



PagerDuty
Operations
Cloud

Crossing the operational chasm:

How to make the leap with a platform
powered by automation and AI

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A new competitive advantage

Technology is supposed to help businesses grow.

Harken back to some of the core innovations of the last couple centuries: the telegraph transforming the railroad industry through real-time communications; assembly lines that enabled the car industry to take off; or the computer-based shift from analog to digital—for all industries.

Those seminal moments empowered businesses to *cut costs* and *grow exponentially*. There were undoubtedly learning curves, but there was a very clear before and after. There was no going back.

Fast forward to today. The Internet, cloud, and software have again transformed business as we know it. So why doesn't it always feel like our ways of working have gotten easier and more effective? Why does it sometimes seem like one step forward, two steps back when it comes to our software stack?

While the telegraph and computer each solved intractable problems, business challenges today are far more complex, multifaceted, global, and real-time. As organizations have attempted to scale and innovate at a faster pace, they've thrown more tools into the equation—but that solution has also created problems. Short-term convenience yields long-term complexity.

The proliferation of tools has created convoluted, chaotic ecosystems—especially in large enterprise organizations. Rampant tech sprawl has led to silos, redundancies, and inefficiencies that can negatively impact the experiences of both employees (who may work anywhere) and customers (who may be anywhere). And it's costly: [According to a McKinsey survey](#), a group of CIOs estimated that tech debt amounts to 20 to 40 percent of the value of their *entire* technology estate before depreciation—which for larger organizations can translate to hundreds of millions of dollars.

Looking forward, the democratization of generative AI and large language models will further accelerate development —while creating even more software and thus even more complexity.

So the burdens on your business—especially your operations—are heavier than ever. And when that burden is too much to bear, things break. A study from [Dunn & Bradstreet](#) found that 59% of Fortune 500 companies experience 1.6 hours of unplanned downtime every week. And an [IBM Global Services](#) study estimates average outage costs to be over \$400,000 per hour for a large enterprise in any sector. When customer expectations are higher than ever, businesses simply can't afford these setbacks and poor experiences.

While there's never a good time for business inefficiencies, now, in this economy, it's a really *bad* time. In a challenged macro environment where every edge counts—whether that's a cost reduction or revenue opportunity—operational efficiency and resilience have become competitive advantages. It's now imperative for organizations to operate in lean ways and provide modern and reliable experiences that keep customers coming back for more. The ones who do that the best will stand out in their markets.

The solution here may not be quite as straightforward as the telegraph once was—but we've got a few ideas.

The opportunity ahead

We see four key strategies to make foundational and lasting changes to your how your business handles critical work:



Dramatic cost reduction

The mandate here is to reduce costs not just for the next couple of quarters, but in a way that gets you to a permanently lower cost structure that will still support double-digit growth. To achieve this, you'll need to implement fundamental changes to how your organization operates.

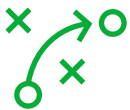
Morgan Stanley estimates that [U.S. corporate earnings are declining 16% in 2023](#), making margins even thinner for businesses and placing even more pressure on operating efficiently.



Consolidation of your tech stack

The web of tools is costing your business, in both time and resources. With fewer, stronger platforms for getting work done in the Enterprise, you'll have greater visibility on spend and return on investment. As business solutions have grown in complexity, it's just as important to maximize and streamline their existing functionality, as opposed to adding more of them.

According to an Enterprise Technology Research survey, the most common method for CXOs to reduce IT spend is by [centralizing budgets and consolidating redundant vendors](#).



Development of your automation and AI strategy

These advancements have the ability to bring consumer-style simplicity to enterprise-grade work—and the companies that harness automation and AI to move their business forward faster are going to be the ones that win.

This can translate to better customer experiences: A [Forrester study](#) (commissioned by IBM) found that combining automation, AIOps, and observability can reduce customer-facing outages by up to 50% and mean time to recovery (MTTR) by up to 95% for enterprises.



Building operational resilience and maturity

Organizations need to be able to proactively predict, manage, and prevent (as much as you can) the events that are going to put your revenue and your reputation at risk.

[Accenture estimates](#) that organizations operating at the highest levels of operational maturity have 1.4× higher operating margins, are 42% faster at product innovation, and have 30% higher customer engagement scores compared to peers at lower maturity levels.

To pull these off, you'll need to leverage a platform that utilizes automation and AI to unify your ecosystem and team, which will in turn improve your customer experience and bottom line.



A hub for your ecosystem

The world of critical operations work requires expertise in so many areas, from the art (think discretion, nuance, and a customer mindset) to the science (efficiency, speed, and predictive elements). Any platform has to have a balance of machine-like precision, with empowering and uplifting effects on the humans on your team.

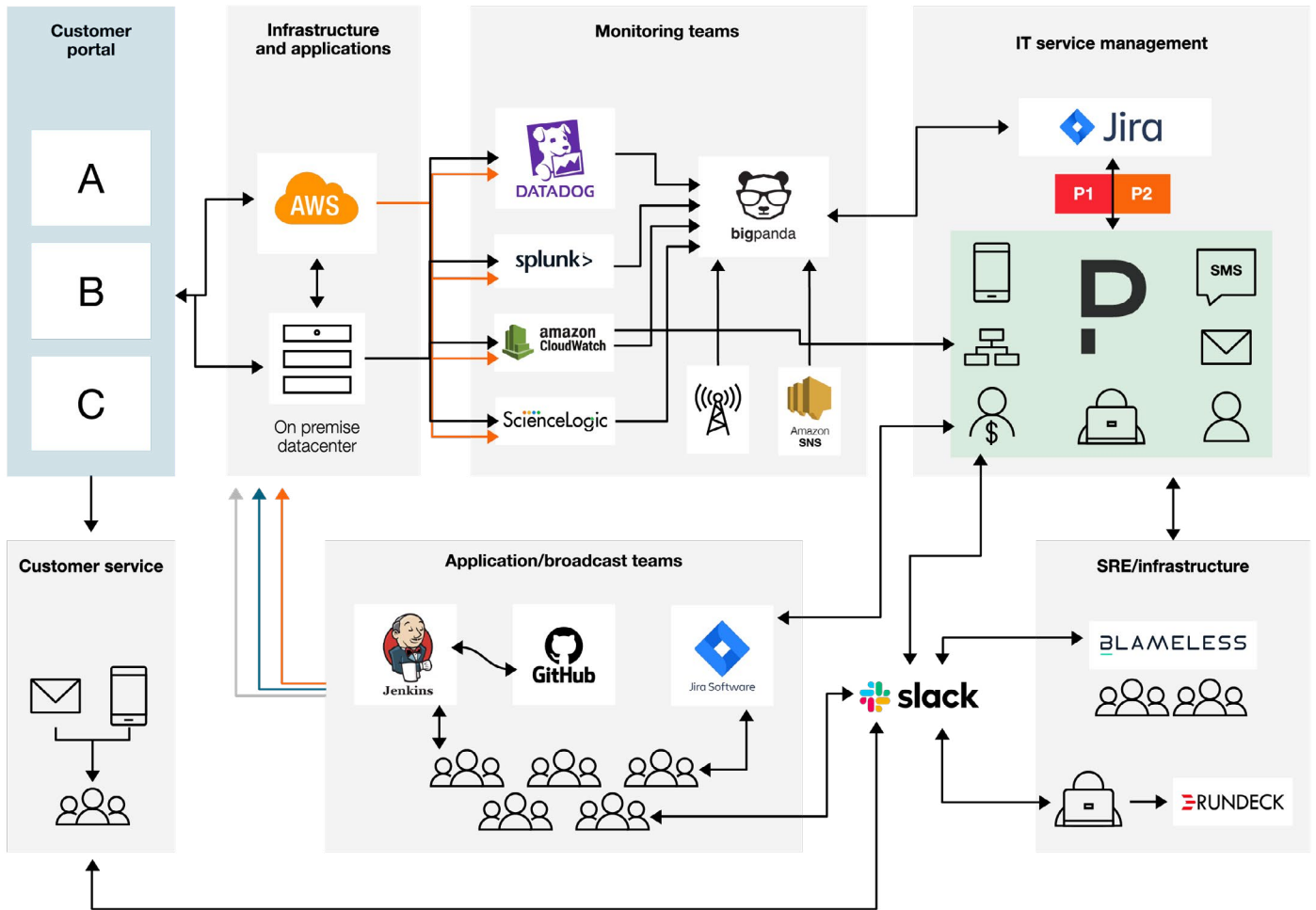
That's why our approach was to build a platform that **scales your people with automation, powered by AI.**

Damon Edwards, Senior Director of Product at PagerDuty, has a vision for critical work being that ballet dance of coordination between people and automation. "You want to try to eliminate the amount of handoffs in your processes," Edwards says. "Start with automating as much work as possible—and then wherever you can't, look for ways to limit the impact on the organization to help the humans reduce those coordination costs. Even when you have a multi-person escalation, you run it through standard processes and get it done in a quick, coordinated way."

That's what the other side of the operational chasm can look like—but first, it starts with the foundation. At PagerDuty, we have a unique offering that's built on an agnostic and flexible ecosystem and a proprietary data model. Tying back to the goal of reducing tech sprawl and debt: We have over 700 integrations that help consolidate and streamline your existing tech stack. By reducing context switching for employees and maximizing the usage of each tool, you can boost productivity and reduce costs.

That open, flexible foundation also utilizes petabytes of data from billions of events, incidents, response data, and operational data ingested into the platform from over a decade. All of that data can flow through a central waystation of the PagerDuty Operations Cloud, in multiple directions.

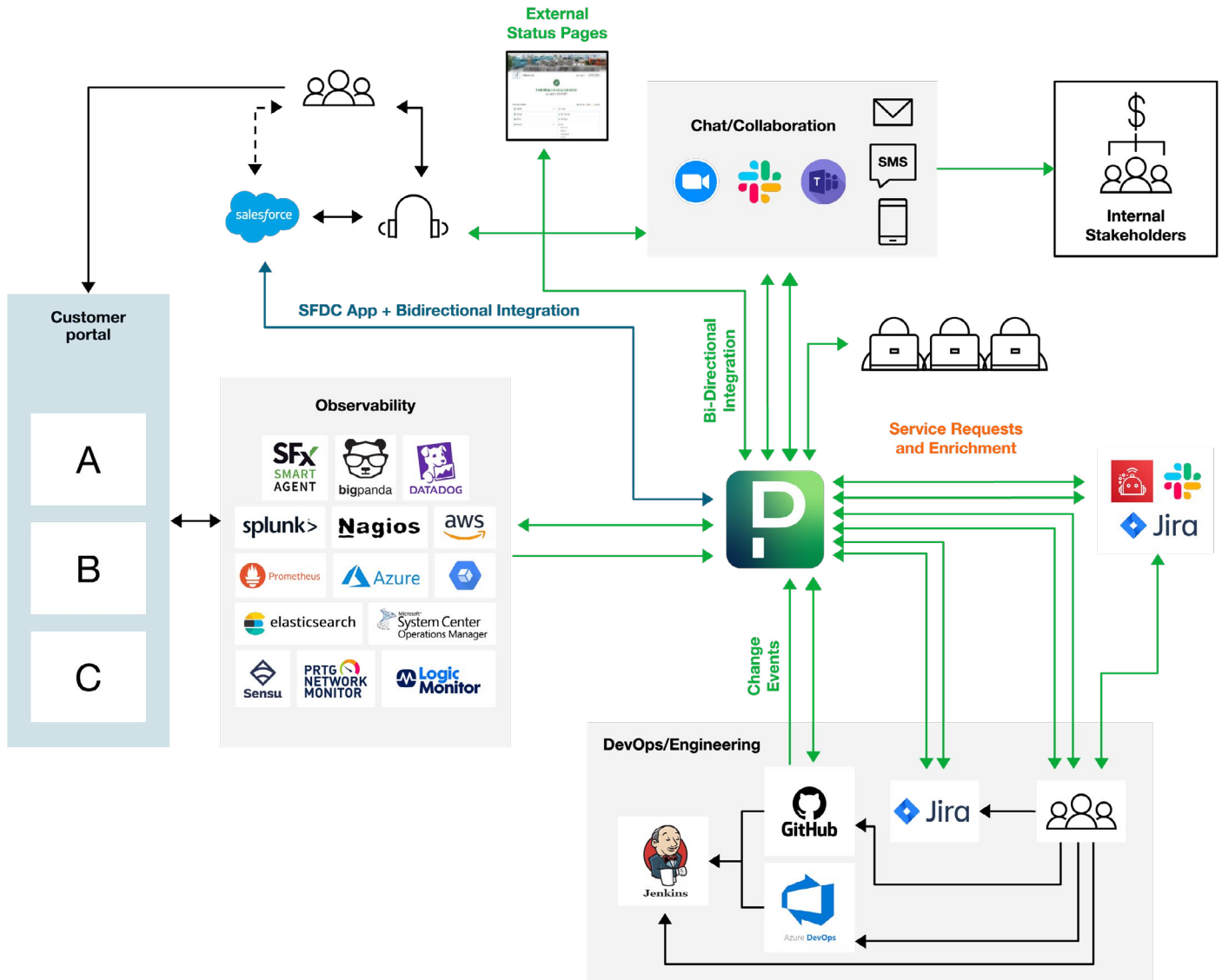
An inefficient way of operating consists of several linear, one-directional flows of information from a variety of disparate sources. It might look something like this:



Each category of tools is siloed and needs to move through several steps to reach another stage in an escalation and resolution process. And then within categories, many organizations have duplicate tools with similar functionality, yet requiring their own flow of information. This can lead to costly redundancies like inefficient use of licenses and lost revenue due to poor customer experiences.

Our vision at PagerDuty is to act as a hub of your operating ecosystem, working alongside and enhancing your existing toolset—and rendering unnecessary tools expendable.

Your new workflow might look something like this:



This state is a coordinated balance of communication, action, and automation, linking tools from different parts of your operational stack together, while offering multi-directional information flows. This way, your observability, collaboration, DevOps, and other systems can sync with one another, through PagerDuty, bubbling up the right information to customer-facing teams and surfaces to resolve issues quickly. When the various tools in your ecosystem can complement one another, instead of overlap or clash with, that creates a better customer experience that wins and protects revenue.

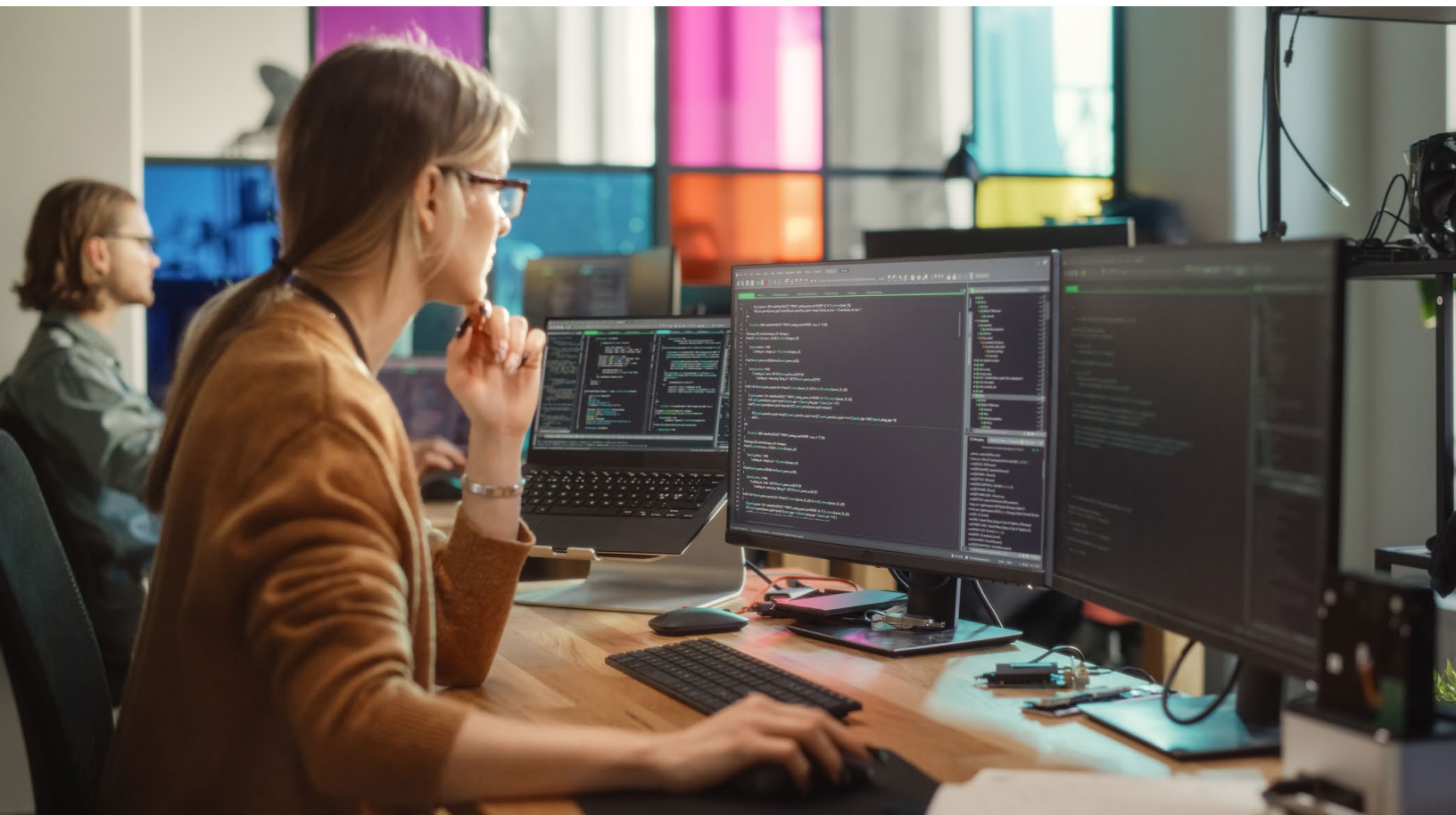
Leveraging automation and AI in your operations

Acting as that ecosystem hub, our platform brings your disparate tools and data sources together into a single source of truth. Let's illustrate in more detail how teams can use the Operations Cloud to manage critical operations work.

It starts with the core of our platform: **AIOps**. Let's say you've got a customer trying to use a feature or execute an experience in your app—but it's not working properly. AIOps uses machine learning to bring in data from that event—and every single event across your applications and infrastructure—to surface only the most urgent, actionable signals for other teams (and for automation) to respond to, downstream. AIOps helps to reduce noise and enable your team to focus on what's most important.

PagerDuty AIOps has been shown to reduce noise by 98%. The remaining signals that AIOps groups and remediates are delivered to **Incident Response**, where teams get notified to resolve an issue in near real time. If the initial responder can't fix the issue themselves, they can use our on-call and alerting capabilities to do a pinpoint escalation based upon what the automated diagnostics discovered. When every second counts, our platform blends the best of automation, AI, and people to resolve issues as quickly as possible.

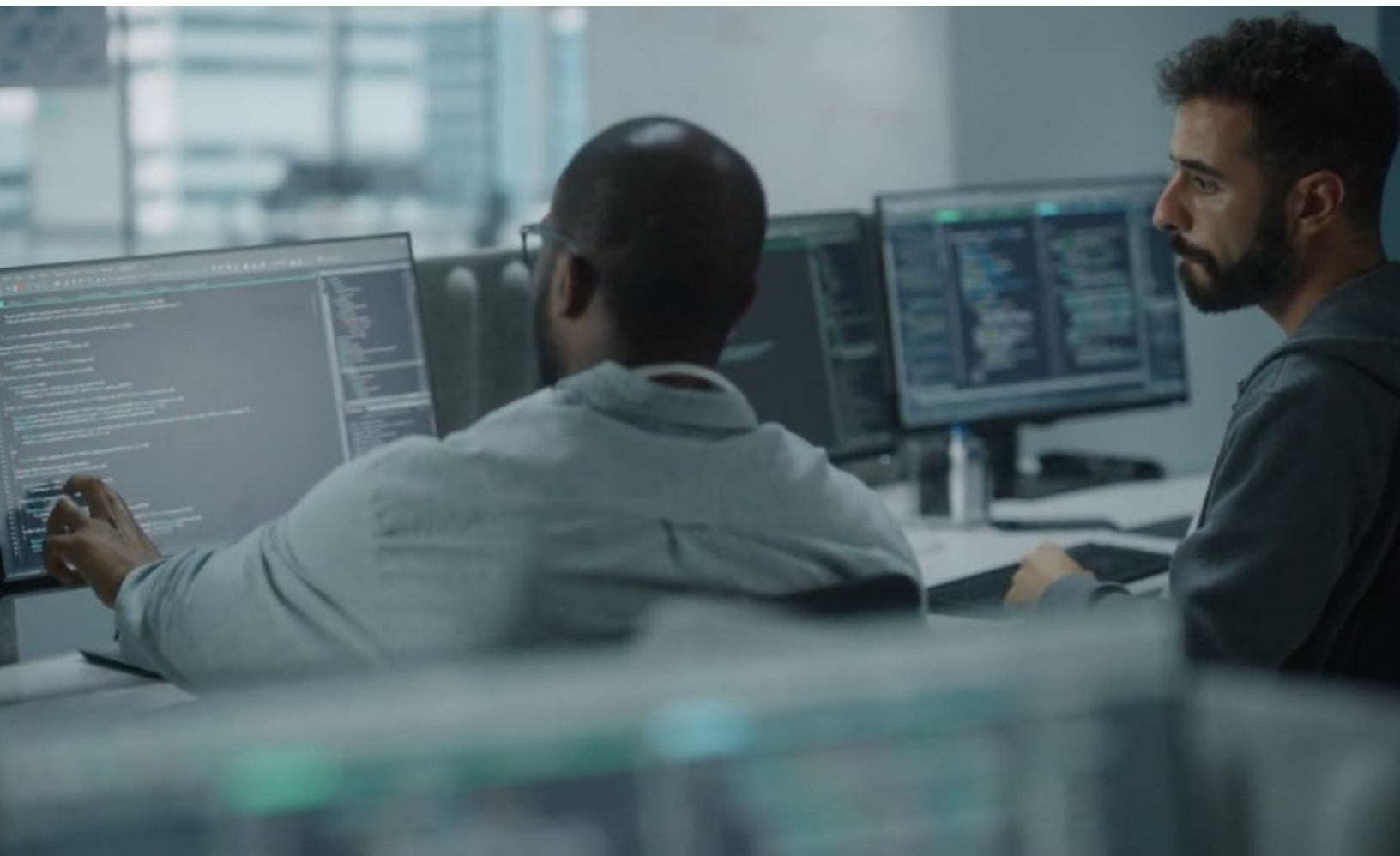
Many incidents will be resolved with AIOps and Incident Response—but that's not where the Operations Cloud stops working. With **Process Automation**, you can build in improvements for the next (would-be) incident. This part of our platform provides any responder with a palette of actions to automatically attempt to diagnose and remediate—before a human can even log in. This is where legacy ticketing systems and repetitive jobs are turned into workflows that run not at ticket speed, but at machine speed.



Finally, **Customer Service Operations** automatically orchestrates the collaboration between engineering teams and customer support teams, to provide the best possible customer experience. This bi-directional flow of information and real-time access to relevant data empowers customer service teams as they're on the front lines with customers. Instead of having customers report issues, our platform flips that on its head by allowing business teams to catch and surface them first. Status pages provide a controlled and tailored way to keep customers informed, while equipping managers and executives with live and post-mortem views to improve on future experiences. In this hyper competitive environment with ever more discerning customers, our platform helps businesses put their customers first.

That's the PagerDuty Operations Cloud flywheel. But any discussion about AI wouldn't be complete without touching on **GenAI**—so here's a quick teaser of some features to come:

- One-click status updates: built for any audience, enabling teams to generate persona-specific status updates with just a few clicks. The goal? Spending 15 seconds composing a message that previously took 15 minutes.
- Incident postmortems: using AI to create a comprehensive summary of what happened in an event
- Process Automation job definitions: relying on AI to develop new workflows, speed up learning and problem solving, and generate results for any scripting language



Long-term benefits— that start paying off now

While we've been building the Operations Cloud for a long time, its relevance today is stronger than ever. As your business has new mandates around cutting costs, protecting revenue, and accelerating growth, we understand that we're operating in a "bottom line" environment. So here are some ways the Operations Cloud can help rein in your organization's tech sprawl and debt, and make an impact on your most important business goals:

- Reduce operating costs: Moving from an environment of disparate toolsets to our unified platform can help eliminate redundancies and wasted time and resources, culminating in an expected **795% three-year ROI** with just **nine weeks to payback**.
- Delight your customers—and win and protect revenue as a result: **Reduce your downtime by up to 75%**, creating better experiences for your most important constituents, keeping them coming back for more.
- Harness automation and AI to build for the future: Reduce the **time to identify troubleshooting issues by 85%**, while generating up to **three months of automated work per year**.

By bringing your operational processes into the modern era with automation, AI, and a platform approach, everyone wins: your employees, your customers, and your business.

Where human potential meets business potential

The time to improve your operational efficiency and resilience is now. We've collectively spent decades throwing more and more tools and resources at problems, without taking the proper step back to evaluate how to maximize the efficacy of what we already have. We have plenty of disparate software solutions—we just need to tie them together.

Streamlining your operations makes practical sense, but one of the biggest benefits may be a more social and human one. AI isn't replacing humans any time soon. The benefit, today, can be to empower them and lift them to be more productive, and bring their best selves to work. We've gotten pretty far as a collective society without AI. It'll be a tool to take us even further, but ultimately it'll be the human brainpower that'll bring your business to new and unexpected heights. When used strategically, it has the potential to transform businesses in a similar way to other watershed innovations of our collective past.

The McKinsey survey referenced earlier on tech debt also reveals upside to freeing up your team: Some companies find that actively managing their tech debt frees up engineers to **spend up to 50 percent more of their time on work that supports business goals**. The CIO of a leading cloud provider said, "By reinventing our debt management, we went from 75 percent of engineer time paying the [tech debt] 'tax' to 25 percent. It allowed us to be who we are today."

The purpose of the Operations Cloud is to help your business and team to cross the operational chasm—seeing that daylight of efficient workflows and more time to focus on your business's most strategic and innovative work.

When they're at their best, your customers and business will see the difference—and impact.

About PagerDuty

PagerDuty, Inc. (NYSE:PD) is a leader in digital operations management. In an always-on world, organizations of all sizes trust PagerDuty to help them deliver a better digital experience to their customers, every time. Teams use PagerDuty to identify issues and opportunities in real time and bring together the right people to fix problems faster and prevent them in the future. Notable customers include Cisco, Cox Automotive, DoorDash, Electronic Arts, Genentech, Shopify, Zoom and more.

To learn more and try PagerDuty for free, visit www.pagerduty.com. Follow our [blog](#) and connect with us on [Twitter](#), [LinkedIn](#), [YouTube](#) and [Facebook](#). We're also hiring, visit pagerduty.com/careers to learn more.

Learn more about the PagerDuty Operations Cloud at pagerduty.com/operations-cloud.



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