elastic | PEPSICO

SUCCESS STORY

UNITED STATES | FOOD & BEVERAGE | ELASTIC OBSERVABILITY

PepsiCo boosts efficiency and reduces MTTR by 30% with Elastic Observability

PepsiCo Products are enjoyed by consumers more than one billion times a day in more than 200 countries and territories around the world. With nearly $92 billion in net revenue in 2024, its product portfolio includes a wide range of foods and beverages like Doritos, Cheetos, Gatorade, Pepsi-Cola, Quaker, and SodaStream.

The organization has made IT and innovation key pillars of its operations and growth strategy throughout its 130-year history. Now, it is putting Elastic at the heart of its digital transformation efforts as it capitalizes on the latest advances in machine learning and generative AI.

elastic

Reduces MTTR by 30%
PepsiCo reduced MTTR by 30% with Elastic Observability to resolve issues in minutes and hours rather than days.

Reduces monitoring tool count from 55 to less than 20
This tool consolidation and simplification contributed to a 99.9% uptime and elevated service reliability across our digital operations.

Lowers hardware costs up to 25% annually
With Elastic Observability on Elastic Cloud, PepsiCo reduced hardware expenses by hundreds of thousands of dollars.

Full Stack Observability with Elastic

Over the years, PepsiCo has invested in a diverse set of Observability tools tailored to support individual applications. While this approach enabled focused monitoring, the absence of a unified platform limited the ability to optimize performance and reliability holistically across critical infrastructure and applications.

In response, the business deployed Elastic Observability as the foundation of its Full Stack Observability (FSO) platform, consolidating MELT (metrics, events, logs, and traces) data from more than 38 critical applications into standardized Grafana dashboards. Hundreds of users across the organization rely on the platform, including those working in One PepsiCo Operation Center, command hubs equipped with dashboards for Full Stack Observability, and Value Stream Monitoring.

When describing Elastic's benefits, Vinod Chilakalapudi, Director - Observability at One PepsiCo Operations Center, emphasizes positive feedback from end users, including the Operation Centers. "Elastic is the backbone of PepsiCo's operational intelligence, powering proactive anomaly detection, rapid root cause isolation, and near-continuous uptime. This has translated into measurable reductions in downtime and elevated service reliability across our digital operations," he says.

Since the deployment of its FSO platform, PepsiCo has rationalized its monitoring tools from 55 to less than 20. This approach facilitates proactive issue identification and resolution resulting in a 30% reduction in mean time resolution (MTTR).

The new platform also enabled PepsiCo to consolidate its investment in Elastic, permitting higher data volumes while reducing net costs thanks to favorable licensing arrangements. "We've standardized Elastic as the core engine for ingesting and analyzing MELT data across PepsiCo, with a roadmap to 99% coverage. This foundation is accelerating telemetry-driven automation, enabling contextual insights, and powering intelligent operations at enterprise scale," says Chilakalapudi.

elastic

> Our migration to Elastic Cloud eliminated legacy infrastructure overhead, unlocking annual savings. More importantly, it enabled dynamic scalability and real-time observability—accelerating our shift to cloud-native operations.

Vinod Chilakalapudi
Director - Observability at One PepsiCo Operations Center

Achieving 99.9% uptime

Elastic's Full Stack Observability has transformed our Operation Centers into predictive control towers—intercepting issues before they escalate and reinforcing the resilience of PepsiCo's global systems. Rapid identification and resolution of issues results in 99.9% application uptime. In addition, PepsiCo achieved a 23% automation rate in incident management, allowing IT teams to focus on strategic initiatives rather than reactive troubleshooting.

Consolidating multiple tools into one platform also drives efficiency across PepsiCo's Observability platform. With clear visibility into consumption patterns, teams can better understand their data needs, including retention periods for readily accessible data. Elastic's tiered approach, with hot, cold, and frozen layers, offers numerous opportunities to optimize storage costs.

Elastic Observability also plays a strategic role, informing wider business decision-making across several PepsiCo functions. With 13.7 terabytes of data ingested monthly, including 1 terabyte dedicated to FSO, teams across the business are making the most data-driven insights to inform strategic decisions and enhance overall operational resilience.

Outcome-based consulting services

The strategic partnership with Elastic Consulting has accelerated architectural optimization—co-innovating data pipelines, ingestion strategies, and ML use cases to drive both cost efficiency and insight velocity. This includes sending data directly to Elastic using pipelines, which has the potential to save another 20%.

In addition, Elastic Support also played a critical role. "Instead of specialists from multiple vendors, the team primarily relied upon our Designated Support Engineer with Elastic, which greatly simplified both resourcing and maintenance," says Chilakalapudi. The Designated Support Engineer (DSE) has been crucial during critical milestones, especially the on premises to cloud migration.

Future state with AI

Looking ahead, Chilakalapudi and his team plan to integrate additional MELT data, leveraging Elastic's AI features, including its vectorized database and ability to securely integrate with large language models (LLMs) using retrieval augmented generation (RAG). This will enable the generation of proactive alerts, increase application uptime, and reduce both MTTR and mean time detection (MTTD).

"Our vision is to create a next-gen Observability ecosystem powered by Agentic AI and LLM-integrated telemetry," says Chilakalapudi. "Elastic's advancements in vector search and RAG align seamlessly with our roadmap for autonomous, insight-driven operations."

Chilakalapudi envisions expanding the use of Elastic Observability to encompass other critical business functions. And in the pursuit of further efficiency gains, he sees opportunities to optimize cloud costs by analyzing usage patterns to identify saving measures.

> Elastic has become PepsiCo's gold standard for telemetry ingestion, correlation, and resolution velocity. It now sets performance baselines across our observability ecosystem.

Vinod Chilakalapudi
Director - Observability at One PepsiCo Operations Center

Start your free trial

See for yourself how your business can benefit from Elastic in the Cloud, with a free 14 day trial.

Get started

elastic