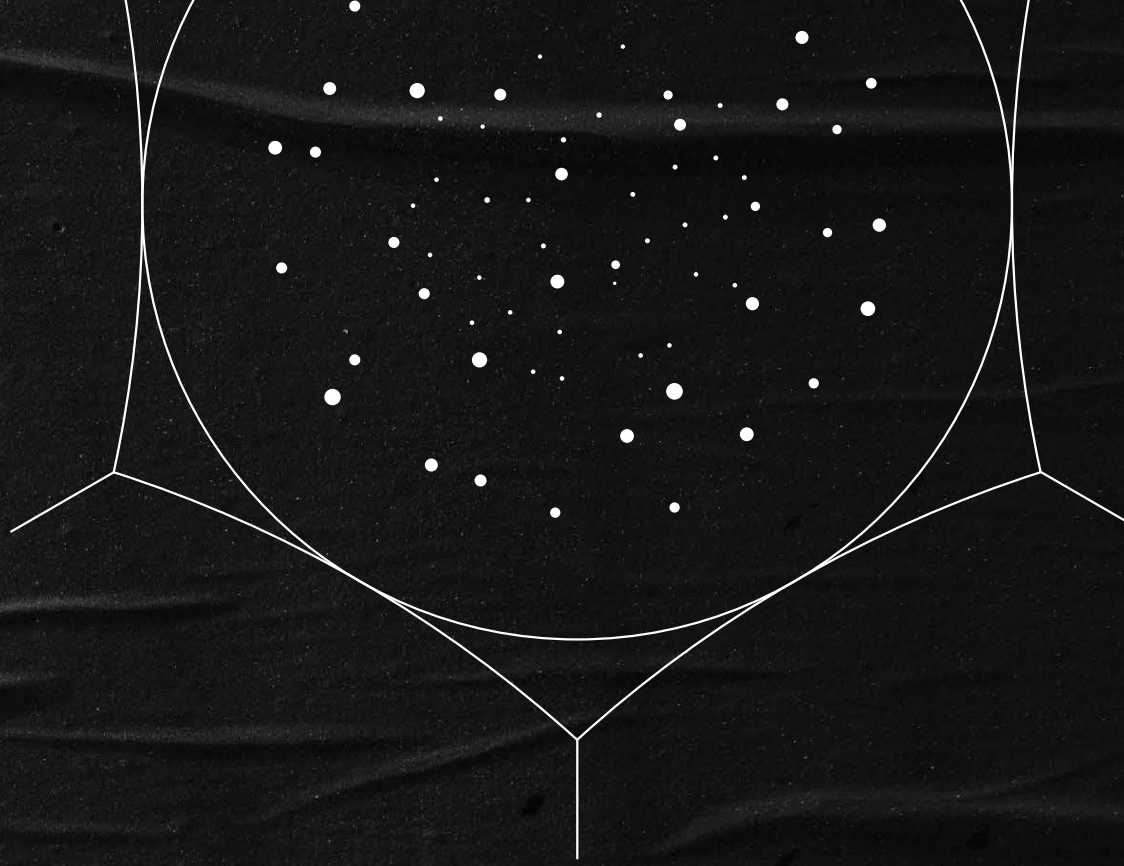


celonis



The Process Intelligence Guide

How to enable
Enterprise AI
at scale

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Working smart in the age of AI

We've entered a brave new AI world

The search for effective AI tools dominates boardroom agendas, with teams in every department, company, and industry tirelessly trying to turn AI's huge promise into commercial headway.

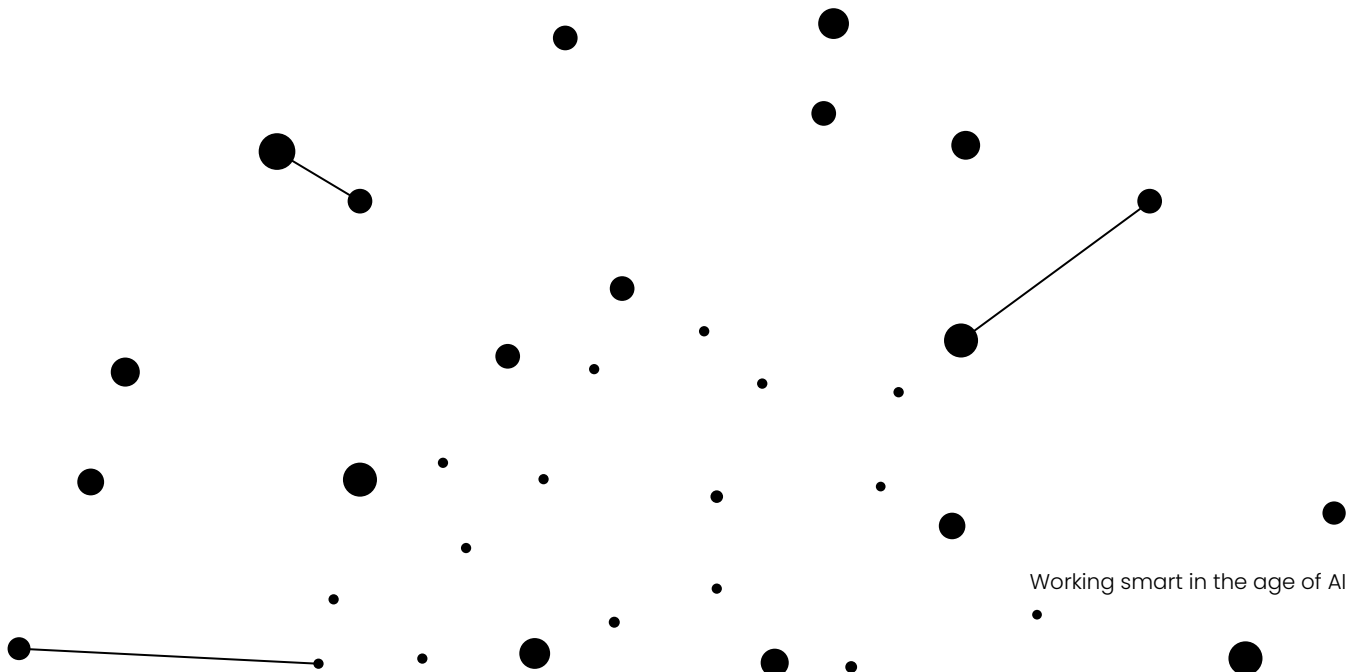
Business intelligence, big data analytics, digital transformation: all have had their moment in the sun, powering business breakthroughs. Now artificial intelligence is doing the same. But most companies haven't unlocked the full potential: only 5% of companies are getting real value from AI.¹

That's where Process Intelligence (PI) comes in.

Process Intelligence combines system data and operational context to create a living picture of how your business flows. PI is a common language for understanding and improving business operations, and it powers the composable applications of the future. It is the missing layer that completes your AI stack to make Enterprise AI really work.

You're about to step into the world of Process Intelligence and see how the journey to real AI ROI starts with your processes. We're excited to be the ones helping you do it. Let's go!

¹[BCG: The Widening AI Value Gap](#)



AI, processes, and PI

So you want to make AI work

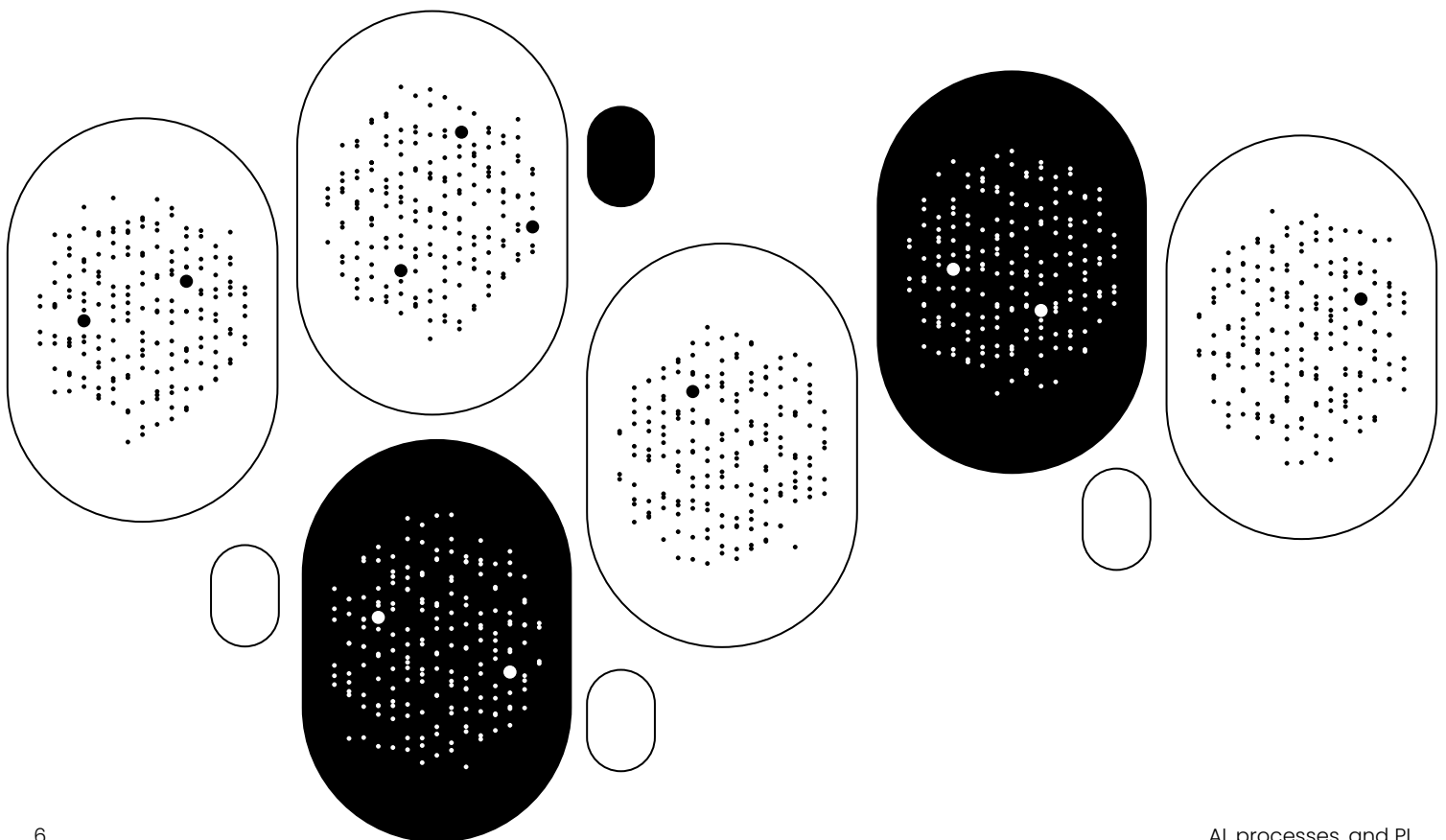
Why processes provide the blueprint

The humble process provides the single most accurate description of how a business runs. Track an invoice, order, or service case from creation to completion, and you get the context of a single workflow. Track hundreds or thousands of similar objects across your organization, and you're sketching out a blueprint of how your business runs.

For decades, the goal of process improvement practitioners has been to create this process blueprint and use it to streamline operations: securing optimal payment terms, paying vendors at the best time for cash flow, removing bottlenecks and roadblocks in finance, sales, service, and more.

But now, with the advent of AI, processes hold the key to a much greater prize: unlocking the full potential of Enterprise AI by giving it a map of your business.

However, too many enterprises struggle to provide this crucial context. Data is often trapped inside dozens or even hundreds of systems like ERPs and CRMs. Departments are speaking different languages. And processes are left running, but not working.



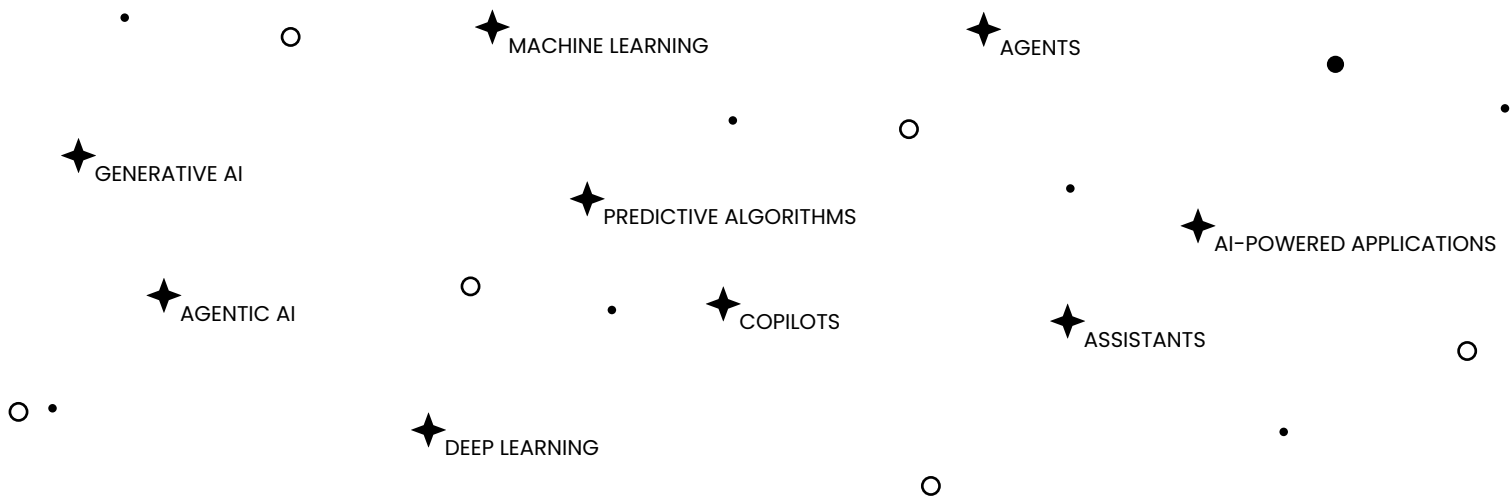
Over three quarters (76%) of businesses are just 'getting by' with sub-optimal processes that they know require improvement. Yet some 82% of global decision-makers say AI can only deliver RoI if it fundamentally understands how the business flows.²

To master AI, you first need to master your business processes. It's time to dig a little deeper into why this is proving difficult for most enterprises, and why AI RoI is far from guaranteed.

² [Celonis: The 2026 Process Optimization Reports](#)

Enterprise AI

Enterprise AI is not a single technology; it's the strategic practice of infusing AI into your operations. Developing an Enterprise AI discipline in your company means putting the tools, skills, and methods in place to deploy all kinds of AI-driven solutions: generative AI, agentic AI, machine learning, deep learning, predictive algorithms, agents, copilots, assistants, and AI-powered applications.



Meet the Process Intelligence Platform

Disconnecting the dots

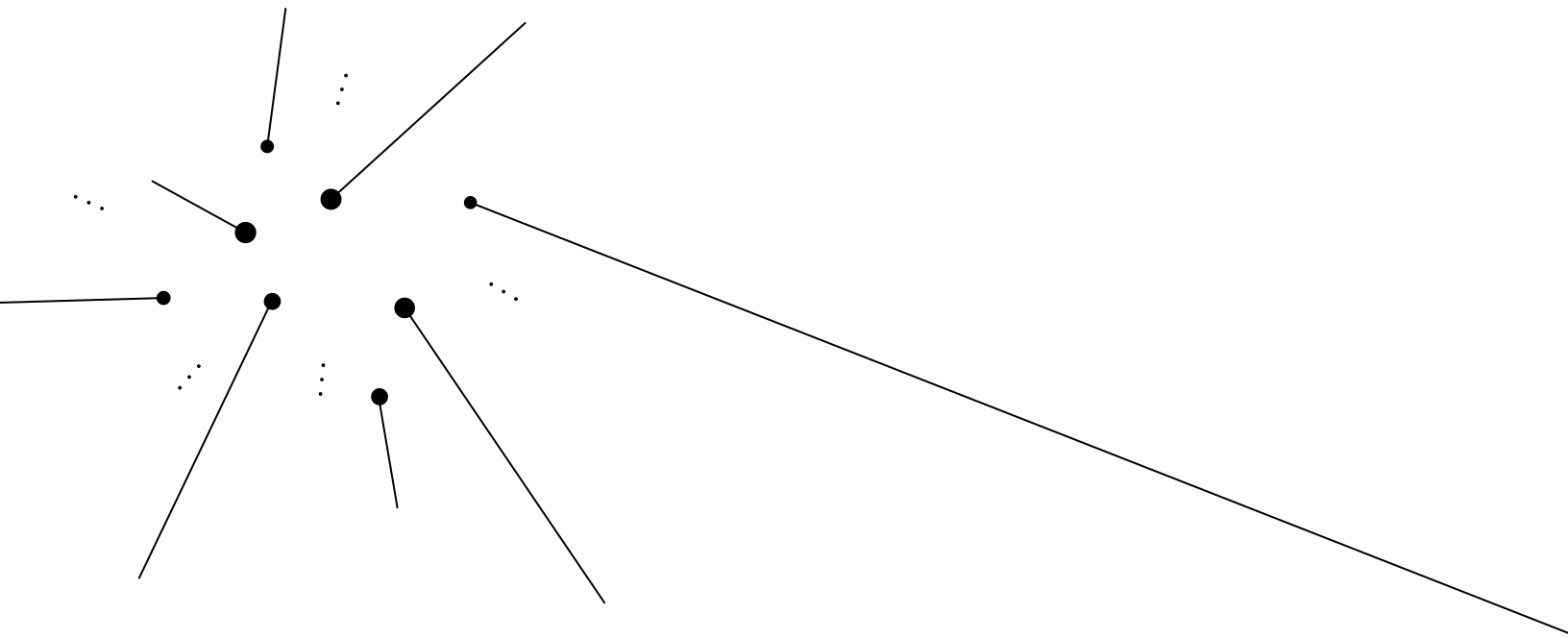
Why processes, operations, and AI stumble

Operations, Finance, Marketing, Sales – each department is made up of large and small processes dedicated to getting a product or service made, ordered, delivered, paid for, and (hopefully) re-ordered.

As a business grows, its processes and operations inevitably grow more complicated. New product lines, markets, teams, and customers lead to new demand on processes and operations. Every new workflow comes with new systems, which come with their own data models and integrations.

Processes that were once simple start looking like a plate of spaghetti. The Purchase-to-Pay process that took three steps now requires ten. A Lead-to-Cash process is stalled by systems that were never properly integrated. Order Fulfillment is hamstrung by communication failures. An increasing number of manual handoffs, workarounds, and unnecessary layers of approval introduce further delays, errors, and waste.

So transformation is slow, productivity is low, and value is lost.



Exacerbating all this, leaders and teams are now being pressured to add AI assistants, copilots, and agents into the mix. The intention is good: to simplify processes and ease manual work. Yet, the reality is this bolt-on approach results in failed pilots and low to zero RoAI (return on AI).

With each failure, the promise of AI to reinvent operations and supercharge the workforce appears to be a promise broken.

Why is AI failing to deliver ROI?

No business context: AI can't understand operations because of disparate and disconnected systems.

No strategy: It's difficult to identify high-value AI use cases without objective knowledge of how the business runs.

No orchestration: You can't just throw AI into existing operations. Processes need to be holistically re-engineered to incorporate AI.

The problems causing processes to remain overly-complex or broken are the same ones causing Enterprise AI to underwhelm. There's a great disconnect at the heart of most enterprises: departments speak different languages, systems don't play well together, and strategic goals fail to translate into effective execution.

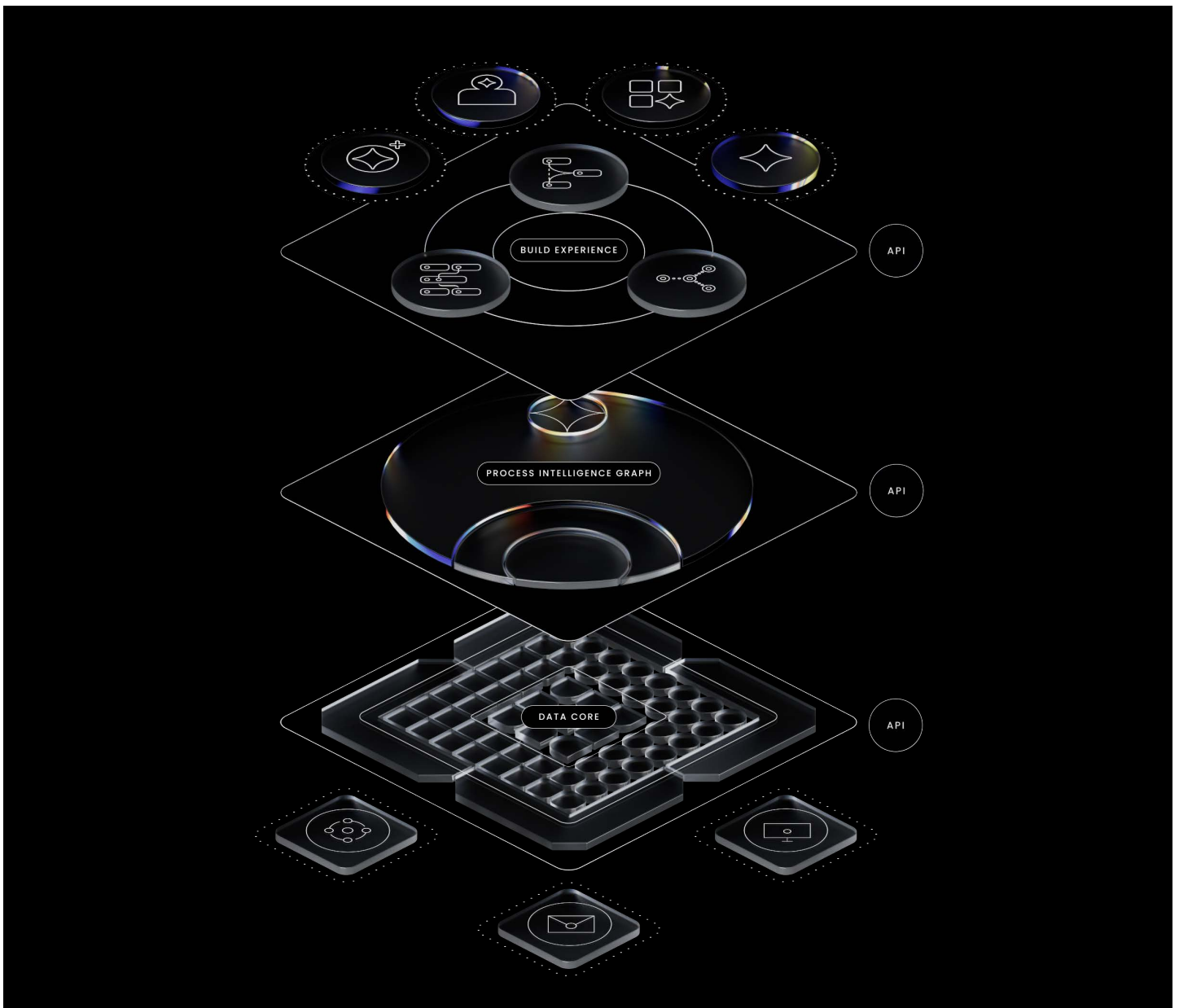
As a result, there's no shared understanding of how business-critical processes and operations run – or how to improve them. **This shared understanding is the essential context that AI – and your people – need to succeed.**

How the Process Intelligence Platform works

Meet the power behind PI

Because processes run across departments, systems, apps, and programs, they help you see how your business runs. Understanding exactly how, when, and where those systems, apps, and programs are being used throughout your enterprise – by harnessing the massive amount of useful data they generate – is the key to becoming an AI-driven enterprise.

Now, let's take a look at how the Celonis Platform unlocks that future.



I. Data Core

It all starts with freeing your processes from the restrictions of your legacy source systems.

The data inside your legacy systems is waiting to be let out. Using process mining and task mining, the Data Core allows you to extract the raw data from all of your systems, applications, and devices. Once data is freed and unified in the Data Core, you're able to query billions of records at speed, scaling seamlessly to the largest enterprise volumes.

Structured data from systems, applications, and third parties? No problem. Semi-structured data like emails and log files? Data Core's got it covered. Unstructured data like documents and desktops? You betcha.

II. Process Intelligence Graph

The Platform then takes your structured and unstructured data and enriches it with your unique business context – rules, KPIs, benchmarks, models, and enterprise architecture. Congratulations, you now have a system-agnostic, unique, living digital twin of your business operations.

This is the Process Intelligence Graph. It provides the end-to-end visibility you need to transform your organization, and the operational context your AI needs to succeed.

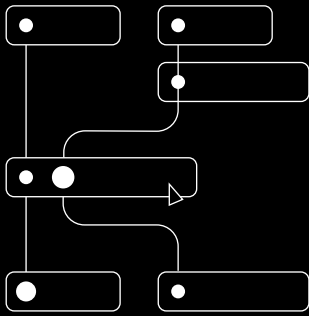
It is utterly unique. You can't get it just from your systems. Other vendors don't offer it. And AI cannot infer it from raw data alone.

Why the Process Intelligence Graph matters

Even though your sales orders are managed in one system, your product manufacturing in another, and your customer invoicing in another, the PI Graph can recreate the whole journey that every order takes from creation to production to cash – also known as a “digital twin” of your operations. And context is key: The PI Graph doesn’t just see the whole flow end-to-end, but also understands where there are deviations from the process as designed, and how these are impacting your goals and KPIs. It’s the difference between having a paper roadmap and a live view of traffic on Google Maps.

III. Build Experience

Data done, digital twin created, time to get building. The Process Intelligence Platform provides you with the capabilities to analyze, design, and operate composable, AI-driven processes. We call this the Build Experience layer. And it’s your final step to becoming the type of enterprise you’ve been dreaming of.

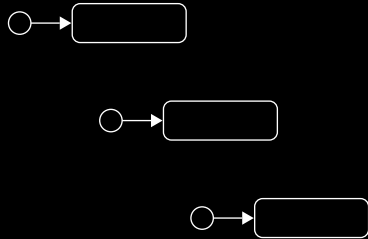


Analyze

Identify where to strategically deploy AI, and give AI the ability to sense, reason, and learn from your operations. Understand how processes are running and where there are inefficiencies. Identify areas to deploy AI to address these issues.

→ *In practice*

Manual back-and-forth communications with customers is slowing down Sales. An AI agent could automate some of this outreach.

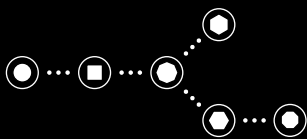


Design

With the help of AI, use the insights you've gained to create processes that run better. Model the ideal state of your processes, and re-engineer them to incorporate AI.

→ *In practice*

Present a model of the current Sales outreach process and how it will change once you deploy the agent.



Operate

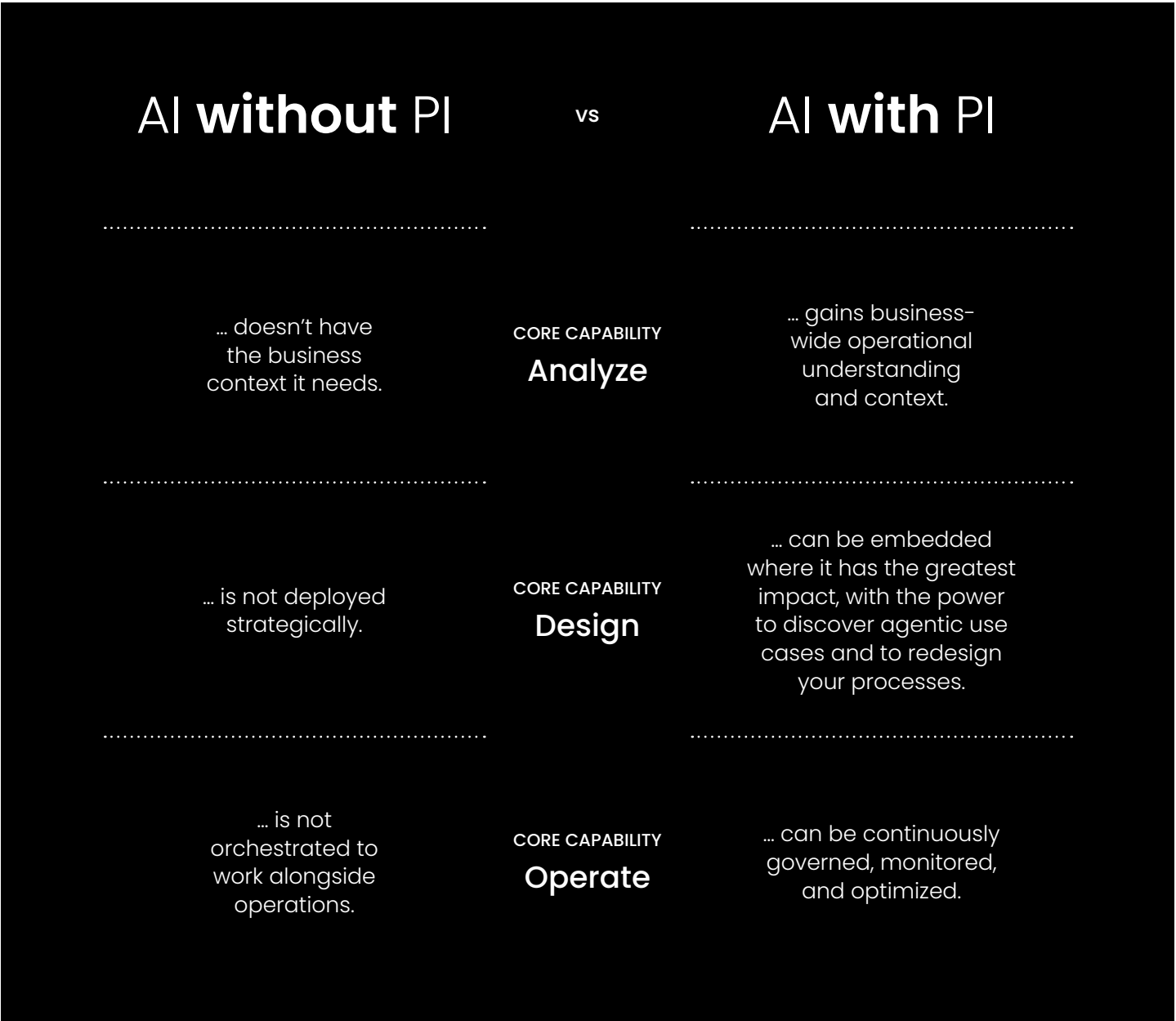
Bring your design to life. Run your new or improved process, ensuring agents, humans, and systems operate in sync toward shared outcomes.

→ *In practice*

Your new AI agent is deployed and you're orchestrating and monitoring its activity alongside your salespeople's actions to measure the impact.

The Celonis Orchestration Engine brings this all together so you can execute your plan end-to-end by coordinating agents, humans, and systems in real time. Every action, every result, is written back to the digital twin, meaning you're learning with each cycle, continuously improving, monitoring adherence, and creating more value with every change.

AI that knows how your business flows



It takes an ecosystem to make AI work

Good things grow from open ecosystems.
That's why **the Celonis Platform is built to be open.**

The road to Enterprise AI is just beginning for most companies, but one thing is certain: AI-driven solutions will not be delivered by just one vendor or system, but by a host of interconnected solutions. You need interoperability. And you should be able to modernize on your own terms, with partners who know your business best.

Your co-creators in this journey range from powerhouse tech and consulting companies that are household names, to smaller, independent software vendors who are blazing a new path (and are well on their way to becoming household names themselves). No matter their size, these partners are:

- Building new applications on top of Celonis to solve your specific industry challenges.
- Creating composable solutions fueled by the one thing that makes AI truly work in the enterprise: Process Intelligence.
- Extending the Celonis Platform every single day.

Make no mistake: **the future of the enterprise is AI-driven and composable.** We know it. Our partners know it. Now let's take a look at what a composable enterprise looks like.



The ever-expanding platform for the composable enterprise

The AI-driven and composable enterprise is built on modular capabilities. It can be assembled, reassembled, and replaced at speed and scale.

It adapts as systems change. And it does so without the friction that typically slows down large organizations. Think less “traditional corporate structure” and more “living organism.”

Many enterprises today want to operate this way. In fact, 89% of IT leaders say their strategy is to adopt a fully composable enterprise architecture.³ Process Intelligence is vital to achieving this.

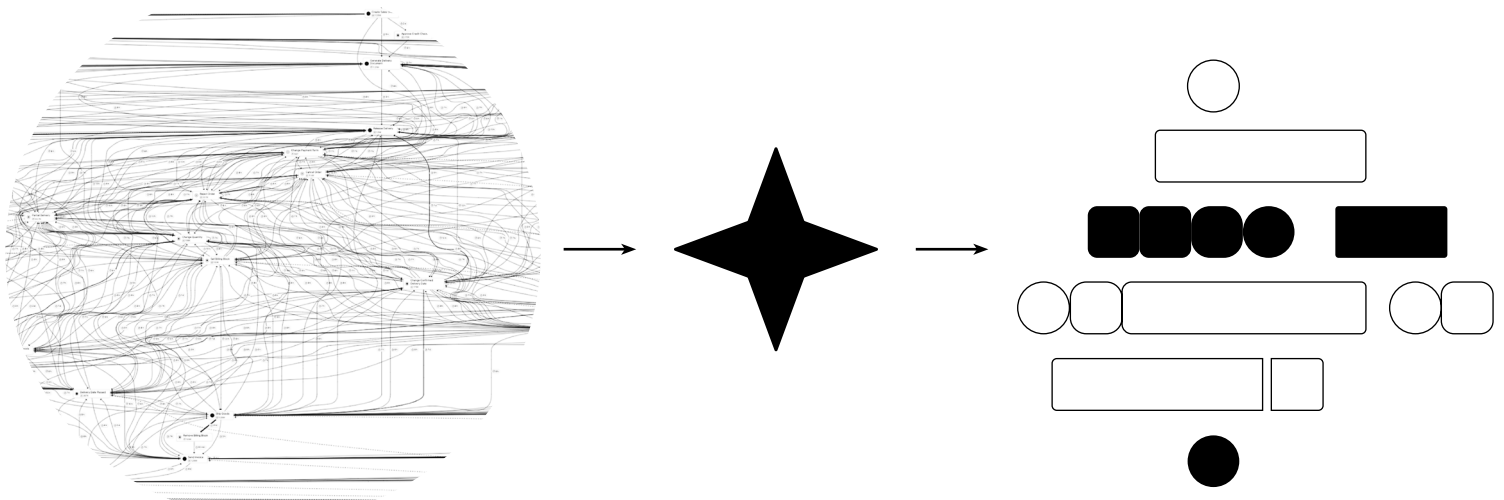
It allows human insight, automation, and AI to work together and reinforce one another. It turns your everyday processes into capabilities, which in turn become the building blocks for composable systems. The result is continuous, deliberate, and less disruptive transformation.

³ [Celonis: The 2026 Process Optimization Report](#)

The AI-driven and composable enterprise:

- **Improves continuously:** Instead of overhauling entire processes in one disruptive motion, organizations can refine or redesign individual capabilities without destabilizing what already works. Teams can improve parts of the system while the rest continues running. Each change becomes a building block for the next.
- **Adapts instantly:** Automated activities become repeatable and reliable. They turn into building blocks that operate consistently regardless of scale or season. Automation becomes less about eliminating manual effort and more about creating stable components the organization can build on.
- **Innovates freely:** Once processes are visible, modular, and free from system limitations, the enterprise can continually reshape itself. Instead of being shaped by the system, the organization shapes its own way of working.

The companies beginning the shift toward composability today aren't chasing a trend. They're building the operating model that future transformations rely on. Here are a few companies doing just that.



Process Intelligence in action

Process Intelligence in action

What Process Intelligence makes possible

Global Packaging Firm

Reducing excess inventory by enabling plant technicians to locate nearby warehouses with available spare parts, using real-time stock and maintenance data.

World-Leading Logistics Company

Minimizing repeat customer contacts and improving case prioritization by using Celonis AI-based pattern recognition to identify key drivers and predict occurrences.

Global Retail Group

Leveraging the AI-driven Insight Explorer to optimize perfect orders, cutting analysis time by 50%, unlocking 1.2x cost savings, and boosting insights by 30%.

Multinational Consumer Goods Company

Optimizing working capital by extracting payment terms from PDF contracts to ensure invoices leverage negotiated terms through automated four-way matching.

Fujitsu

Transparency, an
AI-innovation award,
and shipment costs
reduced by one-third

Fujitsu has a long history of reinvention and resilience. Well-known for its hardware solutions, the company recently set out on a new journey: delivering world-class IT and digital transformation services.

Under the leadership of Kazushi Koga, Fujitsu Japan used Celonis to create a digital twin: showing how Finance, IT Service Management, Master Data Management, Supply Chain, and Inventory Management processes run – and how to make them work better.

In one instance, Celonis found that orders were placed as emergency shipments in over 30% of cases. Reducing this number was an easy way to cut shipment costs. This also made Fujitsu realize Celonis could help them take back control of safety stock.

“With Celonis we were able to integrate the data dispersed across 11 systems in just one month,” explains Kazutomi Taneda, Fujitsu’s Director, Spare Parts Operation Dept.

Now buyers have a single source of truth about stock levels across Fujitsu’s factories, as well as AI-backed information about market developments and customer demand.

The results:

- 20% reduction of safety stock
- 50% fewer inventory orders
- Huge productivity gains
- Internal award for AI innovation

“Our next step is to combine multiple processes in Celonis using AI,” says Koga-san. “If we think about multiple processes combined with our AI, we can support our customers to completely transform the efficiency of their business.”

[Read Fujitsu’s full customer success story here](#)

Florida Crystals

Millions in working capital unlocked in months

It's no secret that an ERP migration is neither simple nor fast. Completing it in two years is considered rapid – three years plus is more typical. But with Celonis, Florida Crystals pulled it off in 12 months.

"It took us only three weeks to see our entire Source-to-Pay and Order-to-Cash process," recalls Florida Crystals VP and CIO, Kevin Grayling. "We got an extremely fast and detailed understanding of our process adherence and where we had process issues."

Creating a digital twin of Source-to-Pay, Celonis provided unprecedented visibility into where Florida Crystals had previously left money on the table. Celonis also enabled smarter invoice processing, prioritizing invoices by cash flow impact rather than first in, first out.

Believing that in the near future, people will only interact with their data through GenAI prompts, Grayling's desire is to make Florida Crystals an AI-enabled enterprise. As a first step, it's begun to use the Celonis AI Copilot to democratize process optimization.

Working with Celonis, Florida Crystals:

- Reduced the number of duplicate payments by 98%
- Migrated ERP in just 12 months
- Saved millions of spend through prevention of duplicate payments and cash discount losses

[Read Florida Crystal's full customer success story here](#)

State of Oklahoma

Streamlining workflows, smoothing out experiences, saving tax dollars

Using a government service like renewing a license or claiming social benefits does not often create joy. But there are public sector pioneers out there overhauling old processes to deliver better experiences. The State of Oklahoma is one.

In April 2023, a report from Oklahoma's Legislative Office of Fiscal Transparency revealed the state's purchasing was far from compliant: Oklahoma's agencies spent \$3 billion – about a quarter of their budget – without oversight in 2022.

It was time to get the house in order. The state's central purchasing agency known as the Office of Management and Enterprise Services (OMES) used Celonis to oversee 100% of their spending, reduce the possibility of maverick buying, minimize fiscal and legal risks, and save millions – all in twelve weeks.

It has even deployed an AI Copilot to flag and exempt purchase orders, resulting in direct financial savings and efficiency gains – money the state can reinvest into critical public services.

Jerry Moore, state chief transformation officer and OMES deputy director, says: "We are just scratching the surface of what Process Intelligence can do for the State of Oklahoma. Wherever there's a process, there's an opportunity to improve it with Celonis."

With Celonis Process Intelligence, the State of Oklahoma:

- Reviewed \$4.5B+ worth of POs in less than 12 weeks
- Achieved 200x faster auditing
- Cut 64 days from Procurement cycle times

[Read the full customer success story here](#)

Recap and next steps

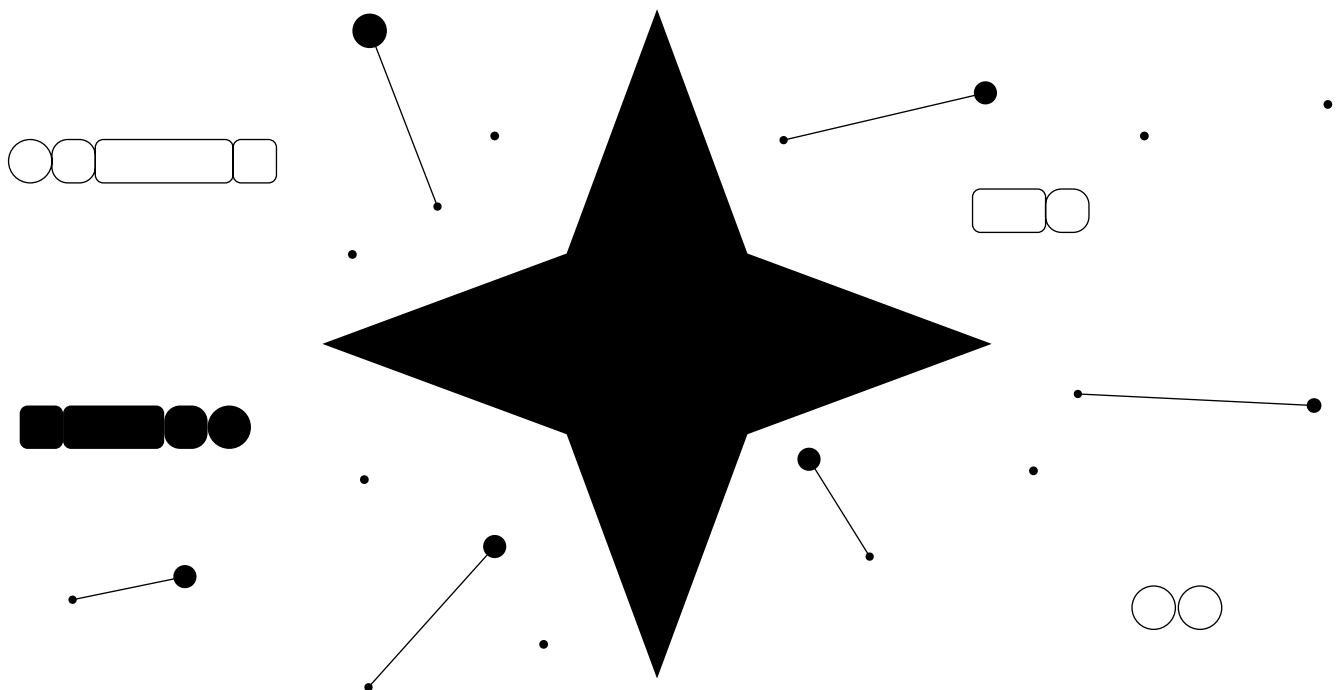
Making PI & AI work

If you believe the enterprise of the future is AI-driven and composable – as we do – then, by reading this, you’ve learned the Process Intelligence Platform is the key enabler of that future.

Our platform connects people, processes, technologies, and data within and across organizations. It builds a unique living digital twin of operations: system-agnostic, unbiased, and dynamic. Thanks to this digital twin, enterprises free their processes from underlying systems, get a shared understanding of how to improve operations, and deploy Enterprise AI strategically at scale.

The Process Intelligence Platform gives you the data-driven insights you need to define and reinvent the AI-driven, composable future of your enterprise operations. By decoupling from legacy data and systems, you won’t just be fixing problems, you’ll prevent them altogether.

In short, you’re ready for the future. That’s Process Intelligence. That’s Enterprise AI. But that’s definitely not the end. Up next, we’ve got some suggestions for where to go from here.



What happens next?

- Understand assistants, copilots, agents – and how orchestration gets them working together – in our free ebook, [Destination AI](#).
- Analyze, design, operate: Learn how [PI maximizes RoAI](#) in your enterprise.
- Cover all the need-to-knows about process mining, and its role in Process Intelligence, in [Process Mining For Dummies, Celonis Special 2nd Edition](#).
- Allow us to introduce you to the Celonis Platform itself... [watch our on-demand Celonis Process Intelligence demo](#).

About Celonis

Celonis makes processes work — for people, companies, and the planet. Powered by process mining and AI, the Celonis Process Intelligence Platform integrates process data and business context to create a living digital twin of business operations. We enable thousands of companies worldwide to understand how their business actually runs and, together with their partners, build intelligent solutions that transform and continuously improve the way they operate — unlocking billions in value.

Celonis is headquartered in Munich, Germany, and New York City, USA, with more than 20 offices worldwide.

Find out more at celonis.com

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