

Supercharged organization adopting Process mining at scale



Harysh Menon
Principal Product Manager,
Power Automate
[in/haryshmenon](https://www.linkedin.com/in/haryshmenon)



Tomas Poklemba
Principal SDE Manager
Power Automate
[in/tomas poklemba](https://www.linkedin.com/in/tomas poklemba)

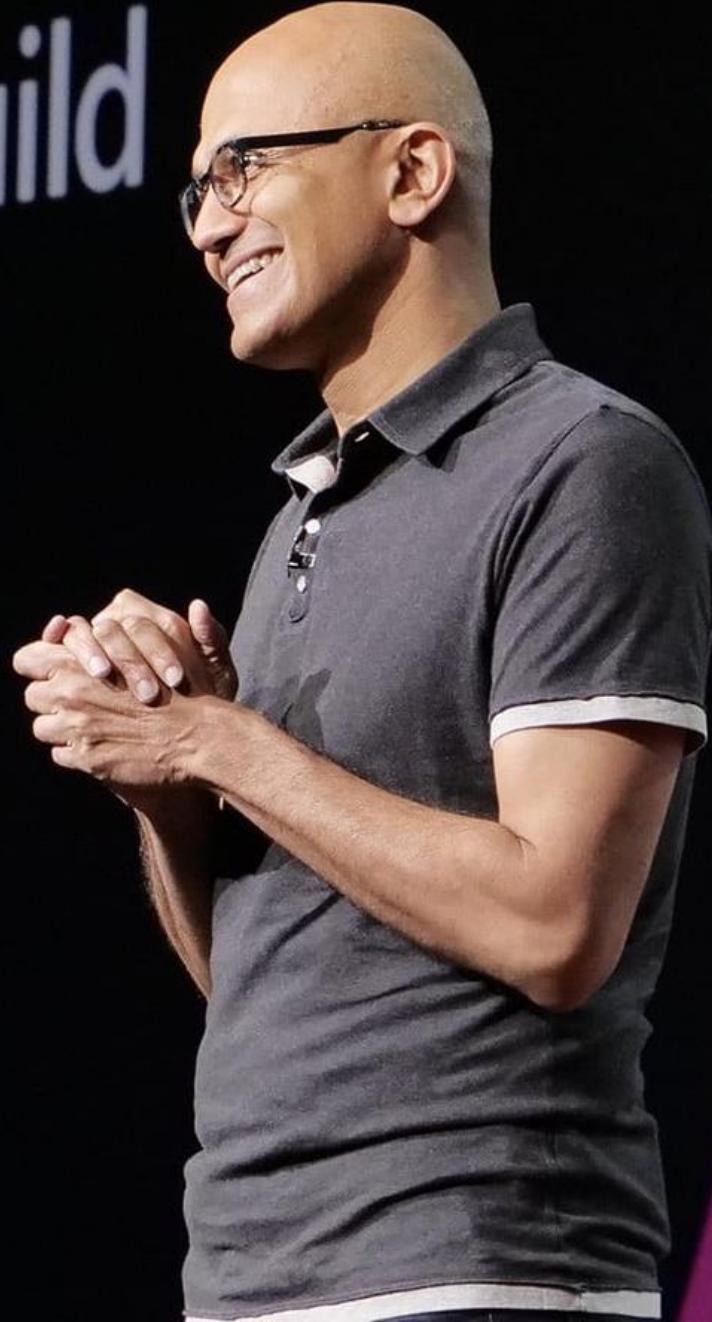


Julia Singh
Product Designer
Power Automate
[in/juliasinghdesign](https://www.linkedin.com/in/juliasinghdesign)



"Microsoft 365, Dynamics 365, and the Power Platform on top of what we're doing with Azure is the core of what we are doing as a company.

Process mining is the tip of the spear to drive additional value to every customer interaction."



10+ years of experience



Since Microsoft acquired Minit in 2022, its technology has been fully integrated into Microsoft Power Automate – enabling a single, comprehensive automation platform with process insights and optimization across first and third-party products and services.

2013

Develop of Minit starts

2015

Minit 1.0 launches

2020

The Process Insights team launches

2021

Minit named a “Top Vendor” by Everest

-
Microsoft Power Automate launches task mining

2022

Microsoft acquires Minit and integrates into Power Automate

2023

Power Automate Process Mining launches
-
Copilot is GA

2024

Available in Government Cloud

Over 30,000 Microsoft customers using task and process mining

Available in 21 regions + 43 languages

Microsoft's AI-first rapid modernization platform

To build enterprise-grade solutions and automations

Copilot



Digital process automation



Robotic process automation



Document Processing



Process mining



Apps



Pages



Analytics



Build and extend Copilot

Workflow automations

UI automations

Intelligent document processing

Business process insights

Internal applications

External websites

Business data analytics



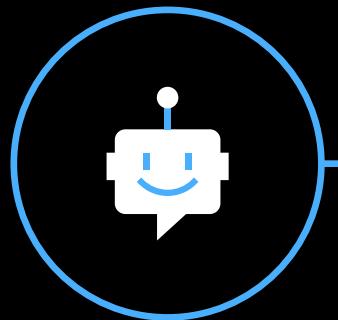
Dataverse
Data Management



Shared Governance
& Security

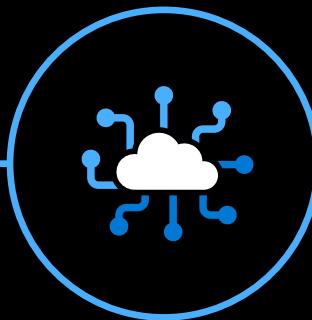
Available Today

Microsoft's hyperautomation platform



Robotic Process Automation

Automate UI actions in desktop or browser, across legacy and modern apps



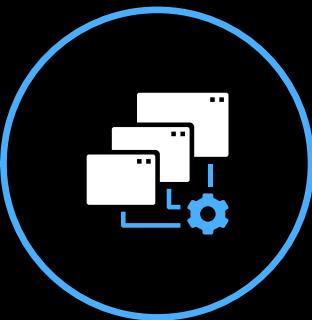
Digital Process Automation

Digital Process automation to build simple to complex workflows with 1K+ of *pre-built* or custom connectors



Intelligent Document Processing

Data extraction and content generation with AI Builder



Process & Task mining

Analyze bottlenecks and get recommendations on how to improve automations



Copilot assisted automation

Infuse AI/ML into any workflow to transform data into actions, without code

How Process Mining acts as the 'tip of the spear'

As part of the comprehensive, end-to-end automation solution powered by low-code and AI

1 Discover

Continuously improve your business with **task and process mining** to identify bottlenecks and opportunities for automation.

2 Automate

Automate workflows with modern and legacy systems alike using advanced **DPA** and **RPA** solutions.

3 Scale

Securely scale across your organization with governance, data loss prevention, and hosted infrastructure.

4 Extend

Infuse automation in chatbots, websites, apps, and more with **Microsoft Power Platform** and native integration within the Microsoft ecosystem.

Work smarter and faster



with AI designed for everyone

Extensibility



Windows 11



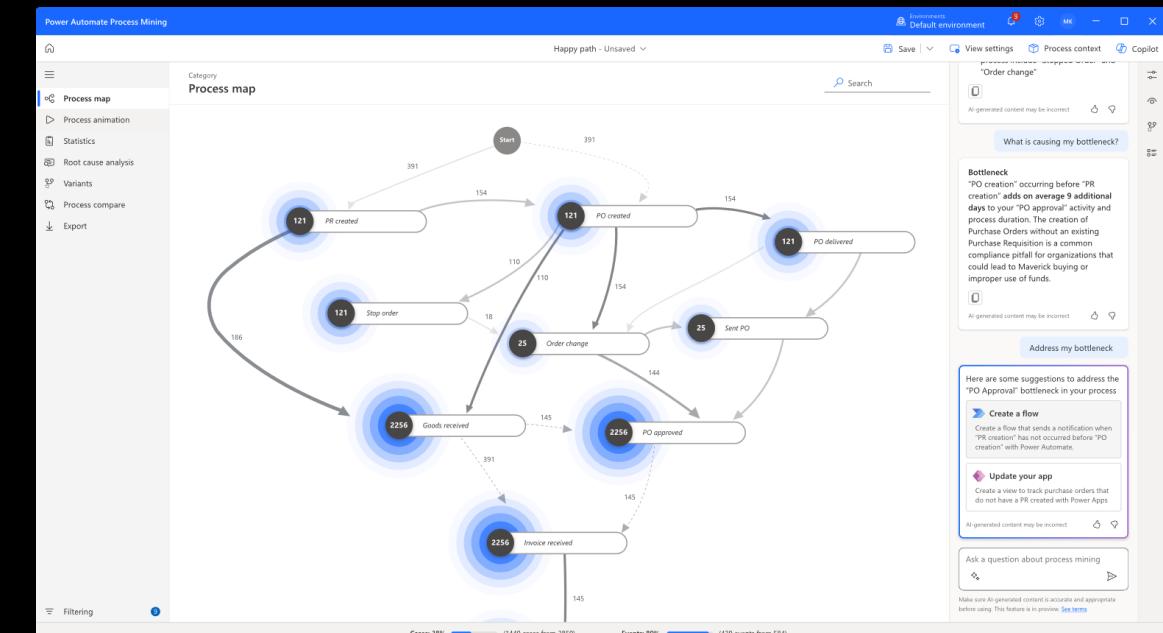
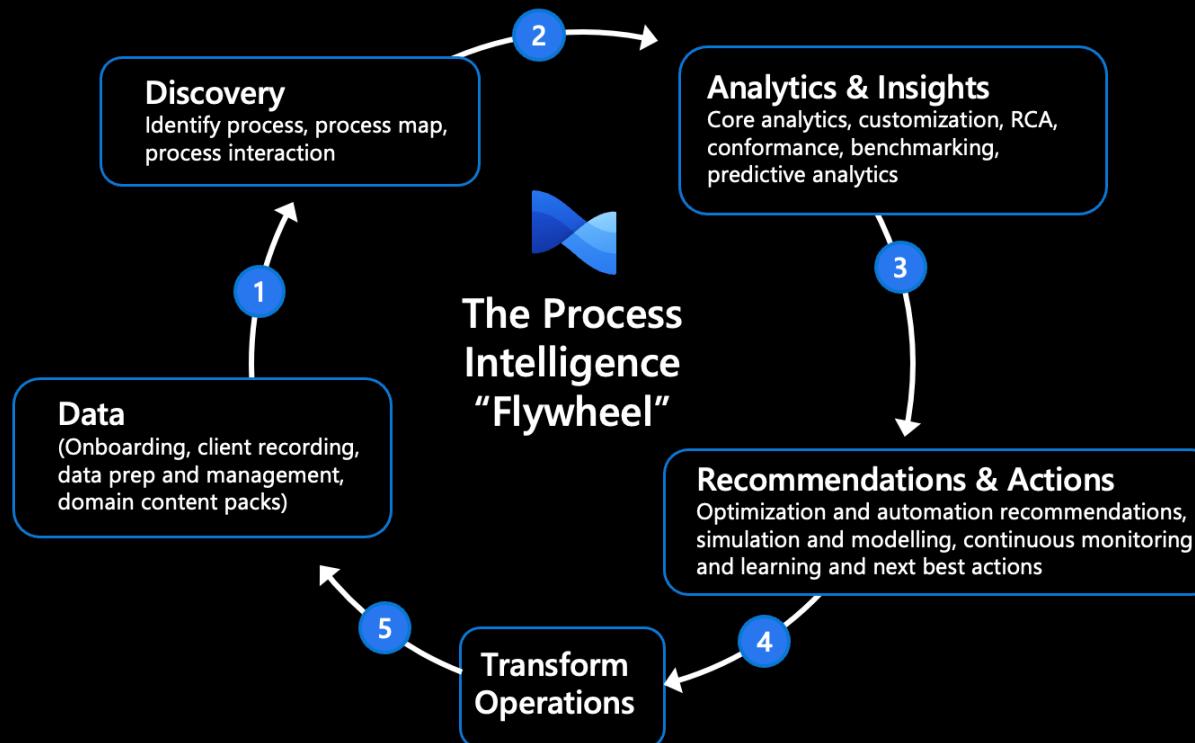
Connectivity

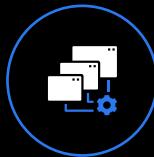


1,200+ 3rd party connectors, including custom and on-prem



Process mining: Analyze bottlenecks and get recommendations on how to improve automations





Process mining: Analyze bottlenecks and get recommendations on how to improve automations

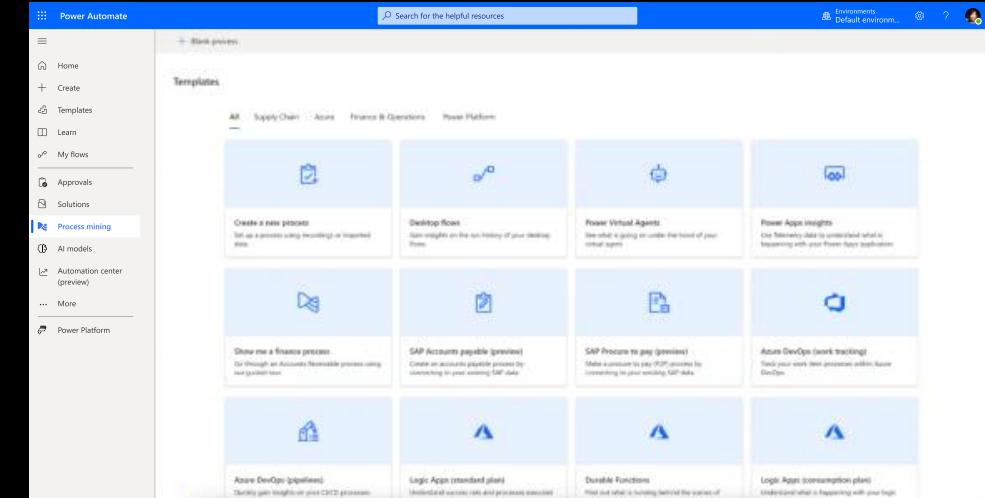
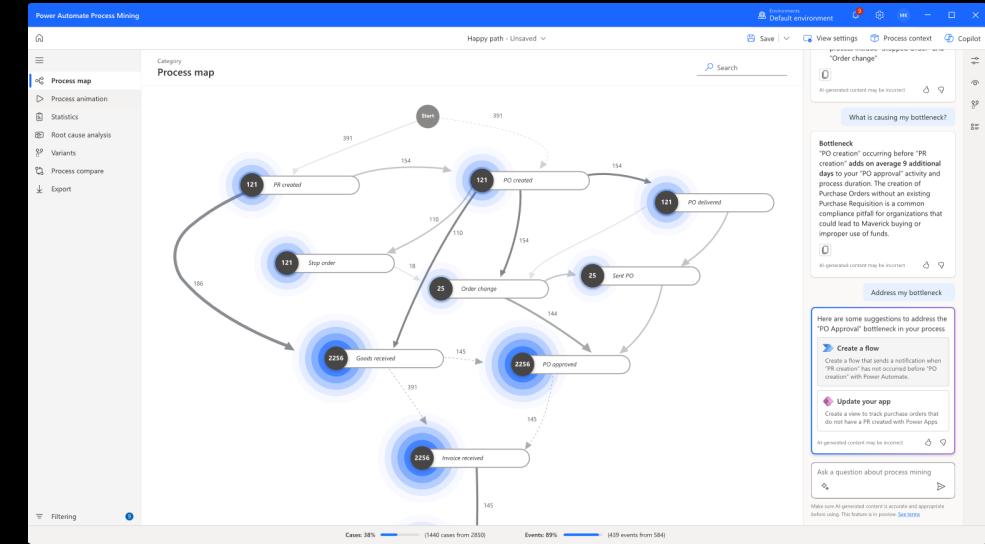
Harness the power of AI with Copilot to optimize your organization faster

Use **out-of-the-box templates** for rapid deployment that are industry and solution focused

Gain deep insights with features like rework detector, root cause analysis, process compare, and custom metrics

Create views, publish them to **create custom Power BI reports** and share across your organization

Seamlessly integrate with **Microsoft Power Platform** to turn insights into action



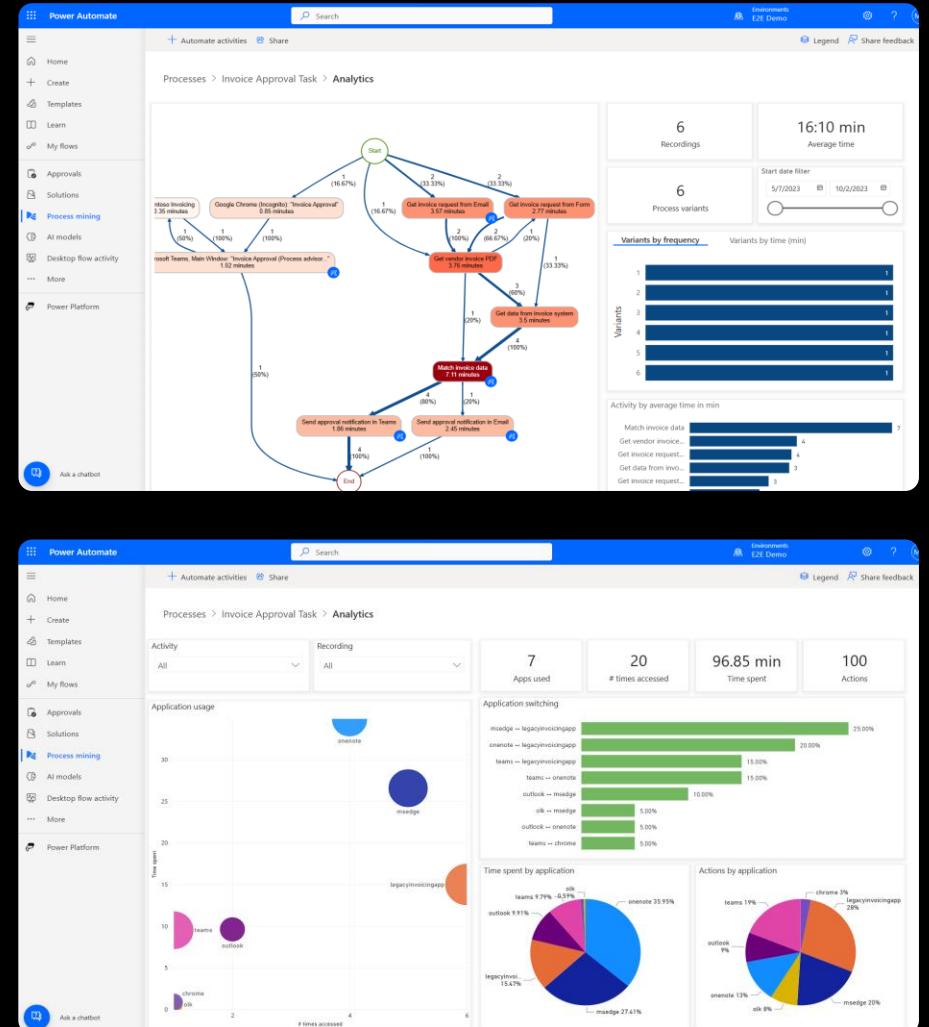
Task Mining

Record. Analyze. Optimize

Record **step-by-step** repetitive tasks across multiple workstreams by multiple humans executing the same process

Understand how humans are performing tasks using **process maps, analysis tools and metrics**

Implement recommended solutions and automations to **build efficiencies**



Magic Quadrant for Process Mining Platforms

Microsoft is a leader

- **Gen AI** – Copilot can identify processes from data, map to schema, identify key insights, pinpoint bottlenecks and suggest solutions such as Power Automate flows and Power Apps

- **Advanced analytics** – predictive analytics, in depth reporting with PowerBI, simulation engine for scenario modeling,

- **Task Mining** – unified task recorder, group steps into activities,

Figure 1: Magic Quadrant for Process Mining

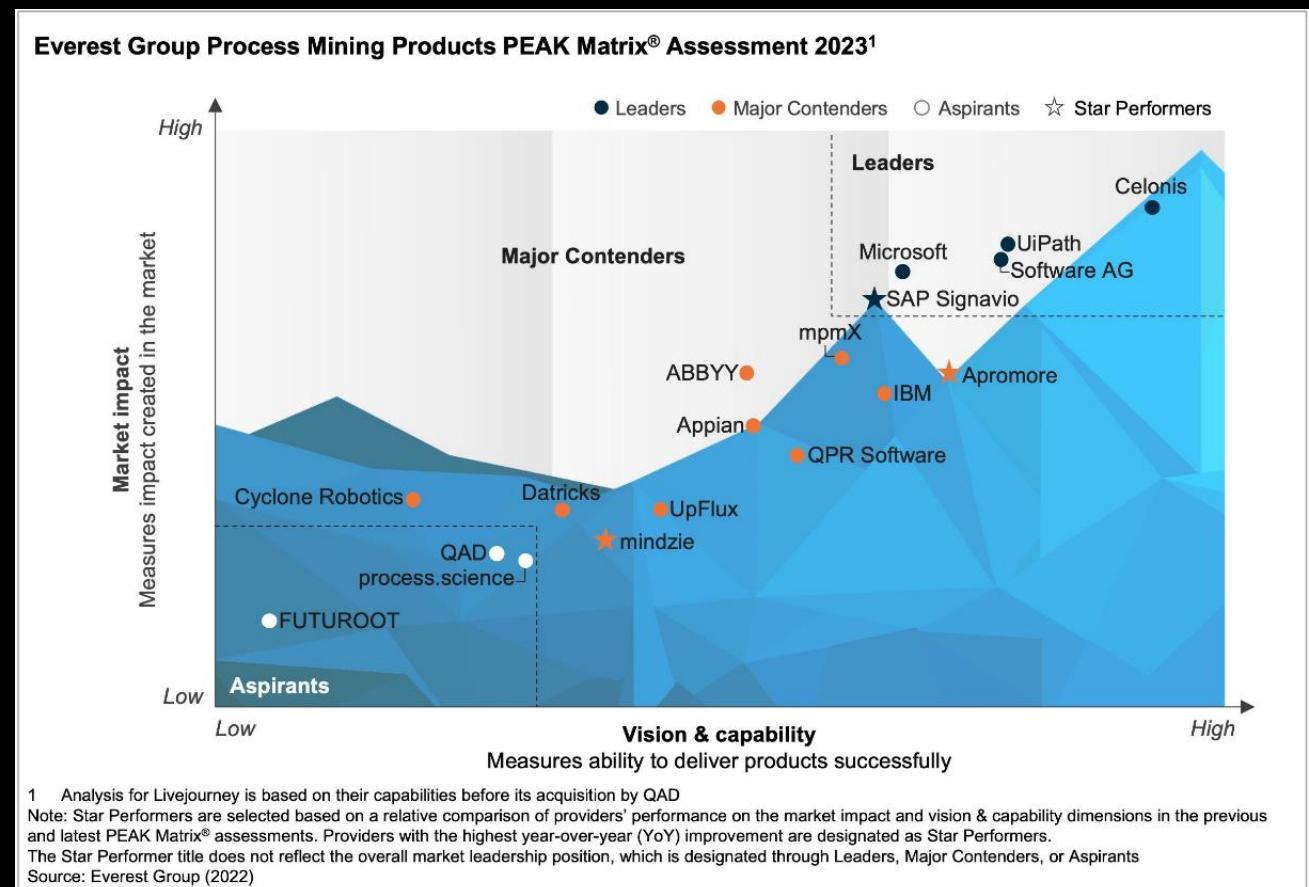


[Link to full Report](#)

PEAK Matrix Assessment 2023

Microsoft is a leader in Process Mining

- A tight **integration** with Power Automate, Connector ecosystem and the rest of Power Platform and Microsoft,
- Platform with **built-in** ETL offering data validation, detection of outliers and near real-time data ingestion, and
- **Core process mining capabilities** such as process discovery, process compare, AI powered root cause analysis, custom metrics and business rules.



[Link to full Report](#)



Power Automate
Process Mining

Process Mining basics



Process Mining

Help organizations to better understand processes, fix problems & seize opportunities



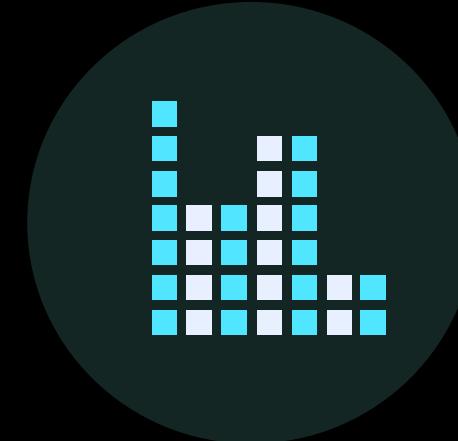
Uncover inefficiencies

Get “x-ray” like visibility into processes with bottlenecks, and compare with efficient processes



Identify optimization opportunities

Get insights and directions for opportunities to automate and deploy solutions for in your company



Continually monitor performance

Track that your processes are optimized and can continually bring improvements

Power Automate Process Mining – Functionalities overview

Intuitive experiences ranging from overviews to hands-on deep dives

Step 3 of 3: Map your data

For each of your attributes, map the column of attribute type correctly to set up your process map. CaseID, activity, and times

Case ID Activity Event start

Showing 5 attributes ⓘ

Attribute name ↑	Attribute type ⓘ	Data type ⓘ
Invoice	CaseID* ⓘ	Numeric ⓘ
PolicyID	Activity ⓘ	Text ⓘ
Action date	Timestamp ⓘ	Numeric ⓘ
ContactID	Event-level attribute ⓘ	Numeric ⓘ

Data ingestion

Intuitive mapping experience, with out-of-box attributes like resource and financial amount. Schedule your Dataflows refresh and refresh incrementally for efficient ETL

Data ingestion

Intuitive mapping experience, with out-of-box attributes like resource and financial amount. Schedule your Dataflows refresh and refresh incrementally for efficient ETL

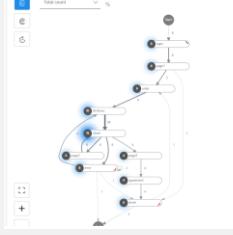
The screenshot shows a process visualization interface. At the top left are three icons: a blue square with a white document, a grey square with a white circular arrow, and a grey square with a white circular arrow containing a smaller circle. To the right of these are two dropdown menus: 'Total count' and '%'. Below this is a process flow diagram. It starts with a dark grey oval labeled 'Start'. An arrow labeled '4554' points down to another oval labeled 'Start', which is inside a light blue rounded rectangle. Another arrow labeled '4554' points down to a third oval labeled 'Process start', also inside a light blue rounded rectangle. A final arrow labeled '4554' points down to a fourth oval labeled 'Initial change is Being Approved', which is inside a light blue rounded rectangle. The entire process flow is contained within a light blue rounded rectangle.

Visualize processes

From a rich process map to hierarchical views and interactive drill downs. (frequency, performance,, rework), switch between overview and deep dive visualizations

Visualize processes

From a rich process map to hierarchical views and interactive drill downs. (frequency, performance,, rework), switch between overview and deep dive visualizations



The screenshot shows a process analysis interface with several key performance indicators (KPIs) displayed at the top:

- Median Case Duration: 22.5 min
- Average Case Duration: 4.47 hr
- Self Loop Cases %: 33.33%
- Loop Cases %: 100.00%
- Rework Cases %: 100.00%

Below these are two circular KPIs:

- Path: 4
- Case: 6

On the left, there is a detailed flowchart of a process with various nodes and transitions, some highlighted in blue.

On the right, there are two bar charts:

- Path:** A chart showing Frequency and Time for four paths. The paths are represented by blue bars of decreasing length from top to bottom. The x-axis ranges from 10.0000 to 100.0000.
- Average:** A chart showing the average time for four cases. The x-axis ranges from 10.0000 to 100.0000. The bars are labeled with case numbers 1, 2, 3, and 4.

At the bottom, there are filter and search options:

- Filter: Includes checkboxes for activity, agreement, check, error, file items, finish, and login.
- Case: Includes checkboxes for 1, 2, 3, and 4.
- Custom event attributes: Includes checkboxes for search, search all, and the current case.
- Custom event attribute: Includes checkboxes for search and search all.

AI powered Insights

Use out-of-box recommended KPIs, visuals, and filter options to uncover inefficiencies and actions to eliminate them. You can also Copilot to showcase these bottlenecks.

AI powered Insights

Use out-of-box recommended KPIs, visuals, and filter options to uncover inefficiencies and actions to eliminate them. You can also Copilot to showcase these bottlenecks.

Summary Map Variant DNA

Filters Clear filters

Variant

Variant Name	Events	Cases %
Variant 1 Cases 1122	7 Events	32.25%
Variant 2 Cases 1130	8 Events	17.64%
Variant 3 Cases 1141	6 Events	9.21%
Variant 4 Cases 1142	8 Events	5.76%
Variant 5 Cases 1144	3 Events	4.66%
Variant 6 Cases 1145	5 Events	3.60%
Variant 7 Cases 1146	8 Events	2.77%
Variant 8 Cases 1155	5 Events	1.81%
Variant 9 Cases 1160	6 Events	1.75%
Variant 10 Cases 1171	5 Events	1.62%
Variant 11 Cases 1188	6 Events	1.45%

Overview

Legend

- INVN (Blue)
- INCR (Purple)
- INCE (Pink)
- INCE (Light Pink)
- APPR (Green)
- APPR (Yellow)
- LENT (Grey)
- REJCT (Red)
- MASS (Orange)
- STOP (Dark Blue)
- NEEDS WIRE (Light Blue)

Page 3 / 2 Next >

Process Mining specific Power BI visuals

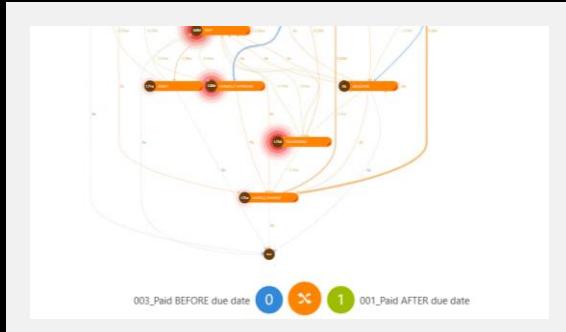
Use Power BI visuals specifically created for Process mining analysis to broadly share process insights

Process Mining specific Power BI visuals

Use Power BI visuals specifically created for Process mining analysis to broadly share process insights

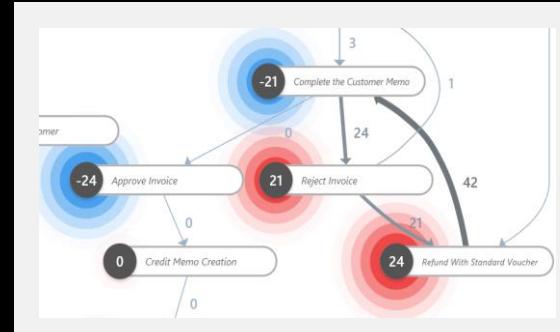
Power Automate Process Mining – Functionalities overview

Power your analysts with data on your processes



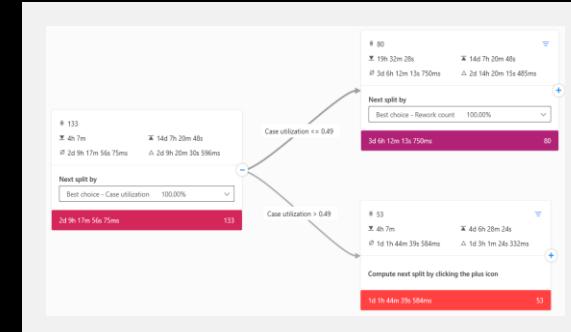
Process Compare

Visualize and analyze processes to find best performers by comparing them against real-life or simulated versions, as well as their BPMN model



Rework Detector

Find unnecessary rework and eliminate it by analyzing the frequency and scale of rework, and investigate which activities trigger and end it



Root-Cause Analysis

Compute attributes and the root causes of problems your process experiences to uncover hidden connections and causalities



Simulations – What If analysis

Users can simulate changes to validate plans for process improvement. Compare simulation results to original process overview.

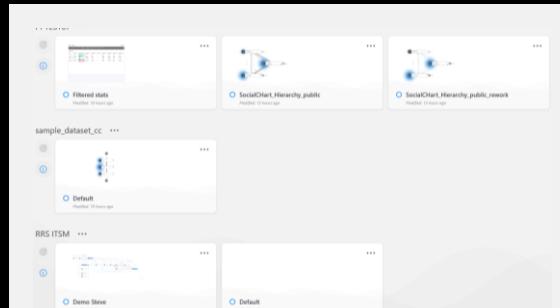
Power Automate Process Mining – Functionalities overview

Easily customize your reports and integrate with Power Platform



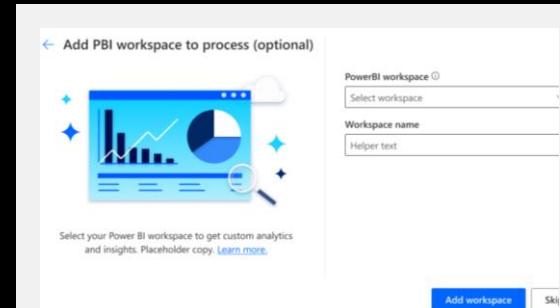
Custom Metrics

Create, edit and customize metrics over process data to produce results and insights tailored to your processes and meaningful to you



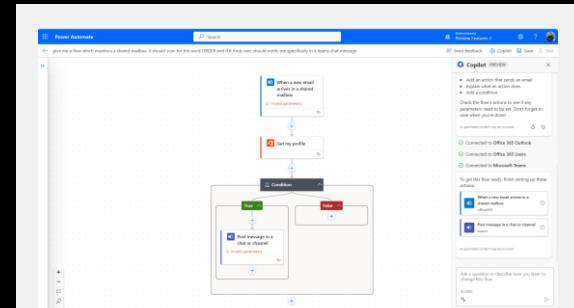
Custom Views

Create custom analytical views to reflect different business contexts/viewpoints and publish them as reports



Publish to Power BI

Publish reports to your own Power BI workspace. Use your custom views and KPIs to tailor the PBI report and share them broadly across the organization.



Power Platform and Microsoft ecosystem

Create cloud flows into processes, as well as automate process improvements with Power Platform apps and flows. Leverage the multiple actions in Power BI and share updates in Teams and Outlook.

Process Mining as a service

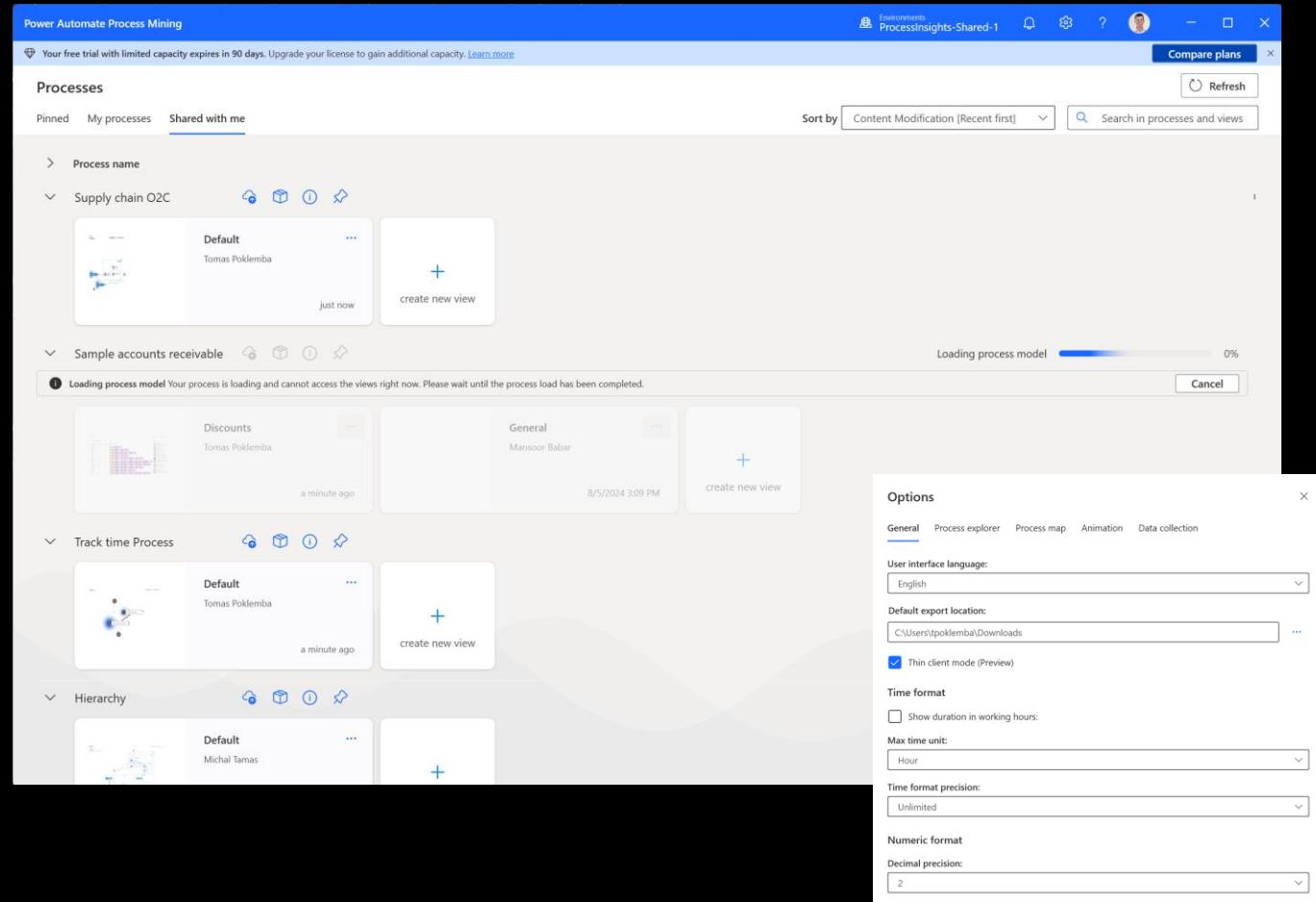
Desktop App becomes a thin client

Enable more users to mine processes; no need for specific hardware requirements for large processes.

Process Model output available via public APIs

Process, Task and Graph insights are available for integrations and querying. Answer complex analytical queries formulated by business users in NL where users work

Ongoing web UX transformation

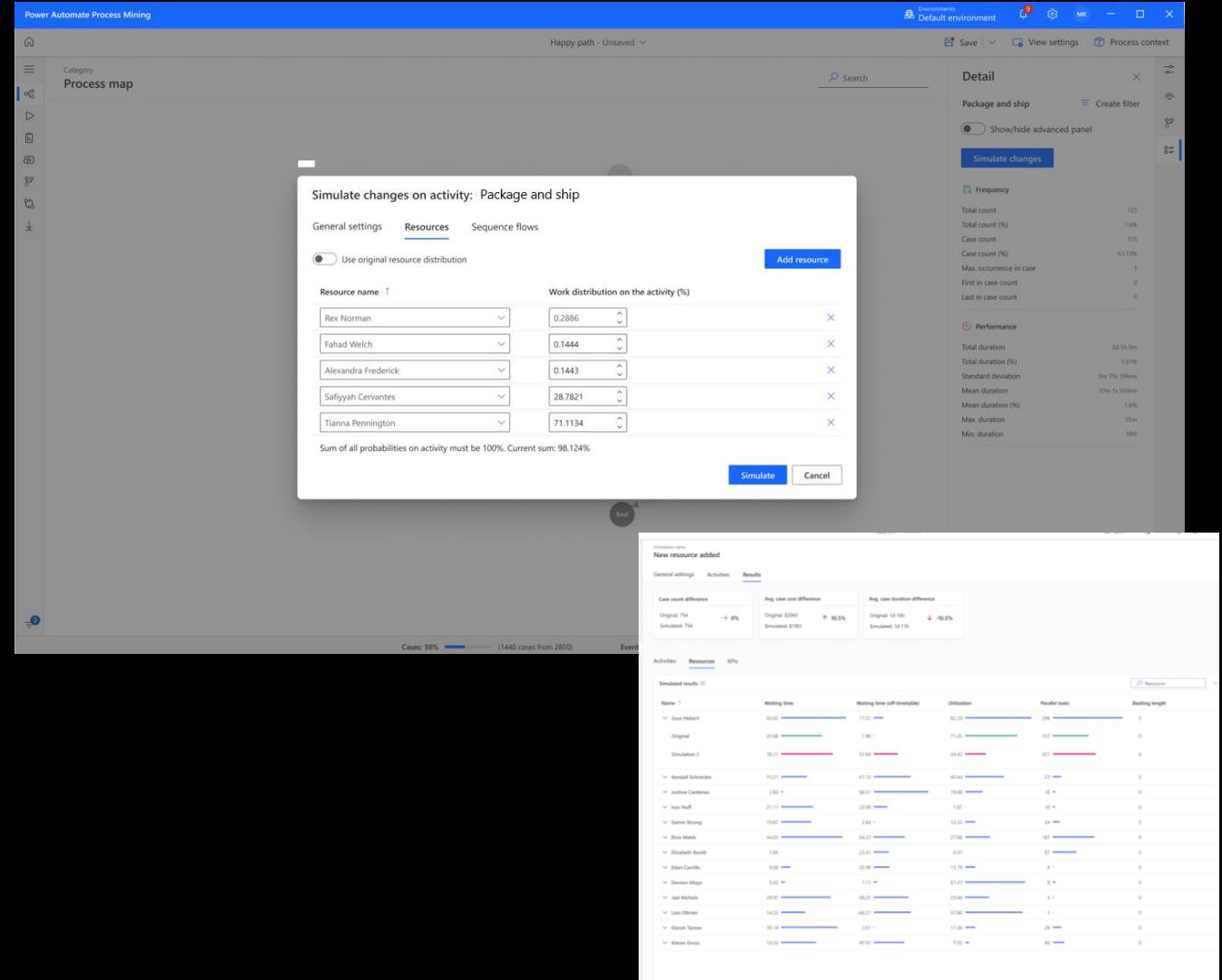


What-if powered simulations

Advanced what-if scenario modeling to understand business outcomes

Users can define various scenarios to validate their hypotheses for process improvement through heuristic process simulations.

Simulation scenarios allows to manage resource pool, duration and waiting times for activities as well as their costs. The results provide comparison with the original process based on overall overview and detailed local changes.



The Right Approach to Process Automation

Streamline First, Automate Second

Eliminate what's not needed

Optimize what remains

Standardize for consistency

Automate for efficiency and scalability

Don't automate your processes



**Eliminate,
Optimize,
Standardize, and
then Automate**





Power Automate
Process Mining

Demo of Process Mining

Microsoft CE & Support organization



Power Automate Process Mining case study

"The Process Mining capabilities were critical to achieving insights this quickly."

– Kirk McNesby Sr. BPM Business Excellence & Experience - Analytics



Opportunity

Manual approvals require time to execute. Process Mining identified this and determined an area of opportunity in the Just In Time security process



Actions

14GB of event data were loaded into Process Mining within the first week, identifying patterns that would contribute to optimization.



Outcome

CE&S used Process Mining as a turnkey solution, leveraging Power Platform integration and experience for faster insights. AI suggestions will boost future efficiency.

Results

	Requests automated	Eliminated time waiting for approvals	Approver time saved
Achievements over the next year by automating approvals for this scenario	13,600	3,300 hrs.	113 hrs.
Opportunity full surface area	54,000	13,200 hrs.	453 hrs.

CE&S was able to leverage Power Automate Process Mining as a turnkey solution. The power of Power Platform integration combined with existing experience shortened the time to insight.

Microsoft Customer and Partner Solutions

Optimizing the Marketing **demand generation process** across Microsoft

Current Process



Efficiency Gains

4 weeks

Decreased cycle time
(days saved)

50%

FY productivity savings

30%

Efficiency gain
(visibility & role clarity)





Process Mining Roadmap





SCALE

E2E Data Scale

Unlimited horizontal scaling exists today

1TB+ per process scale from ingestion to processing and reporting

(150GB per process is already GA)

Fabric Integration

Parquet format event logs can be ingested today

Support for Delta Parquet data format

Process Model Optimization

Optimized process mining output model for reduced Power BI footprint



KEY CAPABILITIES

AI powered Simulations

Continued improvements in simulating resource pool, duration and waiting times for activities and their costs, and comparisons with the original process

Enterprise admin readiness

Complete integration with Power Platform Admin Center with capacity pack management
Service Principal support
Advanced Lifecycle Management of processes

AI-based task mining

Utilize latest GPT models for analysis of task recordings for comprehensive process views and analyses

Process Insights to Actions

Seamlessly turn process insights into action with Process Mining triggers for Power Automate Cloud Flows



DEMOCRATIZATION

Copilot enhancements

Advanced AI reasoning and Retrieval
Augmented Generation over user input and process context for accuracy and coverage of copilot responses

Integrations

Process and Graph insights in private and public APIs

Answer complex analytical queries formulated by business users in NL where users work

Thin client

Enable more users to mine processes; no need for specific hardware requirements for large processes

Templates

More out of box templates for common use cases in Finance, HR, supply chain and more, curated by our partners

More users can get started quickly and reduce overall time to value

Learn more

Resources

- Documentation: <https://aka.ms/ProcessMiningDocs>
- Learning module: <https://aka.ms/ProcessMiningTraining>

Community

- Power Automate Community: <https://aka.ms/JointheCommunity>

Feedback

- [in/haryshmenon](https://www.linkedin.com/in/haryshmenon)
- [in/tomaspoklemba](https://www.linkedin.com/in/tomaspoklemba)
- [in/juliasinghdesign](https://www.linkedin.com/in/juliasinghdesign)

Thank you

Q&A