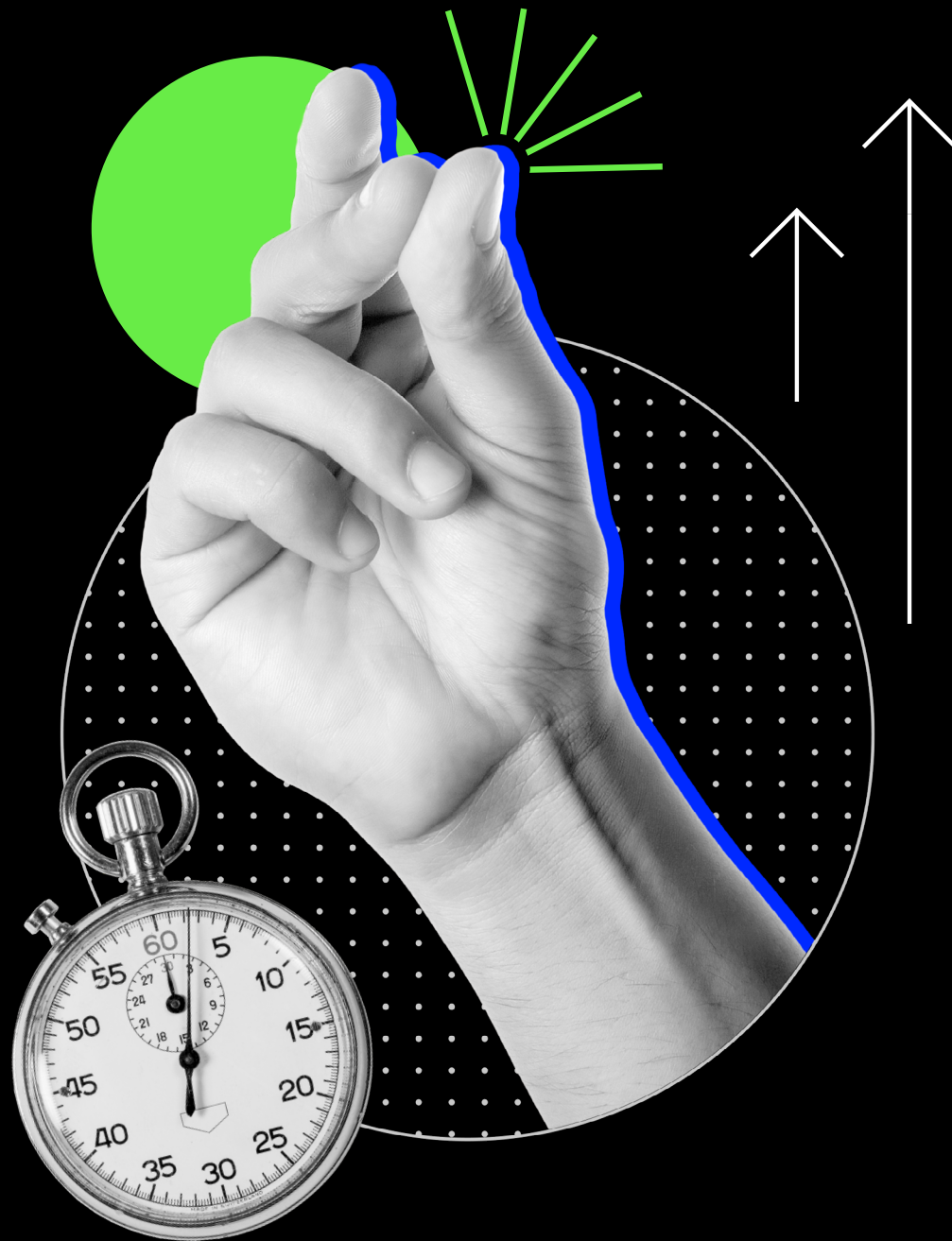




Introducing **Celonis Snap**

The World's First Free Cloud
Process Mining Platform



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Section 01

The connection between systems, processes, and business execution

At a time where customers' expectations are sky-high and a pandemic has disrupted every aspect of business execution, only flawless processes can help.

But with our processes scattered across rigid and fragmented IT systems, all-too-common errors, inefficiencies and delays are getting in the way of your performance. We call them **execution gaps**. Some are visible. Most are hidden. But you know you have an execution problem when:

- You can't see how your processes really run
- You don't know which gaps hamper your performance (and their root causes)
- You can't act quickly enough (or do not have the means) to remove the gaps in the underlying transactional systems, forcing costly workarounds.

Of course, we can't stop dealing with complicated systems.

And it's unlikely that we'll start processing less data. But what we can do is transform our processes to **execute at their best**.

Most companies simply aren't performing at their full potential.

The evidence is everywhere you look:



Customer Service: The average company achieves a net promoter score of only 31. Leading performers are hitting scores as high as 97.



Finance & Administration: The median company's touchless invoice rate is 27%. Fully optimized companies can achieve more than 85%.



Supply & Delivery: The average company is letting down customers with an on-time delivery rate of only 48.5%. Best performers are hitting 98.9%.

That doesn't mean we haven't been trying. We have BI dashboards that track our KPIs. We have Process Excellence people with Six Sigma black belts. We've held process mapping workshops — with expensive consultants! We've even started to implement automation.

But these methods can only tell us part of the story. They show issues after-the-fact, not in real time. They tell us how the process should work, not how it's actually running. They're focused on standardizing processes, instead of optimizing them for outcomes. They offer quick-fix solutions, not long-term improvement.

Process Mining is a revolutionary approach to these age-old process problems. It's the missing piece to see how our processes actually do — and transform them for the better.

In this guide, we'll show you how to kickstart your Process Mining journey for free with Celonis Snap.

What is Snap?

Meet the tool for transforming your business operations.

Process Mining has become an essential tool for forward-thinking companies seeking to eliminate execution gaps and transform their business operations enterprise-wide (think Uber, L’Oreal, Vodafone, and Siemens).

But despite its growing popularity, it can still seem complicated to some people, difficult to understand, or just... somehow inaccessible.

Our goal is to change that. That’s why we created [Celonis Snap](#), the world’s first free and open Process Mining platform. It lets you see how your processes are performing — in as fast as one week.

Get 100% transparency into your processes

Measure the KPIs and benchmarks that matter

Immediately identify execution gaps and their root causes

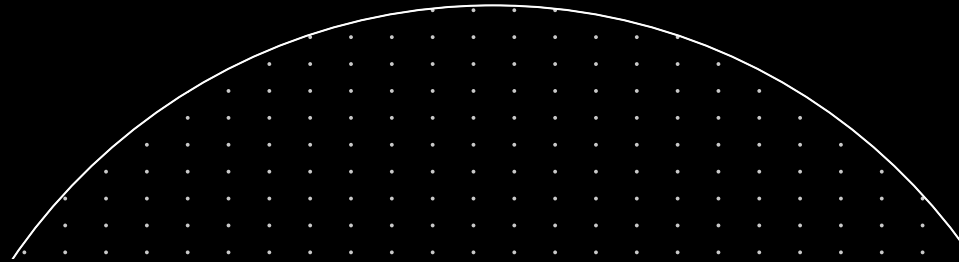
Make data-driven decisions, faster

What are execution gaps?

Execution gaps are the bumps in your road to maximized business execution. It’s what happens when departmental silos, manual workarounds, and disparate systems cause costs to rise and experiences to suffer. Most of them are hidden. But they become painfully visible whenever things get stuck, when products get delivered late, when customer promises get broken.

Eliminating execution gaps leads to a whole new way of work. It’s the **precondition** for continuous, intelligent process improvement that will unlock real business breakthroughs. It empowers your people to be more effective. It leads to increased customer satisfaction. And ultimately to higher revenue.

Snap at a glance



Snap Capabilities

Process Discovery

Get a snapshot of your process with one-time data uploads from your source systems (flat files). Detect process variants and their underlying causes automatically with AI-driven root-cause analysis.

Process Analytics

Analyze how execution gaps affect your key business outcomes. Use pre-configured KPIs or create and track your own unique metrics.

Process Enhancement

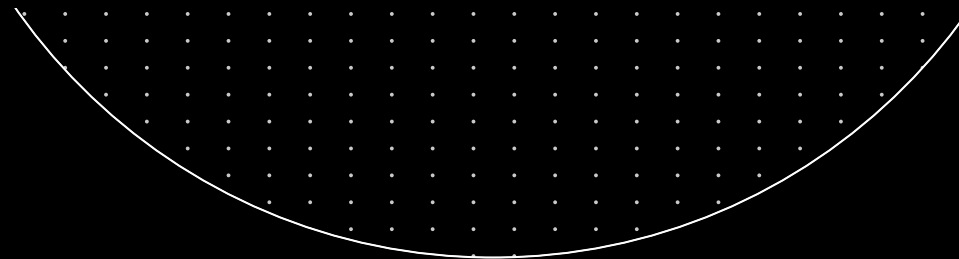
Experience the power of the EMS and get a taste of how you can convert insights into actions based on your one-time data upload.

Process Benchmarking

See how your process execution compares across departments, regions, and teams, so you can apply best practices and increase process standardization.

Conformance Checking

Evaluate current process compliance against your reference process model and instantly identify areas that fail to conform, so you can drive process standardization.



Who should read this guide

We've put together this guide for everyone who wants to discover their processes with Process Mining, but doesn't quite know where to start.

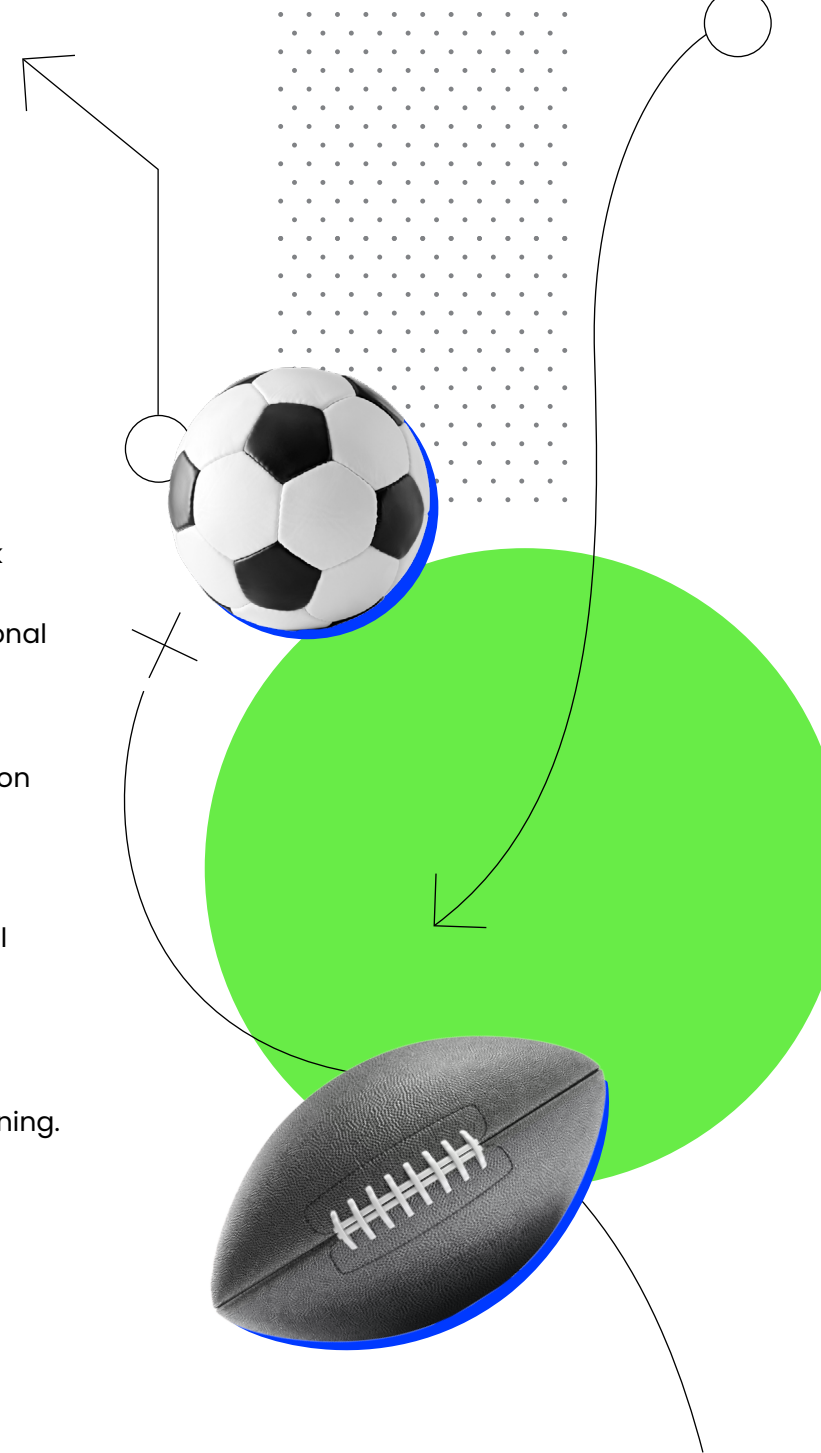
This guide will introduce you to the technology that helps you to untangle your business processes — in Accounts Payable, Supply Chain, Procurement, Warehouse Management, Customer Service, and anywhere else.

Whether you're looking to achieve better business outcomes or you've already started to look into Process Mining but you're struggling to get your stakeholders on board, this is your ultimate guide on how to get started.

And if you've come from somewhere else, stick around. People are using Snap for all kinds of things, even post-match analyses of international football games.

But let's be clear about something. This is not meant to be an exhaustive technical description of all the cool features Snap offers. To get to know the platform, you can attend our monthly [Snap Webinars](#) or [log into Snap](#) for step-by-step instructions. This guide is about sharing all of our experience and best practices on how to accelerate your journey to breakthrough performance in your company.

So you too can unlock the power of Process Mining.



Section 02

Process Mining with Snap

The first step to maximized execution

How execution gaps hurt your business

The slightest hiccup in your process can turn a happy customer into a disgruntled one.

Let's say you're buying a red cashmere pullover at your favorite online shop. Instantly, you get a notification that your order will soon be on its way. Great! You're happy that you didn't spend a lot of time walking in and out of shops, and can't wait to unwrap it at home.

But a couple of days later, you get another notification that the sweater is momentarily unavailable. No word about when it will be back in stock.

Does that sound familiar?

If so, you were on the other side of a process that went wrong. And trust us, there can be millions of reasons why this red sweater never made its way to you.

It could be because the warehouse doesn't get notified when items are out of stock.

Or the third-party supplier is unreliable and never fulfilled an order.

Or maybe the e-commerce website isn't aligned with the actual inventory in the warehouse.

Now imagine that you are the retail company that has failed to deliver the red pullover to someone. And this happens not once, but a hundred times a day.

It might seem like a small thing, because you are successfully shipping tens of thousands of products everyday. But over time, those glitches can quickly turn into millions of dollars of profit loss and customers looking somewhere else for more reliable vendors.

The bad news is that knowledge lies buried in the masses of data in your transactional systems.

You might be aware of some problems, but you can't drill down to their root cause. And no matter how many business intelligence tools you have, how many dashboards you use, and how much you pay consultants, they simply can't recreate a truly objective, data-driven end-to-end view of the "as-is" process happening in your business.

The good news is: Process Mining can.

By analyzing your transactional data at scale, Snap renders your whole process environment in a level of detail that whiteboards, sticky notes, and traditional process mapping tools can never provide. It shows you every step of every process, every time it's ever been executed. And it identifies the execution gaps that get in the way to best-in-class performance. No more subjective opinions, no more guesswork.



A large, stylized white quotation mark icon consisting of two thick, curved strokes.

“What makes Process Mining technology and companies like Celonis game-changing is that they combine process modeling and data analysis. This makes for an incredibly powerful mix to solve performance and compliance problems.”

Wil van der Aalst,

Professor of Process and Data Science,
and “Godfather of Process Mining”

So how does it work exactly?

Event Logs and Event Collection

Every interaction inside the transactional systems your business runs on (think ERP systems like SAP, Oracle, Salesforce, ServiceNow, etc.) leaves a digital footprint — raw data that can be turned into a record of actions taken.

By uploading flat files (such as CSV, XLSX, and XES files or Google Sheets) into Snap, you can easily turn your data into event logs. Or you use our pre-built quickstarts that automatically transform your data into event logs.

Event logs have three parts: an activity, a time stamp, and a case ID.

In our online shopping example, the **activity** would be the selection of the item (the red pullover), the **time stamp** is the exact time when the order was created, and the **case ID** (a unique identifier) would be the item itself.

Snap extracts and transforms this rich and varied data to reconstruct how your processes actually flow — not how you think they do.

This is called **event collection**.

CSV/XLSX Upload

Progress: 1. Upload File, 2. Select Sheet, 3. Configure File, 4. Define Event Log, 5. Generate Analysis

Configure the table and set the data type for each column. Make sure to define the correct datetime format.

#	Case ID	ACTIVITY	EVENTTIME
1	1116492	Scan Invoice	2020-02-07 00:00:00
2	1116493	Book Invoice	2020-04-19 00:00:00
3	1116493	Change Price	2020-03-23 00:00:00
4	1116493	Create Purchase Order...	2020-03-15 00:00:00
5	1116493	Receive Goods	2020-04-04 00:00:00
6	1116493	Scan Invoice	2020-04-10 00:00:00
7	1116493	Send Purchase Order	2020-03-17 00:00:00
8	1116494	Book Invoice	2020-02-28 00:00:00
9	1116494	Create Purchase Order...	2020-01-23 00:00:00
10	1116494	Receive Goods	2020-02-02 00:00:00
11	1116494	Scan Invoice	2020-07-08 00:00:00
12	1116494	Send Purchase Order	2020-01-24 00:00:00
13	1116495	Book Invoice	2020-04-18 00:00:00
14	1116495	Change Price	2020-03-25 00:00:00
15	1116495	Create Purchase Order...	2020-03-15 00:00:00
16	1116495	Receive Goods	2020-04-01 00:00:00
17	1116495	Scan Invoice	2020-04-09 00:00:00
18	1116495	Send Purchase Order	2020-03-16 00:00:00

Table Configuration

Formatting

☒ Sheet has header row

Thousand separator: .

Decimal separator: .

Apply

Jump to row:

Back Next

Process Discovery

Process Discovery takes event logs and turns them into an end-to-end view of your business processes.

It helps you to:

Identify

execution – gaps when do things go off-road? Why?

Find

the optimal process path – what does “good” look like? And every deviation from it.

Leverage

best practices by benchmarking your processes.

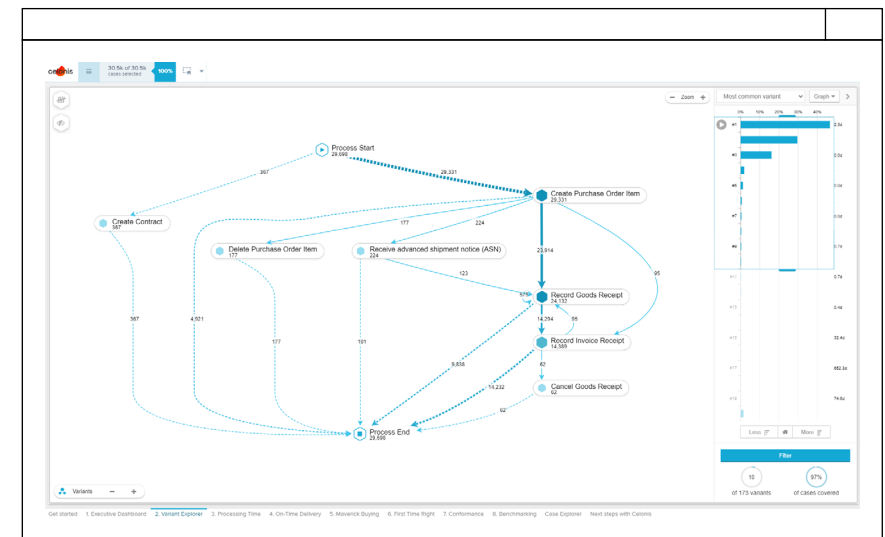
By extracting data from your underlying software systems, Snap recreates an interactive “Digital Twin” of your process. Think of a living, breathing visualization of your process, based on the real data running through your source systems.

You can see every case, pathway, variation and error – and their business impact.

What’s a Digital Twin?

For many years, the ‘Digital Twin’ has been a visualization model mainly used in manufacturing companies to optimize their product life cycles. Every physical piece had its digital counterpart that could be tracked through the entire production cycle.

Today, it’s possible to visualize and understand how *all kinds* of operational processes are really executed end-to-end, in all their wonderful (and less wonderful) variations, across any number of systems.



Process Analytics

Now that you've seen all the variations of your process, it's time to drill deeper.

Because knowing what's going wrong in your process isn't enough. You need to understand why to be able to act on it.

Process Analytics enables you to understand the root cause of every process variation, determine its business impact and prioritize your response according to the KPIs and business outcomes you're working towards. In other words, you can discover opportunities for optimization you simply didn't know were there.

Take your Accounts Payable process in SAP for example. Extracting data from your underlying SAP system, Snap might

discover early payments as one of your biggest execution gaps, impacting your working capital. Snap's automated and AI-enhanced root cause analysis would reveal that this is happening whenever vendors delivered goods early. Now that you know what's causing early payments, you can take concrete action, for instance by calling your vendor to deliver exactly on time.

What's more, you can benchmark your processes from plant to plant, vendor to vendor, region to region (and many more) to leverage best practices within your business.

Focus on your business outcomes

These are just some of the business outcomes you can monitor with Snap:

- **On-time delivery**
- **Working capital**
- **Customer satisfaction**
- **Risk reduction**
- **Operating costs**
- **Automation rates**

You can use pre-configured KPIs or create and track your own unique metrics.

Conformance Checking

Once you have this complete transparency into your business process, you might want to sit down...

...because like so many others before you, you'll see that your real-life process is far from what you and your consultants had in mind.

There are literally thousands of ways a process can deviate, caused by errors and inefficiencies. It basically looks like a big, messy plate of spaghetti.

Your goal is to find the route from initial input to final output that best meets your business goals. This is what we call the ideal or happy path. Depending on the KPIs you set, it might not be the fastest path — it can be the one that requires the least manual rework, or that results in the greatest customer satisfaction, for example.

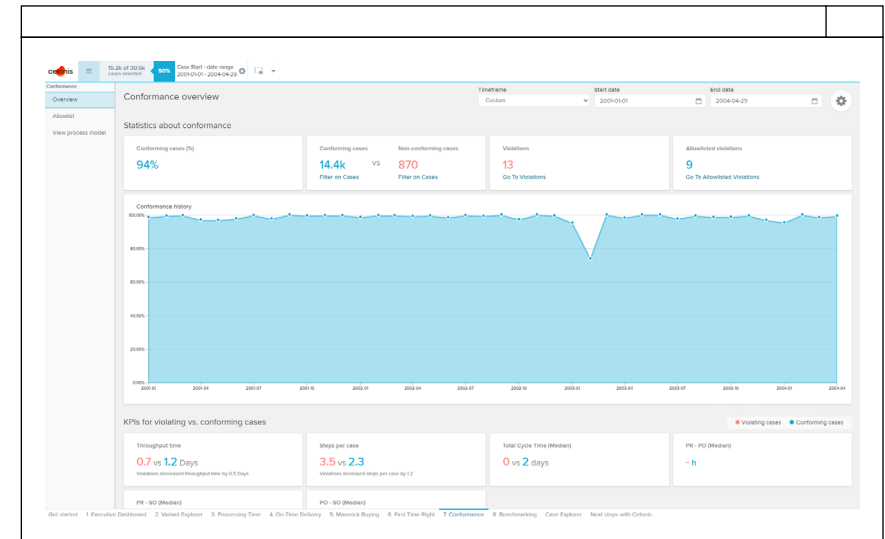
If you're leading Accounts Payable, your KPI might be on-time payments or the average time per invoice processed.

As the VP of Supply Chain, you're probably measuring on-time delivery or the Order-to-Cash cycle time.

Conformance checking helps to continually assess how closely your core processes adhere to their ideal path. Snap does this automatically. The AI-powered technology takes all the variations in your process, compares them to the happy path you've designed and tells you why those variations are happening.

This can help to identify and correct new execution gaps as they occur, as well as support transparent governance and reduce risk around regulated processes.

Even better, Snap helps you find the variants that have the biggest negative impact on your KPIs. Focus on tackling process deviations that hurt your efficiency the most instead of spending valuable time and resources on process variants that are actually mostly innocuous.



A Sneak Peek into Process Discovery and Analytics

Discover your process end-to-end

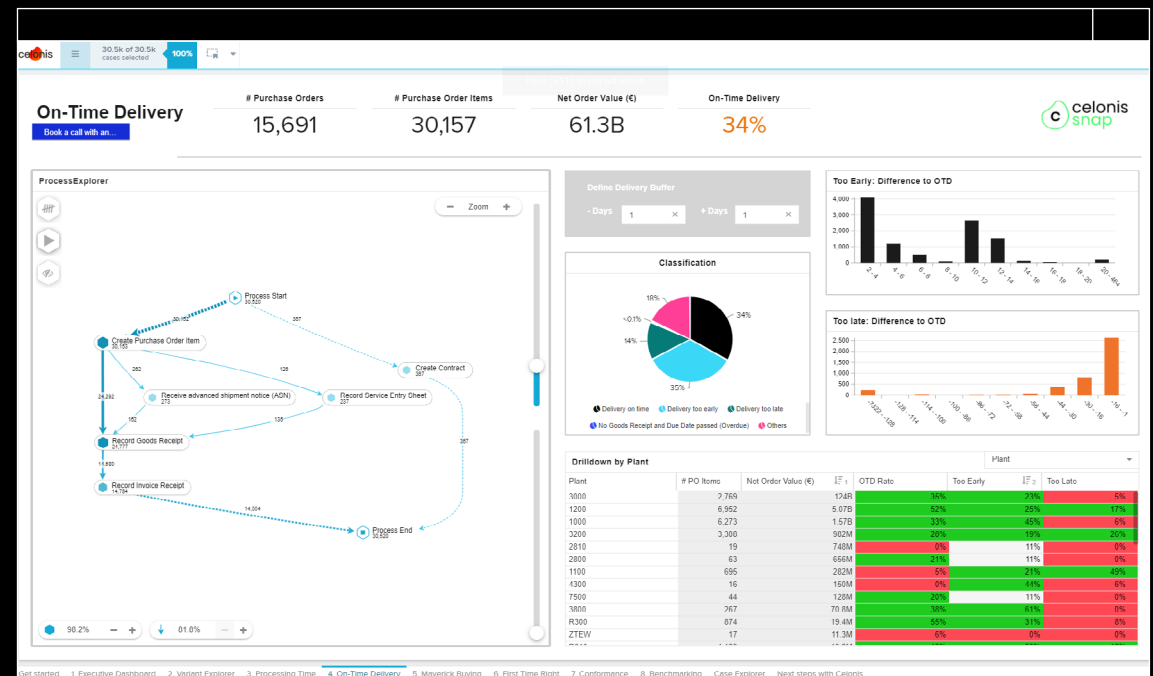
The Process Explorer on the left side shows your end-to-end process. See every variation and identify execution gaps at a glance.

Filter your view to include or remove variants with specific process steps — i.e., processes skipping a specific step, such as the creation of a purchase order.

Get the insights you need to act

Drill deeper into the root cause of every process variation. Use any of our 40+ pre-built visualization components to build your customized view.

Filter any visual component to drill down deeper into data — and the entire view will update.



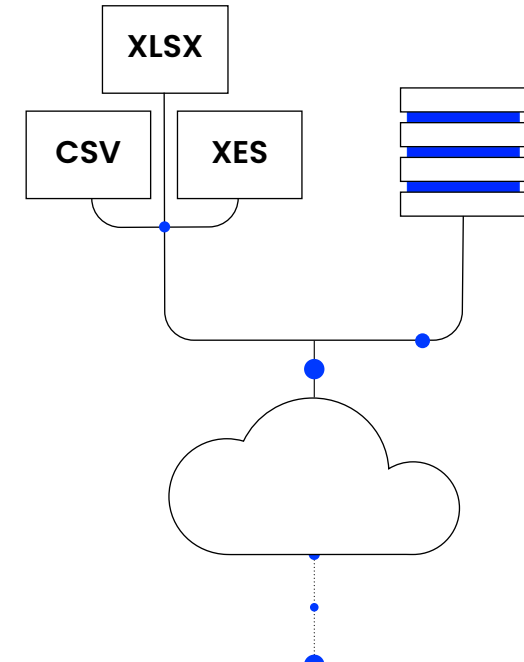
The benefits of Snap

Snap gives you the opportunity to look under the hood of your operational engine. It combines Event Collection, Process Discovery, Process Analytics, and Conformance Checking to give you 100% transparency into your process and the execution gaps that hamper your performance.

The open platform in the cloud allows you to upload your own data for free (up to 500MB) or to use a sample data set provided by Celonis. Flat-file uploads are

supported from CSV, XLSX, and XES files or Google Sheets. You can also link directly to your source systems, with our powerful quickstarts to source systems like SAP, UiPath Orchestrator, ServiceNow, and many more.

Harness the power of Process Mining to discover how your processes are really performing, reveal hidden execution gaps and inefficiencies, and make improvements over time.



Look under the hood

Visualize your processes like never before and **understand** the root causes of execution gaps. No more subjective opinions or guesswork.

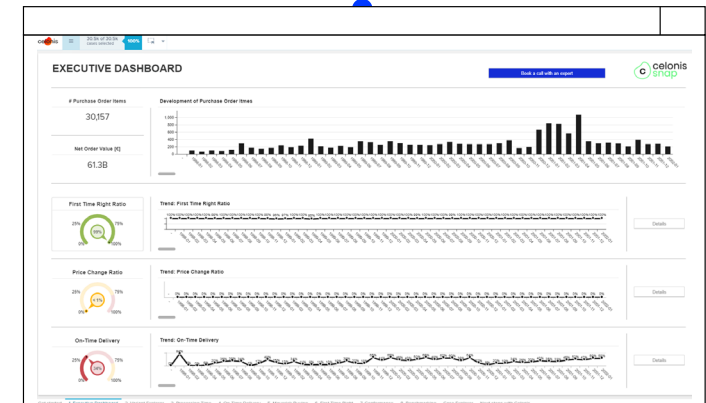
Get inspired

Benefit from monthly webinars and 1:1 calls to deep-dive into different use cases. See what others have achieved with Process Mining and **share** best practices.

Get your team on board

Show your team how easy Process Discovery can be.

Convince your stakeholders that Process Mining paves the way to true business transformation and maximized execution.





“

“We were duly impressed by the many functions provided in the free Celonis Snap solution: It made the introduction to Process Mining quick and easy, and, at the same time, delivered impressive results.”

Mara Adermann,

Data Scientist,
Degussa Bank AG

Section 03

What you can achieve with Snap

A short tour of our most frequent use cases

Order Management

Let's get back once more to our miserable online shopping journey and assume it was your company that couldn't deliver the red pullover on time.

As a Supply Chain Manager, you may be aware that you fail to fulfill a certain amount of orders, but are often blind when it comes to understanding why those unfulfilled orders happened.

And without knowing the root cause, you can't proactively tackle the problem. Your process is just too complex, and too many factors come into play.

By uploading your event log data into Snap, you can immediately get end-to-end visibility over your process and hone in on the variants causing delays in order fulfillment.

You might find out that you have a specific vendor who never delivers on time. Their products are available on your website, but they are not actually in stock. If this is the case, your team can jump to action. They can pick up the phone and call the vendor to find out what's happening and solve the problem — or find a new, more reliable vendor.

Maybe you discover it's not just this vendor that's late, but your website also doesn't correctly reflect what's in your warehouse.

Or maybe the order was undeliverable. Your products get shipped but never make it to the customer because the address isn't valid.

With this knowledge, you can refresh the inventory level in your warehouse and on your e-commerce website more frequently. Or you can update your order management software to validate customer addresses.

All things you would have never known (and acted on) without a clear, objective end-to-end view of your Order-to-Cash process.

Procurement

Let's say you are the Procurement leader in a manufacturing company and your goal is to shorten the cycle times to receive goods and reduce costs in your Purchase-to-Pay process.

With 1.1 million Purchase Order items (tracked as "cases" in Snap) per year and an annual net order value of roughly \$2 billion, you know that the slightest hiccup in the process can cost you millions.

You might even know that you have a problem with maverick buying — when your employees are purchasing outside of the accepted buying channels — and price changes, but you don't know the true business impact or how to tackle it.

Snap gives you full visibility over how your P2P-process is actually running.

You might see that very few of your purchase orders (only 38%) actually follow your ideal path. The other 62% (!) follow one or more of over 600 variants of that very same process. Paths that are not as efficient and slow down your process.

Let's go back to your assumption that you have a problem with maverick buying and price changes. Leveraging the Process Discovery capability within Snap, you might learn that the creation of a Purchase Requisition is skipped in **150,000 cases**. Besides obvious compliance issues, this kind of maverick buying can seriously harm your business. For example, it might result in purchasing products from non-vetted suppliers at higher prices when existing contracts are not leveraged.



If you explore more variants, you might see that there have been price changes made for **150,000 PO items** after the purchase order was already sent. That process deviation doesn't only impact your cycle times, it also causes a lot of rework.

Let's assume those non-value-add activities like contacting the vendor, getting new approval for a purchase and sending an updated PO costs you \$30 per price change. That's more than **\$4M in annual losses**, simply because of process inefficiencies.

After you've identified these execution gaps, it's time to drill deeper and understand why they are occurring. With the Process Analytics feature

in Snap, you can filter your process deviations using different categories, such as different vendors or regions. For example, you could find out that price changes are only an issue in your North American plants, not in your European ones. Or realize that it's a specific vendor group that causes **73% of the price changes**, resulting in manual interventions.

Once you've identified the root cause of your process deviation, you can take immediate action to remove execution gaps and maximize performance.



Section 04

Conclusion

Start your journey to maximized business execution with Process Mining

Process excellence is not a one-time project; it's a long-term goal. With Celonis Snap, you've got everything you need to kickstart your journey to maximized execution within your organization.

- **Visualize** your processes like never before and **understand** the root causes of execution gaps in your operations.
- **Share the magic** with your colleagues and stakeholders to drive adoption of Process Mining at your company.
- **Join** the [Celonis Community](#) to access resources, stay up-to-date, and share tips and tricks with other Snap users around the world.

Sign up for your free Snap account today at **snap.celonis.com**

And if we can recommend one more thing...
don't stop there!

Section 05

Going beyond Process Discovery

What's next?

Process Discovery is **only the first step** in your journey to maximizing business execution. It gives you total, ongoing clarity over your operational environment so you can visualize what really happens — and where you go off-road.

Now, it's time to act on it.

Celonis' enterprise solution, the Celonis Execution Management System (EMS), is a new class of technology built to achieve execution capacity breakthroughs. Leveraging a complete set of process improvement tools, including Process Mining, AI, and automation — it enables companies like you to walk the last mile of digital transformation and achieve the breakthrough outcomes you were looking for.

How it works:

Measure

The EMS leverages **Process Mining** technology to extract data in real-time from source systems and measure capacity. It identifies and visualizes the execution gaps limiting execution capacity.

Know

It knows the right course of action to close gaps. Based on **machine learning** and execution best-practices, it suggests the best steps to eliminate the most impactful execution gaps and help maximize execution capacity.

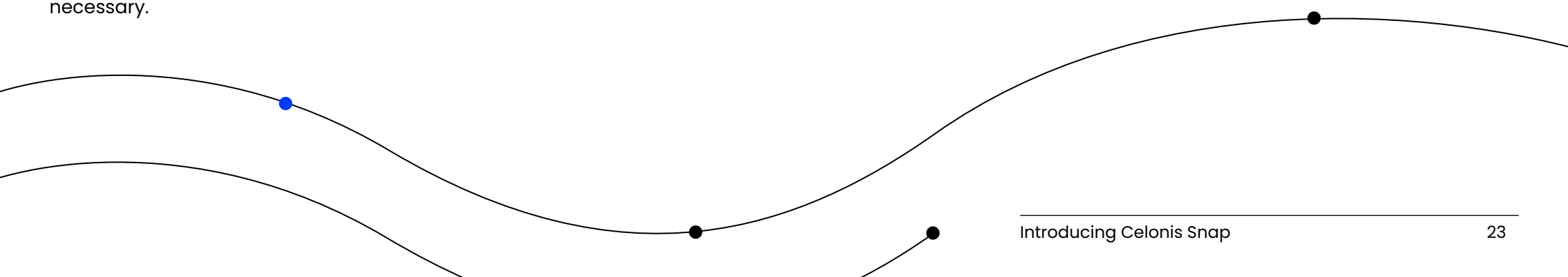
Act

The EMS takes action in a number of ways, both by **automating** real-time actions across systems, as well as deploying the right people to remove gaps.

Snap and EMS at a glance

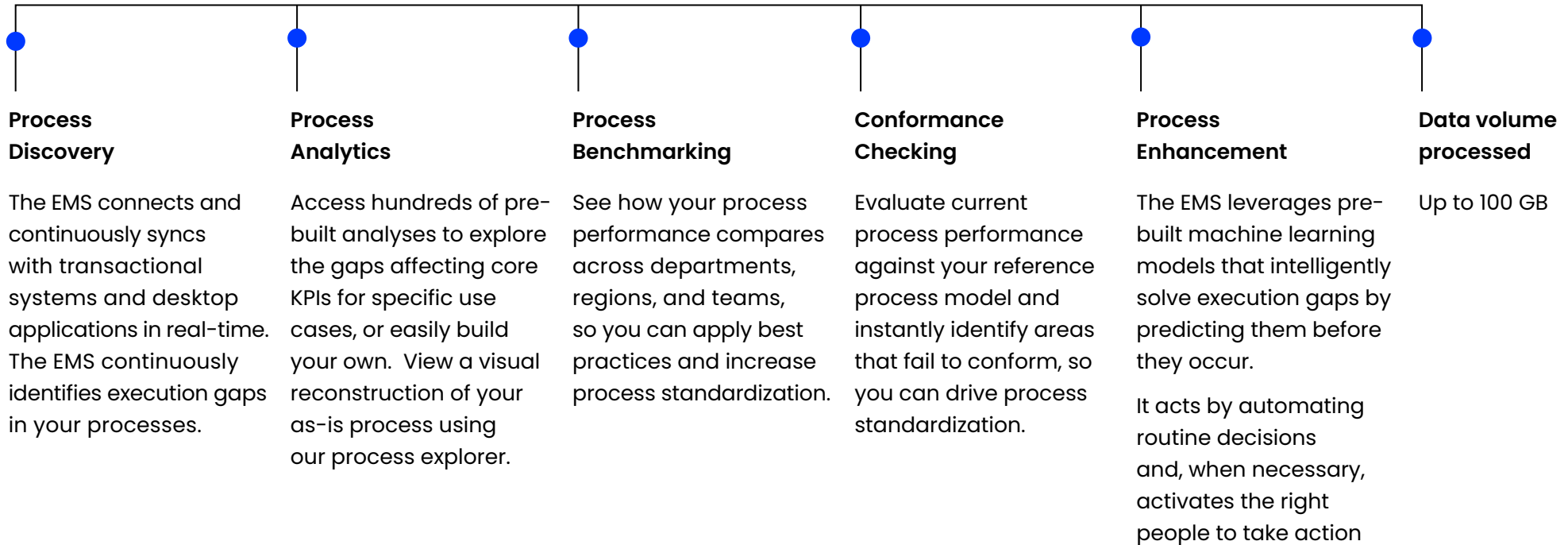
While the EMS empowers enterprises to run the full marathon to maximized execution, leveraging a complete set of process improvement tools, think of Snap as the boot camp to get you warmed up.

Snap Capabilities



Process Discovery	Process Analytics	Process Benchmarking	Conformance Checking	Process Enhancement	Data volume processed
Snap offers pre-built Quickstarts for one-time data uploads from a range of common source systems. Get started with your analysis right away, no data transformation necessary.	See your process end-to-end, identify execution gaps and drill down using AI-powered root-cause analysis. Analyze how execution gaps affect your key business outcomes.	See how your process performance compares across departments, regions, and teams, so you can apply best practices and increase process standardization.	Evaluate current process performance against your reference process model and instantly identify areas that fail to conform, so you can drive process standardization.	Limited availability: Experience the power of the EMS and get a taste of how you can convert insights into actions based on your one-time data upload.	Up to 500 MB

EMS Capabilities



Process Discovery	Process Analytics	Process Benchmarking	Conformance Checking	Process Enhancement	Data volume processed
The EMS connects and continuously syncs with transactional systems and desktop applications in real-time. The EMS continuously identifies execution gaps in your processes.	Access hundreds of pre-built analyses to explore the gaps affecting core KPIs for specific use cases, or easily build your own. View a visual reconstruction of your as-is process using our process explorer.	See how your process performance compares across departments, regions, and teams, so you can apply best practices and increase process standardization.	Evaluate current process performance against your reference process model and instantly identify areas that fail to conform, so you can drive process standardization.	The EMS leverages pre-built machine learning models that intelligently solve execution gaps by predicting them before they occur. It acts by automating routine decisions and, when necessary, activates the right people to take action	Up to 100 GB

Section 06

The future belongs to the businesses that can execute

The world's industry leaders are already using the EMS to maximize business execution.



Degussa started with Celonis Snap and discovered loops and variants in their Customer onboarding process. When they upgraded to the Celonis EMS, they shortened their onboarding-time by 32%, while increasing automation by 20%.



Deutsche Telekom eliminated countless execution gaps across Procure-to-Pay — like duplicate payments and cash discount losses — **and saved over €66M.**



By tackling credit and order blocks across their Supply Chain, L'Oréal increased their efficiency rate by **3x over an 18-month period.**



In Products & Services, Vodafone reduced time to market by **20% and cut procurement process costs by 11%.**

**Learn more about the full power of the
Celonis EMS at celonis.com.**

