomes trapped in the system.

1

It takes on average 3 days for salespeople to follow up and turn marketing qualified leads into sales qualified leads. Jan knows that this is leading to wasted effort and lost sales.

2

He uses process mining to highlight the largely manual handover of leads between disparate marketing and sales systems, as well as the manual monitoring of new leads required by salespeople, as the chief culprits.

3

Jan works with his process mining team to configure alerts to salespeople whenever a new lead is assigned to them. He also configures an alert to managers when a lead has not been actioned in 24 hours.

4

Passing leads between marketing and sales is an ideal automation. A robot can quickly execute the activity, so Jan passes the idea to the automation team, and uses process mining to monitor the MQL and SQL conversion cycle time.

Claims Management

Insurance

When someone makes a claim on their insurance policy, they require two things. First, they want fast and efficient service. Secondly, they want a positive settlement and swift payment. Poor customer experience in these circumstances will often result in losing the customer.

However, insurance companies are faced with a growing tide of claims fraud. In the UK alone, fraudulent insurance claims amounted to over $1.5 billion in 2019 – a 5% increase from the previous year[7].

Part of the reason for this revolves around the slow pace of technological change within the industry. Many firms find themselves supporting highly manual, legacy processes. These provide many gaps where fraudulent activities can and do occur.

Process mining gives visibility into how firms are handling claims and identifies where processes can be optimized to reduce financial and business risk.

BENEFITS AT A GLANCE

- **Improved the speed and quality of the process**
- **Reduced the potential for fraudulent claims**
- **Improved customer experience by accelerating claims processing**

Let's meet Taylor and see how process mining gives visibility into how firms are handling claims, identifying where processes can be optimized.

1

The average cost of a fraudulent claim for her insurance company has risen to over $14,000. Taylor decides to deploy process mining and finds that there are weaknesses in the process where fraud could occur.
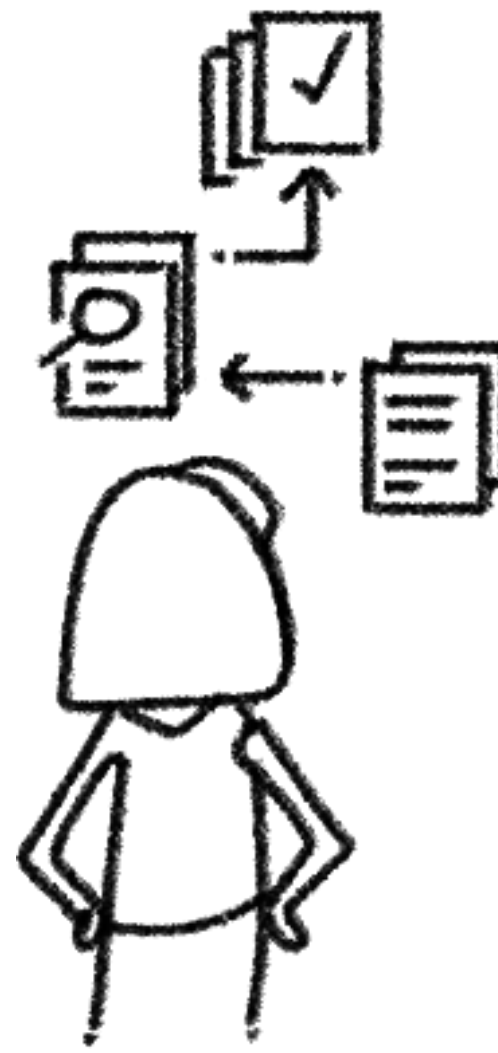
2

This was prevalent in the heavily manual claims intake process. Activities like cross-referencing claims information and tracking claims behavior were slow and error prone. Taylor uses process mining to define the optimum path through the process.

3

After eliminating non-standard and redundant activities, she supplies the automation team with detailed process documentation so they can take an end-to-end approach to the automation.

4

She can see that the speed and quality of the process has improved. More importantly, she can quickly identify suspicious activities and closely monitor the cost of fraudulent claims.

Record-to-Report

Accounting

Record-to-Report (R2R) involves collecting, processing, and delivering relevant, timely, and accurate information used for strategic and financial decisions. With data held in different systems, most organizations require a team primarily dedicated to this task.

General ledger reconciliation is one of the major R2R tasks. Accuracy is the goal, so you can't allow poor data to populate multiple business and accounting systems. Manual reconciliation opens the way for errors that add time and cost, as well as potential fraud and compliance breaches.

When it comes to repeatable and rules-based processes, there are few examples as good as general ledger reconciliation. Your team completes the same tasks, at the same time, and in the same way every financial close.

Process mining surfaces where the logjams are and enables process optimization that reduces data processing and matching tasks from days to hours.

BENEFITS AT A GLANCE

- **Higher quality with fewer errors**
- **Accountants freed for value-adding activities**
- **Reduced potential for fraud and compliance breaches**

Let's meet Julia and see how process mining can reduce the data processing and matching tasks from days to a matter of hours.

1

Julia discovers that, on average, her organization's general ledger reconciliations process takes 6 days.
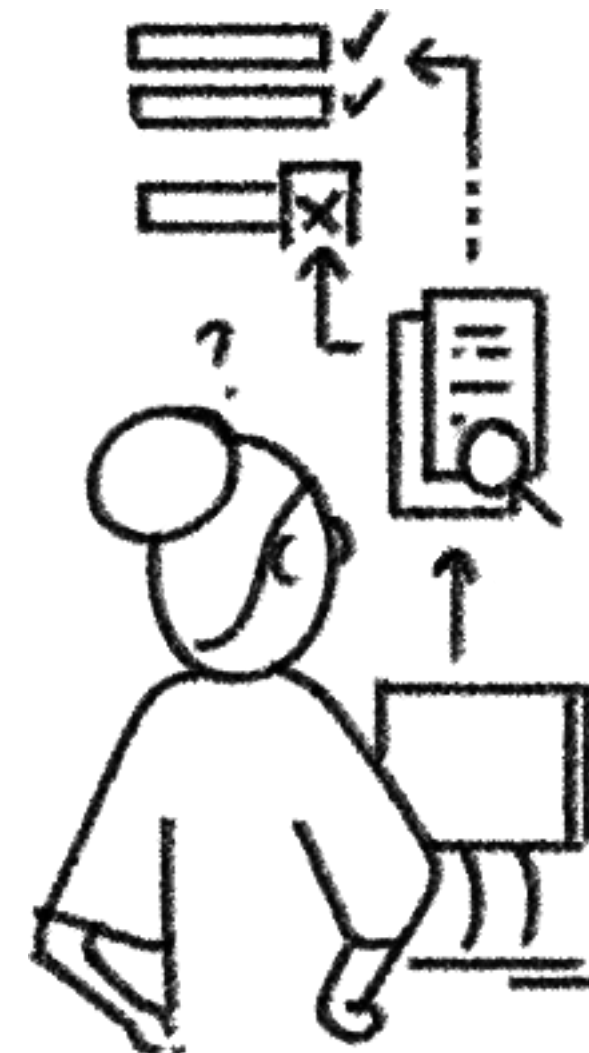
2

With process mining she discovers that manual data comparison and data entry between systems leads to errors and re-work. Missing or incorrect information is difficult to spot causing problems later in the process.

3

Process mining lets Julia instantly see where process bottlenecks are occurring and where variations in how some tasks are performed are leading to error and cost.

4

She works with the automation team to automate comparing account balances across systems. Accountants are now only alerted to handle exceptions and escalations like discrepancies, duplicates and missing invoices.

Where process mining and automation can help your business

Process mining is the foundational step to enterprise-wide automation. The intersection of process mining with automation allows you to transition to a Fully Automated Enterprise. You can prioritize and deliver automations at scale that deliver real business impact to every part of your organization.

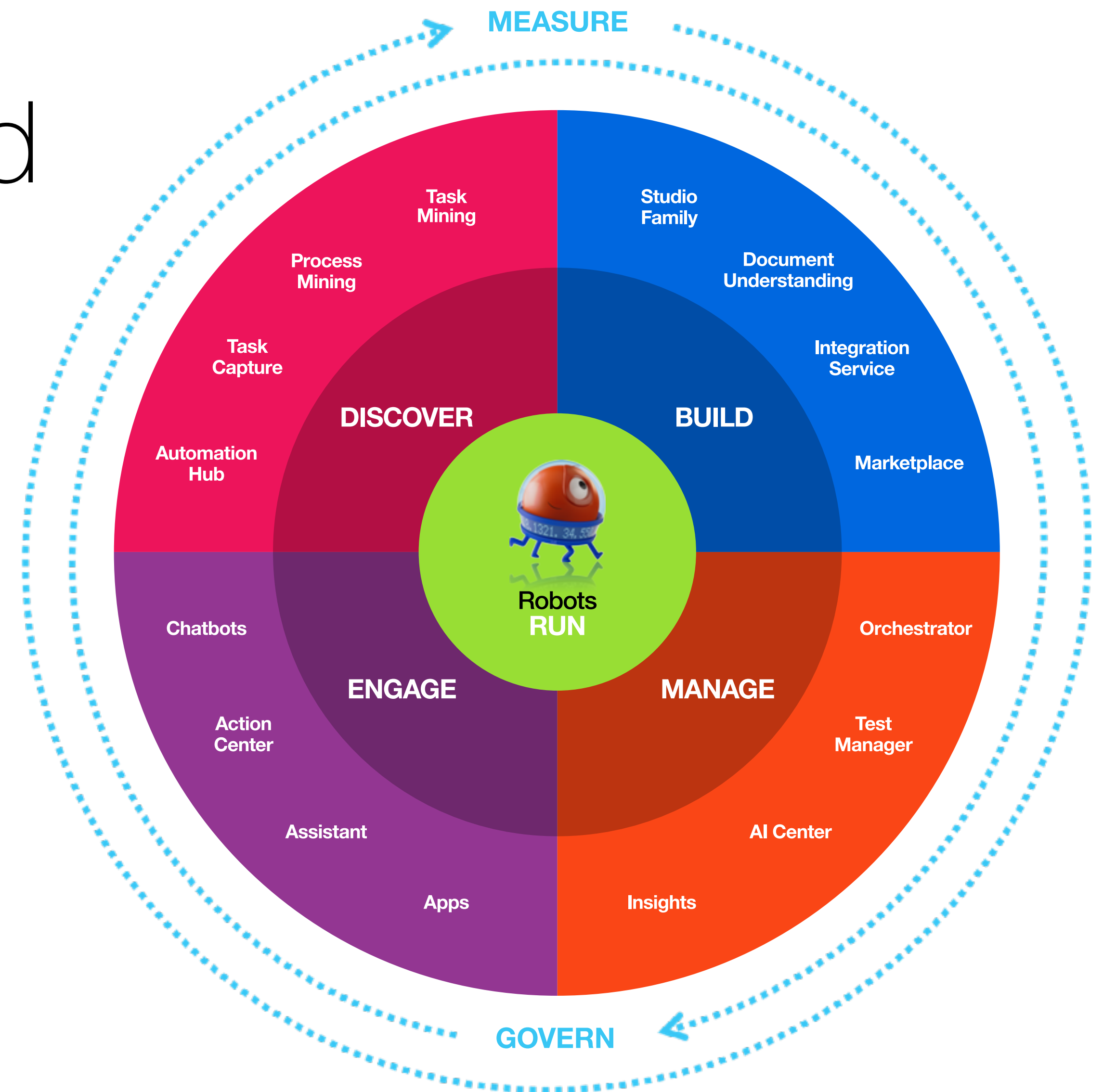| BUSINESS GOAL	BUSINESS OUTCOME	KEY DRIVERS	RELATED PROCESS	IMPACT
Cycle time & agility	• Improved cash-to-cash cycle time • Improved planning & forecasting • Improved innovation • Improved customer experience	• Eliminate routine, repetitive tasks • Faster product, configuration & master data replication • System integration & consolidation • Cognitive intelligence for planning & forecasting	• Purchase-to-pay • Order-to-cash • Customer strategy & relationships • Change management & communication • Governance, risk % compliance	25-40%
Capacity/asset efficiency	• Increased production capacity & scheduling Improved asset utilization • Improved equipment efficiency & maintenance	• Capacity to pull manual & digital data from multiple feeds • Data integration & analysis • Metric generation from Excel/manual feeds • Real time data distribution to field engineers & maintenance staff	• Production management • Asset utilization & management • Maintenance& support • Retirement & disposal • Health, safety & the environment	25-40%
Cash flow & finance	• Improved receivables, paid on time • Increased working capital • Increased revenue & profitability • Reduced debt & risk	• Automated checks, invoice handling & follow-up • Automated planning, reconciliation & reporting • Data integration & compilation for auditing, governance & compliance • Accurate record of all financial transactions • Real time tracking alerts for payments & debts	• Accounts payable • Accounts receivable • Record to report • Financial & capital management • Month end/annual reconciliation	30-40%
Supplier satisfaction	• Increased collaboration • Improved discounting & financial incentives • Faster procurement & delivery cycles • Improved quality assurance	• Automated data set/document collection • Automated messaging & communication • Faster procure-to-pay process • Better demand & inventory forecasting • Lower late payments or canceled orders • Improved collaborative processes • Cognitive ability to assess quality & feedback	• Purchase to invoice • Tender & proposal management • Discount & finance management • Supplier onboarding & performance management • Order management	20-35%
Customer satisfaction	• On-time delivery • Increased purchasing & loyalty • Responsive relationship • Personalized experience • Targeted innovation	• Accurate & timely master data & order tracking • Automated cognitive capabilities to analyze market trends & patterns • Automate personalized communications at each stage in the customer journey • Optimized contact center & chatbot performance • Single view of all customer data	• Product design & development • Lead to cash • Customer strategy & relationships • Customer acquisition & retention • Customer experience management • Claims management	20-35%
Employee efficiency & satisfaction	• Less repetitive & mundane work • More responsibility with higher value activities • An enjoyable & rewarding work environment • Work & job flexibility	• Prior organization review & sensible change management • Task/role analysis: planners, coordinators, managers, facilitators • Augmented support for individual staff members • Mundane tasks reduced or eliminated • Less potential for human errors while updating key information	• Employee experience management • Training & development • Career progression management • Change management • Employee onboarding • Salary & benefits management	20-35%
Supply chain management	• Improved receivables, paid on time • Increased working capital • Increased revenue & profitability • Reduced debt & risk	• Automate inventory tracking & analytics • Automate responses: proposals, quotes & supplier/customer questions • Optimize logistics, warehousing & operations performance • Improve efficiency at each h&over point on the chain • Provide real time data for supply & demand planning • Improve fill rates & 'perfect order' delivery	• Purchase to invoice • Inventory optimization & management • Returns management • Supply & demand planning • Manufacturing flow management	15-45% [see article]

Delivering the end-to-end automation platform

For the best results, discovery is the first step on your automation journey. When combined with other automation and AI solutions, you can quickly achieve real business transformation. UiPath is the only company to deliver a completely integrated platform for automation.

The UiPath platform addresses the end-to-end automation lifecycle by leveraging tools to address the discover, build, run, manage and engage phases of your automation program.

WANT TO SEE MORE?
Process mining and automation in a nutshell
Watch a demo →

MEASURE

DISCOVER
- Task Mining
- Process Mining
- Task Capture
- Automation Hub

BUILD
- Studio Family
- Document Understanding
- Integration Service
- Marketplace

ENGAGE
- Chatbots
- Action Center
- Assistant
- Apps

MANAGE
- Orchestrator
- Test Manager
- AI Center
- Insights

RUN
- Robots

GOVERN

AUTOMATION CLOUD™   ON-PREMISES

About UiPath

UiPath has been recognized for a number of years as the global leader in Robotic Process Automation[8]. Today, we're recognized as providing the most comprehensive discovery and automation platforms turning the promise of the Fully Automated Enterprise into a reality.

Trusted by hundreds of organizations worldwide, UiPath Process Mining is one of the most comprehensive and feature-rich available today. In its PEAK Matrix for Process Mining technology 2021, the Everest Group places UiPath as a global leader and star performer in process mining[9].

In conjunction with UiPath Task Mining, UiPath Task Capture and UiPath Automation Hub, UiPath Process Mining delivers the most comprehensive solution to discover, evaluate, analyze, and monitor your key processes. It provides accurate, real-time data to accelerate and improve your automation program.

What's next?

Get started with UiPath process mining by talking to one of our experts.

Contact us →

UiPath Academy

Continue learning about automation and process mining with our free training courses.

Enroll now →

UiPath "are ahead in developing superior process mining capabilities, with greater focus on ease of use for business users, integration with enterprise applications, accuracy in process model generation, and analytics and dashboarding capabilities … They have a vision to drive enterprise performance and improve customer experience using a data-driven approach to process mining."

-The Everest Group

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