celonis

Starting Your Process Mining Journey

Your Buyer's Guide

2024

From insight to value: empower your company
with process mining

Process mining is a widely-used technology that helps companies understand and improve business processes. It uses data to build a complete view of your organization's processes and then empower teams and technologies to find and capture hidden value opportunities.

That value can come in the form of grabbing low-hanging fruit like fixing gaps in your processes (think eliminating duplicate invoices) as well as enabling enterprise-wide innovation (like making AI really work for your business).

We live in a world where the pace of change continues to accelerate and companies that understand and optimize their processes are set to grow faster and innovate smarter. That's why process mining is important. It's also likely why more and more companies are adopting it: global process mining software revenue grew 40% in 2023 alone[1].

The era of hit-or-miss business improvement plans is over.
Welcome to the process era.

About this guide

As with all technologies, getting started with process mining can seem challenging. As the pioneers of process mining, here at Celonis we've helped many companies begin their journey toward operational excellence. That's why we've created this guide as a resource for anyone considering process mining, especially those who are evaluating different vendors. Here you'll find helpful resources like a process maturity assessment, a list of features you should ask vendors about, and a template for your process mining RFP or RFI.

Now, if it works for you, let us guide the way.

Process mining: what it is & useful things to click

Since you're scanning through this Buyer's Guide, there's a strong chance you don't need the very basics. But just in case, here's a chance to get up to speed with some foundational knowledge and links so you can learn even more

What is process mining?

Every process step you take leaves digital traces — event log data — in the transactional systems you use. Process mining extracts those digital traces and meaningfully connects them to help you understand your business better. Think of a MRI that shows how your processes actually run — not how you think they run.

Some 10 years ago, process mining started out as an academic theory. Today, it's a well-established business technology, used by thousands of organizations around the world, with hundreds more starting every day.

Watch the Godfather of process mining explain it all. His name is Professor Wil van der Aalst and by clicking here you can get his full rundown on the theory behind process mining as well as practical use cases and exercises.

Or head over to 'In the Process', a short video series that will ease you into what process mining is, how it works, why it matters, and how to get started. As simple as that.

Plus there's always Process Mining For Dummies, Celonis Special 2nd Edition if you're after a good read.

25%

"By 2026, **25% of global enterprises will have embraced process mining platforms** as a first step to creating a digital twin for business operations, paving the way to autonomous business operations."

Why process mining keeps gaining momentum

Having complete visibility into your company's processes is key to maximizing value – especially in a rapidly changing world. Process mining extracts and analyzes data, contextualizes it with related tasks, performs conformance checking, performance monitoring, and builds a virtual model of your organization.

All this can help you create a "digital twin" of your company: a virtual representation of your organization's processes across its systems. A digital twin allows you to monitor, analyze, test, simulate, and model your processes.

Process mining doesn't stop there. It's a critical pillar of Process Intelligence, a broad suite of technologies that helps you not only understand your processes, but orchestrate and optimize them.

More and more, companies are not just adopting process mining software, but thinking about the bigger potential impact that a Process Intelligence platform could make.

**Meet Process Intelligence:
the connective tissue for business – ebook**

And while we're proud at Celonis to offer a Process Intelligence platform including industry-leading process mining technology and AI, for the sake of this Buyer's Guide we'll mainly focus on process mining.

How to start
with process mining
Start small,
find value, scale

Ready to drive immediate cash impact by optimizing your processes? Process mining can take you there. As with any transformation 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 a dedicated team supporting you from assessment to deployment, adoption, and beyond.

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 across your organization.
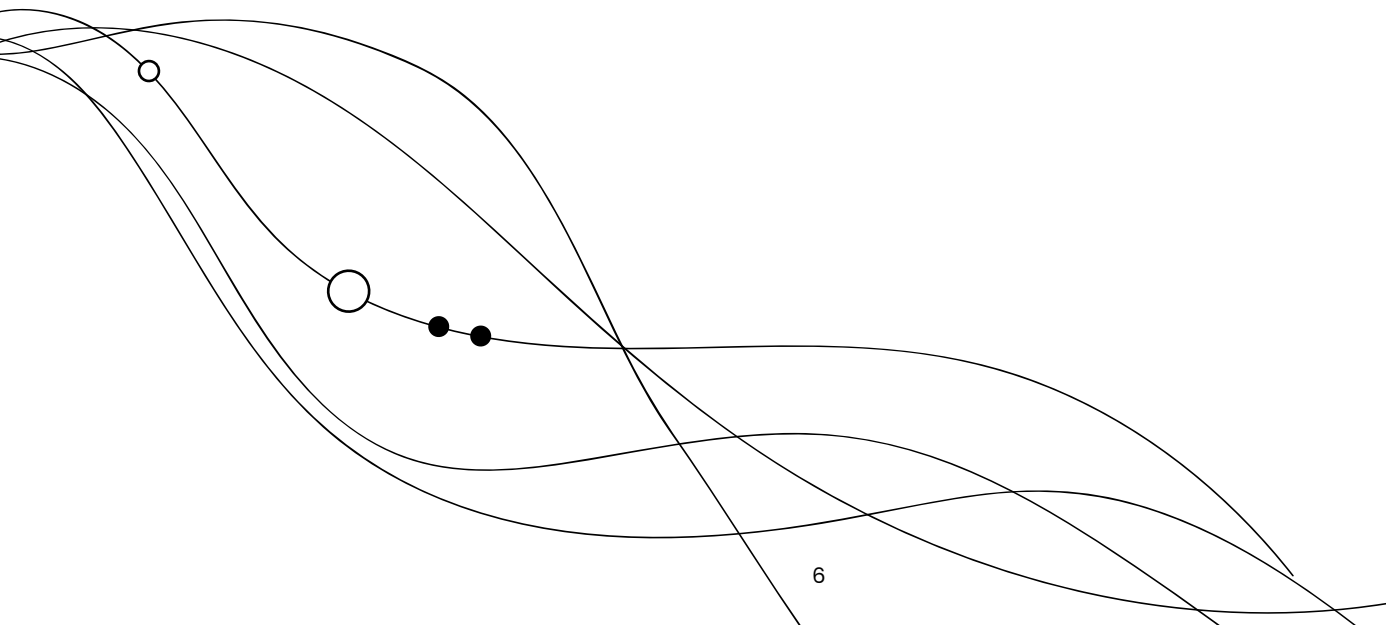
Five steps to process optimization

Every process mining deployment is slightly different, but the top performers walk a similar path. Here are five typical steps you'll want to take on your journey to process optimization.

1 **Select one or two processes with high volume and/or high value throughput.** Typically, enterprises start with processes of strategic significance with executive visibility.

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

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

4 **Trial tools like process management and automation alongside process mining** to directly drive business outcomes from the insights surfaced.

5 **Review the outcomes against the criteria aligned with internal stakeholders** to establish the necessary buy-in to ensure a successful roll-out.

Where do companies stand on the process maturity scale?

01 | **Developing process mining understanding**
65% of companies

**02** | **Optimizing processes**
10% of companies

03 | **Standardizing processes**
20% of companies

04 | **Innovating process execution**
5% of companies

Not sure where you stand?
Have a look at our Process
Maturity Assessment checklist.

Understanding your process maturity will help you select what kind of process mining deployment will suit you best.

01
Develop

02
Standardize

03
Optimize

04
Innovate

85% of companies
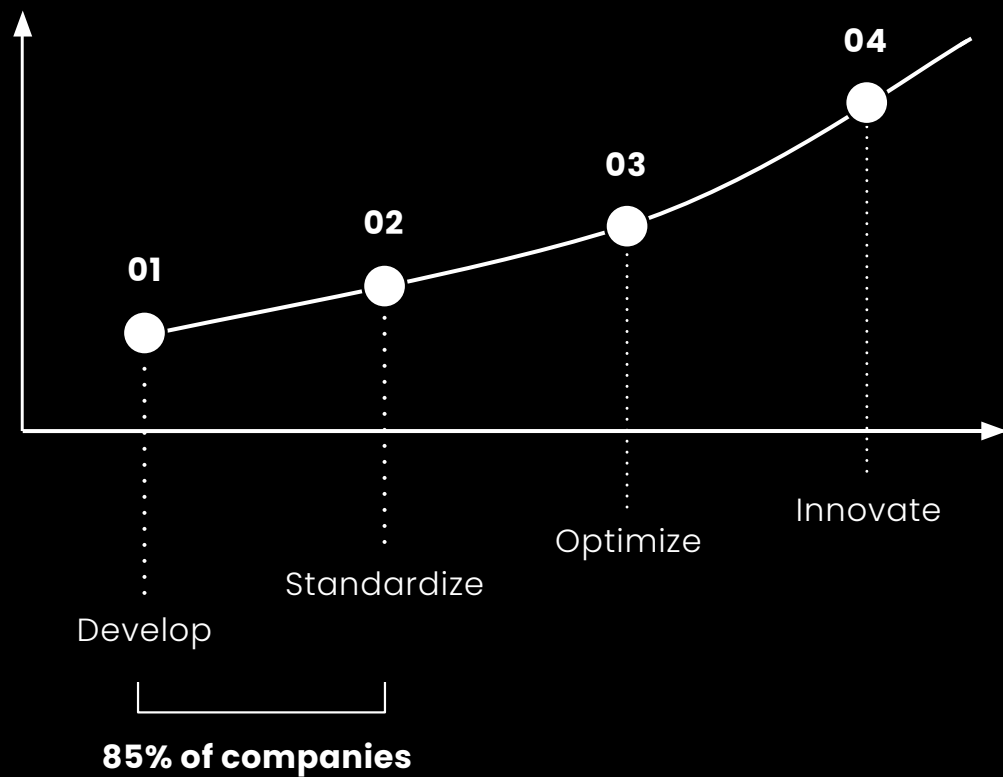
Assess your maturity here

To start, it is crucial to know where your company stands. By determining your company's process maturity level, you can forecast (and start looking forward to) the benefits created by improving your processes.

Check out our evaluation table below to see how your enterprise ranks.

STAGE	01 Emerge	02 Standardize	03 Optimize	04 Innovate
ORGANIZATION	Diverse, inconsistent initiatives	Established process owners and targets	Presence of process champions across departments	Center of excellence driving execution
PROCESSES	Unknown process gaps	Known process gaps	Process-specific optimizations	Automations and actions integrated across processes
TECHNOLOGY	Siloed KPIs across fragmented systems	Consolidated end-to-end KPIs and reporting	Integrated digital systems	Intelligent layer connecting people, systems and solutions
BENEFITS	- Find the easy wins - Develop understanding - Identify standardization opportunities	- Pursue transversal wins - Support larger improvements - Drive company-wide standardization	- Go after the big wins - Enable deep dives - Lead optimization	- Innovate ahead of the curve - Support change management - Expand to new opportunities

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

" Technology executives who embrace process intelligence […] now have the unique opportunity to overtake their competition.

They have more timely, accurate, and comprehensive insights that can inform decisions that matter to customers and employees."
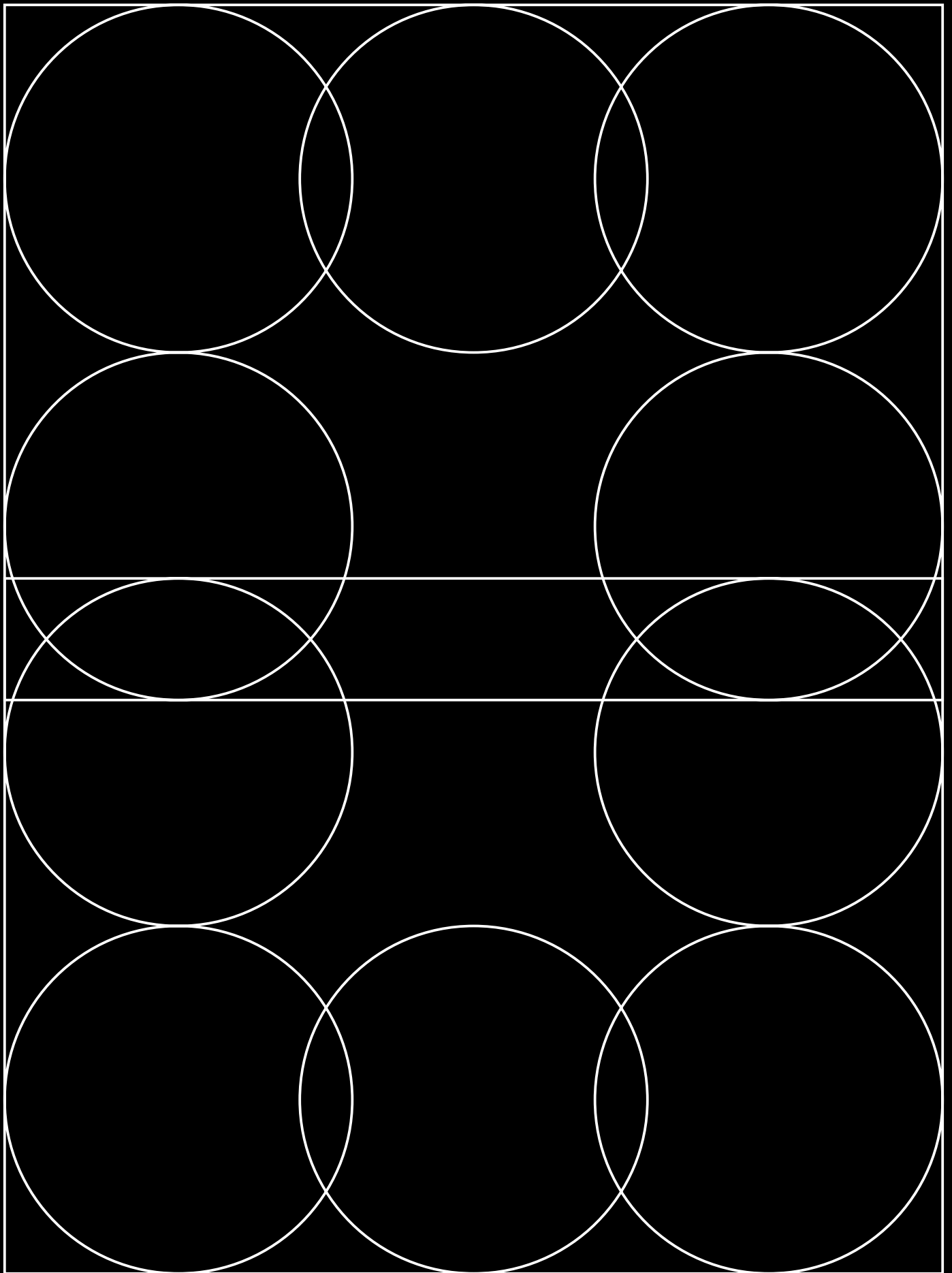
How to find the right technology vendor

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:

1 Leadership and innovation

The vendor has been acknowledged as a market leader by analysts.

ASK THEM:

Can you provide third-party validation of your solution from analysts?

2 End-to-end Process Intelligence

Their solution offers enhanced capabilities beyond process mining, including process modeling, automation, orchestration, AI, effectively providing process intelligence.

ASK THEM:

What additional features does your technology offer beyond process mining? Does it include the full suite of Process Intelligence capabilities such as task mining, process modeling, and AI, orchestration, and automation?

3 Apps

Their offer includes pre-built assets that address core challenges, helping you to get to insight quickly.

ASK THEM:

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

4 Depth of knowledge and ecosystem

The vendor is experienced with your processes and works with your trusted partners.

ASK THEM:

Does your solution integrate with our existing systems? Can a partner deploy the solution for us?

5 Enterprise readiness

Their solution can scale with your initiatives and existing systems.

ASK THEM:

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

6 Results and time-to-value

The vendor has a track record and methodology to deliver value quickly.

ASK THEM:

Who are your reference customers for enterprises of a similar industry and technology complexity to us? Can you share their story(ies)?

Partnering for process mining success
There's an ecosystem for that

Partnerships are key to successfully bringing process mining into your organization. Technology vendors not only provide their software, but can also open up an ecosystem full of expertise, experience, and different methodologies.

Ensure you work with vendors rich in partnerships and you'll avoid a lot of unnecessary trial and error. To do that, ask big, important questions to the vendor about just how extensive their ecosystem is and whether partners deploy process mining on your behalf.
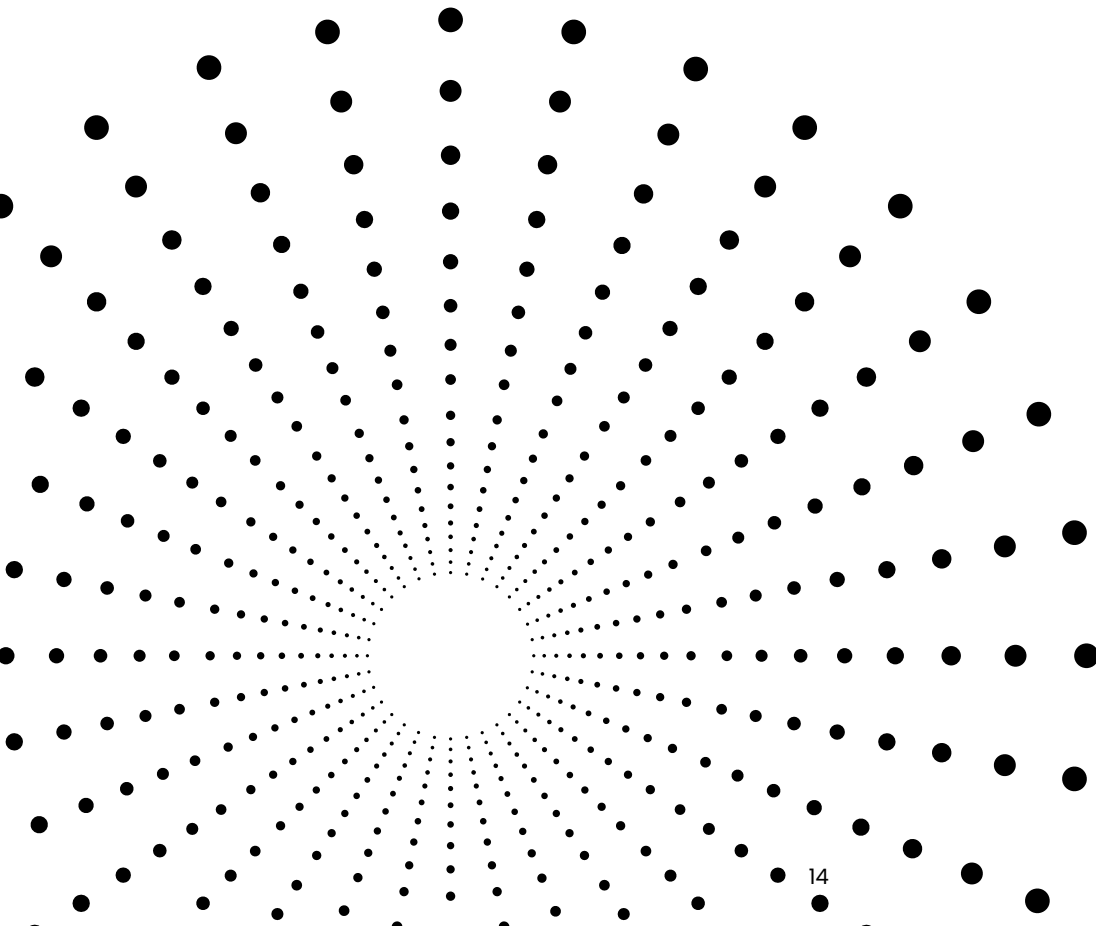
Which capabilities should you evaluate?

1 Real-time data integration

Data extraction, preparation, and transformation are critical to process mining. It's essential to know that the vendor's data tools work with 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).

2 Object-centric process mining

Regardless of source systems, a comprehensive process mining solution provides a common understanding of individual objects. 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, replacing static, two-dimensional views with a dynamic digital twin. Can the vendor give you this power?

3 Out-of-the-box process improvement

To analyze process mining data, you need to define key metrics, strategic objectives, and value opportunities. Check if your vendor gives you a head start by providing out-of-the-box insights, formulas, and calculations for the most common metrics, and whether these can be tailored to your business and used across all of your systems.

4 System-agnostic platform

Ensure the vendor has a system-agnostic platform that 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.

5 Query engine for enterprise-level data volumes

Transactional data from your invoices, purchase orders, or sales orders can quickly add up to large data volumes with billions of rows. To analyze data collected over several years in an enterprise setting, you need a query engine to handle complex data models with multiple objects and large data volumes without trade-offs in speed, latency, or response times.

6 Prebuilt AI capabilities and customizable AI solutions

AI capabilities provide additional insights and let you get more out of process mining. Prebuilt AI capabilities should cover the most common use cases and help you find process insights fast. A toolbox for custom AI solutions provides additional flexibility to build AI systems tailored to your business – and lets you feed process data and knowledge to your existing AI tools. Consider searching for a vendor with a full Process Intelligence offer, not simply process mining.

7 Process visualization and benchmarking

Visualizing your process is fundamental. You need to make sure vendors can display and allow you to customize metrics such as throughput times between activities, and show other relevant KPIs such as activity frequency. Additionally, the vendor needs to support benchmarking processes between regions, products, teams, and other subsets.

8 Intelligent process orchestration and task automation

Process orchestration is a layer that manages the dynamic interplay between systems, tools, and people based on Process Intelligence. It lets you build complex processes and helps you automate the entire flow. An integration with additional task automation tools lets you trigger actions such as sending an email or making changes in the source system based on specific criteria. Your vendor should support process orchestration to let you turn your insights to action.

9 Prebuilt apps

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 Process conformance and model-based adherence checking

Adherence 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 with your existing tools, and look for automated root-cause analyses to determine the source of any deviations. In addition to simple conformance checking, the vendor should support a model-based adherence check that lets you define business rules and SLAs.

11 Value tracking

Value tracking lets you identify which transformation initiatives are on track and generating value – and which ones need your attention. Your vendor should provide out-of-the-box formulas to calculate tangible value generated and aggregated across data models, processes, and business objectives. Additionally, make sure that you can assign owners to each initiative.

12 Process modeling and model distribution

Process mining will sometimes reveal that to improve your process, you need to redesign it. That means you need to make sure that your vendor provides a process modeling solution that is integrated with the process mining data. Plus, you need to be able to define your enterprise architecture, hierarchies, and roles and responsibilities in your modeling tool and have the ability to roll out any process changes to your employees.

Ask around, stay informed

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

Who can you speak to?

REFERENCE CUSTOMERS

Speak with reference customers
Ask the vendor if you can speak directly with a customer of theirs, ideally in a similar industry or with an equivalent use case.

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 them to learn about 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 next page.

Since 2011, Celonis has helped thousands of the world's largest and most esteemed companies yield immediate cash impact, radically improve customer experience, and reduce carbon emissions.

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

Customers use our Process Intelligence platform in different – but always inspiring – ways. Check out their stories of success by clicking here.

Recognized by
Industry Analyst Firms:

Gartner.

FORRESTER®

Everest Group

HFS Research

IDC

constellation™

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 by clicking here.**

Discover more

Top questions answered:
What is process mining
and how does it work?

Process Mining For Dummies,
Celonis Special 2nd Edition

Learn the basics:
"In the Process" video series

Take the Masterclass:
"Process Mining: From Theory to Execution"

Meet Process Intelligence:
the connective tissue for business
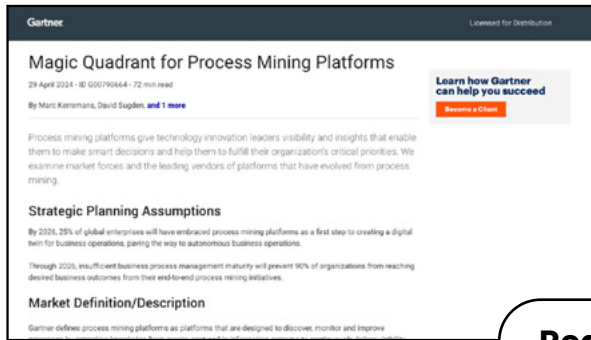
Read now

2024 Gartner® Magic Quadrant™ for Process Mining Platforms
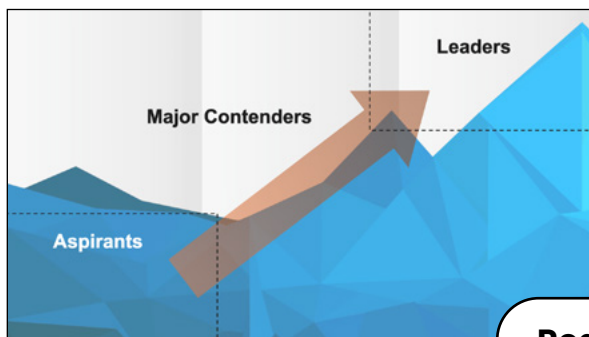
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Everest Group Process Mining PEAK Matrix Assessment 2024

Read now

HFS Horizons Report: Process Intelligence Products 2023

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