

Joint study  
and report by:

celonis

Fraunhofer  
FIT

An abstract geometric pattern consisting of numerous white dots of varying sizes connected by thin white lines. Some lines are straight, while others are curved. The pattern is scattered across the dark background, with a higher density of lines and dots in the upper right and lower right areas, and a few isolated dots in the lower left.

# Accelerating Business Transformation with Process Mining Centers of Excellence (CoEs)

A study on the  
power of CoEs in  
achieving ROI

## **Accelerating Business Transformation**

with Process Mining  
Centers of Excellence  
(CoEs)

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## Abstract

The global adoption of process mining has sharply increased over the past few years, with an ever-growing number of companies around the globe launching initiatives that leverage this powerful technology.

We have reached the stage where the ‘why’ of pursuing process mining is clear, and the insights that process mining uncovers are recognised as being a crucial lever in the process transformation agenda. What’s more, most companies who have adopted this technology have successfully managed to connect multiple processes, gain insights, and realize value.

However, little guidance is available on how best to scale process mining at the enterprise level – across multiple functions and teams – and therefore move successfully towards large-scale value realization and end-to-end process transformation.

To better understand the status quo of process mining inside organizations as well as to provide best practices and recommendations on how to drive scale, Celonis and Fraunhofer FIT have conducted a joint study on Centers of Excellence (CoE) for process mining.

The results of this study are summarized here and enriched with expert knowledge from both the Celonis Customer Transformation Advisory Team and Fraunhofer FIT’s Center for Process Intelligence. Our purpose in publishing this study is to share key learnings and shed light on various aspects of Centers of Excellence, such as key success factors, value proposition, operating model and organizational setup.

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# 1

## Management summary

History shows that even the most brilliant idea on its own cannot spark a revolution. It requires dedicated accelerators to drive adoption.

The Celonis EMS has been widely acknowledged as the leading solution to drive execution management and process excellence in organizations. But to accelerate adoption, see significant value, and (most importantly) achieve ROI faster, Centers of Excellence (CoEs) are a key lever of success.

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### What is a Center of Excellence (CoE)?

**A CoE is a team that has been mandated to provide leadership, best practices, technical deployment, support, and training for a new technology and/or methodology within an organization. In this study, we refer to CoEs as dedicated accelerators for process excellence and transformation.**

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While we've long since been aware of this, the study you are about to read provides rich empirical evidence. With scientific support from Fraunhofer FIT, we conducted a customer study in early 2022, yielding a solid 214 responses from a range of customers across industries and regions, and with different approaches and maturity regarding their CoEs.

Listening to these customers' voices has substantiated our anecdotal evidence and provided many insights into CoE best practices and key success factors.

To leverage these learnings for the greatest operational impact, the study is structured in three parts:

1. **Why are CoEs important?** We start with results that prove the value of creating a CoE for process mining. This includes the ROI of process mining in general and of the CoE itself, and the benefits of creating a CoE — like driving positive impact and accelerating value creation.
2. **What are some best practices?** Next, we share the key success factors and hurdles that the study has revealed. It provides guidance on CoE roles as well as ramp-up, operating models, and organizational setup.
3. **How do you get started creating a CoE?** To make the study tangible and valuable for your individual journey, the last part of this study covers guidance on how best to get going.

The study takes the entire Celonis Customer Value Group and the Fraunhofer FIT to the next level, allowing us to provide concrete advice and recommendations based on facts and figures to support you in shaping your CoE.



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# 2

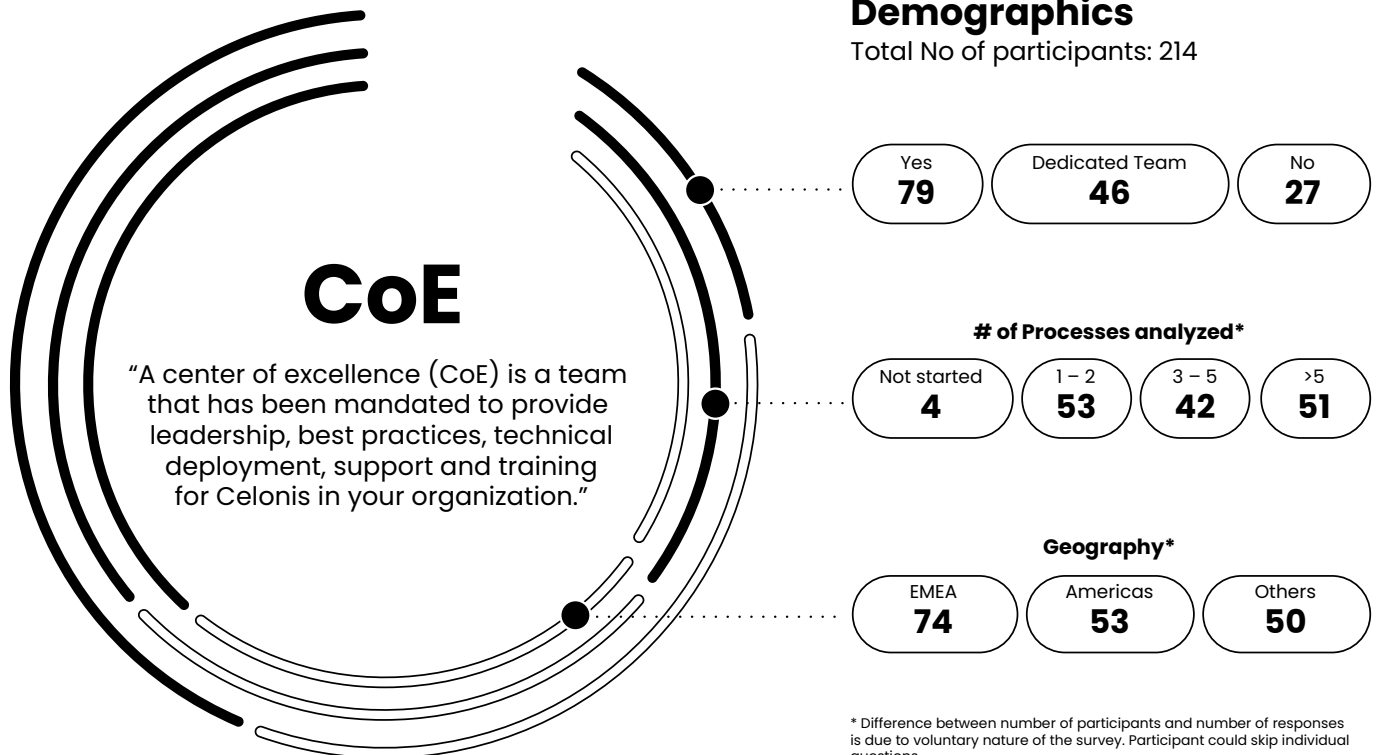
## Study design and approach

The underlying study, conducted in February 2022, was a collaboration between Celonis and Fraunhofer FIT, the leading institute for applied research in Europe helping to drive innovation and digital transformation. In short, this study was designed to add vital evidence to some of the most crucial questions around CoEs: Why are CoEs important, what are best practices, and how can customers accelerate value realization via powerful CoEs?

The results are based on the anonymous feedback of 214 Celonis customers from various industries, sizes, and geographies. The study was not targeted at a specific group but included customers that have already established a process mining CoE, customers with a dedicated team, and customers with neither. Maturity levels range from organizations about to launch and connect their first processes to heavy users who have already connected 5+ processes and support 5+ departments.

### Demographics

Total No of participants: 214



The study covered organizational aspects such as operating model and organizational setup, people topics such as roles & responsibilities, as well as questions on value proposition, investment, future needs, and overarching success factors and hurdles.

**Key messages from the study:**

1. Customers are convinced: 100% confirmed that a CoE is valuable.
2. Customers with a CoE or dedicated team are almost nine times as likely to report positive ROI on their total investment.
3. For 85% of customers with 5+ processes the investment in a CoE has already paid-off.
4. A CoE has a positive impact on transparency (92%), quality and impact of use cases (79%), cost savings (75%), and automation (57%).
5. CoEs accelerate value creation.
6. Executive Sponsors are the #1 critical success factor.
7. Lack of business buy-in and no strategic direction are common hurdles to CoE success.
8. >90% of customers consider change management/active community as important for CoE success.
9. There is a positive correlation between CoEs that are well perceived within the business and the CoE's ROI.
10. Overall, the study shows a strong correlation between size of CoE and positive ROI / pay-off for the CoE.

# 3

## Why are CoEs important?

While Celonis has always promoted setting up a CoE to maximize the value created from process mining, it has been reassuring to see that all surveyed customers agree with us that a CoE is valuable — even the ones that currently do not have a CoE.

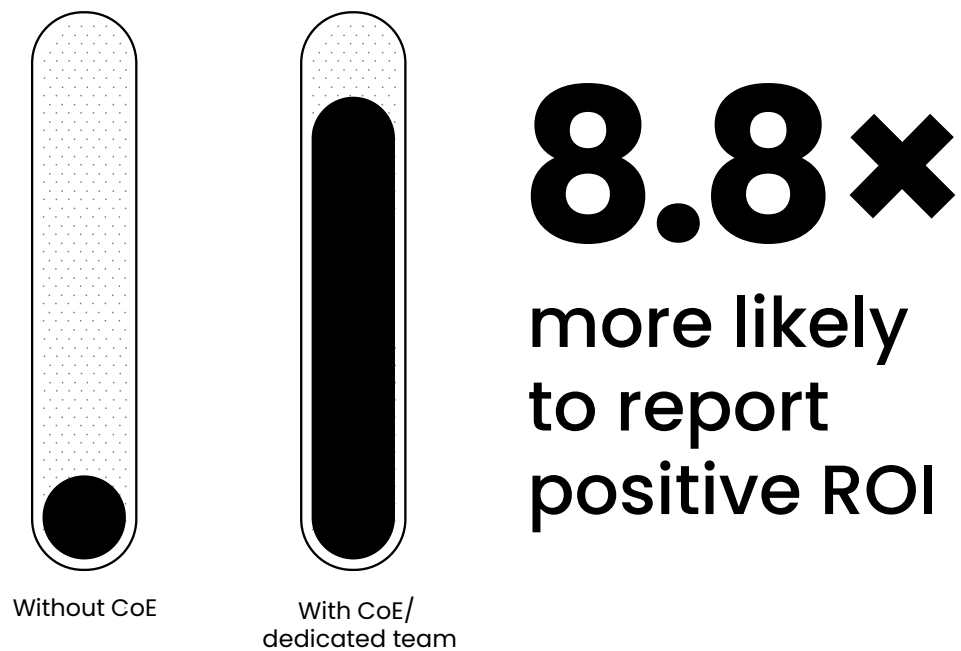
**Customers  
are convinced**  
100% confirmed  
that a CoE is  
valuable

**100%**  
of customers  
agreed. Whether  
they have a CoE  
or not.

What's more, they identified some of the exact areas where they see the process mining CoEs adding the most value:

- › 92% agreed that a CoE drives greater transparency
- › 79% agreed that a CoE results in better and more impactful use cases being prioritized and implemented
- › 75% agreed that a CoE drives higher cost savings
- › Almost 60% agreed that a CoE leads to greater speed of automation efforts and the resulting positive process impact
- › Approximately 50% agreed that a CoE results in more effective decision-making in real-time

However, the most compelling finding was that **customers with a CoE or dedicated team are almost nine times as likely to have a positive ROI from their investment in process mining:**



Further, the study revealed that the chances of generating a positive ROI from the use of process mining are greatly increased as more processes, teams, and business functions are connected.

In fact, the critical tipping point seems to be at five processes connected; 85% of customers who connected five or more processes stated that their CoE investment had already paid off. This is why Celonis consults and guides customers towards the point on the maturity curve that they'll see the greatest return on their investment.

By constantly supporting customers' CoEs to develop new capabilities and ways of working to expand in scale and scope, Celonis is helping them achieve more and more positive ROI. The study revealed that 30% of study participants — many of whom Celonis has been supporting with their CoE development — already have what would be classified as mature CoEs, with over 5 processes connected and serving 5 or more departments or functions internally. As mentioned, these are also the CoEs that report the highest overall ROI.

We also discovered a positive correlation between the wider business' perception of the CoE and the overall ROI. Positive perception is not only based on achieving hard savings, but also on the way the CoE accelerates factors such as process maturity, organizational capabilities, overall digital fitness of the organization, and organizational resilience. When speaking of the reputation that their CoE has internally, one of the study respondents explained:

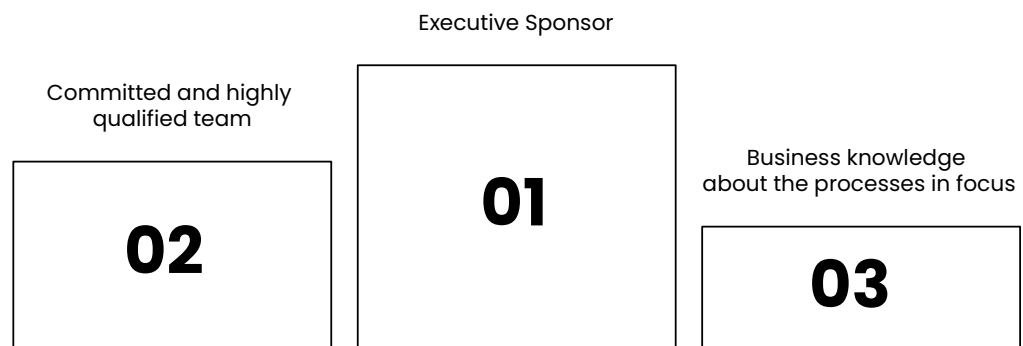
**“[The CoE] is viewed as an accelerator, a game-changer and as an aid for them to achieve huge success in their functional areas and careers.”**

# 4

## What are some key learnings and best practices?

One of the most compelling findings from the study was that most respondents agree that it's the 'human factors' of a CoE, rather than the technical ones, that either make it a success and generate fast value, or hinder progress.

**Executive Sponsors are the #1 critical success factor**



### Three most crucial success factors for a CoE



## 4.1 Executive Sponsorship & change management

There is a strong and direct link between executive sponsorship and CoE success:

- › A majority of respondents cited having a strong, committed Executive Sponsor as the single most important factor for CoE success
- › Of all respondents reporting a positive ROI on their CoE, 94% reported having an Executive Sponsor



In the work across their customer base, Celonis recognizes that the best Executive Sponsors are active and visible. They:

- › Communicate often and over multiple channels
- › Formulate clear value targets
- › Use their position and influence to build a coalition of support for Celonis and tie it strongly to organizational strategy and goals

In this way, the Executive Sponsor paves the way for the CoE to expand horizontally and vertically and deliver maximum value.

In addition, having a change management plan in place to communicate, share success stories, and engage new teams and business functions is critical. Over 90% of surveyed customers voted change management and building an active community as important for a CoE's success.

## **4.2**

### **Success factors and hurdles**

Besides executive sponsorship, other critical levers for success cited were having:

- › An experienced and committed core team
- › The right level of business knowledge represented in CoE activities (e.g. through the engagement of the right subject matter experts)
- › Clear and transparent setting of value targets and reporting against them

In the study, we also asked customers what they perceived as the common hurdles to CoE success. Customers with a neutral or positive ROI cited:

- › Lack of executive sponsorship
- › Low engagement and support from the business
- › A lack of a clear strategic narrative for the CoE

Again, these reasons relate to the human versus technical aspects of implementing a process mining CoE, which is why we consider having a proactive change management plan as a best practice (more detail on our change management methodology is found in the next section – the ‘How’).

The findings of our study are very much in line with what Celonis has observed across many customer engagements both past and present. Customers who are committed to creating a strong strategic narrative for Celonis (and who invite early business and end-user involvement) gain more momentum, achieve higher adoption rates, and create a stronger internal demand for Celonis. Ultimately, this results in more compelling use cases and a faster path to value creation.

## 4.3

### Key learnings around CoE setup and operating models

Through Celonis’ experience working with diverse customers, they recognise that there are many variations in how individual organizations set up and resource their CoE, including the governance model applied; after all, the CoE must be designed with the unique organization and corporate culture – within which it must operate and be successful – in mind. The study allowed us to capture the choices that the study participants have made when faced with these organization design decisions.

#### The CoE team

The study revealed that customers with a positive ROI cited a committed and highly qualified team as the most important factor for their success, but it is important to note that this does not necessarily require a ‘large’ team.

Success is to a larger extent determined by the quality of the team, and in matching the size of the team to the stage of process mining adoption (ie. early stage, ramping up, or mature). Teams can start quite lean, with less than five FTEs for a 'small' CoE (defined as 1-2 processes connected for 1 department), building up to almost 20 FTEs for a 'large' CoE (5 or more processes connected across 5 or more departments).

## CoE roles and responsibilities

Effort and roles to run a CoE increase with the number of supported teams

### Recommended role setup for various CoE sizes

(based on the number of supported departments and implemented processes)

Role	CoE Lead	Subject Matter Expert	Data Analyst	Data Engineer	IT Application Owner
<b>Small CoE</b> 1 department 1 – 2 processes	<b>0.5</b>	<b>0.5</b>	<b>2</b>	<b>1.5</b>	<b>0</b>
<b>Medium CoE</b> 2 – 5 depart. 3 – 5 processes	<b>1</b>	<b>4.5</b>	<b>4</b>	<b>2</b>	<b>0.5</b>
<b>Large CoE</b> 5+ departments 5+ processes	<b>1.5</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>2</b>

**For Small CoEs, Data analysts and Data engineers are the most important** team members, while IT application owners are only needed for medium or large CoEs.

**Subject Matter experts are especially important for large CoEs** and scale proportionally with the number of connected processes.

All numbers based on averages

Obviously, at the beginning of a CoE journey, the role of the CoE Lead is critical. When advising customers on CoE setup and resourcing, Celonis recommends a CoE Lead who is not only technically competent and experienced in agile project management, but who is also a great networker, a strong advocate for change, and who can position process mining as a critical technology for strategic process transformation. Ideally, the CoE lead is an entrepreneur within the company and proactively promotes process mining both vertically and horizontally throughout the organization.

In addition to the CoE Lead, a successful CoE will need technical and data-driven roles such as data analysts and data engineers. Customers confirmed that when a CoE grows and company-specific applications are created, IT application owners also become important members of CoEs in order to drive innovation for those applications.

Once the CoE has been set up and the first use cases have been successfully implemented, the next challenge is scaling. This is when having access to dedicated subject matter experts (SMEs) becomes a lever for success, so the CoE can scale proportionally with the number of connected processes.

These SMEs bridge the gap between the CoE and operational units and must understand the processes in question deeply, including common pain points, the strategic objectives for the process – including the process maturity ambitions of leadership – and the measurement of process performance.

These subject matter experts are also crucial in helping define the appropriate actions that need to be taken at the team level to ensure the maximum impact of process mining for that team. The experience among Celonis' customer base shows that the SMEs deliver the biggest impact on process efficiency and value if they are sourced from within the respective departments responsible for the process execution.

All that being said, **the most important factor is to search for process experts who challenge the status quo** and therefore are intrinsically motivated to drive efficiency.

## 4.4

### What makes a good Executive Sponsor or Business Champion?

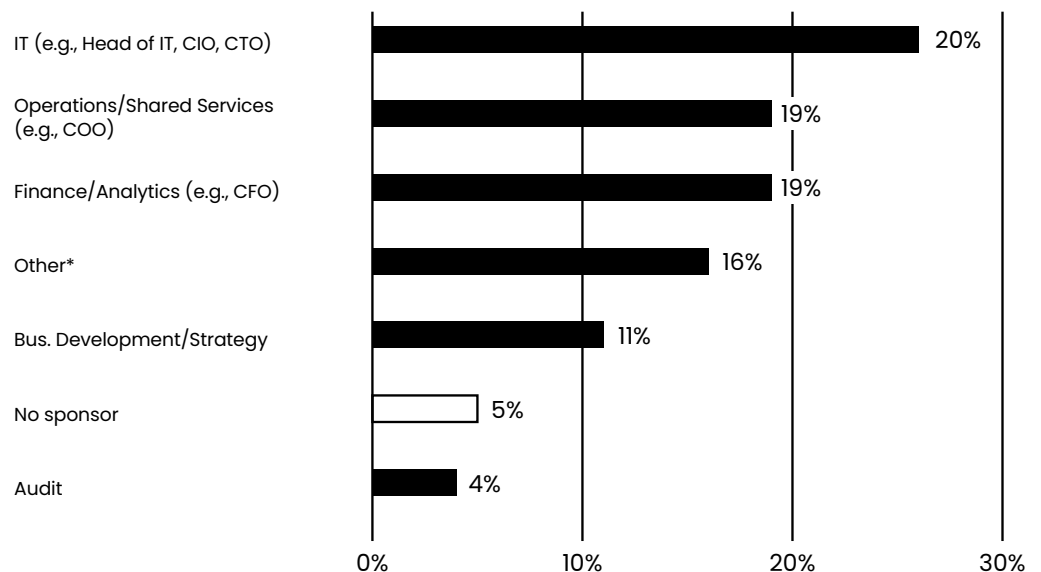
Two roles to highlight, although not core roles within the CoE, are the Executive Sponsor(s) and the Business Champion(s).

Customers cite the Executive Sponsor(s) in particular as being the number one lever for the overall success of the CoE (as described in the previous section). The study showed that the Executive Sponsor may come from the business or IT; in most cases, the sponsor comes from the business unit/function the CoE is embedded in.

However, regardless of where the Executive Sponsor is found in the organization, it's critical they act as the bridge between IT and the business, supporting the process mining deployment by giving appropriate guidance, making expectations clear, and setting relevant targets and incentives.

#### Business role: Executive Sponsor

An Executive Sponsor is the #1 success factor



Definition: A sponsor is a senior executive with budget and management authority, who supports the Celonis deployment by giving appropriate instructions, targets and ideally sets incentives.

\* Selection of answers that were given as part of "Other":

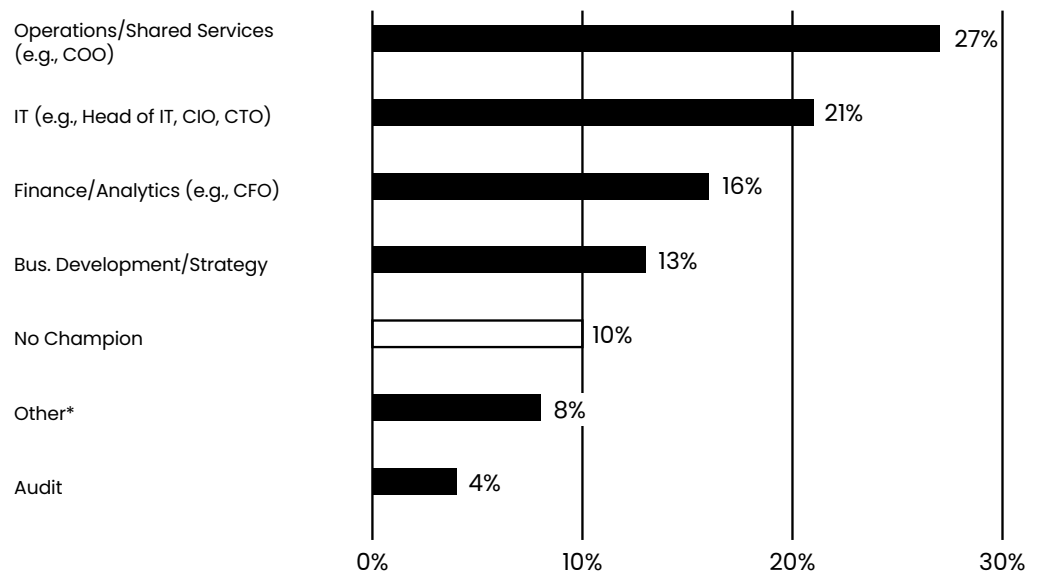
Chief (Digital) Transformation Officer or similar (6) | SCM & Procurement (3) | Global Process Excellence/BPM (2)

In addition to the Executive Sponsor role, successful customers also report having a Business Champion, and often more than one (and if a sponsor is also a champion, the impact is even greater). When looking at customers reporting positive ROI, only 2.5% report not having a champion.

While many Executive Sponsors come from IT, business champions are much more likely to be found in operations or shared services due to the need for this role to be hands-on in supporting and engaging operational users in their day-to-day adoption of process mining; logically, they need to be closer to the business operations and end users.

### Business role: Champion

A champion helps promote process mining across the organization



Definition: A champion is an engaged, proactive operational user who supports and promotes the usage of Celonis across her/his organisation.

\* Selection of answers that were given as part of "Other":

Process Excellence/Automation (4) | SCM & Procurement (3) | Transformation Office (1)

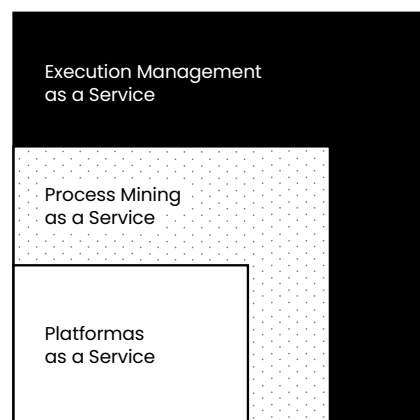
## 4.5 CoE value proposition and operating model

Defining the value proposition — or mandate — for a CoE is usually among the first decisions to be made, as all other decisions around staffing, operating model, and logical organizational placement flow from there.

Celonis suggests three options for the CoE value proposition:

### Operating model

Shaping the  
value proposition  
of the CoE



### CoE drives execution excellence

Leading organizational change

### CoE drives process insight

Proving operational transparency

### CoE provides a technical platform

Facilitating for operational users

The general trend we see is that the value proposition for customers evolves over time, with most new CoEs concentrating on “Platform as a Service” and then progressing towards “Execution Management as a Service”.

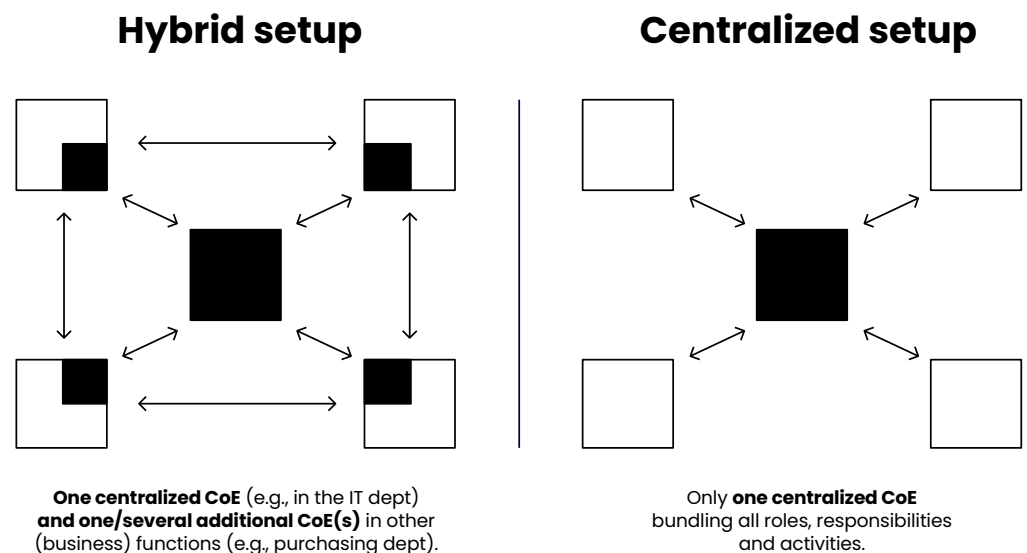
The good news is that in the study we see examples of customers with a positive ROI across all three of these value propositions. However, relatively more value has been reported from customers who have progressed to the third stage “Execution Management as a Service”. This is in line with the overall Celonis methodology which recommends that customers should never stop at the insights level; driving actions based on the insights is where the greatest value is achieved. Even in cases where the CoE does not have the mandate to drive the actions itself, a strong engagement with the business is required of all CoEs to instill a culture of process transformation based on valuable insights.

With regards to where to place the CoE, the study showcased high variability and did not reveal any strong link between one placement choice and success. In fact, we can confidently say that a CoE can be successful in almost any part of an organization so long as the key levers for success (sponsorship, high business engagement, etc.) are present. We did see, however, that most CoEs are established in IT organizations (20% globally), followed by shared services organizations or business functions (each with 15% globally).

As for whether the CoE should be based in just one department, we did see a strong preference from customers (67%) for a centralized set-up versus a hybrid model.

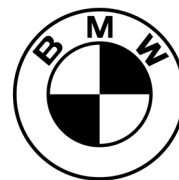
## Operating model

Two models\* have emerged among customers



\* Two customers indicated a decentralized setup. Since this is usually a temporary setup as part of the scaling process, we have not listed it as a separate option.





**“At BMW, our hybrid Celonis Center of Excellence has been the key enabler to most effectively leveraging the Celonis Execution Management System across our global organization since 2016.**

**Despite having many years of operational experience with Celonis, the CoE continues to give us valuable insights on best practices and success factors. We are always seeking to better optimize how we operate in all our business units starting from engineering to production to customer support and enabling.”**



**Dr. Patrick Lechner**

Head of Process Mining at BMW

# 5

## How do you get started creating a CoE?

### 5.1 CoE value proposition and operating model

Picking the right time to start a CoE is an important decision in ensuring long-term success. The study revealed that most customers tend to set up their CoE quite early in their process mining journey, either immediately after purchasing Celonis, or once the first implementations have been completed and there is a desire to expand to new process areas and teams.

Based on the study results, we do not recommend waiting until there is a critical mass of users to be 'served' by the CoE before setting it up, as it is apparent that the CoE in itself is an important lever in reaching this critical mass.

From Celonis' extensive experience advising customers in CoE setup and scaling, we also are confident that an early CoE setup allows for the right attention and focus on setting up the process data models, and aligning these with the business. These can then be quickly leveraged by incoming use cases and therefore deliver fast-tracked value.

After setup, choosing what to focus on is critical in ensuring ongoing support, demand, and scalability of Celonis and the CoE. The study has revealed that the vast majority of customers prioritize the activities of their CoE based on value realization potential and/or in line with company strategy. Nearly 70% of all surveyed customers selected both options, indicating that the majority of decisions are made looking at both factors in tandem and not simply one or the other.

## 5.2 Change management

The next factor driving acceleration is change management (already discussed in the previous section). The vast majority of customers, regardless of industry, region, and current success, pointed to change management and an active community as important factors to accelerate and drive value.

**NOKIA**

**“We have the ambition to apply process mining across our process landscape. To achieve that, we want to expand user adoption on a daily basis with the Celonis Execution Management System.**

**Our Celonis Center of Excellence is playing a crucial in the roll out of Celonis, by providing tremendous insight into best practices for accelerating time to value, in particular with regards to change management, which is top on our priority list.”**



**Timo Peters**

Business Process Consultant, Nokia

Celonis has made a Change Management Playbook available to their customers which recommends the following best practices:

1. Start with a clear and **compelling strategic narrative** for implementing Celonis. Answer the question: What does Celonis help us achieve within our core processes that we have never been able to do before? Why is this exciting?
2. Secure **change sponsorship (an Executive Sponsor)** and set up change governance. Task the Sponsor with a clear role to make Celonis a success.
3. Clearly **communicate impact** early to end-user groups (“What’s in it for me?”) to help them exploit the potential of Celonis as much as possible. Give them visibility of the progress they are making and the impact they are driving.
4. Provide multiple channels and engaging options for users to **engage with & learn about Celonis**. Celonis is a new and powerful technology, and most people report that once they have seen it, they believe in it – so show, don’t tell.
5. **Celebrate success** and **build communities** of passionate super users to ensure continuous improvement and fuel adoption. Peer-to-peer advocacy (neural networks) tends to work much better in the long term than purely top-down messages and can help create viral adoption.

(adapted from Celonis Change Management Playbook, 2021).

Change management is also the means by which the CoE, as a new team, is introduced across the organization. In large, complex organizations, a new team can easily run the risk of flying under the radar, having low visibility within the business.

As the study clearly shows the link between a positive perception of the CoE and ROI from the wider business, we recommend that change management doesn’t simply focus on end-user enablement end user metrics such as adoption, but also introducing, explaining, and building excitement for the new team and its remit within the organization. This can also have the powerful effect of attracting excellent talent who are excited about being pioneers of data-led execution from other parts of the organization.

A surprising finding from the study was that although more than 90% of respondents named change management and community building as being important, very few customers engage a change management expert as a permanent part of the CoE, whether full-time or part-time.

What we also see across our engagements is that even if there is no formally assigned change management resource, the change management tasks do need to be completed to drive adoption and scaling; these tasks generally fall to the CoE Lead.

## 5.3

### The road to glory: scaling logic

When asking customers what their scaling logic has been, we saw a high degree of consistency, regardless of whether customers had an early stage CoE or a more mature one.

Most customers begin by scaling vertically — in other words, increasing the number of use cases within one process area, moving upstream or downstream in the process. This allows the CoE to leverage existing data models to drive exponential value. Most customers reported global expansion (taking one use case to new geographies and teams) as being a secondary priority to vertical scaling.

We also saw most customers prioritizing the onboarding and enablement of teams outside of the CoE at an early stage, allowing operational end users to become more self-sufficient and thereby freeing up the CoE resources to focus on new use cases.

All customers, regardless of maturity, reported having a slight preference for developing their own CoE resources, over the hiring of external consultants, when preparing to scale. We view this as positive; data-driven business execution is emerging as a competitive advantage in many industries and promises to remain so, and it is far better for customers to build up their own internal capabilities in this regard than to rely in the long term on the external market.

# 6

## Putting it all together: our top ten recommendations

To conclude, we wanted to turn the key insights from the study into actionable learnings for you. While there's no one way to success with a CoE, the most successful companies:

### 10 things to do!

- ✓ ... bundle their know-how in a CoE as central accelerator
- ✓ ... have at least one Executive Sponsor and one Champion
- ✓ ... consider Change Management and an Active Community as very important
- ✓ ... rate Leadership alignment and ownership as the most important change Mgmt. aspects
- ✓ ... established their CoE when expanding to different departments
- ✓ ... scale big: support more than 5 departments/functions
- ✓ ... scale big: analyze more than 5 processes
- ✓ ... understand that a committed and qualified team is a key success factor
- ✓ ... expand vertically (e.g., identifying new use cases, work with new depart./processes)
- ✓ ... don't just provide a technical platform but drive execution excellence and transformation

To learn more about how Celonis has partnered with customers to build successful CoEs that drive transparency, process transformation and value, click [here](#).

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