celonis

Starting Your Process Mining Journey

Your Buyer's Guide

2023

Let's start with the basics.
What is process mining?

Process mining is defined as an analytic discipline for discovering, monitoring, and improving processes as they actually are — not as you think they might be.

It offers objective, fact-based insights, derived from real data, to help you unveil hidden value opportunities in your processes and empower everyone to take action on them.

Process mining augments or replaces other tools that either provide insights but no action, or actions without insight. (Think sticky notes and subjective anecdotes, or basic RPA bots and static reports that can't show root causes behind missed KPIs, let alone fix them.)

From its beginnings in academia, process mining is now transforming the world of business. By answering both compliance-related and performance-related questions, it's helping organizations of all kinds to close the gap from insight to action to value — so they can make a meaningful difference to the top, bottom, and green line.
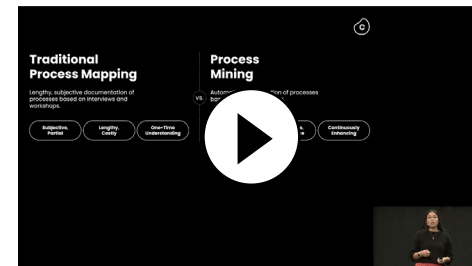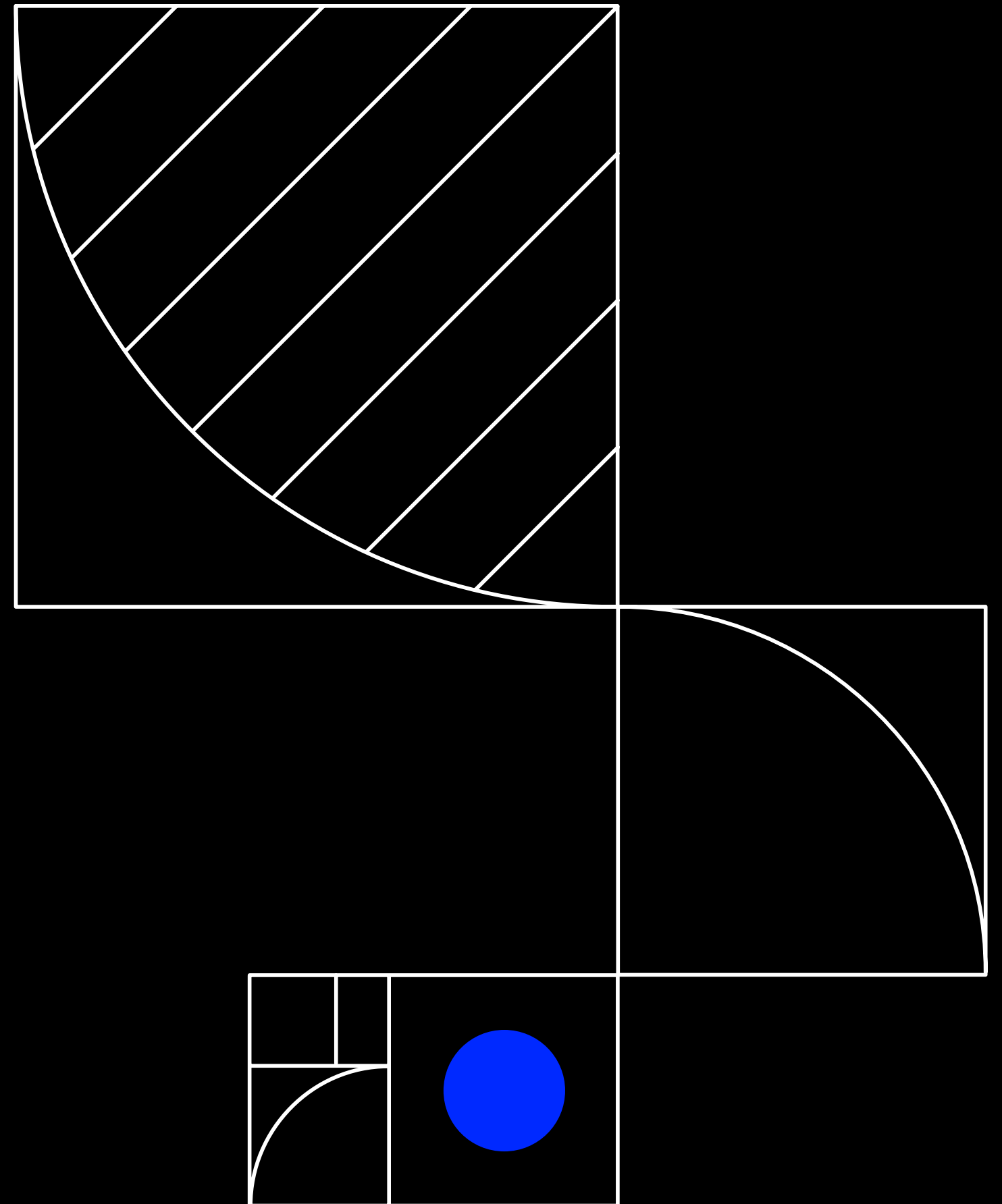
Read more

Learn more

Get the definitive guide: Process Mining For Dummies
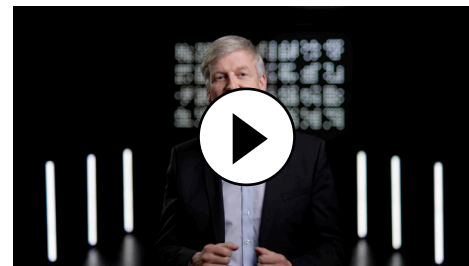
Process Mining: From Theory to Execution Masterclass

Watch our Zero to Process Mining session

80%

Process mining: the optimizer's tool of choice

"By 2025, **80% of organizations** driven by the expectations of cost reduction and automation-derived enhanced process efficiency will embed process mining capabilities in **at least 10% of their business operations.**"

—Gartner

The momentum behind process mining is undeniable. It was already one of the fastest growing categories in enterprise software back in 2021, when over 60% of companies were evaluating or planning to use it in the next 12–24 months, and many were already experiencing significant ROI.[1]

The rise of process mining has continued, with Gartner projecting it "to grow to $2.3 billion by 2025 at a compound annual growth rate (CAGR) of 33% from 2020 through 2025. The key drivers continue to be accelerated digital transformation efforts, growing process visibility requirements and increasing demands for business operations resilience."[2]

Elsewhere, The Economist has called process mining "**the real next big thing in business automation**." But market momentum aside, the real question for businesses like yours is this:

What's the best way to bring process mining into your organization?

[1]Commissioned study by Forrester Consulting on behalf of Celonis, Oct. 2021

[2]Gartner® Magic Quadrant™ for Process Mining Tools, 2023

Partnering for process mining success

A close partnership is key to successfully bringing process mining into your organization. Technology vendors not only provide their software, but also their expertise, experience, and methodology either directly or via their ecosystem partners.

If you're looking to begin process mining, this guide is your starting point. We'll cover the different ways companies are adopting process mining, and share the key questions to ask vendors. So you can start small, find value, and scale.

In March 2023, Gartner® published its first Magic Quadrant™ for Process Mining Tools. **It names Celonis as a Leader, placing the company furthest on Completeness of Vision and highest on Ability to Execute.**

Process mining dominates process intelligence conversations

"Companies are struggling with economic headwinds and external forces that throw uncertainty into their next-year budget planning, and it's clear that automation is top of mind. Most inquiries centered around the theme of digital transformation and how to use tools to achieve end-to-end automation. Fully 40% of all inquiries centered on process mining, either how these tools can support process improvement and automation generally or, more specifically, understanding potential use cases, opportunities, maturity levels and critical success factors for process mining."

— Forrester, Process Intelligence Inquiry Spotlight, 2022

Read more
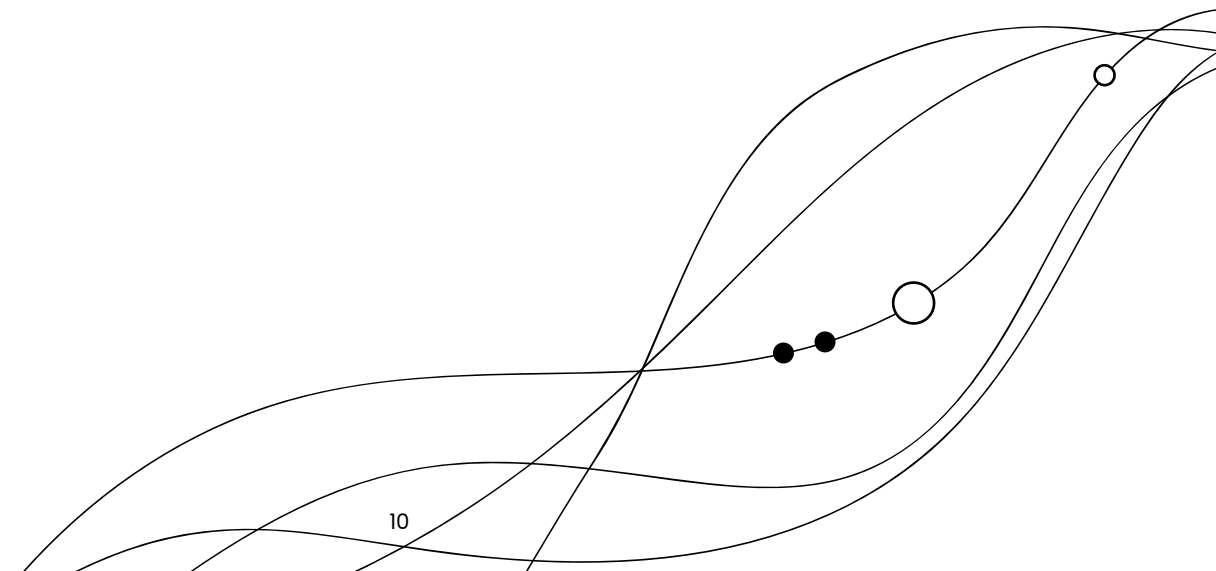
How to adopt process mining

In effect, there are three options for adopting process mining:

01

A **standalone process mining** project AKA a 'discovery-only' approach, where only insights are generated and fed ad-hoc to an organization.

02

A **process mining plus enhancement approach**, where process mining is loosely connected with other initiatives like automation to turn insights into action.

03

An **Execution Management System (EMS) approach**, where process mining is embedded into a wider platform for outcome-driven execution.

Choosing the correct process mining deployment **is key to success.**

Adoption of
basic process mining types

	2018	2020	2022*
Option 1	48%	38%	34%
Option 2 or 3	52%	62%	66%
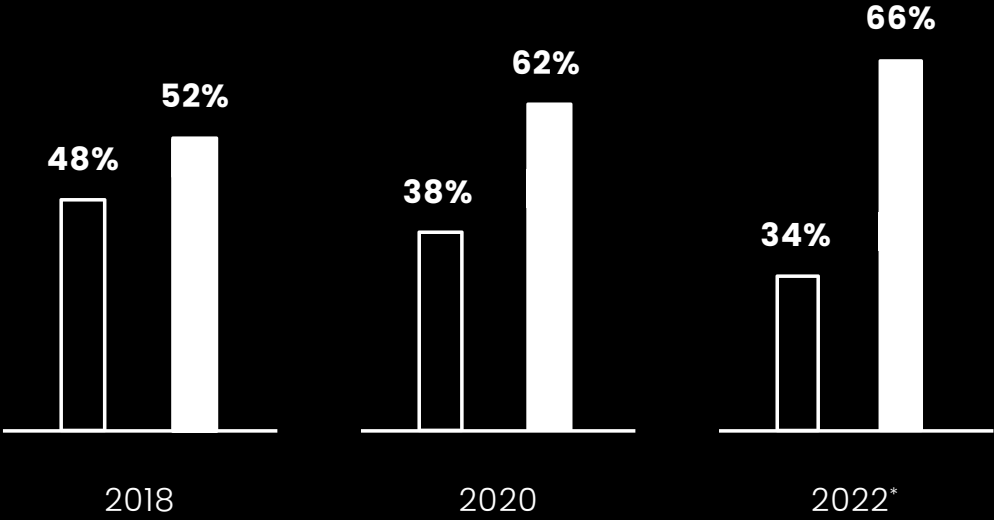
☐ **Option 1** — Standalone Process Mining

■ **Option 2 or 3** — Process Mining Plus Enhancement or EMS

Source: Gartner | *Estimated

What stage of process maturity are you in?

Understanding your process maturity helps to select the process mining deployment that is best for you.

01
Developing process mining understanding
65% of companies

02
Standardizing processes
20% of companies

03
Optimizing processes
10% of companies

04
Innovating process execution
5% of companies
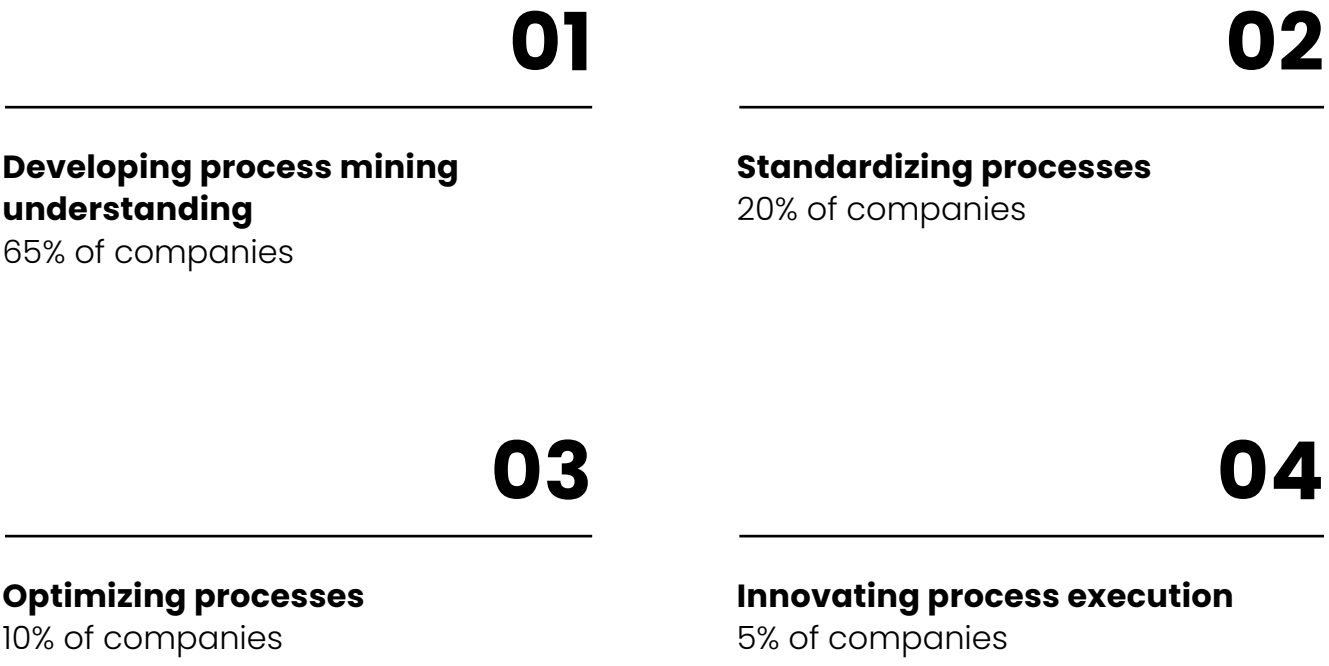
Use the assessment on the next page to **see where you rank.**
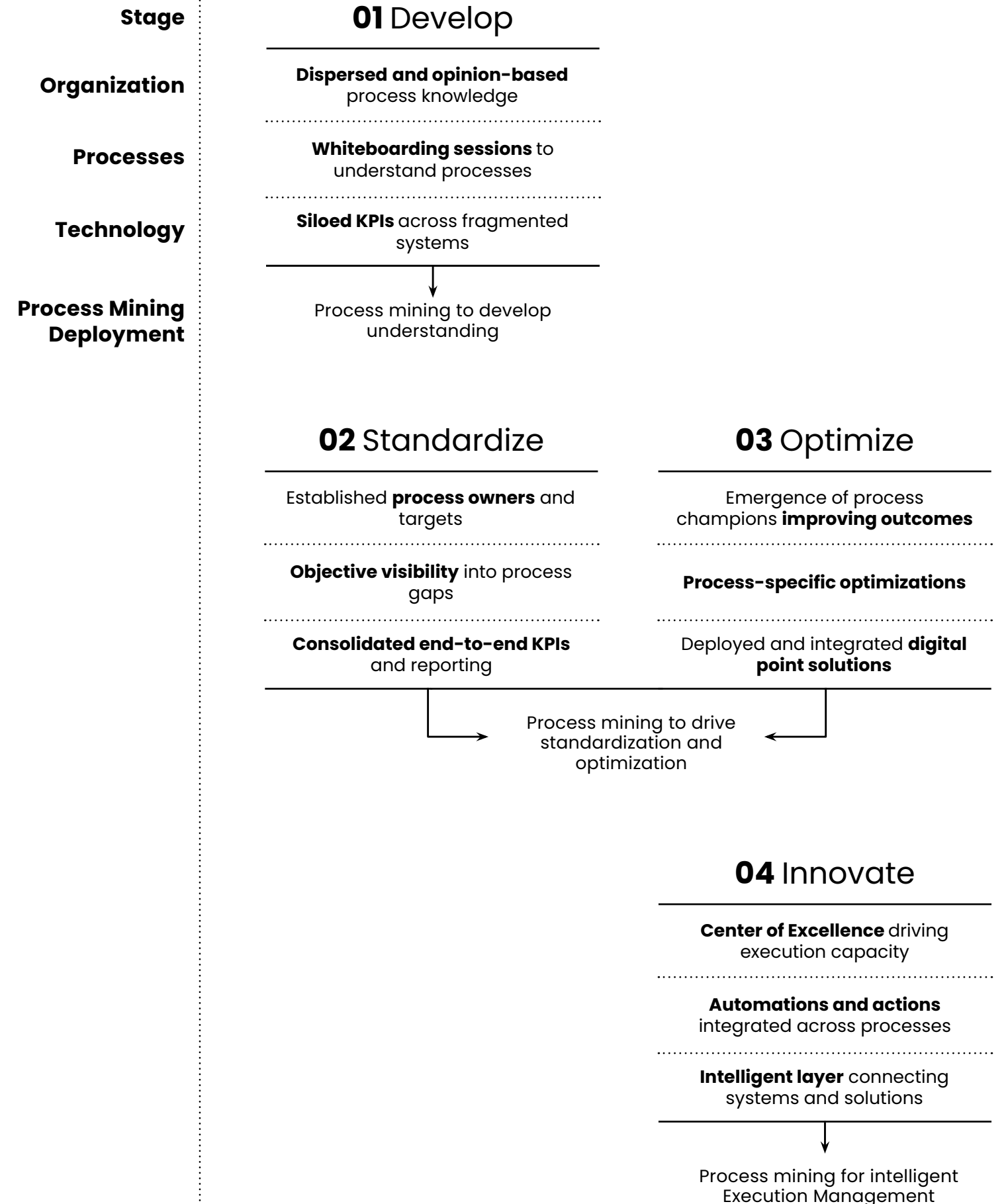

85% of companies
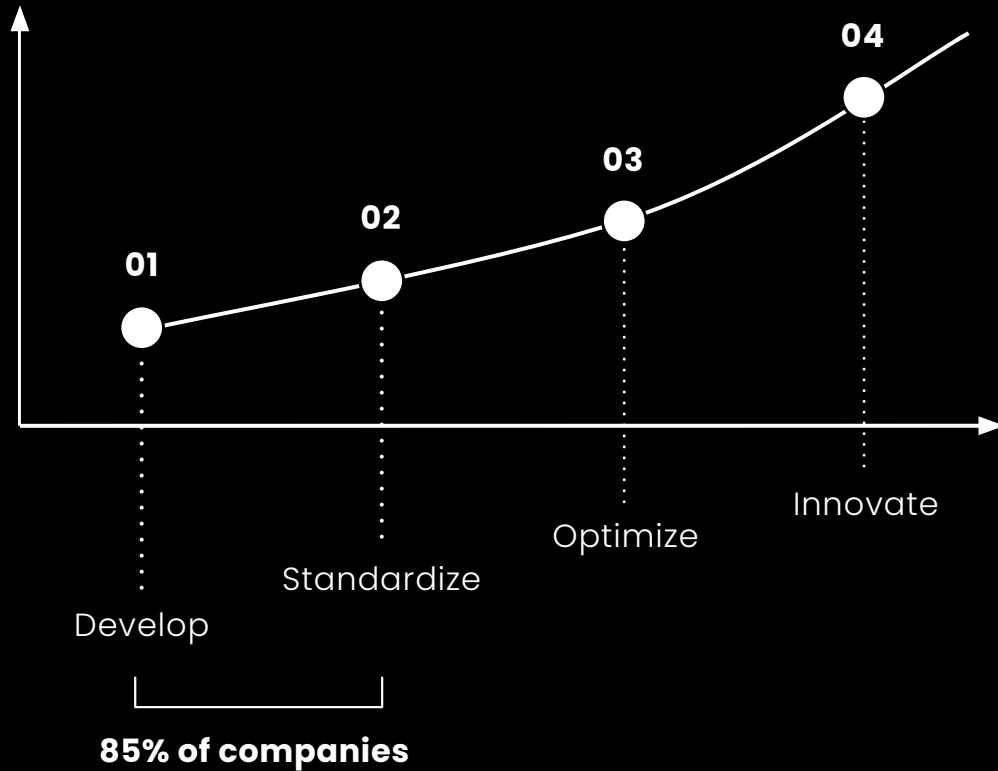
Source: data from APQC (American Productivity & Quality Center)

Process maturity assessment

It's important to select a deployment that fits your level of organizational, process, and technology maturity. Check out our evaluation table below to see how your enterprise ranks.

**Whatever level of maturity you're at today, your enterprise can benefit from process mining.**

Stage

Organization

Processes

Technology

Process Mining Deployment

01 Develop

Dispersed and opinion-based process knowledge

Whiteboarding sessions to understand processes

Siloed KPIs across fragmented systems

Process mining to develop understanding

02 Standardize

Established **process owners** and targets

Objective visibility into process gaps

Consolidated end-to-end KPIs and reporting

Process mining to drive standardization and optimization

03 Optimize

Emergence of process champions **improving outcomes**

Process-specific optimizations

Deployed and integrated **digital point solutions**

04 Innovate

Center of Excellence driving execution capacity

Automations and actions integrated across processes

Intelligent layer connecting systems and solutions

Process mining for intelligent Execution Management

"**EMS** (Execution Management System) **is an ambitious product portfolio that has the potential to modernize business operations, allowing customers to gain competitive advantage by being able to out-execute competition.**"

Maureen Flemming

Program VP, Worldwide Intelligent Process Automation Market Research and Advisory Service IDC

Read more
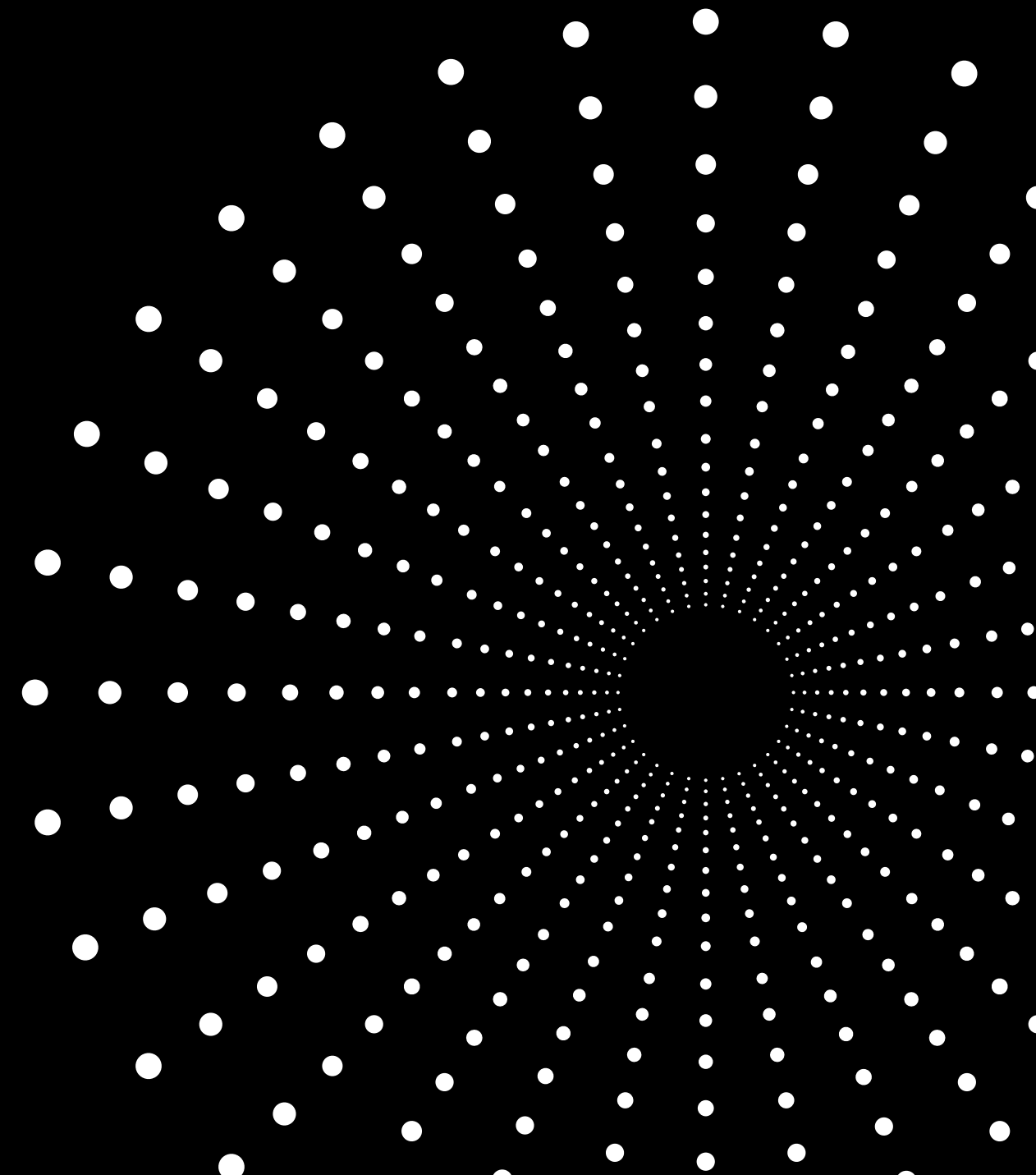
How to find the right technology vendor

Put your prospective vendors to the test. Asking the right questions is an essential part of the selection process.

The questions you ask should be designed to evaluate **six key areas**:

01
Leadership and innovation
Has acknowledged as a market leader by analysts.

02
Execution Management
Has enhanced capabilities on top of process mining.

03
Apps
Has pre-built assets for you to get started.

04
Depth of knowledge and ecosystem
Is experienced with your processes and works with your trusted partners.

05
Enterprise readiness
Can scale with your initiatives.

06
Results and time-to-value
Has a track record of realizing value quickly.

Questions to ask vendors

01
Leadership and innovation
Can you provide third-party validation of your leadership from analysts like Gartner and Everest?

02
Execution Management
Is your technology a standalone process mining tool or is it a platform that also provides automation capabilities?

03
Apps
Do you have a marketplace of connectors, apps, and automations? If so, how many and for which processes?

04
Depth of knowledge and ecosystem
How extensive is your ecosystem? Can a partner deploy the solution for us?

05
Enterprise readiness
What are your cloud security accreditations and what data governance do you have in place?

06
Results and time-to-value
Who are your reference customers for enterprises of a similar industry and technology complexity to us? Can you share their story?

Which capabilities should you evaluate?
10 key capabilities

01
Real-time data integration

Data extraction, preparation, and transformation are critical prerequisites to process mining. It's essential to establish that the vendor's data tools work for your specific systems including cloud, on-prem, and legacy. Ensure that the data can be synced in real time, so that you get insights in time to take action (manual or automated) before negative outcomes can manifest.

02
Enterprise-wide visibility

Advanced process mining goes beyond analyzing data for a single process within a single system. Ensure the vendor can integrate data from multiple systems and processes in one process model, enrich the model with user desktop action through task mining, and connect sequential or parallel processes — so you gain total visibility across your organization.

03
Object-centric understanding

In addition to enterprise-wide visibility, you need a common understanding of individual objects, independent of source systems. For example, the ability to analyze an invoice whether it's in Oracle or SAP, as well as its relationships with other objects. Object-centric process mining (OCPM) represents a step-change in process mining and execution management, replacing static, two-dimensional views with a dynamic digital twin. Can the vendor give you this power?

04
Process conformance

Conformance checking enables comparison of your as-is process to your desired to-be process model for audit, compliance, or monitoring purposes. Ensure the vendor can integrate your process models that you may have built with your existing tools and additionally look for automated root-cause analyses to determine the source of any deviations.

05
Benchmarking

Ensure that the vendor supports the ability to benchmark processes between regions, products, teams, or other relevant subsets. Additionally ask if external industry benchmarks are available.

Which capabilities should you evaluate?
10 key capabilities (continued)

06
Process simulation

Process simulation allows you to run a what-if analysis to test process changes and view their impact without committing resources. When vendors combine simulation with mining capabilities, the scenarios are anchored in data.

07
Prescriptive automation

Combining process mining and automation allows you to close the gap from insight to action to value. No-code integrations with ERP systems, cloud tools, and custom software enables easy corrective process automation to be deployed.

08
Integration with complementary tools

Creating a seamless discovery and enhancement experience is key to driving business outcomes. A key consideration is whether process mining can be integrated with existing technologies such as BI, eBPA, iPaaS, and RPA.

09
### Pre-built solutions (or an App Marketplace)

Pre-built assets decrease time-to-value and showcase vendor experience for your specific use cases. Look for system connectors, analyses, machine learning models, and automations.

10
Enterprise readiness

Whether your data is held in the cloud or on-premise, sensitive data must be stored and handled securely. Checking your vendor's security policies and accreditations is an important step of the evaluation process.
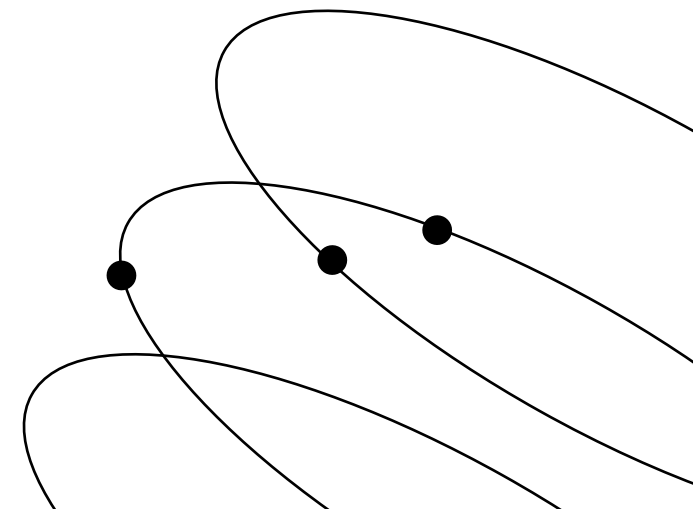
Ask around, stay informed!

Don't just take a vendor's word for it. Go and speak to real customers and analysts in the market to see what they have to say about process mining.

Who can you speak to?

Leading analysts:

REFERENCE CUSTOMERS

Speak with reference customers directly
Ask the vendor if you can speak directly with a customer of theirs. Ideally this should be a customer in a similar industry or with an equivalent use case to yours.

Attend customer webinars
Join webinars, panel discussions, and events to hear how enterprises are successfully incorporating process mining into their business.

Ask for concrete examples
When speaking to a vendor about use cases for their technology, focus on specific examples to understand exactly how value can be realized.

MARKET ANALYSTS

Attend analyst webinars
Most analysts conduct regular webinars covering the state of the market, their perspectives, and customer adoptions. Reach out to the analysts to see upcoming events.

Speak with an expert
For an in-depth view of the market or for specific questions, arrange a briefing directly with a market expert. Vendors can help to connect you with the leading experts.

Read the reports
Most analysts publish reports and whitepapers covering the state of the market. They can be purchased from the analysts or in most cases via the vendors on request. We've included a few in the buyer's kit later in this guide.

How to get started with process mining and EMS

Start small, find value, scale

Ready to drive immediate cash impact and make your transformations cheaper, faster, and safer? Process mining can take you there. As with any transformational project, the key to success is to set short-term, achievable goals and align the relevant stakeholders.

Technology partners are typically experienced in running value assessments for their customers. They often have a methodology and dedicated personnel for supporting such projects, and can also support process mining deployments.

Once success has been achieved in an area of the business, whether a process function, department, or region, it sets the foundation for scaling process mining within your organization.

01 **Select 1–2 processes** with high volume and/or high value throughput. Typically enterprises start with processes of strategic significance with executive visibility.

02 **Set clear criteria** to define success, such as KPI targets and timelines. Ensure the business stakeholders are engaged in the definition stage.

03 **Conduct a value assessment** on the selected processes. Vendors normally provide a structured framework for an assessment.

04 **Trial automation** alongside process mining to directly drive business outcomes from the insights surfaced.

05 **Review the outcomes** against the criteria aligned with internal stakeholders to establish the necessary buy-in to roll out.

Your buyer's kit

Use this RFX template

Some enterprises issue a formal RFI or RFP to help them in their vendor selection process. In addition to the questions included in this buyer's guide, Celonis has combined the leading analyst vendor requirements into a best practice template, available to download.

Category	Question / Requirement	Vendor Response
Company Profile	Brief presentation of the company	
Company Profile	What is your company's vision for Process Mining? What is your company's vision for Execution Management?	
Company Profile	What is your company's code of ethics & sustainability?	
Company Profile	Where is your company located? Where are the headquarters and development team?	
Company Profile	Provide an overview of your solution/service history since its inception. Please include any major updates or changes.	
Company Profile	What is your product roadmap?	
Company Profile	What is your unique value proposition? Please describe in detail.	
Company Profile	Describe what generally differentiates you from your key competitors	
Company Profile	How many employees work for your company? How many of them work on Process Mining product development?	
Company Profile	Describe any relationships you have with key suppliers of enterprise software and consultancy partners.	
Company Profile	Briefly tell us about your company's revenue (entire company and the Process Mining line of business), growth rate, and forward projections.	
Company Profile	Describe your company's capital structure (e.g. current capitalization ratios, debt-to-equity ratios, recent M&A activity, recent equity funding).	
References	Please provide three concrete examples of customer success, and state the customer name. (i.e. realized results or	

Download

Reach out to **rfx@celonis.com** for guidance.

Gartner

Magic Quadrant for Process Mining Tools

Published 20 March 2023 - ID G00774746 - 63 min read

By Analyst(s): Marc Kerremans, Kimihiko Iijima, Andrei Razvan Sachelarescu, Nick Duffy, David Sugden

Initiatives: Digital Future

Process mining tools deliver visibility and insights to technology innovation leaders that enable smart decision making and strong performance on an organization's critical priorities. Here, we examine market forces and the leading enterprise vendors for such software.

This Magic Quadrant is related to other research:

Read now

2023 Gartner® Magic Quadrant™ for Process Mining Tools

Everest Group

Leaders

Major Contenders

Aspirants
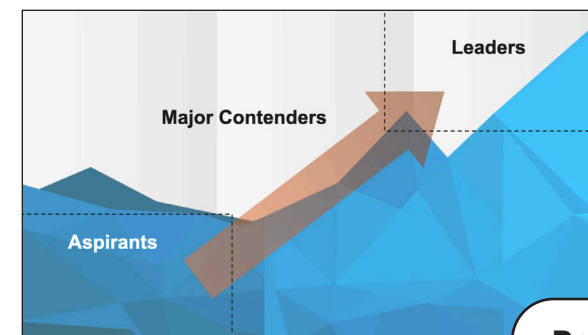
Read now

Everest 2022 PEAK Matrix for Process Mining

HFS Research

HFS Horizons Report

Process Intelligence Products, 2023

January 2023

AUTHORS:
Reetika Fleming, Executive Research Leader
Sam Duncan, Practice Leader
Hrishka Biswas, Senior Analyst

Read now

2023 HFS Horizons: Process Intelligence Products

celonis