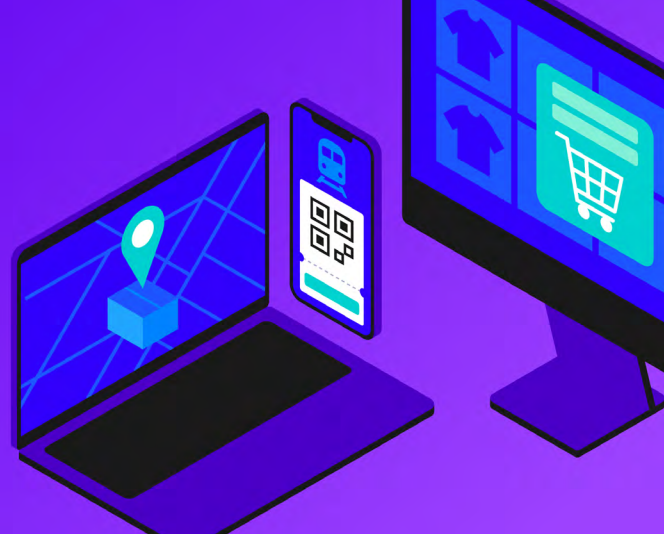# Power Peak-Season Commerce with Datadog Unified Observability

Executive Summary

Major shopping events like Black Friday, Cyber Monday, and Singles' Day put retailers under intense pressure. Each step of the customer journey relies on complex, interconnected IT systems, yet many organizations still depend on siloed tools that force teams to correlate issues manually. A sudden drop in checkout conversions could take hours—or even days—to trace back to the root cause.

Introduction

Modern observability for seamless retail experiences during peak sales events

With Datadog's **Digital Experience Monitoring** (DEM) suite — including **Real User Monitoring (RUM)**, **Session Replay**, **Synthetic Monitoring**, **and Product Analytics** — retailers can proactively **prepare, monitor,** and **protect** revenue-generating activities across the customer lifecycle and enter peak sales events with confidence.

By correlating DEM data with **metrics, traces, logs, and Cloud SIEM signals** in a single platform, teams can quickly pinpoint the root cause of end-user issues and determine whether they stem from degraded IT performance or security threats without switching tools. **Datadog's AI/ML-based anomaly detection engine, Watchdog,** automatically flags unusual patterns, helping retailers resolve customer-impacting issues during high-traffic events.

This unified approach helps retailers stay ahead of challenges, safeguard uptime, and maintain customer trust.

1 Proactively prepare and test IT systems ahead of anticipated spikes

Learn from past events

Collect and analyze real user data (like UI latency, page load times, frontend errors, core web vitals, and other frontend performance errors) across retail sites and mobile apps with RUM to establish baselines for normal traffic behavior

▶ Use Session Replay to **watch real user sessions** and pinpoints where experience slow downs and errors occurred

Leverage Product Analytics to **prioritize IT optimizations that maximize revenue** by tracking customer behaviors tied to revenue, such as conversions, feature adoption, and drop-offs

Implement necessary system changes and test for resilience

- Find and **scale infrastructure resources** (hosts, containers, and clusters) with infrastructure monitoring to accommodate traffic surges

- **Identify potential bottlenecks across checkout, payment, and delivery systems** with Application Performance Monitoring (APM) to enable engineers to make necessary changes that prevent outages and other disruptions

- **Proactively test critical user journeys** (website loads, product searches, checkouts, and payments) with Synthetics Monitoring to validate that workflows function, CDNs cache effectively, and APIs respond reliably

S É Z A N E

Sézane, a French fashion brand, uses Datadog's observability platform to deliver seamless customer experiences during high-traffic periods like "Archive Days" (twice-yearly sales events offering discounted prices on items from past collections). With Datadog, Sézane gains comprehensive visibility into its infrastructure, applications, and user interactions.

"We don't need load tests anymore because we are able to monitor every deployment on Datadog."

Nicolas Benoist
Chief Technology Officer at Sezane

Learn more →

2

Monitor and connect digital experiences to backend resources in real time

Understand the real customer experience with DEM

Surface real-time metrics (page load, checkout errors, latency) with RUM to determine whether traffic surges are degrading performance and impacting customers

Replay and diagnose user issues with Session Replay to identify problems like website crashes and failed checkouts

Run tests and **find early warning signs** with Synthetic Monitoring to detect potential outages or slow downs

Because DEM is natively correlated with metrics, traces, and logs, find the underlying issues disrupting end-user experiences in real time.

- Trace backend service performance with APM to **identify issues across microservices, APIs, and databases**

- Discover under-resourced servers, containers, and cloud services with Infrastructure Monitoring to **prevent capacity shortfalls during traffic surges**

- Ingest and investigate logs with Log Management to **detect error messages and transaction anomalies**

- **Find inefficient code paths and memory leaks** with Continuous Profiler to improve application performance

- Track communications across services, regions, and third parties with Network Performance Monitoring to **pinpoint latency or connectivity issues**

- Understand the health of third-party service dependencies with **Datadog's 900+ out-of-the-box integrations** to maintain reliable operations

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CJ OLIVEYOUNG

CJ Olive Young is the most popular health and beauty retailer based in South Korea, with thousands of stores and e-commerce sites. The company uses Datadog to optimize correlations between business KPIs (such as sales, loyalty program, and deliveries) and IT health, and improve reliability during peak sales times.

"We are building a culture where everyone is actively engaged in real time, enhancing visibility and reliability across the business, with Datadog at the center of this transformation."

Minju Shin
Translation Service Development Lead at CJ Olive Young

Learn more →

3

Protect customers and revenue by unifying observability and security data

Investigate issues surfaced by DEM to mitigate live issues and improve overall resiliency

Investigate end-user issues with Cloud SIEM to see whether they were caused by IT performance issues or malicious activities, such as bot attacks, credential stuffing, or malicious API abuse

Connect end-user issues with Security Signals Explorer to identify threats generated by Datadog detection rules

Search, filter, and analyze logs from applications, servers, containers, and third-party services with Log Explorer to uncover error messages, transaction failures, or system anomalies that correlate with end-user issues surfaced by DEM

POSHMARK

Poshmark is a leading social commerce marketplace based in the United States, where millions of users buy and sell new and secondhand fashion, accessories, and home goods. Its security team uses Datadog Cloud SIEM to reduce account takeovers and other threats, saving the company millions.

"The onboarding process with Datadog Cloud SIEM was a breeze as we were already using their other products…. We were able to ingest all of our initial set of data sources in a matter of weeks."

Kapil Punna
Engineering Manager for Security Operations at Poshmark

Learn more →

Learn More

To see how Datadog can help your organization maximize performance, prevent disruptions, and secure peak-season commerce, visit us at datadoghq.com, where you can start a free trial or request a demo.

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