

One of the Year's First Unicorns Uses Splunk Observability to Conquer Cyber Five

Key Challenges

Rapidly growing company and Splunk partner Quantum Metric needed visibility into their increasingly complex infrastructure and applications to better support their customers, especially during high-volume events like Cyber Monday.

Key Results

With Splunk's Observability Suite, Quantum Metric has clear visibility into their architecture to help developers work more productively, improve capacity planning and better fulfill customer needs.



Industry: Technology

Solutions: DevOps, Observability, Infrastructure Monitoring, Application Performance Monitoring, Digital Experience Monitoring

What do Alaska Airlines, Lululemon, Western Union and Crate & Barrel have in common?

They all strive to serve their customers better every day — and Quantum Metric's platform helps them reach their goal. The company has developed a Continuous Product Design (CPD) solution that unlocks real-time customer insights so businesses can prioritize, build, test and iterate quickly, leading to even better digital products. As CEO Mario Ciabarra likes to say, they help companies do what they're already doing, only better and faster.

As more industries realize the need for accelerated digital transformation, more diverse companies are flocking to Quantum Metric to maximize their potential. For the 2021 unicorn, an influx of customers meant an even bigger influx of data — and an increasingly complex engineering environment that includes everything from Kubernetes clusters to Docker engines.

"We want to do the same thing as our customers: build better products, move quickly, iterate, be able to experiment — and do so safely," says Brent Miller, senior director of cloud operations. "Solving a problem across different use cases requires an observability solution that is extensible and robust enough to meet those use cases without forcing us down one path," adds Eric Irwin, director of engineering.

Quantum Metric needed a flexible observability solution that would help them and their customers build better products, faster. That's why they chose the Splunk Observability Suite.

Observability Leads to Clearer Customer Insights

"Observability is about getting answers to questions that we didn't know we'd have to ask," says Irwin. "When I think about observability, I'm thinking from top down and bottom up. It's the actionable insights you collect from your entire system, not just one piece, that tells you the health of your environment," Miller says.

Data-Driven Outcomes

\$80K

saved by switching to Splunk thanks to better downsizing analysis and capacity planning

96%

faster application development, increasing developer productivity

95%

reduction in pending CI jobs due to better assessment of capacity needs

99.9%

average success rates for availability, completeness and freshness service-level objectives (SLOs)

Adopting the Splunk Observability Suite, which includes application performance monitoring, infrastructure monitoring and synthetic monitoring, has given Quantum Metric full-stack visibility into their increasingly complex environment.

The easier Quantum Metric can see how their code releases are working, the faster they can make product improvements. Ultimately, this level of observability has led to a better understanding of customer behaviors, allowing the team to measure customer impact more effectively.

Thanks to full-fidelity ingestion of logs, metrics and traces, the team now sees what's happening across their infrastructure and applications — insights that otherwise would be impossible to account for. With full-stack, end-to-end visibility, they can be sure that demo sites are running and understand how their services are working together to deliver value to their customers. “The Splunk Observability Suite pulls some of our raw metric data right out of the Google Cloud environment and displays that for us on intuitive dashboards,” Miller says. “That alone is a big win because that takes a lot of effort out of doing some other type of a tool deployment.”

Splunk's Observability Suite even allows Quantum Metric to mitigate risk to their customers by using it as a metric store for canary releases. The team can implement changes for a small group of users and observe the impact before rolling it out to their entire base.

Thriving With Data During the Biggest Shopping Event of the Year

The busiest time of year for Quantum Metric is “Cyber Five,” the period from Thanksgiving to Cyber Monday that kicks off the winter holiday shopping extravaganza. During these five days alone, the platform handles well over a billion sessions — more than 5% of their total volume for the year. A lot of preparation goes on behind the scenes so they can expand their platform rapidly while maintaining high availability and sustaining the optimal performance their customers expect. At times like these, observability is critical.

“This year, Black Friday was much more successful than in previous years,” says Miller. “Not just from the number of sessions we handled but also from the quality of the platform to customers. The Splunk Observability Suite was a key part of our pre-capacity planning.”

When the platform reached peak volume, the team could see what was happening within their systems and take troubleshooting to the next level. “As things picked up, we could understand what parts were degrading in real time, make adjustments and see that impact,” Irwin says. “We could get ahead of problems during what has historically been kind of a painful time for us.”

Because the Splunk Observability Suite gave them better insight into their cloud footprint usage, Quantum Metric developed a tool that shed light on their resource capacity needs based on the time of day. Not only did they have the flexibility and agility to scale their resources based on their actual business needs, thanks to Splunk's host-based pricing model, they saved \$80,000 in overages compared to their previous DataDog solution.

Acing Alerts, Achieving Faster Time to Value

One of the most important services that Quantum Metric offers its customers is real-time alerting. Customers rely on Quantum Metric to notify them when their business is experiencing, say, a drop in conversion rates or a spike in page errors. These alerts are critical, because if Quantum Metric misses even one, their customer does, too — and may experience a big impact in revenue and customer satisfaction. So Quantum Metric must know how well their own systems are functioning.

“If we don't have observability, it impacts our ability to show data to customers in real time,” Miller says. For example, if a customer is using Quantum Metric's dashboards to see how a sale is going and something isn't working internally, they also can't see what's going on with their own site. “Splunk helps us provide complete, real-time alerting so customers always have a clear picture.”

The Quantum Metric team also configured Splunk's intuitive dashboards to reflect customer-specific service-level objectives (SLOs); built-in detectors notify them as soon as a customer is impacted, allowing them to address the issue quickly. These



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Glenn Trattner, Chief Operating Officer, Quantum Metric

dashboards help easily collect baseline performance data and better contextualize historical incidents. Quantum Metric's developers can then determine how critical an alert is for their own systems and how something has performed over a period of time — both of which help Quantum Metric better understand their customers.



SLI and SLO definitions for services on the dashboard

Alerting dashboard for a customer with SLI/SLO calculations over seven days as well as charts reflecting the SLIs



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Eric Irwin, Director of Engineering,
Quantum Metric

A Powerful Integration for Greater Visibility

Quantum Metric is both a Splunk customer and partner — and the bi-directional integration between the two platforms unifies data for faster processes and better outcomes.

Quantum Metric and Splunk both collect data about their customers' environments to identify and resolve real-time issues impacting user experiences and outcomes. Quantum Metric focuses on behavioral and intentional data of frontend applications, such as web and native apps, while the Splunk Observability Suite focuses on performance and technical data of backend systems.

Given that both business and technical teams work closely in the era of digital transformation, combining these two datasets and their analytics creates a best-in-class observability solution. By leveraging this joint solution, all teams — technical, business and operations — can align on one dataset for business-oriented prioritization and quick technical resolution.

Quantum Metric Speeds Into the Future

As the Quantum Metric team continues to grow in size and scope — and as their backend infrastructure requires more help with capacity and demand —

Splunk has grown with them. “We’re confident that we’ll be able to leverage Splunk in a way that works well for us to meet future demands, whether that’s if we double the size of our engineering team or incorporate orchestration into our workflows,” says Irwin.

Quantum Metric COO Glenn Trattner agrees. “The Splunk Observability Suite helps us see clearly into our complex environment, allowing us to act based on data so we can deliver on our mission to help customers build better products, faster.”

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