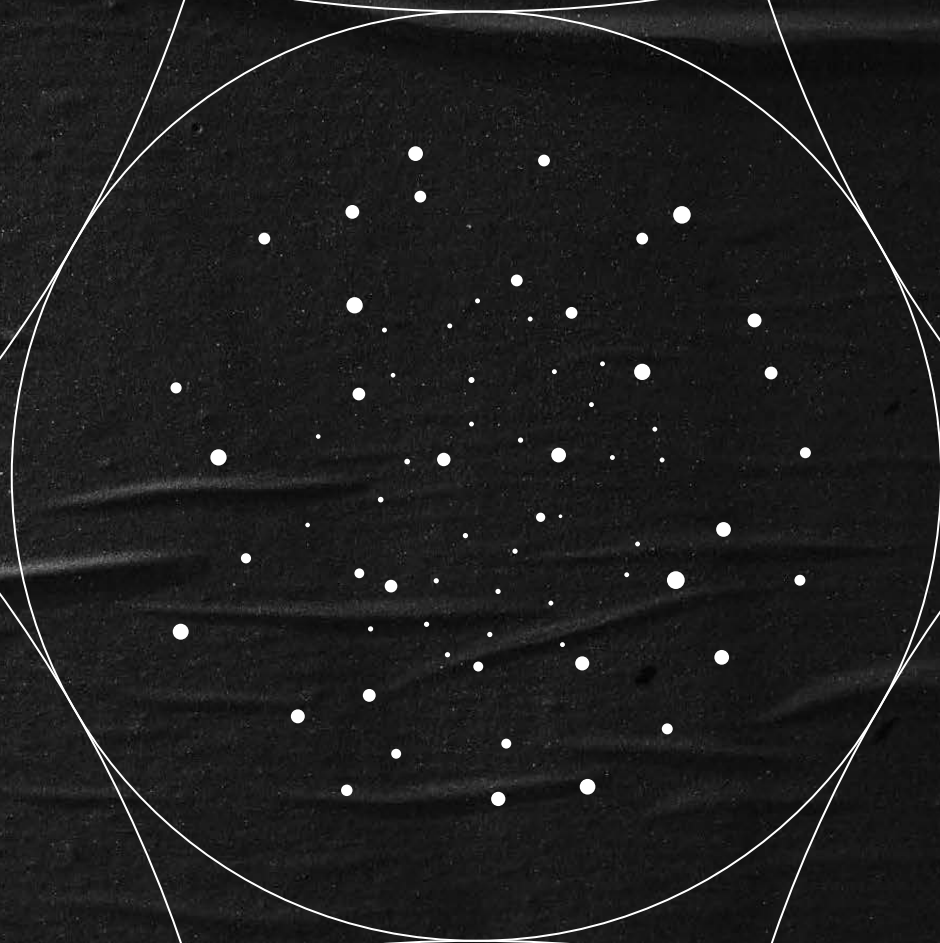


celonis



Meet Process Intelligence

The connective tissue for business

Welcome to the intelligence era

Businesses have always invested in new technologies to stay relevant and sharpen their competitive edge. We used to live in the data era. Businesses spoke in terms of big data, data analytics tools, and data processing platforms, as they tried to get as many insights as possible.

Today, that's evolved into the intelligence era.

Companies are now using that data for actionable insights that lead to maximum business improvements. The modern intelligence stack is being built out: first with business intelligence, then with data intelligence, followed by system intelligence, and most recently, artificial intelligence.

Against this backdrop we see the emergence of something new: Process Intelligence. The name might not mean much to you right now, but by the time you've finished this definitive guide, you'll know exactly what we mean when we say Process Intelligence is a game-changer — for the good of people, companies, and the planet.

Since processes are crucial to unearthing the insights and knowledge needed to take real action that captures value, Process Intelligence is the missing piece in businesses' decision-making ability. So you're about to take a big step toward finally capturing the value that's been hiding in your processes. We're excited to be the ones helping you do it.

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Processes: the levers to create value and control change

Even the most everyday, seemingly simple processes can be unexpectedly complex. Paying the humble invoice, for example, can involve numerous variations in how it's prioritized and paid. When processes work well, businesses buy with the best payment terms, pay at the optimal time for cashflow, sell without needless credit checks getting in the way, and ship on-time (nearly) all of the time.

When processes don't work well, orders are canceled even when product is in-stock, teams pay invoices more than once (yes, it happens), and teams continually get bogged down in monotonous tasks that technology could solve in seconds.

By getting processes into shape, businesses can make a significant top-, bottom- and green-line impact. (More on all that later.) Improving cash, improving efficiency, driving revenue, cutting waste – all these can be done much more easily if you do them process-first.

Not so long ago, this was a shocking new idea. But times have changed and **businesses around the world are recognizing the importance of processes: as the greatest lever for value and the fastest lever for change.**

Some 80% of business leaders worldwide told **our survey** that processes are the “lifeblood” of their organization, and 99% see it as essential or important to optimize their processes to meet objectives at an organizational level.

If you're reading this, it's likely you understand the importance of processes – so what's getting in the way of progress?

The great disconnect preventing progress

No matter how differently organizations might believe they operate from each other, there are some things that make unwelcome repeat appearances: departments speak their own language, systems don't play well together.

This disconnect leads to processes that are designed one way (nice and linear), assumed to operate in another (almost linear with a few minor variations), and actually run completely differently to both (nowhere near linear with a vast amount of variations). As a result there's no shared understanding of how the business actually works.

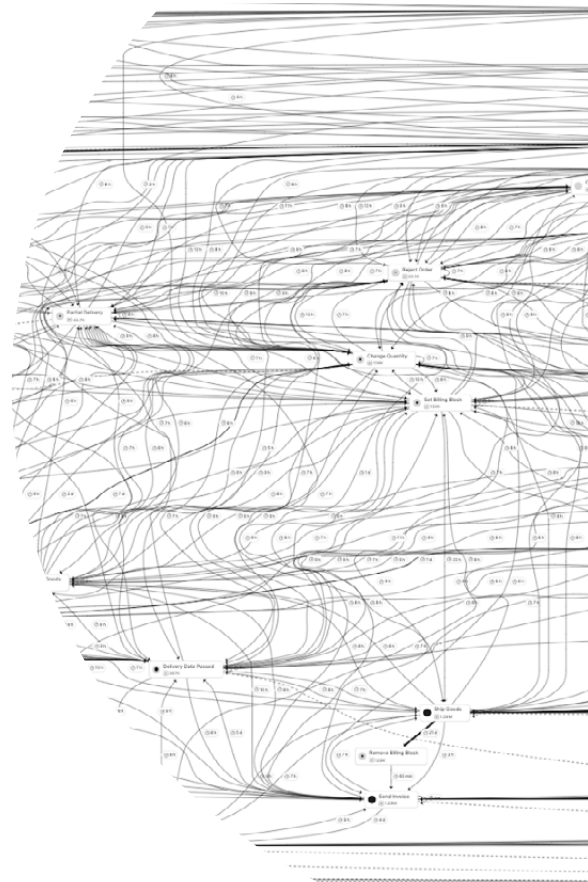
How the process was designed



How businesses think the process runs

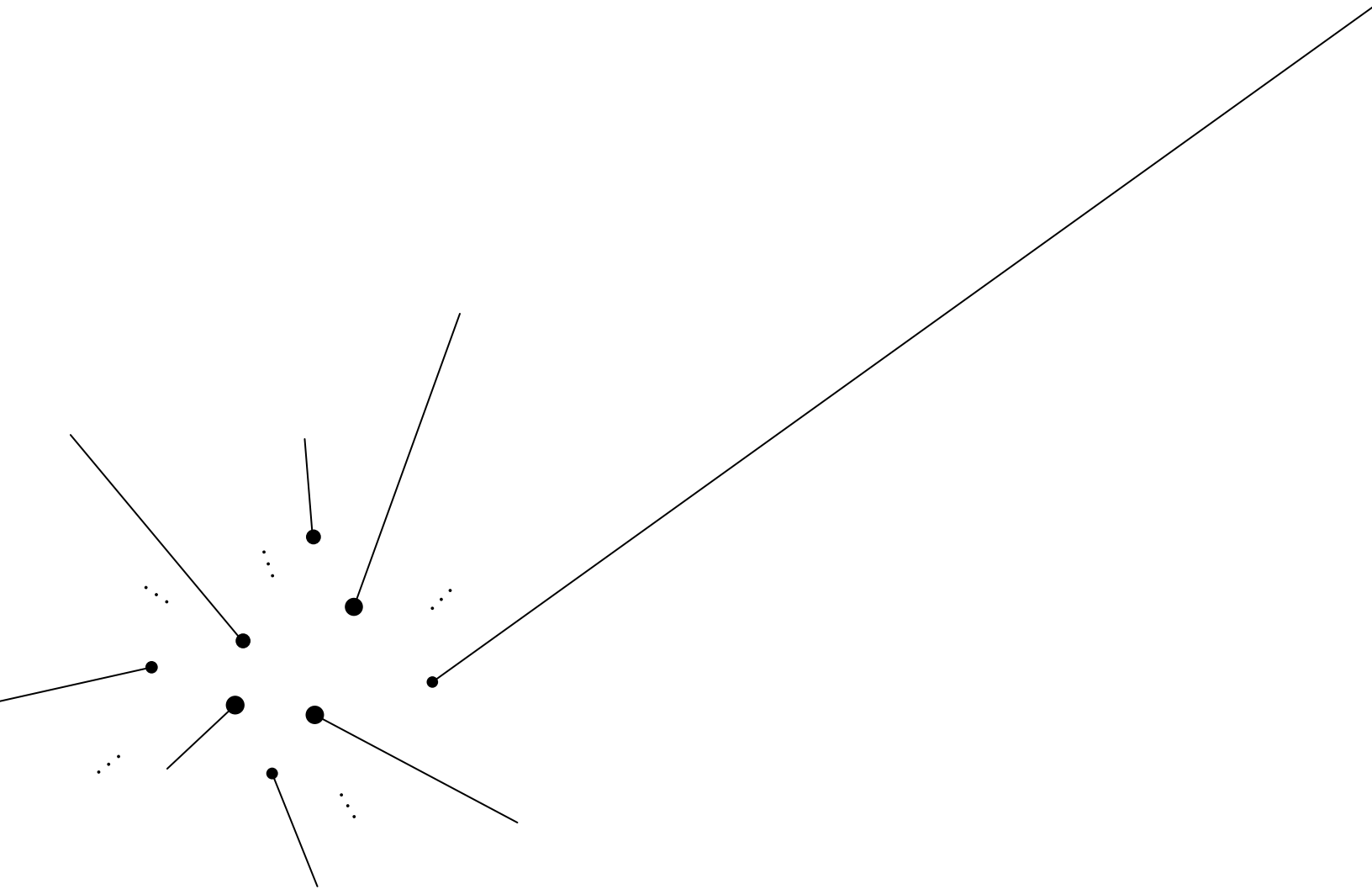


How the process actually runs



Even if you've invested in technology to help close this gap, your system observability and data analytics tools don't give you all the visibility, collaborative power, and orchestration you need.

To add insult to injury, the disconnect not only harms how a business runs, it makes the very processes that power the business hard to see and harder to improve. So value is lost. Efficiency is low. And customer needs are left unsatisfied.



How Process Intelligence works

Fortunately, the solution to the great disconnect also lies in your processes.

Because processes run across departments, systems, apps, and programs, they create a massive amount of useful data. Inside that data lies the possibility to understand exactly how, when, and where those systems, apps, and programs are being used throughout your enterprise.

Using the right technologies to work with this data, you can observe and optimize entire processes, and not only get better at keeping the business running – you can better execute transformation projects and deploy tools like AI. At Celonis we've packaged up those technologies into our Process Intelligence platform.

Time to get a little technical to describe how Process Intelligence works.

Inside processes are business objects – things like invoices, purchase orders, deliveries. These objects leave a trail of breadcrumbs, whether it's an invoice making its way from "requested" to "paid," or a customer service ticket going from "submitted" to "resolved." These digital footprints are called events.

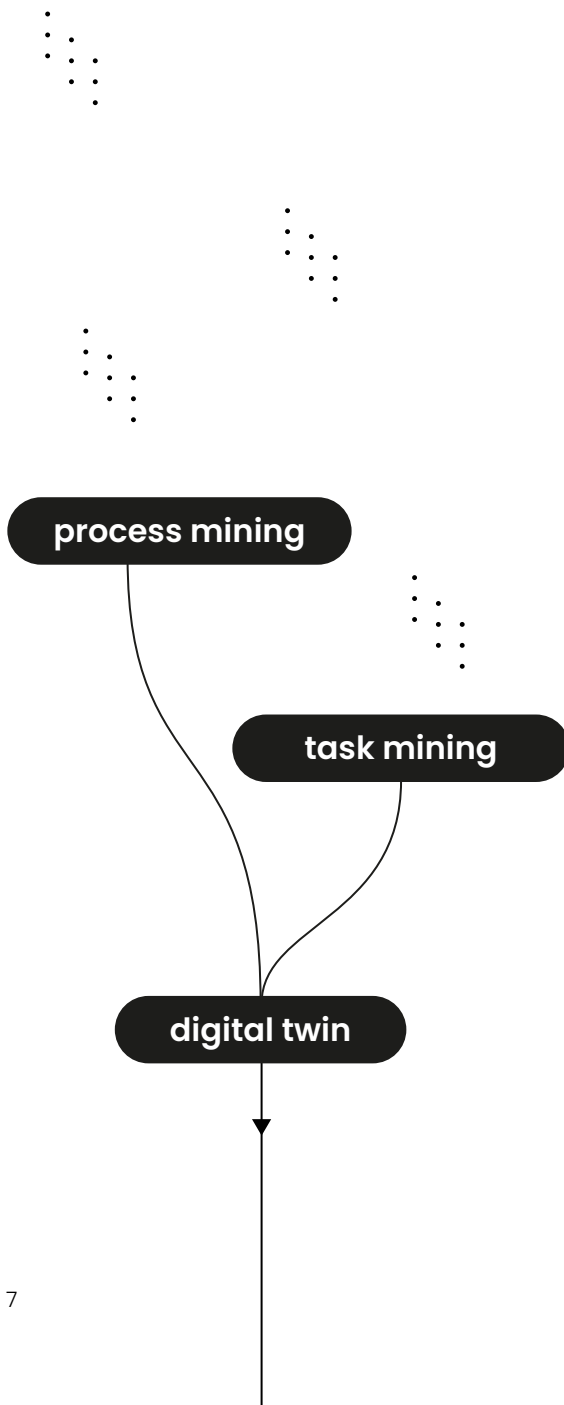
Process mining technology picks up these breadcrumbs by ingesting system logs of these events, and visually reconstructs what's happening in the process.

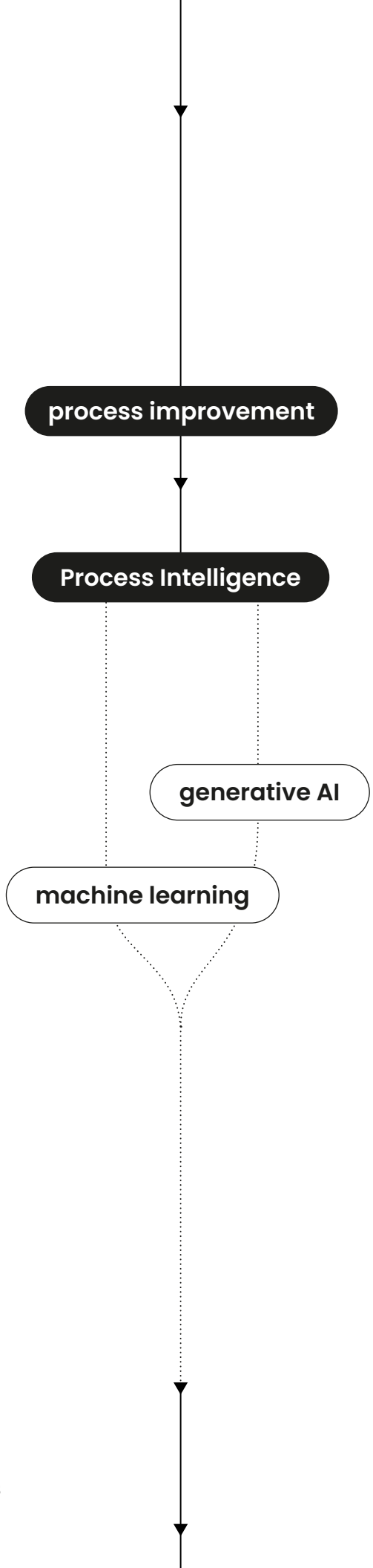
Once process mining provides the objective starting baseline of how your processes operate today, task mining comes in.

While process mining extracts business data, **task mining extracts user interaction data – like filling in a PO or checking the amounts are correct in a tool like Excel.**

So now we know how processes run on and off system. Together, this creates a living, breathing, moving process digital twin of the enterprise.

Next up: figuring out where hidden opportunities for value lie.





The Process Intelligence platform uses process improvement knowledge — basically, your company’s unique business context — to do exactly that. Things like how your organization defines on-time delivery, the relationship of opportunities like unshipped orders to strategic objectives like improved revenue, and what “good” means for you when it comes to working capital.

Process improvement knowledge makes sense of all the data. It is made up of a decade’s worth of Celonis implementations plus your own institutional knowledge.

The application of this process knowledge to your data produces **Process Intelligence: a common language for how your business is running, revealing why, and where hidden value lies.** And because Process Intelligence is system-agnostic, it can take data from any source and give you a truly objective and unbiased view of your end-to-end business processes, and the value hiding within. This allows you to analyze, improve, and monitor your processes like never before.

That’s where other technologies come in — including generative AI and machine learning.

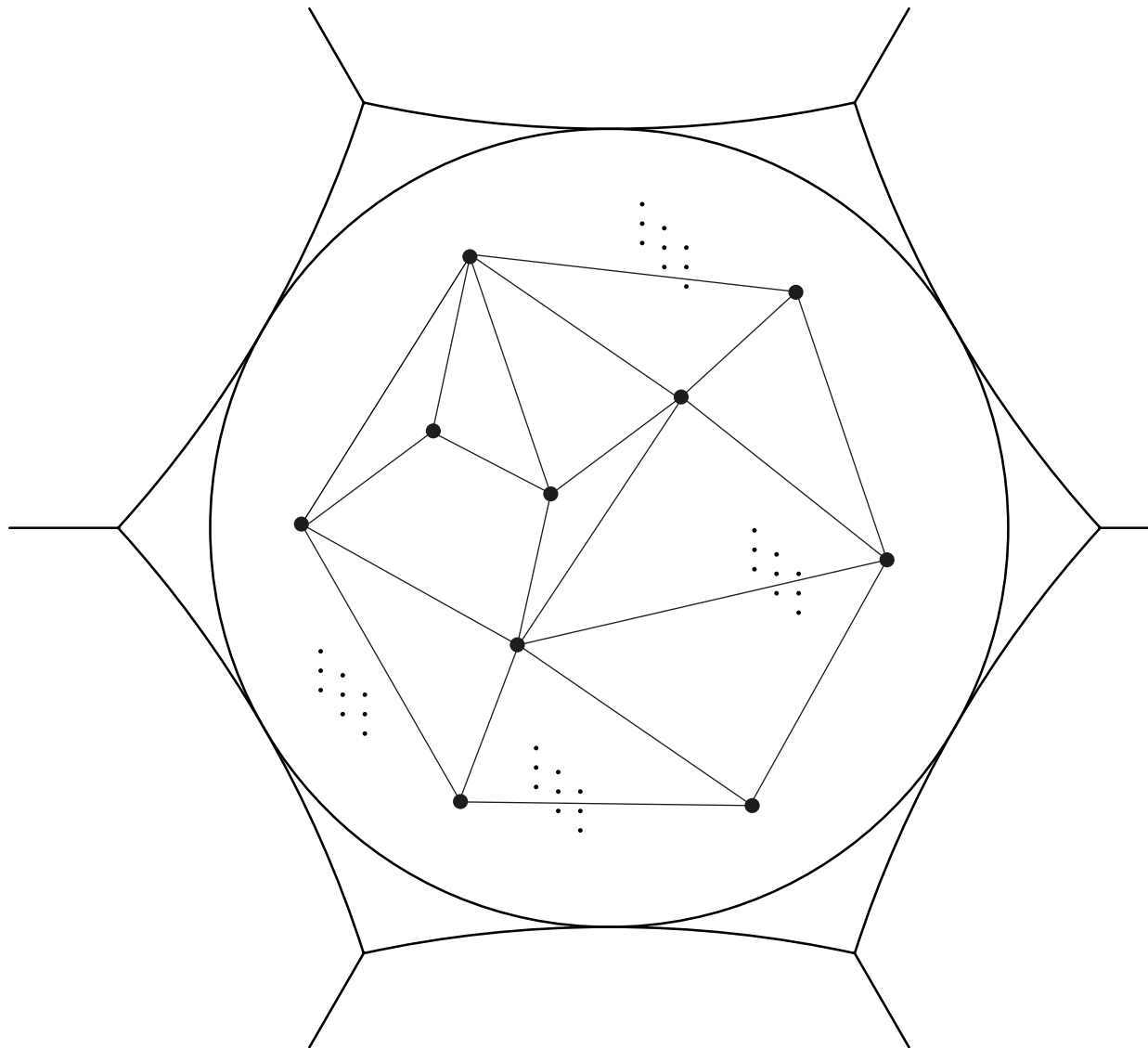
These technologies build on the data foundation from process and task mining and the productized process knowledge to make it easy to get insights fast via natural language chatbots or use powerful algorithms to produce predictions, recommendations, and even automate process steps.

process modeling

Finally, to help you operationalize change across your business, technologies like process modeling come in.

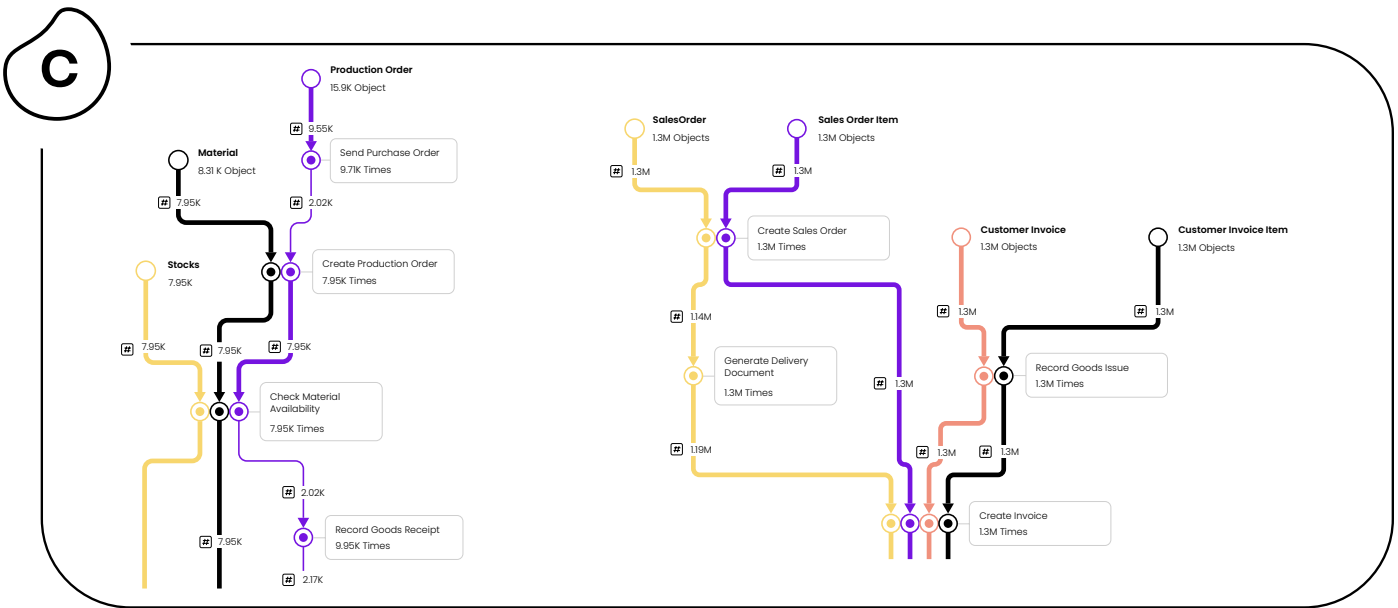
Process modeling creates a repository of institutional knowledge on how the business should operate, including the structure of your process landscape.

Process modeling helps you to: design how you want your processes to run, capture the organizational structures and hierarchies in your company, understand which systems are required to run your processes, and document which processes are related to one another so you can identify critical handoff points between departments.



What Process Intelligence makes possible

Process Intelligence is purpose-built to unlock business value. It provides leaders and their teams with unprecedented clarity of their businesses as they truly operate, rather than how they think they operate. It provides both the roadmap to process optimization and the vehicle to get there.



Process Intelligence connects you to your processes

– Get a living, moving, digital twin of your end-to-end business processes. It's system-agnostic and without bias, so you can objectively see where faulty processes are creating issues like paying duplicate invoices, making needless credit checks, and shipping goods without invoicing for them.

It connects your teams to each other

– Give everyone a common language for how your business runs. Without it, the supply chain people talk about SKUs and shortages, finance speaks of ROI and cycle times, while IT talks about scope configurations and changes to tables. With a common language, you create the shared understanding needed to find and capture value in processes.

And connects technologies to the business

– Make the use and adoption of existing and new technologies smoother. Process Intelligence provides context for root cause analysis and workflow automation with AI, and pinpoints the “why” behind the bottlenecks and issues your BI tools flag. It also feeds into applications your people are already working in, giving them additional process insights from their tools.

Find and capture value fast

There is a huge amount of value hiding in processes. Capturing that value could be fairly straightforward and rest on one process – like ensuring every shipped good gets billed. But when that value is hiding at the intersection of several processes, it's more complicated.

Here's how Process Intelligence finds and captures value in the pharmaceutical industry, for instance.

The Celonis platform enables end-to-end transparency by connecting production batches with sales order and delivery documents, so you can clearly see what's contributing to delays in order-to-deliver. Businesses can create and deploy an app that surfaces issues proactively along the process chain to trigger immediate corrective actions.

Other Process Intelligence use cases include:

- Streamlining credit checks on customers, so order-to-cash processes run faster and don't damage customer relationships.
- Recouping millions of dollars by matching credit memos with open invoices, thanks to visibility across systems.
- Reducing the time and manual effort to identify and prioritize which deliveries to ship, saving millions of dollars in late deliveries that impact top-line performance and long-term customer satisfaction.
- Preventing tickets being re-assigned multiple times, which hugely impacts SLAs, quality of service, response time, and customer satisfaction.

Take a look at some real-world results:

**Fortune 500
Car Insurance
Company**

Applying AI to get insights from claims notes taken by case workers – unstructured data – to better understand a customer, identify risks, and prevent unearned payouts.

**Fortune 100 Oil
& Gas Company**

Saved **\$100M+** in duplicate payments to suppliers by detecting duplicate invoices missed by the ERP and existing duplicate detection solutions.

**Fortune 500
CPG Company**

Identified **\$3M** in excess stock due to duplicate materials across six plants, reducing holding costs for excess stock, purchasing spend, and revenue leakage from production downtime.

How PI makes AI work for the enterprise

Artificial intelligence has landed for the enterprise world. And there's no shortage of raw data sources to feed it. Problem is, if there is no business context to accompany the information, AI's usefulness at work is limited. Here, Process Intelligence comes into its element again.

If you're familiar with how vast data repositories such as Wikipedia fuel ChatGPT, Process Intelligence works in much the same way for Generative AI. Specifically, Process Intelligence provides AI the contextual data it needs to understand how your processes interact and actually run. Without it, artificial intelligence lacks that crucial situational information around why processes run the way they do and, therefore, how they can be improved. It's the difference between something like RPA bots, which can simply follow a series of steps, and technology that can dive deep into your processes to help you make intelligent decisions for your business.

Process Intelligence is the piece that makes your company AI-ready by enabling AI to speak the same language as your different departments, systems, and processes.

Embed, build, enable: Make AI work for your enterprise

Here's how Process Intelligence brings valuable AI to every process in the enterprise:

Embedded

AI in the Celonis platform means you can immediately leverage ready-to-use solutions for fast insights and value.

Build

with AI using the Celonis toolbox for custom solutions.

Enable

AI anywhere in your tech stack by feeding Process Intelligence insights into your existing copilots, agents, and algorithms.

Optimize beyond the borders of a single company

One of the most exciting innovations made possible by Process Intelligence is how improvements within your organization are amplified and ripple out.

Process Intelligence creates a network effect that drives the standardization of processes and operations across departments and even companies. The benefits of a common language extend beyond the borders of a single company by facilitating shared understanding with and across organizations. A lingua franca for our global economy.

Just as Process Intelligence improves the usefulness of AI for your organization, this feeding of data also enables cross-company benchmarking, creating the right foundation for networks. Sharing data and intelligence between companies can foster macro goals such as supply chain ESG improvements, so we can all decrease our carbon footprints.

Process Intelligence change-makers: it could be you

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.



Why shouldn't you be one of them?

Three customer success stories are coming up next. But click below to find out more about:

- **Finding hidden value**
recommended for Process Excellence pros
- **Making decisions with precision**
Finance experts, over here
- **Winning and keeping customers for good**
Supply chain supremos, this is for you
- **Building a stack fit for any future**
IT pros, click here



\$35M annualized working capital benefits for Accenture

The Procurement function of this globally renowned professional services company aims not only to enable the business by covering all the transactional aspects of Procurement quickly and efficiently, but to do so while driving innovation and responsible buying.

360-degree relationships with its suppliers are paramount and “Technologies like Celonis are there to make the transactional side as efficient, as transparent, and as predictable as possible so that I can invest in the relationship side,” said Kai Nowosel, Accenture’s CPO.

The platform has helped Nowosel streamline to release funds Accenture can then use to create additional value and a competitive edge. He’s gained the insight to drive standardization in a decentralized organization.

Process Intelligence has helped Accenture:

- Slash Request-to-Order cycle times by 50%
- Reduce invoice approval time by 30%
- Optimize client procurement operations and working capital

Accenture is now using the platform to prioritize invoices based on their impact on KPIs, which benefits working capital but also reputation and long-term strategic relationships with suppliers. The opportunities Accenture has seen with Celonis are “limitless”.

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



Saving over €66M through Procure-to-Pay for Deutsche Telekom

For Deutsche Telekom Services Europe (DTSE), a subsidiary of Deutsche Telekom, success means providing innovative, high-quality, end-to-end shared services across the company. A highly digitized Procure-to-Pay process for the entire Deutsche Telekom group is at the core of it.

Handling over 2M order items – with an order volume of more than €7B – and processing almost 9M invoices a year, the slightest hiccup in the value chain could mean millions in losses. Although DTSE had successfully digitalized all of its core processes and was aware of some pain points, it struggled to zero in on the root causes of the issues and, by extension, act on them.

By connecting data from more than 10 source systems, including SAP Ariba and Salesforce, to the Celonis platform, DTSE gained unprecedented visibility into its process flows. Armed with an always up-to-date knowledge of how its processes actually run, DTSE can now not only define new KPIs, but also develop an early warning system for the KPIs going off-track.

DTSE has:

- Achieved a cash discount rate of 96% through real-time reports
- Automatically prioritized invoices to drive an on-time payment rate of over 90%
- Increased the no-touch rate to free up tactical resourcing for €12M savings

[Read Deutsche Telekom'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 of them.

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 without oversight in 2022, about a quarter of their budget.

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

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 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

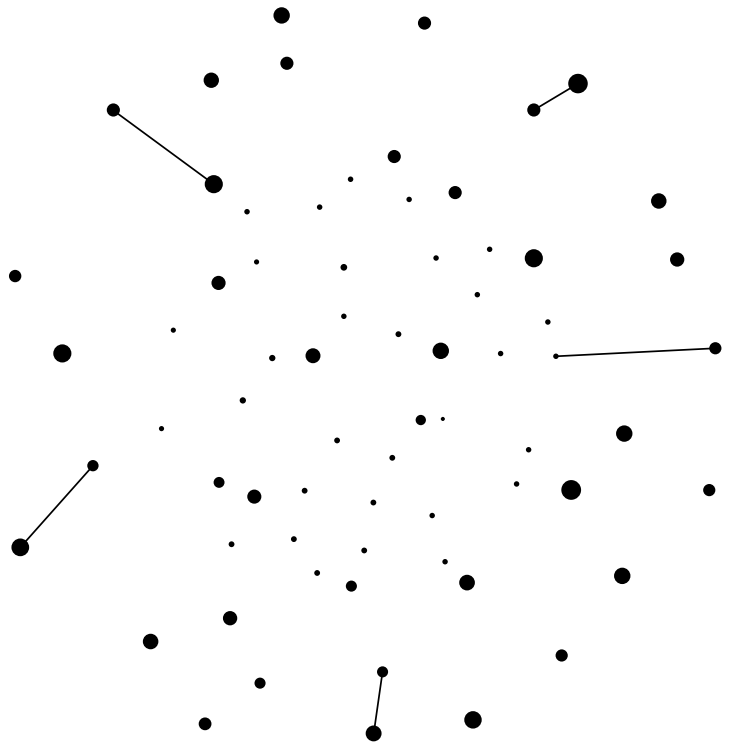
[Read the full customer success story here](#)

Could Process Intelligence be a game- changer for you?

We hope you agree “game-changer” is a fair assessment of Process Intelligence. Or that we’ve at least piqued your interest to take a look at how valuable its varied uses could be for your business.

It’s not designed to overhaul how your business operates, but to use the data you’ve already got to uncover opportunities in the processes you already rely on. With our decade of process improvement knowledge and AI to show you where value is hiding, you can empower your people with easy-to-action insights, and effectively deploy technologies like AI and automation to improve how they work together.

All this means that change might keep coming, but now you have a way of keeping on top of it – continuously.



What happens next?

Take what you've learned about Process Intelligence further...

- Go on an **interactive journey** through the themes we've discussed here in 'Process Intelligence 101'.
- Cover all the need-to-knows about process mining, and its role in Process Intelligence, in our **'For Dummies' guide**.

Without further ado, allow us to introduce you to the Celonis platform itself...

Sign up for one of our weekly introductory demos to see how it's used in practice – in just 20 minutes.

[Sign up](#)

About Celonis

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.

Its Process Intelligence platform uses industry-leading process mining technology and AI to present companies with a living digital twin of their end-to-end processes. For the first time, everyone in an organization has a common language for how the business runs, visibility into where value is hiding, and the ability to capture it. Celonis is headquartered in Munich, Germany and New York City, USA with more than 20 offices worldwide.

Find out more at celonis.com

