



# The Road to Go-Live Handbook

Running a Data-Driven  
System Migration

# Why transforming systems is so damn hard

## Introduction:

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## Pre-migration:

Optimize early, optimize often

## Process mapping:

Understand the status quo

## Fit-gap Analysis:

Mind the gaps

## Change Management & Hypercare:

Winning hearts and minds

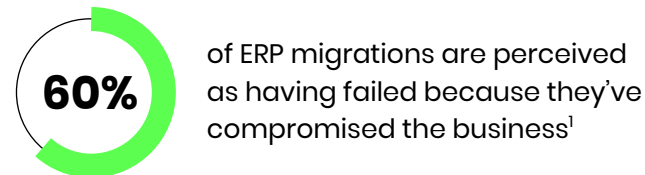
## Beyond migration:

Transform your entire business

Have you ever tried to stream music on a cassette player? Doesn't really work, right? The same goes for today's business execution.

Trying to run 2020s business initiatives on outdated infrastructure, companies see their most valuable resources — time and money — disappear into productivity black holes. But these rigid and fragmented IT systems don't only slow things down, they create new (often hidden) problems in your processes. Think of things like late payments affecting working capital, unnecessary credit blocks holding off deliveries, or order changes creating havoc.

You're already painfully aware that your legacy systems won't do the job. Otherwise, you wouldn't consider a system migration in the first place. But whether you're upgrading, consolidating, harmonizing, or switching vendors, these initiatives come at a cost — not only the price tag of the migration itself but also the risks to your business.



## Why?

Because they lack data, process intelligence, and strategic action to support system migrations from start to finish.

Sticky notes and anecdotes can't recreate real-life process complexities. Politics and emotions won't reveal the inefficiencies bludgeoning your outcomes. User logins alone don't tell if people really adopt new systems and workflows.

# In a nutshell

These old-school methods are unscalable, unsustainable, and inefficient — and tend to add new layers of subjectivity. And before you know it, you're back at square one creating old process problems in new systems.

Thankfully, there's a new way to mitigate risks and costs across the system migration lifecycle. An **Execution Management System — or EMS — like the one from Celonis** provides solutions across the migration timeline from optimizing processes pre-migration, to automating process documentation, accelerating fit-gap analysis, and smoothing the path to user adoption. In this e-book, we'll be talking through some of the major challenges experienced by IT leaders and program managers and how Celonis can help.

The Celonis EMS has three core capabilities to support every step of the migration process:

1. **Real-time** - Integrate and enrich data from any system, data lakes, desktops, documents, and event streams in real time.
2. **Process Intelligence** - Get a living, breathing end-to-end X-ray of your processes that identifies gaps and makes intelligent suggestions leveraging machine learning, industry benchmarks and experience from over 2,500 customer deployments.
3. **Strategic Action** - Take intelligent action in a number of ways by automating fixes within systems, orchestrating your other technologies (RPA, Low-code, BI, etc.), and deploying the right people to do the right things.

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# It's never too early to start preparing for your migration

## Think about your upcoming migration like planning a big house move.

Before you hire movers or pack anything in boxes, you assess all of the furniture, appliances, clothing, and decoration in your old house.

You throw out items that are broken, old, or unused.

Why would you want to pay more to move them and clutter your beautiful new house?

Similarly, the first step before migrating systems is to do an inventory. If you streamline and optimize your processes ahead of time, you can save valuable resources and focus on the most important processes during your migration. For large migrations, this process of “cleaning house” should begin a year or more before you kick off your migration.

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## Process mapping

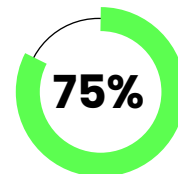
### Understand the status quo

Before you start any migration, you need to understand what your process and system landscape actually look like. Whether this is to document the scope of your migration or to gather requirements for a net-new implementation, you need to understand what you're dealing with. To go back to our moving house analogy, before you buy a fancy new microwave for your new house, maybe you want to evaluate whether you actually use your old microwave.

### However,

manual business process mapping exercises are time-consuming and resource-intensive — especially when you're leading a global migration with multiple functions, processes, and regions, all of which may have distinct processes and system landscapes.

Think about the number of workshops it would take to fully map the processes for one team within your organization. Add to that the time out of each subject matter expert's day and the cost of external resources to run these workshops. Then multiply it by all the affected teams in your organization.



of ERP transformations fail to stay on schedule or budget<sup>2</sup>

Example:

Workshops  
per Team

8  
Workshops

×

Hours per  
Workshop

4  
Hours

×

SMEs\* &  
Consultants  
per  
Workshop

6  
SMEs  
3  
Consultants

×

Cost per  
Hour

\$50/hr  
per SMEs,  
\$150/hr per  
Consultant

×

Teams  
affected  
by  
migration

30  
Teams

=

**\$720,000** and  
**~1000 hrs** on  
process mapping

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## Furthermore ...

... even if you do invest the time and resources into diligently mapping every process in the organization, typical methods of process mapping like workshops, surveys, time studies, and KPI reporting are far from infallible. Ultimately, your IT team and external consultants aren't experts on your business processes, and your business users and SMEs don't understand everything about your system landscape. This leaves you trying to stitch together the pieces from subjective and incomplete sources, plaguing this crucial phase of the migration with bias, feelings, and politics. Even worse, process mapping is outdated as soon as it's completed.

**What if there was a better way?**

A way to instantly map all processes running through your organization using objective data rather than subjective anecdotes and assumptions? A way that maps your exact process in real time. Celonis automates the process mapping phase and provides not just visibility but *insights* into your as-is process to drive efficiency and create value throughout your migration.

## Let's see how easy it is.

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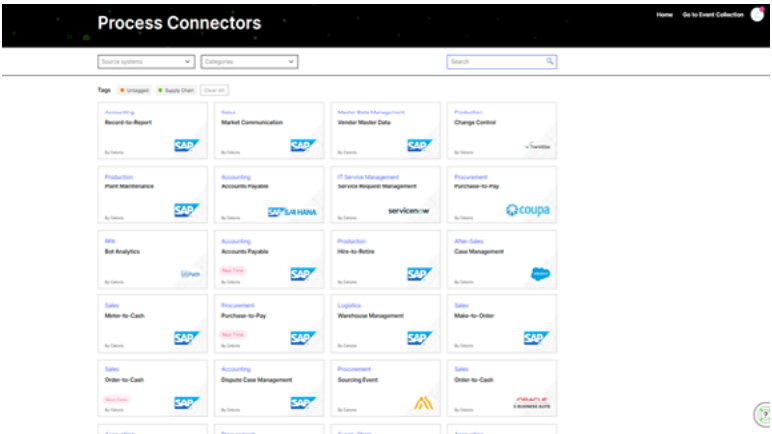
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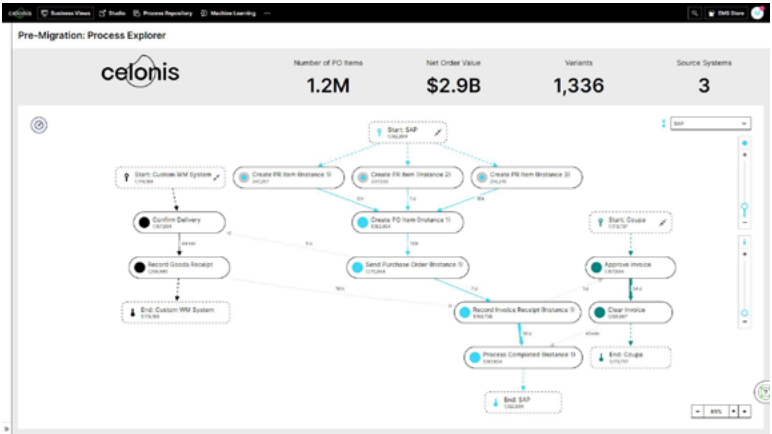
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**Connect to your entire system landscape**

Celonis connects to your source systems either through 80+ pre-built connections to major systems like SAP, Oracle, and Salesforce or to your homegrown and legacy systems. The EMS automatically combines all this data into a unified model of your end-to-end process complete with contextual information.



**See your process truly as-is**

Visualize and explore every variant of your process as it is actually executed in your IT systems. This saves all of the time and energy traditionally put into documentation workshops, and is 100% objective.

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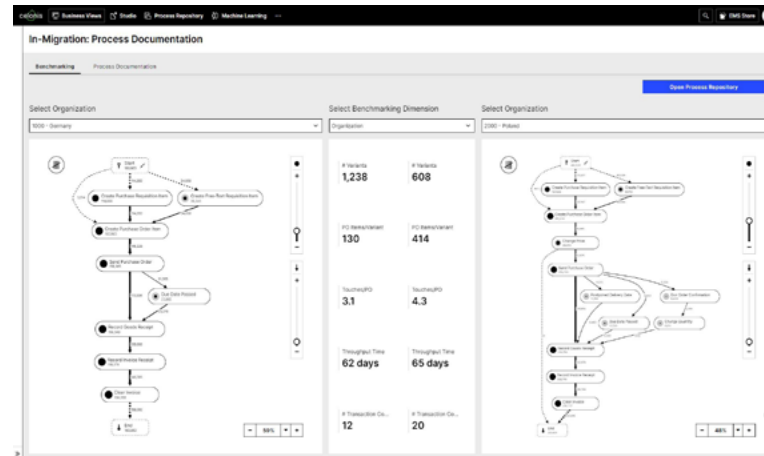
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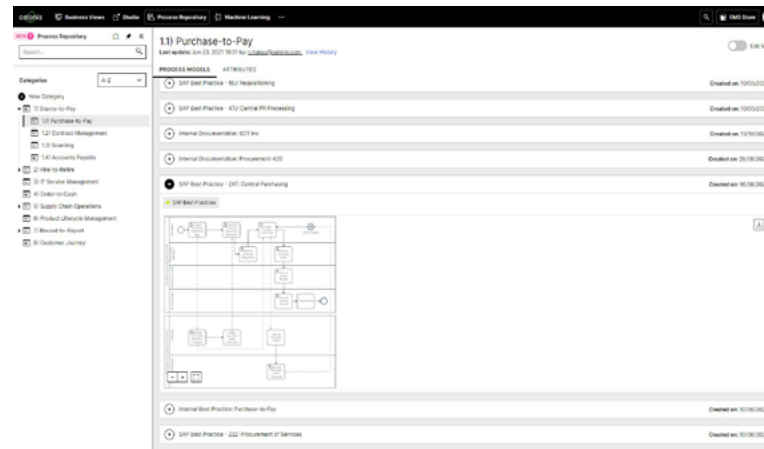


## Drill down on best practices

Explore your processes and evaluate objectively which variants are driving business results, which are most frequently used, and which are efficient or low cost.

Celonis also brings in technical information about how process steps are executed within IT systems like which user types, documents, and applications are being used when.

Identify business improvement goals and barriers to goal achievement for each process that you map — this will serve as your guide for future design and keep your efforts focused on business outcomes. Use [our process mapping template](#) to map these requirements for your processes.



## Organize and manage all your process models

Celonis converts mining process models into standard BPMN and allows you to store, edit, version, and manage these models in a native process repository. This way it's easy to keep track of all the processes you've mapped and make tweaks and adjustments as needed.



# How Sysmex streamlined their S/4HANA migration with Celonis

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Sysmex, a global leader in designing and producing diagnostic solutions for medical laboratories, initially brought in Celonis to gain better visibility into their requirements for S/4HANA. “Customer satisfaction is the most important thing for us and that was one risk we did not know how to mitigate,” said Kris Cherukuri, Director of Enterprise Systems at Sysmex America.

Celonis was the ideal complement to their migration efforts with a third-party consultant — the process explorer could shed light on any opportunities or requirements they might be missing. “Initially, we were thinking of Celonis as an insurance policy, but we’ve already identified process variants that didn’t come up in the discovery workshops with the consulting team.”

Through root cause analysis, the EMS also enables them to identify the process variations that were having the biggest impact on their outcomes, making it easy to prioritize initiatives — and quantify their effects. Armed with accurate, up-to-date knowledge of how their processes actually work, Sysmex can move forward with their next phase more confidently: “Celonis will help us focus on the test cases and scenarios that are critical for us as an organization.”

## Read the full story

“Initially, we were thinking of Celonis as an insurance policy, but we’ve already identified process variants that didn’t come up in the discovery workshops with the consulting team.”

– Kris Cherukuri, Director of Enterprise Systems at  
Sysmex America

# Fit-Gap Analysis: Mind the gaps

**With all process variants documented, existing best practices captured and optimization opportunities cataloged, it's time to figure out what the to-be solution should look like.**

## Typically ...

... you'd achieve this through a series of workshops, which start from a standard model or an internal best practice model — which serves as a blueprint of what your to-be solution will look like. The proposed solution is then demonstrated to key stakeholders from across the organization who validate its overall viability for their areas of responsibility and expertise. For example, if the new solution primarily impacts Procurement and Accounts Payable, you would show a demo of the solution to a selection of AP managers and category managers to get their feedback. Could this solution work for their team? Are there areas or processes that are not supported?

Next, you'd hold additional workshops to identify specific deltas — gaps in the blueprint — that impact the solution from the perspective of the included stakeholders. A delta could be as small as a custom field or activity that's missing in the new system or as large as a custom application that needs to be built to bolster out-of-box functionality.

Then, you organize your gaps into a backlog, which is prioritized based on input from stakeholders — if people in the organization believe that a specific customization is a requirement, it will be prioritized in the backlog. Solutions for the prioritized gaps are then designed and more workshops are scheduled to validate the solution to the gap and identify further gaps. This iterative process continues until stakeholders are satisfied with the solution.

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**Ultimately**, fit-gap is an iterative process in which you are trying to answer five key questions

1. **Is the standard viable for us?**
2. **What are the gaps that might make it not work for us?**
3. **Which gaps are the most important to fill?**
4. **How can we fill a particular gap?**
5. **Are the solutions to our gaps viable?**

**Sounds easy — until reality kicks in.**

**1. Politics and biases complicate everything.**

The problem is that your fit-gap analysis depends entirely on who is included in these workshops — which functions are represented, how knowledgeable SMEs are about day-to-day operations, how outspoken they are about potential issues, and the social dynamics of the workshop itself. In fact, research shows that group decision-making is subject to many biases (i.e. groupthink, group polarization, etc) that could negatively impact which opinions are voiced and what decisions are ultimately made.

“It’s difficult to keep politics, feelings and biases out of the equation, data-driven decisions are crucial in this phase.”

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## 2. Customizations create new complexity

Remember what we said earlier about the danger of creating new complexity in new systems? That's exactly what tends to happen in fit-gap analysis workshops. If your Accounts Receivable team is adamant about keeping their customized collections workflows, you might be inclined to go with it. But if you want to reduce system complexity and streamline business operations, staying as close to the "out-of-the-box" blueprint should be your number one priority. And as long as you don't have a data-driven method to quantify the business impact of moving a customization across, you're simply flying blind.

## Don't get us wrong:

Input from your subject matter experts across the company is still an important source of validation during this cycle. But wouldn't it be better (and faster) to show up to a validation meeting knowing objectively that what you are presenting works for the majority of the business needs? You could then use that face time much more efficiently to confirm what the data told you and incorporate qualitative feedback into your design. This is exactly what Celonis allows teams to do.

**The EMS** can automatically compare as-is and to-be processes, highlighting deltas and revealing their root causes. It also tracks which customizations are actually being used, and the concrete business value they're adding. It then provides the ability to simulate closing those deltas using machine learning, to ensure that no new bottlenecks or gaps will be created from the proposed solution.

This not only helps IT leaders accelerate this process and include more objective sources of information into their designs, but also enables them to quantify the impact of potential process changes on future performance.

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QUESTION	CHALLENGE	SOLUTION
Is the standard viable for us?	Viability is based on conference room demos to SMEs, who determine fit based on their experience and perception.	Celonis enables teams to measure quantitatively how well a proposed solution fits the way users actually work.
What are the gaps that might make it not work for us?	Rely on people catching small details live in a workshop.	Celonis automatically generates a ranked list of deltas based on how the business actually uses the system.
Which gaps are the most important to fill?	Based on perception and discussions of importance not data about frequency or outcomes.	Celonis reveals the relationship between deltas and KPIs that your business users care about.
How can we fill a particular gap?	No objective root cause analysis.	Celonis automatically performs root cause analysis, revealing where a gap is occurring and how it could be addressed.
Are the solutions to our gaps themselves viable?	Adds additional layers of subjective information.	New or amended designs can be analyzed to identify further gaps and iterate on solutions.
How customized are my systems?	No end-to-end visibility of processes across systems	A 360-degree view of processes across systems to understand the impact of changes.

# How a Global Aerospace and Defense leader infused data into Fit-Gap

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During their migration to S/4HANA, the customer used the Celonis EMS to measure how well SAP best practices fit their needs and as-is process. They were able to identify specific activities that presented risks to the overall rollout and opportunities to increase process standardization. With these quantitative insights, they were able to proactively mitigate these risks prior to rollout and capture additional optimization opportunities.

Deploying Celonis opened up many opportunities for process improvement. The solution really fits with every aspect of the customer's business process portfolio – from purchasing to operations to finance and human resources. The EMS helped them identify value realization potential and accelerated their preparation phase for S/4HANA.



“Celonis provides an effective way for manufacturing to capture several critical relationships between production order cycle times (days/months) and our production order processes.”

# Change Management & Hypercare:

## Winning hearts and minds

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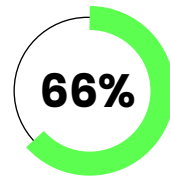
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**There's nothing worse than getting to the end of a long implementation project only to struggle with user adoption.**

If users are employing workarounds, covertly using legacy tools, or just struggling to follow processes in an unfamiliar system, there's little to no chance your investment will generate ROI.



of ERP transformations don't achieve ROI<sup>3</sup>

However, research shows that a properly managed hypercare and go-live can accelerate value realization by 70%<sup>4</sup>.

Many leaders think about adoption as whether or not the new system is being used. During change management and hypercare, this means tracking metrics such as how many users log in every day or what percentage of orders are entered in the new system.

The problem is that system adoption is only half of the story — traditional adoption monitoring doesn't help you understand how processes are performing, not to mention the drivers behind low or high adoption. Additionally, if you are able to identify a block to adoption, it's difficult to take actions that impact user behavior besides sending angry emails and offering additional training resources.

**"A properly managed hypercare and go-live can accelerate value realization by 70%."**

# Celonis enables leaders to understand and steer user adoption in a new way and answer critical questions about user behavior.

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—— **Conformance:** How often are users conforming to the intended process models? What deviations are still occurring? And what impact do they have on business outcomes?

—— **Benchmarking:** Which business units and teams across regions are laggards in adoption? Which best practices have your best-performing teams have implemented that others can learn from?

—— **Workarounds:** How often are users skipping critical steps in a process? For instance, creating POs without first creating a PR.

—— **Rework:** How often are users performing the same steps multiple times in a process?

—— **Lag time:** Are there long gaps between steps that should normally be performed in quick succession?

—— **User satisfaction:** Are there activities, subprocesses, or variants that are highly correlated with low user satisfaction scores?



# Celonis can easily answer these questions and track them over time.

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More importantly, it uses AI to unveil the root causes behind low adoption and satisfaction. Leveraging industry benchmarks and experience from over 2,500 customer deployments, the EMS can either trigger automated actions across systems or alert the right people to act at the right time.

—— **Alerts:** Send alerts to IT or management when priority or systemic adoption issues occur

—— **User reinforcement:** When users make mistakes (i.e. expense report created in the legacy tool) automatically send users reminder emails about the new process

—— **Recommended next-best actions:** Let AI guide users through new processes and ways of working with recommended actions supported by one-click automations

—— **Automation:** Automatically course correct user actions with full backend automations to any major source system

And while all of this user support is being dished out, the team running the migration can continuously track the change management progress. This allows for a data-driven conversation with the teams that are being asked to make the changes.

With the right insights and the right tools to support your users, change management finally becomes data-driven. And that is, after all, the main driver of value realization and ROI.

# Beyond migration

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System migrations are an opportunity to gain new operational agility and visibility into your operations. **But migrating to a new system shouldn't be the end game of your transformation efforts.**

It's rather the beginning of a new era of optimization and intelligent execution management. This is what an Execution Management System does. It acts as an intelligent layer on top of your underlying systems, leveraging real-time data, process intelligence, and strategic action at every process step, every time.

**For example**, the EMS might identify early payments as one of your biggest inefficiencies in your Accounts Payable process, impacting your working capital. Celonis might reveal that this process gap has its root cause further upstream in Procurement, whenever vendors delivered goods early. Celonis can then automatically update the invoice when this occurs — every time it happens.

This is how you drive immediate, long-lasting impact on your Days Payable Outstanding and working capital, and ultimately perform at your full potential. To understand how Celonis helps maximize business performance across all kinds of use cases, watch our [demo](#) or read the [Big Book of EMS Use Cases](#).

“Celonis can support a SAP S/4HANA migration in all phases – in preparation, during the rollout and with continuous improvement in operation. The use of the technology enables bottlenecks to be identified in advance and optimal use of internal and external resources. This reduces the risk of the project. Process mining also helps us to recognize and realize business value.”

– Michael Huemer, Head of the Business Analytics & Operational Excellence Competence Center, BDO

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## Business breakthroughs across industries and processes

### Manufacturing

# 10M

Manual steps  
removed

SIEMENS

[Learn more](#)

### Telecommunications

# \$70M+

Saved across  
Procure-to-Pay



[Learn more](#)

### Technology

# \$1B

Cash flow potential across  
enterprise wide processes



[Learn more](#)

### Transportation

# \$12M

Savings in Customer  
Service

Uber

[Learn more](#)

### Healthcare & Life Sciences

# 20%

Improved manufacturing  
lead time



[Learn more](#)

### Chemicals

# 27%

Higher on-time-delivery  
in 4 months



[Learn more](#)

### Financial Services

# \$68M+

Efficiency gains by  
re-engineering 40 processes



[Learn more](#)

### CPG

# 8x

Increase in  
Touchless Orders

L'ORÉAL

# Turn your system migration into an enterprise transformation

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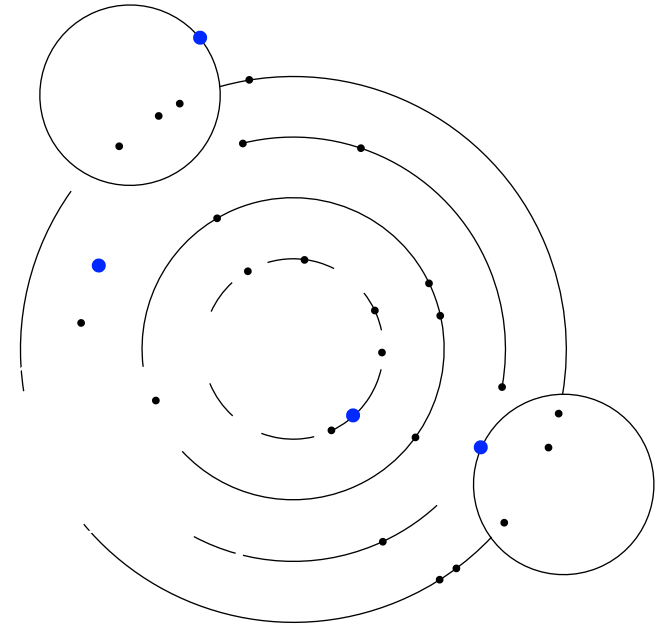
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We get it: System migrations are nerve-wracking initiatives for any IT leader — the risks, costs, and efforts are high and the pay-off may be uncertain. But, done right, they are also huge opportunities for IT to drive the business forward, to facilitate game-changing innovation, and to demonstrate their value as a strategic force in the enterprise. If they're understood not only as a technical upgrade, but as a way to truly transform your entire process and system landscape.



The good news is that Celonis can help you along **every step of the journey.**

Want to learn more? **Dig in!**

**celonis.com**

Celonis helps businesses everywhere run a data-driven system transformation — see how an Execution Management System can help you too at every step of the way.

For more information,  
visit [our resource page](#).

