

Digital Resilience Beyond Cyber Week

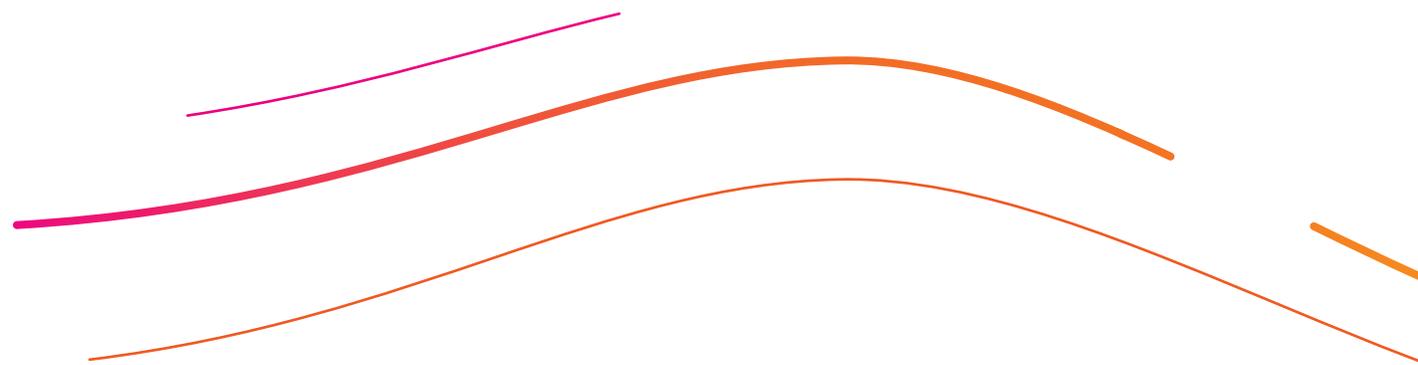
7 e-commerce leaders deliver for customers when demand and traffic peaks.

splunk>



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The holiday shopping season continues to shift as promotions keep getting earlier and earlier. However, few occasions test system resilience more than Cyber Week, the five-day period between U.S. Thanksgiving Day and Cyber Monday. On Cyber Monday last year, consumers spent \$1.14 trillion online globally, and in the peak hour of Cyber Monday in the U.S.,¹ consumers spent \$12.8 million online every minute — which means even a few minutes of downtime could be catastrophic for business.

In a modern e-commerce world, slow is the new down. If a customer spends more than three seconds on your webpage waiting for it to load, they will leave quicker than it takes to say, “Please don’t go.” If a complete crash and a 500 page on Cyber Monday is the stuff of nightmares, then a very slow page is a bad dream. Poor, buggy web performance can result in increased cart abandonment rates and ultimately drive customers to shop at competing sites. Unhappy customers might never return. (We’ll save the horror stories for Halloween.)

It’s not just the U.S. that participates in high-traffic digital shopping — Click Frenzy, which is modeled on Cyber Monday, takes place on an Australian e-commerce platform. Similarly, November 11 is a massive shopping event for Singles’ Day in Asia and December 26th is well-known as Boxing Day for dramatic price reductions throughout the United Kingdom and other countries.

In the digital era, the speed of business has changed, and consumer expectations are higher than ever before. This means smart technology teams invest in digital well in advance — stress-testing system resilience as early as August, adding functionality in September and locking in new changes as they approach the holiday shopping season, all while ensuring systems stay safe and secure from bad actors.

With a rapidly changing landscape, there’s more pressure to find and fix problems faster.

This leads to three main challenges:

- Slow and inefficient troubleshooting
- Limited visibility into customer experience
- Degraded service performance from new deployments

The consequences of poor digital experiences are severe. The margins between success and failure are slim. According to [The State of Observability 2023](#), nearly two-thirds of orgs report that every hour of downtime costs more than \$150,000. On a busy shopping day, these numbers could be even higher. In 2017, 40% of browsers abandoned a website that takes more than three seconds to load. In 2023, up to **87% abandoned a website** that takes more than two seconds to load. Google aims for under half-a-second load time and penalizes slow websites in search ranking.

As teams deploy cloud technologies to deliver new capabilities to customers faster, environments are more ephemeral and dynamic. With so many variables, teams need superhuman context to quickly resolve a problem. They also need visibility across their software environments to troubleshoot issues faster, and to manage their telemetry data in a cost-effective manner. Yet a plethora of different monitoring tools — one for apps, one for web and yet another for logging — only exacerbates these problems.

To remain resilient and maximize revenue during the upcoming busy buying season, companies need:

- Deeper context across their entire business landscape
- AI to identify problems faster and guide troubleshooting
- The ability to quickly identify the source of a problem and determine if it comes from business operations, IT infrastructure issues or even third parties

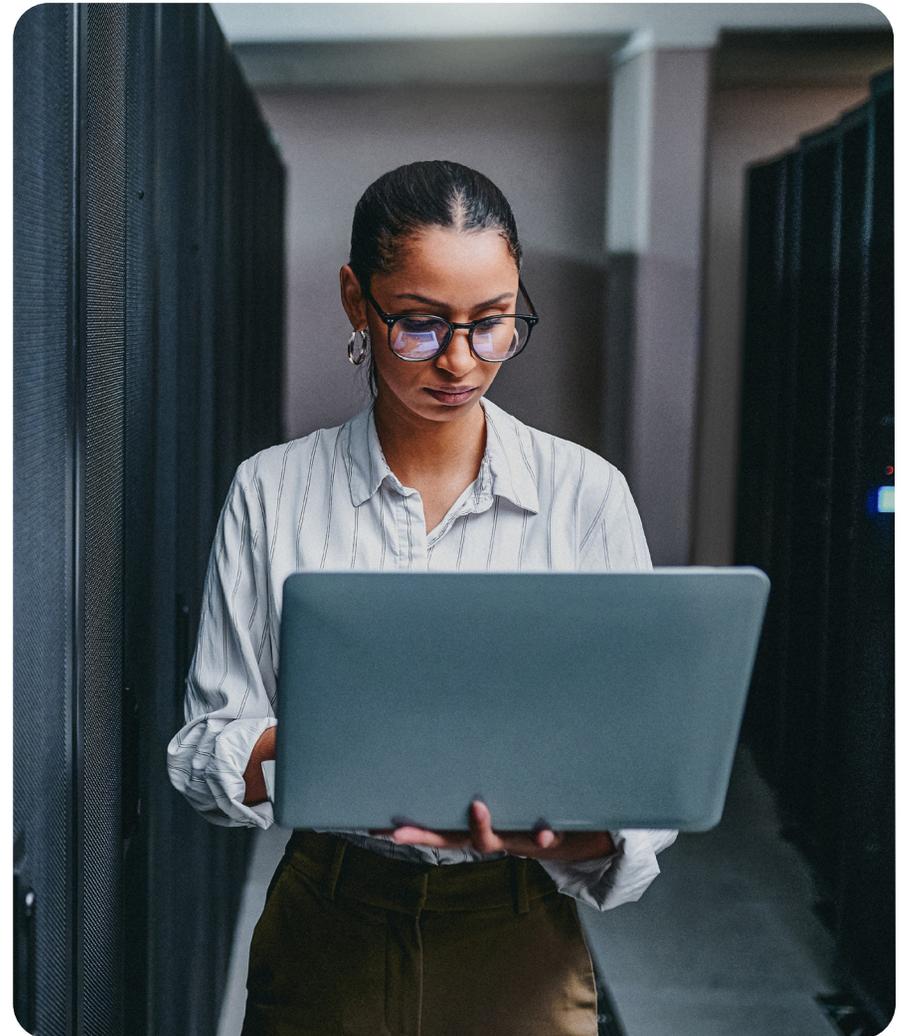
An observability practice helps engineering teams:

- Add business context to their data
- Point organizations to the problems impacting customer experience and business outcomes the most
- Identify the top areas of improvement for service performance and customer experience

With these insights, organizations can find the cause of problems within seconds, accurately detect changes that negatively impact their business, and prioritize and resolve issues. Furthermore, as teams deploy code, make improvements or launch new features, they measure business output alongside the health of their infrastructure, applications and end-user experience. Then, when problems happen, as they inevitably do, teams can troubleshoot across their entire environment — on-premises, public clouds, private clouds and beyond. And the most resilient teams foster collaboration across not only engineering, but also ITOps and security to ensure nothing threatens the customers' experience.

In the next section, we feature companies that are building resilience across all their digital systems so they can accelerate time to find and fix issues, absorb shocks like spikes in demand (planned like Cyber Week or unplanned like a well-executed marketing campaign), and ultimately transform their businesses. These e-commerce leaders are integrating continuous monitoring, predictive issue detection, and intelligent web, API and mobile optimization into their observability practices so they can predict and prevent major outages, especially during high-traffic events.

Read on to discover the top strategies that 7 e-commerce leaders use to stay up and stay resilient when their traffic peaks.



Rent the Runway

Key challenges

The engineering team's limited visibility across Rent the Runway's complex microservices architecture led to outages and disruptions in the customer experience.

Key benefits

Rent the Runway's engineering and application operations and infrastructure teams have improved their ability to find and fix problems fast. This keeps digital systems resilient so they can continue to serve customers seamlessly and efficiently.

With Splunk, Rent the Runway has complete visibility across the company's complex multi-cloud landscape in a single console — helping teams reduce MTTR by 94%, prevent unplanned downtime and offer exceptional customer experiences.

Now with full visibility across warehousing and consumer apps, teams can monitor what they need to manage and involve fewer people for incident resolution. The result: increased customer satisfaction — and an improved employee experience.

50% increased
developer
efficiency
during incidents

**94% faster
MTTR and 84%
faster MTTD**
for SLA-impacting
incidents

**Prevented
downtime,**
saving dollars and
team resources



I don't remember the last time someone has woken up over Thanksgiving to deal with an outage. Holidays used to be tumultuous from a tech perspective due to increased customer demand. Since we've upped our usage and adoption of Splunk, we haven't had a single major outage, and the last critical incident was resolved in less than 15 minutes.

— Stephanus Meiring, VP of Engineering, Rent the Runway



DANA

Key challenges

135 million Indonesians use DANA's digital payment platform, making it one of the largest e-wallet providers in the country. Reactive, fragmented monitoring made it difficult for DANA to ensure service availability across its distributed microservices-based applications in a fast-paced digital payment environment.

Key benefits

DANA's formerly siloed, fragmented monitoring is now replaced by a centralized observability platform with full-fidelity tracing of every transaction.

Thanks to full-fidelity observability via Splunk, DANA has increased business resilience with proactive troubleshooting, faster incident resolution, higher availability and better service quality.

With Splunk, DANA can quickly identify anomalies that once took hours or even days to uncover, while also proactively preventing the same problems from happening in future. The mean time to recovery for errors is now 70% to 90% faster. And with a new seamless workflow across monitoring, troubleshooting and resolution, Splunk has helped DANA optimize staff time and resources.

70-90% faster recovery from incidents

Near-instant anomaly detection that once took hours or days

Higher productivity and collaboration across teams



Splunk gives us both the depth and breadth of visibility we need, helping us reduce gaps from dropped transactions. Splunk [helps us] predict and detect problems before our customers notice them, which helps us deliver a flawless customer experience and quality service.

— Norman Sasono, Chief Technology Officer, DANA

Rappi

Key challenges

To keep up with skyrocketing demand for its delivery services during the pandemic, Rappi needed scalable, powerful observability tools to ensure customers could place and receive orders quickly and reliably. These observability tools needed to grow at the same rapid pace that Rappi was growing.

Key benefits

Splunk's observability tools help Rappi's IT team deliver a smooth purchase experience for 7.5 million weekly active users by quickly detecting problems with Rappi's mobile app, infrastructure or backend services.

"Splunk Observability Cloud helps us make blazing-fast decisions," says Alejandro Comisario, Executive Vice President of Engineering at Rappi. Ensuring brisk web page loads and frictionless mobile app transactions has helped Rappi grow to process more than 8.8 million orders each month.

With the Splunk platform, Rappi meets high shopper expectations for smooth ordering via mobile apps and websites, enabling fast delivery of local goods and services to doorsteps in nine countries.



We're all attuned to the potential business impact of downtime, so we're grateful that Splunk Observability helps us be proactive about reliability and resilience with end-to-end visibility into our environment.

— Jose Felipe Lopez, Engineering Manager, Rappi

90%+ faster
MTTR with Splunk's observability products

300% growth
managed with real-time monitoring during the pandemic

8.8 million monthly orders seamlessly processed

Lenovo

Key challenges

Operating an e-commerce site often means getting unexpected web traffic and data usage spikes, so performance, stability and flexibility are top priorities, especially when cloud migration is also underway.

Key benefits

With Splunk Observability Cloud, Lenovo cut troubleshooting time in half, reduced total cost of ownership and maintained 100% uptime despite a 300% increase in web traffic.

As a \$50 billion multinational technology company providing smart devices for consumers and businesses in 180 markets around the world, Lenovo sells its complete product range both in-store and online. The company operates a successful global e-commerce platform that not only offers seamless shopping experiences, but also maintains full visibility into every process, staying ahead of potential threats that may affect daily transactions.

On Black Friday 2020, Lenovo offered a doorbuster deal on computer products and gave away a limited number of gaming products as incentive gifts. While Lenovo had expected a sudden surge in sales and web traffic, the spike turned out to be a staggering 300% higher than the same period in 2019. Thanks to Splunk Observability Cloud, Lenovo's online shop maintained 100% uptime with zero outages or digital crises and delivered a flawless shopping experience, despite the massive increase in traffic to its website and mobile app.

~5 min MTTR,
compared to about 30
minutes previously

100% uptime
despite 300% increase
of online traffic

Zero
outages or
digital crises



What's most lovely about Splunk is we benefit hugely from having centralized, customizable analytics dashboards that collate and analyze transactions in real time, ensuring that we respond to customers in a timely manner while spotting errors and latency at a glance.

— Ben Leong, director of operations for the online and eCommerce platform at Lenovo

Stripe

Key challenges

Stripe has a bold mission: increase the GDP of the internet by making it easy for ambitious companies everywhere to grow their business.

Key benefits

Stripe enables businesses to go online — achieving 99.9998% availability during Cyber Week.

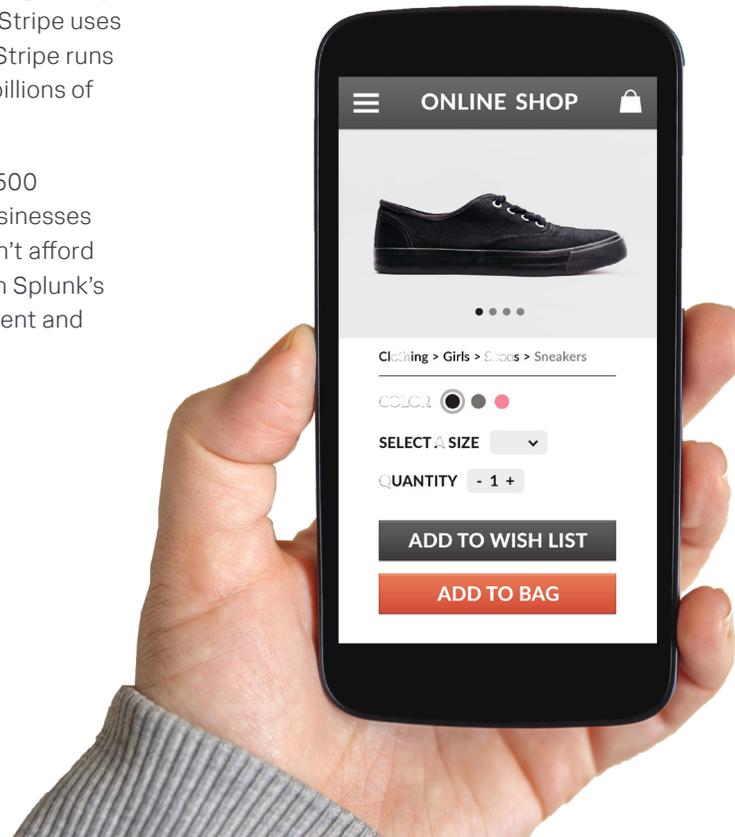
In 2021, 2400 new businesses and 100 nonprofits started on Stripe every day. It takes a lifetime to gain a user's trust, and you can lose it overnight. Even during peak times like Black Friday and Cyber Monday, Stripe maintains server uptime and availability — translating to only 13 seconds of downtime in a whole month of processing. Stripe uses hundreds of millions of data points per day. With Splunk, Stripe runs its mission-critical infrastructure globally to ensure that billions of daily payment processing transactions run smoothly.

Stripe needs data on all of those data points — handling 500 billion API calls per year. With so much at stake for the businesses it supports and the online economy as a whole, Stripe can't afford downtime or lapses in security. That's why Stripe relies on Splunk's security and observability platform to keep systems resilient and reliable around the clock.



The Splunk platform is critical to our infrastructure strategy, delivering ease of use, massive scale and fast decision-making. We need all three to power our business.

— Rahul Patil, Head of Infrastructure, Stripe



99.9998%
uptime

1.2 seconds
downtime during
Cyber Week 2021

60%+
of companies
that went public
in 2021 use Stripe

Tesco

Key challenges

When COVID-19 upended the world, Tesco had to immediately change course to scale its online business, meet unprecedented demand and ensure people in the UK had reliable access to groceries and household essentials.

Key benefits

With Splunk, Tesco used data to understand customer touchpoints, streamline supply chain operations and improve delivery tracking. As a result, Tesco doubled online delivery slots while keeping systems secure and reliable — even ensuring zero downtime during a 30% surge in online traffic over Christmas.

Tesco clocks over 42 million transactions per week — roughly 66 per second — and every single one must be secure. Not to mention the additional security complexities created by Tesco's myriad systems and devices — as well as its over 450,000 employees. That's why Splunk is at the heart of Tesco's security efforts.

In December, tens of thousands of people logged into Tesco's online waiting room, ready to snag an online delivery slot. Demand was so fervent that Tesco became a topic of national conversation, trending on Twitter the entire day. "The pressure on our systems was unlike anything we've seen, and having Splunk to provide visibility into these systems was critical to fulfilling our customers' needs," Olive says.

Tesco engineering and operations teams used Splunk to monitor everything from infrastructure health to critical business transactions to the virtual waiting room. "During this Christmas surge, Splunk helped us improve our monitoring, observability and entire software development environment," says Davood Torabzadeh, Splunk product manager at Tesco.

3x more
weekly website orders

2x more
online delivery slots

3.3x more
data ingested daily



The pressure on our systems was unlike anything we've seen, and having Splunk to provide visibility into these systems was critical.

— Josep M. Olive, Lead Technical Program Manager, Tesco



PUMA

Key challenges

PUMA lacked insight into customer orders on its e-commerce websites, which led to poor customer experience and missed sales opportunities.

Key benefits

With Splunk, PUMA now monitors events as they happen, performs quick investigations and rectifies problems before they prevent customers from making purchases online.

Splunk saves PUMA time and makes it money. Since its busiest regions earn tens of thousands of dollars in sales per hour on their e-commerce sites, any delay in detecting and fixing order failures quickly adds up.

An unresponsive inventory system, for example, cost PUMA \$108,000 in lost sales when it prevented customers from making purchases. The system is queried as part of each order to ensure available stock. When it failed, it cost PUMA both revenue and hard-earned customer goodwill.

“Now, with Splunk, we would see right away what’s causing that inventory issue, and we could fix the problem so customers could continue to buy merchandise,” says Gaskin. “Before using Splunk, we had no visibility into our e-commerce activity at this granular level. We had to wait until a customer or someone on our content team noticed it and complained about it. By that time, we’d already lost money and frustrated customers.”



We’ve decreased our average time to detect issues to 15 minutes with AIOps and Splunk, compared to hours previously. And because we also know exactly where the issue lies, we can escalate and fix the issue quickly and effectively.

— Michael Gaskin, Senior DevOps Manager for Global E-Commerce

45 worldwide

PUMA.com sites with enhanced monitoring

\$10k+ per hour

in boosted revenue

15 minutes

to detect order issues, compared to hours previously

As e-commerce brands head into the highly competitive Cyber Week season, they must prioritize their customers' shopping experience. We don't want to get gloomy so close to the holidays, but if it takes longer than three seconds for your page to load, your customer is likely gone. Regardless of the cause of the issue, resilience and a focus on performance ensures the customer experience is seamless.

Splunk Observability Cloud provides full-stack visibility across your infrastructure, applications and business services to improve customer experience, innovate faster, and run services with greater resilience, scale and efficiency. Get dynamic recommendations on how to improve performance and find issues before your customers do. Cut through silos of data — no matter the scale or complexity — and deliver real-time, context-rich insights to DevOps engineers and SREs, IT Operations and software developers.



Solve problems in seconds with the only full-stack, analytics-powered and OpenTelemetry-native observability solution.

[Free Trial](#)