



A guide by Celonis

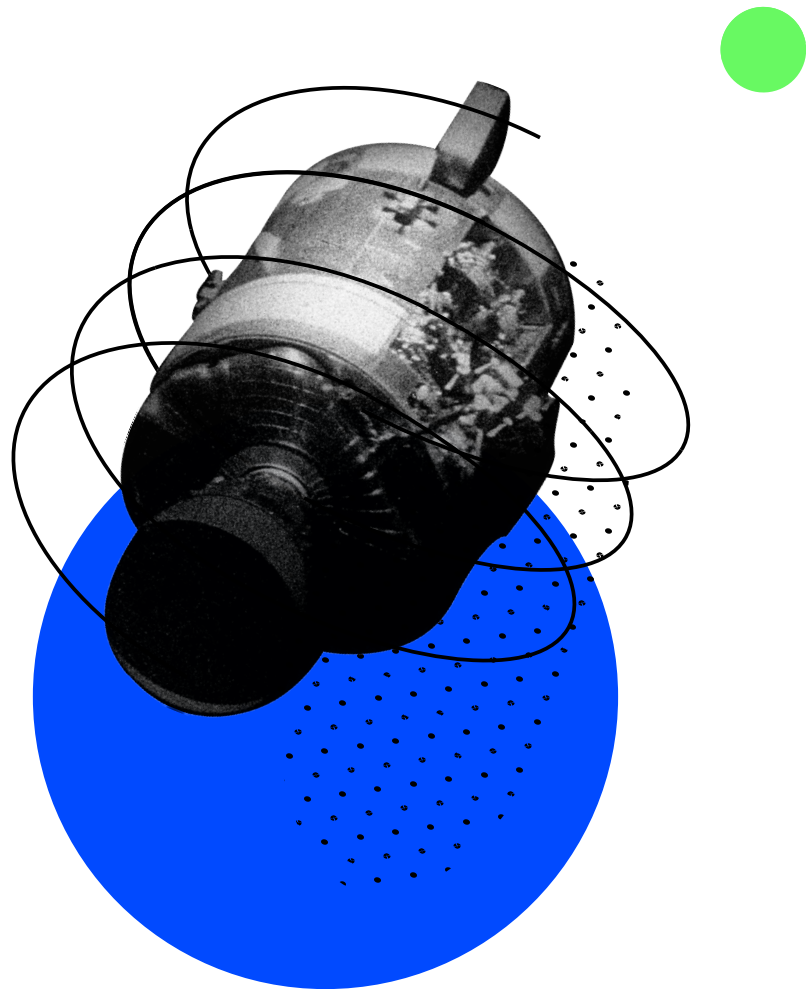
The State of Process Excellence

Insights and lessons
from over 500 process leaders

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Houston, we have a process problem.



**Consider this: 99%
of success is good
execution, and 100%
of good execution lies
in your processes.**

If these statements are true — and at Celonis we believe they are — then it's safe to say process excellence deserves the recent surge in attention it's received in enterprises across the globe.

Perfect execution (via process excellence) is the dream, but of course the reality is that most companies are not executing their processes at full capacity today.

Why is this? To start with, it's because processes are forced to run across rigid and fragmented systems. Imagine trying to run 2020s business initiatives on a patchwork of outdated infrastructure — you're never going to reach the execution capacity of a modern organization.

This is one of the key findings you'll discover in this report. A significant proportion of enterprises today are hamstrung by existing IT systems, and fit their processes to the old technology. Which means it's still only a minority of businesses that actually create and optimize their processes with the goal of achieving the best possible outcomes.

Let that last part sink in for a minute.



Mining for process insights

We wanted to understand the rise of process excellence, along with the challenges and opportunities playing out in the real world. And what better way to do that than to ask the people making it happen?

In a recent study, we spoke to more than 500 process leaders working at companies with annual revenues of more than \$1 billion. This international sample of process people, at VP and director level or above, spans industries like financial services, retail, hi-tech, life sciences, chemicals, telco, manufacturing and more.

The insights in this report come from these process leaders — from their experiences good and bad, their failures and successes, and the challenges and opportunities that lie ahead for them and for every leader pursuing process excellence today.

Here’s a snapshot of some of the topics we’ll explore:

- Process discovery as a top priority, and the technologies used to optimize it
- The opportunity for process leaders to adopt a (surprisingly rare) outcomes-driven approach to process design and ROI
- The importance of process mining as a powerful driver of business execution, and a still untapped opportunity for many enterprises
- The rise of the Process Center of Excellence
- Some big challenges ahead for process leaders

Let’s dive in.

The people behind the processes

Before we get too deep into the technicalities, we want to understand more about the process people themselves. (People in roles and organizations that are probably very much like yours, if you're reading this guide.) Who are they, how do they work, and who do they report to?

35% of process excellence leaders report to the CEO.

Enterprise leadership teams today want direct visibility into their process excellence initiatives, and the chain of command proves it. 77% of process leaders report directly to C-suite leaders, including CEOs, CIOs and CFOs. More than one in three report to the CEO.

Process discovery is a top priority.

Here we come to a key finding, and an increasingly important capability in a maturing process excellence landscape: the importance of process discovery.

63% of process leaders view process discovery as a top priority. For context, this figure comes in above the 56.5% who indicated that automation

was a top priority. Automation is of course a critical component of any process excellence strategy, but the stronger focus on getting comprehensive visibility over your process end-to-end suggests that enterprises now recognize understanding a process is as (or more) important than automating it.

In other words, process leaders know that automating blindly is not an effective approach. They realize it's not wise to rush into an automation initiative without first understanding the underlying systems and processes inside out.

However, while enterprises are getting more strategic about understanding the inputs of process excellence, the data tells a different story about the desired outcomes they're designing for.



‘Our goal is to deliver the best outcomes for customers, and that only happens with a continued focus on technological advancement and process modernization.

We’re leveraging process mining capabilities and infusing them with AI and machine learning to drive innovation, but also to globally standardize the outcomes we deliver to customers.’¹

– Amit Sawhney
VP of Services Technology, Dell Technologies

1. <https://partners.wsj.com/celonis/unlock-your-capacity/youre-an-executive-so-hows-your-execution-management/>



Process pragmatism, or a fundamentally flawed approach?

Only one in three process excellence leaders take an outcomes-first approach.

When asked about their ideal company processes, just 35% of process leaders said their priority is to optimize each step of a process to achieve the best outcome. In contrast, almost half (49.5%) focus on creating processes that either align to pre-defined IT source system flows or are explicitly designed to reduce cost.

While a focus on immediate cost efficiencies is attractive, the opportunity cost is often much greater: forgoing the long-term value created by genuine process improvement.

Likewise, the rigidity and fragmentation that's usually found in existing source systems makes them a difficult foundation for the work of process excellence. In our experience, when enterprises default to a standardized approach to process management (as 15% of

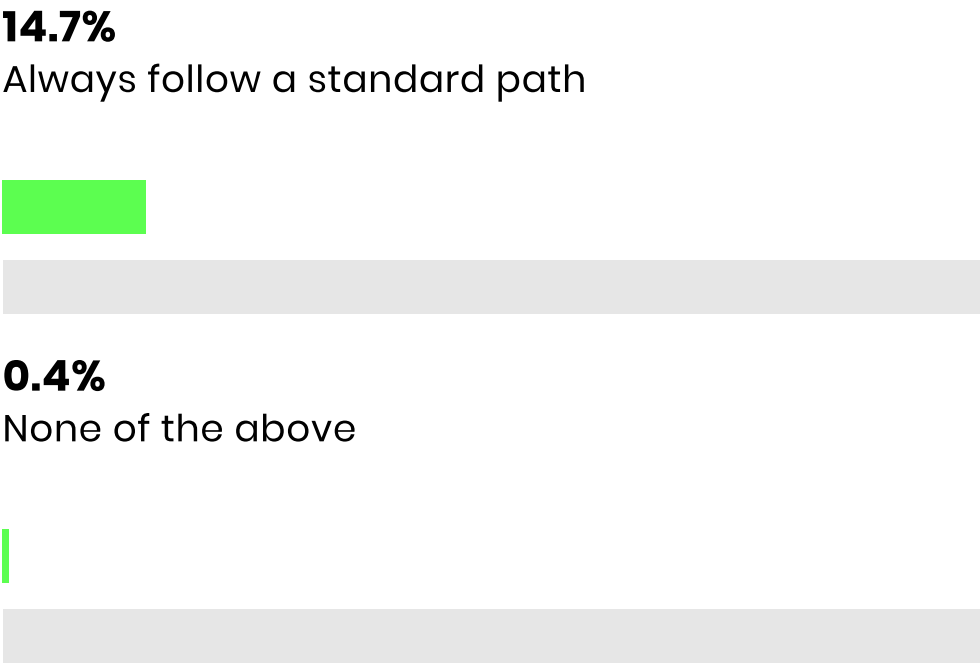
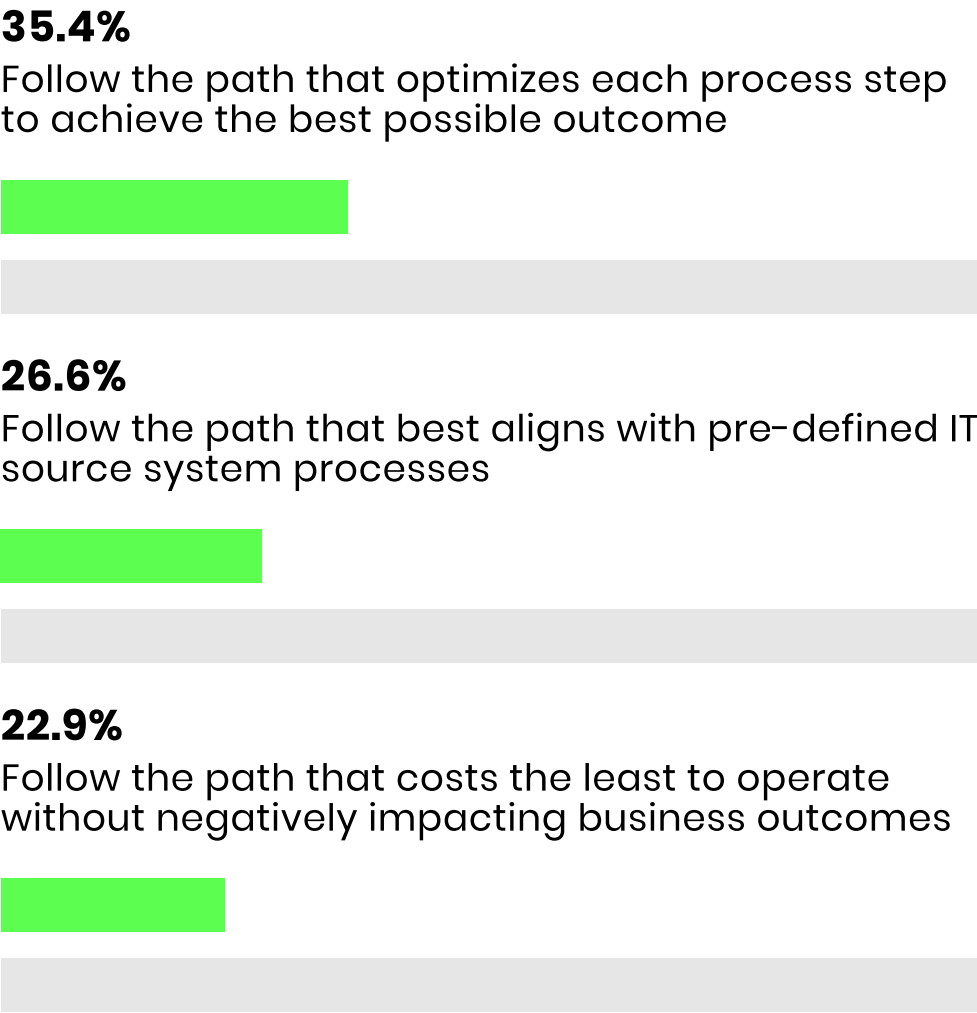
our respondents do), it's usually because that's what works best for the underlying IT systems — not for the business itself. While a generous assessment might call this a form of process pragmatism, in reality it's a fundamentally flawed approach: adapting processes to fit the technology, instead of the other way around.

An outcome-driven opportunity

We believe the 35% of process leaders who first and foremost prioritize outcomes are the early movers that others will follow.

This approach — which seeks to find and fix the execution gaps buried deep within existing processes, in order to transform them for the better — is at the heart of the Execution Management System. And it's why, here at Celonis, we're so excited by the potential of technologies like process mining. More on that later in the guide. ►

Our company’s ideal processes...



Business improvements via process improvements

In a similar vein to the outcomes-driven approach we identified in a minority of process leaders, we wanted to learn more about how they prioritize process improvements.

So we asked about the factors that sway their allocation of limited resources when they're doing the work of process excellence.

33% of process leaders prioritize ROI when deciding how to optimize processes.

Our take on this one-in-three figure is that, just like the adoption of an outcome-driven approach, this represents an easy win for process leaders.

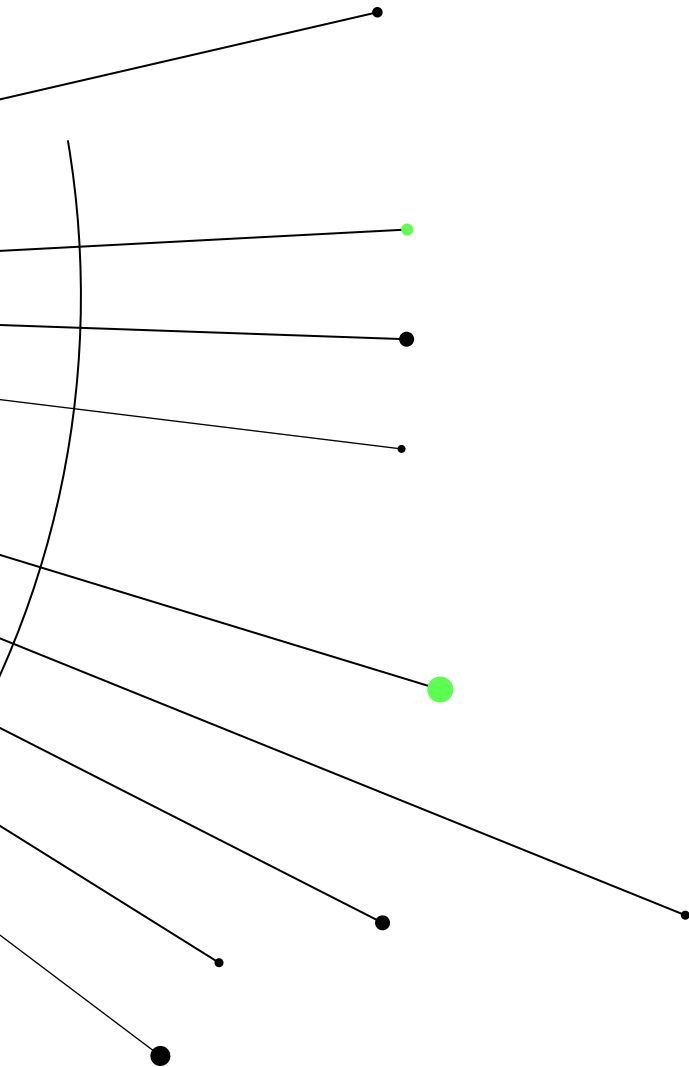
That two thirds of process leaders don't prioritize by ROI paints a picture of a process practice that still lacks maturity, but it's worth considering the other answers given. In second place, executive priorities were cited by 21% as a primary factor in process improvements.

Another interesting point is the discrepancy between business impact at 33% and executive priorities at 21%. Are executives really pursuing goals other than business ROI, or is there a lack of understanding on their part about how strategic process improvements can unlock real business impact? And what can process leaders do to quantify the impact of strategic improvement initiatives to resolve this apparent misalignment?

The spread of other priority factors, many of them pragmatic considerations or simple 'first come first served' rules, suggest a significant lack of strategic direction in process improvement initiatives.

The result? The full potential for business improvement through process improvement remains untapped.





How do you prioritize process improvements?



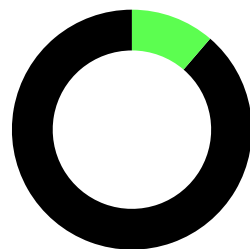
33.2%
Business
Impact (ROI)



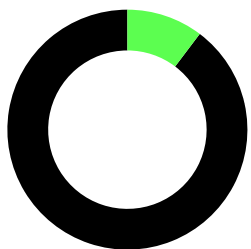
21.3%
Executive
Priorities



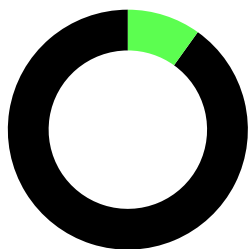
13.7%
I work on projects/
opportunities in the
order they are
identified



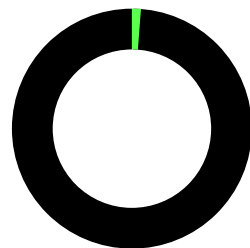
11.3%
Available
Resources



10.3%
Stakeholder
Relationships



9.9%
Project Length



0.2%
We Do Not
Prioritize Process
Improvements

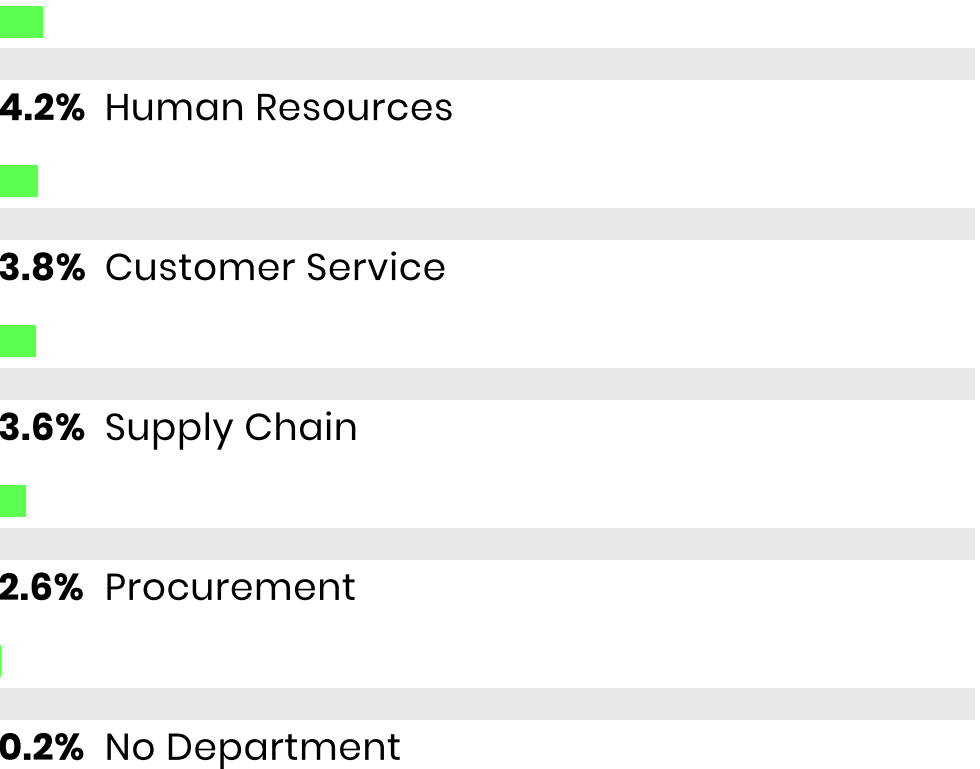
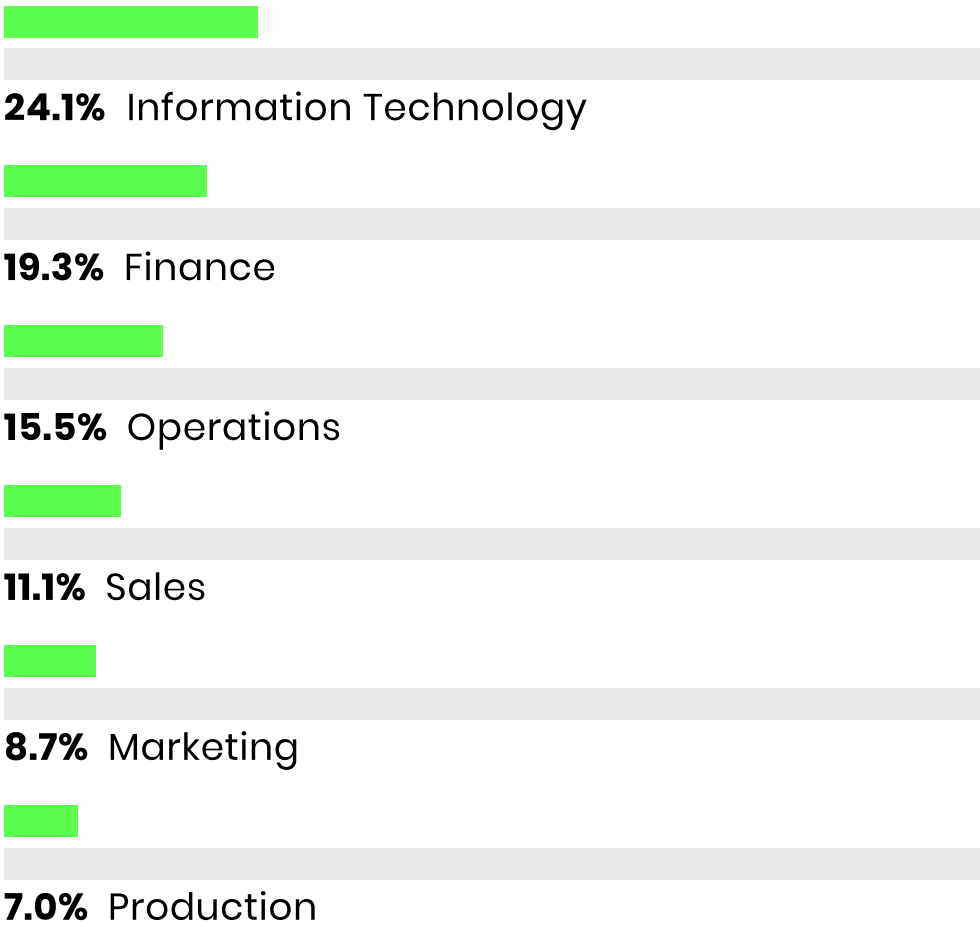
Process partnerships

Process leaders can't operate in isolation. It takes teams from across the enterprise working in close collaboration to successfully find and fix inefficiencies and execution gaps.

Some business functions are natural collaborators for process excellence professionals, but we wanted to find out which ones form the most frequent partnerships.

We learned process leaders collaborate with departments across the enterprise, from back office to front office. Here's the breakdown.

What department do you partner with most frequently?



The Process Center of Excellence

One of the most striking findings from the survey was the prevalence of Centers of Excellence as a means of managing — and evangelizing — process excellence within enterprises.

In fact, 87% of process excellence professionals are part of a Center of Excellence today, or are setting one up.

The rise of the Process Center of Excellence illustrates the recognition of process excellence as an increasingly strategic function within the modern enterprise.

It's also an interesting trend from a structural point of view. Very few of the process leaders we spoke with are part of a line-of-business team. There may be process excellence professionals embedded in various departments, but typically the leaders are now part of a Center of Excellence. ►

<p>The Center of Excellence as an accelerator for change</p> <p>As a central hub and driver of enterprise transformation, your Process Center of Excellence can fulfil three roles:</p> <p>Catalyst – ensuring executive alignment around purpose, turning strategic targets into operational KPIs, and enabling a data-driven organization.</p> <p>Evangelist – spreading the mission and value of process excellence far and wide, coordinating across business units and functions, and sharing best practices and innovation.</p>	<p>Enabler – collecting data and technical implementations, managing data access and performance, and providing onboarding and training.</p> <p>If you'd like to learn more about driving organizational change and building your own Process Center of Excellence, Dr. Lars Reinkemeyer, VP Customer Transformation at Celonis, explains more in this video.</p>
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The tools that power process excellence

Broadly speaking, we can break down the use of technology and tools into two categories in process excellence. First, for the discovery and documentation of processes, and second, for process improvement.

DISCOVERY AND DOCUMENTATION

Process mining pulls ahead of diagramming tools for process discovery and documentation.

Unsurprisingly, process mining is the preferred tool for discovering and documenting, with its ability to deliver an objective, real-time view of your processes as they actually run. But there's still a worrying reliance on diagramming tools and even sticky notes – the kind used in the extremely lengthy workshops where process maps are created by hand (and become outdated the moment they're finalized).

What tools do you use to discover and document processes?

56.1%

Process mining technology

54.3%

Diagramming tools

50.3%

Stakeholder interviews

49.5%

Whiteboards

35.6%

Sticky notes

PROCESS IMPROVEMENT

Process mining beats out RPA as preferred tools for process improvement.

Robotic Process Automation has seen a surge in attention among process excellence leaders in recent years. But in practice, these professionals are learning that RPA alone is often not enough. Indeed, if you don't understand your processes and root out the gaps, automation on its own is a surefire way to simply scale up your existing inefficiencies.

They need a combination of analytics and automation to find and fix process gaps and improve their ability to execute in real time. Process mining helps them achieve this. Business intelligence, process mining, and AI are neck and neck for the most used tools for process improvement, highlighting the importance of analysis and process discovery for these projects.

Next up we'll take a closer look at process mining. ►

‘With process mining, we’ve empowered our teams with a new analytical capability.

The business engages very quickly when they see the opportunities that process mining uncovers, and that’s why we hope it will be a game-changer for the company.’²

– Vin Cardoso
Global Tech Director, Finance, AB InBev

² <https://partners.wsj.com/celonis/unlock-your-capacity/the-truth-lies-within>



Which of the following technologies do you use for process improvement?

	Use, increasing spend	Use, decreasing spend	Use, maintaining current spend	Don't use, considering	Don't use, not considering
Business Intelligence (BI) tools	32.2%	28.4%	30.4%	6.8%	2.0%
Process Mining	30.8%	23.3%	35.2%	6.8%	3.8%
AI and Machine Learning	30.0%	24.3%	37.2%	6.0%	2.4%
Business Process Management (BPM) tools	27.0%	26.2%	37.4%	7.0%	2.0%
Robotic Process Automation (RPA)	26.4%	27.8%	35.2%	6.8%	3.4%
Domain-specific cloud software (eg. Salesforce)	23.1%	29.8%	39.0%	5.8%	1.8%
Enterprise Resource Planning (ERP) systems (eg. SAP)	20.5%	27.6%	44.5%	4.6%	2.6%

Process mining in the spotlight

Ten years ago, process mining was the subject of a few academic research papers. Today, it's one of the most important technologies in business.

We define it as an analytical discipline for discovering, monitoring, and improving processes as they actually are (not as you think they might be), by extracting knowledge from event logs readily available in today's information systems.

AN X-RAY OF YOUR BUSINESS

In essence, process mining is a way to get an X-ray of your business — a real, living, breathing picture of how your processes work. Companies like [Siemens](#), [Lufthansa](#) and [Uber](#) use the technology to achieve that penetrating visibility into their enterprise.

But the real value of process mining lies in what it enables process excellence leaders to accomplish for their businesses. It provides the insights they need to not only identify the gaps in their processes, but understand why they're happening, the impact they're having on business outcomes, and what they can do to fix them.

It's the gateway to Execution Management.

To put it another way, it's the first step you need to take if you want to maximize the capacity of your entire business. ►

At Celonis, we're all about process mining.

It's our history. Today, Celonis is the gold standard in process mining for over 2,000 companies, Fortune 500 and mid-market customers alike.

And it's not just us saying this — it's the world's most important analyst firms, from Forrester, Gartner, HFS and beyond. (If you see a quadrant for process mining solutions, look for us in the top right-hand corner.) We offer true enterprise performance at scale, in an easy-to-use, highly flexible package.

[Learn more about process mining](#)

‘In the last decade many companies discovered that process mining has been the key to unlocking their entire digital transformation. This is because process mining makes DX transparent, measurable and tangible.

It’s possible to drive an organization’s automation efforts with fact-based insights, by setting transparent targets, enabling an organization to see and measure progress.’

**– Dr. Lars Reinkemeyer
VP Customer Transformation, Celonis**

The impact of COVID-19

COVID has forced organizations to realize that processes must be more digitized and standardized — but not at the cost of flexibility.

One of the findings from our study was the desire for increased standardization in processes. This may be a side effect of increased workforce distribution and remote working, with companies realizing they've been relying on too much tribal knowledge and too many ad-hoc meetings to support normal business.

It seems that working from home really has disrupted business as usual. So when we asked how the pandemic has affected their approach to process improvement, we weren't surprised to see a redoubled need for standardization, digitization and flexibility.

Has your approach toward improving processes changed as a result of COVID-19?

34.4%

Yes, processes must be further standardized

33.4%

Yes, processes must be further digitized

29.0%

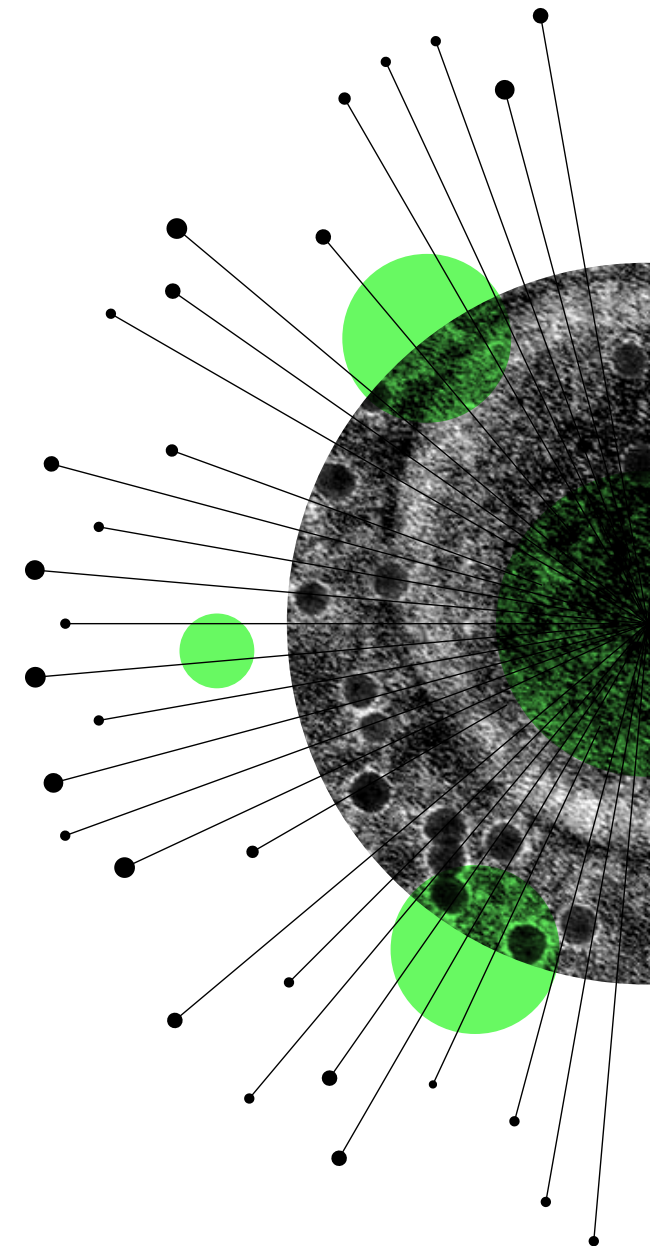
Yes, processes will need to be more flexible

1.8%

No, nothing has changed

1.4%

No, but it has highlighted key areas of stress and friction.



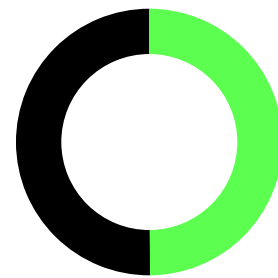
It's interesting to note that a need for standardization and a need for flexibility needn't be seen as contradictory. With people having to collaborate remotely, there's been a pressing need to offer alternative (digital) methods for employees and customers to complete the steps in any process. By centralizing information and collaboration, enterprises are standardizing processes and ending their reliance on tribal knowledge. By digitizing steps that would otherwise have to be performed in an office, they're keeping things flexible.

PROCESS EXCELLENCE IS FEELING THE PINCH.

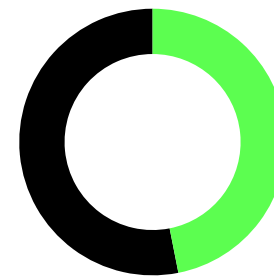
Of course, like everyone else, process professionals aren't immune to the financial consequences of COVID-19.

The pandemic has seen budget cuts affecting 50% of process leaders' plans. And 38% have had to reprioritize projects as a result of the pandemic. Now more than ever, earning and maintaining executive buy-in — by demonstrating the ROI of process excellence — is a critical skill for process leaders.

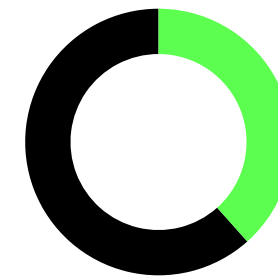
How has COVID-19 impacted your work in process excellence?



49.9%
Budgets have been cut as a result of COVID, impacting our process excellence plans



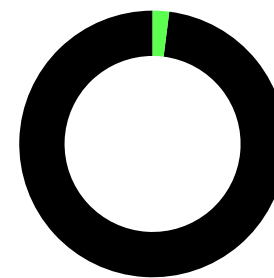
46.9%
We have lost personnel as a result of COVID which has affected our process excellence plans



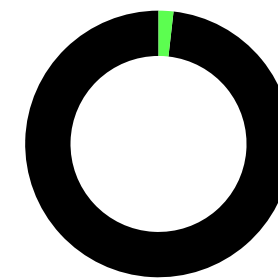
38.4%
I needed to reprioritize my projects as a result of COVID



36.0%
I had to put some of my projects on hold



2.0%
My work hasn't been impacted



1.8%
I recently launched an unplanned process excellence project due to COVID

Process excellence as a strategic function

The good news is that process excellence is perceived as a strategic function in the majority of enterprises. The bad news is, it's a view that's held inconsistently.

Here's what we mean by that. When we asked more than 500 process professionals about their companies, almost 90% reported that process excellence is perceived as a strategic function. However, only 12.9% said it was seen as strategic all of the time.

On the surface, this might not seem too worrying a finding, but consider this. Would the strategic value of functions like Finance or IT be recognized so inconsistently?

As a function that underpins an enterprise's fundamental ability to maximize business execution, process excellence still appears to be undervalued.

This chimes with some of the other findings in our report, such as the apparent disconnect between business outcomes and process excellence in most organizations. Not to mention the fact that, in many cases, process excellence budgets fell victim to COVID-related budget cuts.



Process teams are too often viewed as operational improvers, offering ad-hoc fixes but no strategic direction. Their challenge (and their big opportunity) lies in proving the real business value they deliver.

In this respect the pandemic has proved to be an opportunity for companies that really have their processes under control — their focus on process excellence has allowed them to make strategic, make-or-break moves.

Is process excellence perceived as a strategic function by your company?

40.8%
Some of the time

35.8%
Most of the time

12.9%
All of the time

10.5%
Not at all

Ascend Performance Materials uses process execution technology to bring a brand new product to market

Here’s the story of one manufacturer who turned the crisis into an opportunity to transform, and shipped a new product fast. The reason they were able to do it? They had complete oversight and control over their processes, and were able to pivot fast as a result.

[Read their story](#)

The process excellence challenges ahead

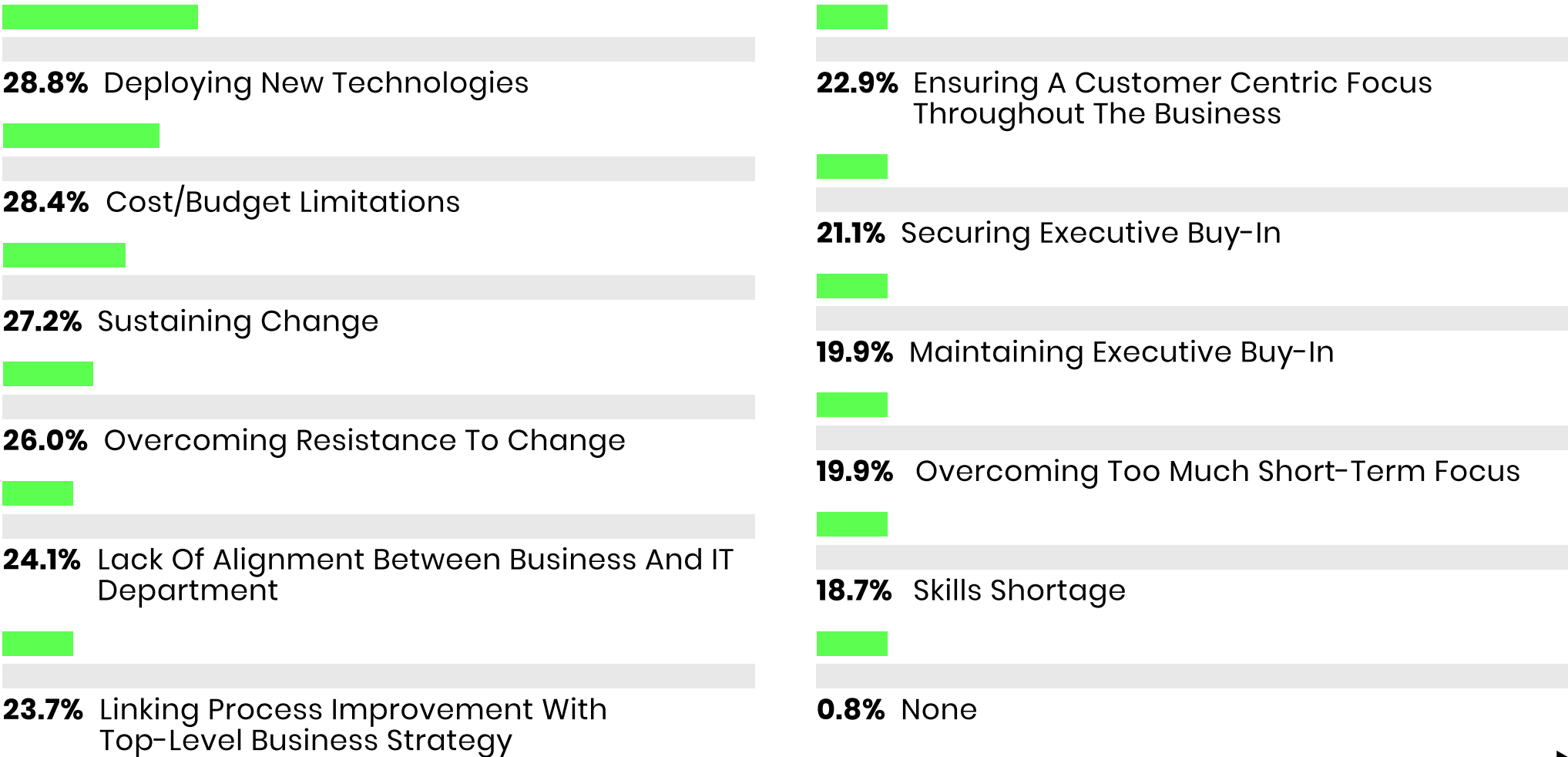
DIGITAL TRANSFORMATION

74% of process excellence leaders say that digital transformation is important or very important to their organization for the year to come.

No surprises there. But let’s dig a little deeper into the specific challenges around digital transformation.

Process leaders’ top three transformation challenges ahead are: deploying new tech, limited budgets, and sustaining change.

Transformation challenges



It’s clear that process leaders will need to develop certain capabilities, and harness the right tools, in order to tackle these challenges.

Platforms with pre-built data connections, for example, will lower the barriers to entry for new solution deployment.

Monitoring process conformance will be critical to sustaining change and course-correcting where necessary. Not to mention the ability to run proof-of-concept initiatives that prove ROI and can become a business case for further investment and roll-out across the enterprise.

PROVING THE VALUE OF PROCESS EXCELLENCE

Of those who could quantify the financial impact, the majority saw cost savings.

41% of the process excellence leaders we spoke to were able to quantify the financial impact of their work, and the majority of those (36% of the total group) reported that process improvement saved their organizations money. Only 6% said the project was a financial loss.

58% of process excellence leaders weren’t able to quantify the financial impact of a recent process excellence project.

This doesn’t mean that they didn’t quantify success in a different way. They may have measured results like automation rate, but may have lacked the ability to fully understand and quantify the financial impact of that change.

The takeaway here echoes the findings of previous sections: that there’s still a disconnect between process excellence as a function and the wider business on which it certainly does have an impact.

Ambitious process leaders must not neglect to foster a greater understanding of their work — and the value of that work — among their peers in the business whose support and cooperation they rely on.

The financial impact of a process excellence project



Not applicable



Saving



Loss

Conclusion: Your process excellence opportunity

So there you have it. We wanted to capture the state of process excellence today, and we went about it by talking to the people making it happen.

Much of what we learned validated what we already knew, or at least suspected. There are several encouraging signs that process excellence is set to maintain its impressive upward trajectory. The fact that most process professionals operate within a dedicated Center of Excellence is a big one. Another is their direct line of report to the highest levels of leadership.

Those who have measured the financial impact of their work have seen proven cost savings — but in many ways it's those who have not yet managed to prove the ROI of process

excellence that have the greatest opportunity ahead of them.

A simple but important step is to join the minority who design processes first and foremost to drive towards the best possible outcome at every step. Let the technology fit the process — not the reverse.

Finally, we saw the importance of stepping back and seeing the bigger picture. Process excellence is not an end in itself but a process with its own desired outcome: perfect business execution. And if the outcome of process excellence is in sharper focus now, so too are the inputs.

Process discovery is receiving the attention it deserves as a critical phase that must come before any kind of optimization, including

automation, and process mining is emerging as the most effective tool at our disposal today.

As more process people become experts in this kind of technology, and as their work continues to gain standing as a strategic function in the modern enterprise, we expect to hear many more stories that prove — and celebrate — the effectiveness of process excellence initiatives.

Want to learn how process mining can help you find and fix inefficiencies, maximize the capacity of your processes and get you closer to perfect business execution? [Get in touch today.](#)

Appendix: The process leaders who provided these insights

NUMBER OF PROCESS EXCELLENCE RESPONDENTS:

503 respondents

SENIORITY:

VP/director level or above and involved in process excellence, operational excellence, continuous improvement, business excellence, productivity process engineering, process reengineering or business reengineering and working at companies with annual revenue of more than US\$1billion (or equivalent).

COUNTRIES REPRESENTED:

USA, UK, France, Germany, Netherlands and Spain.

INDUSTRIES REPRESENTED:

Financial services (banking and insurance), CPG and retail, hi-tech, life science and pharma, chemicals, telco, utilities, and manufacturing.



About Celonis

Celonis believes that every company can unlock its full execution capacity. Powered by its market-leading process mining technology, the Celonis Execution Management System consists of a platform, a full suite of apps, and a developer studio for business executives and users to unlock their execution capacity and eliminate billions in corporate inefficiency.

Celonis has thousands of customers, including ABB, AstraZeneca, Bosch, Coca-Cola, Citibank, Dell, GSK, John Deere, L'Oréal, Siemens, Uber, Vodafone and Whirlpool.