Redpanda

CASE STUDY

Truecaller halves costs and latency with Redpanda, shifts from maintenance to growth

Leading caller ID and spam blocking platform ensures safer calls for millions of global users with reliable, cost-efficient streaming
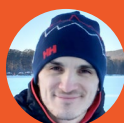
~450M	58%	50%
MONTHLY USERS	INFRASTRUCTURE COST SAVINGS	LOWER LATENCY

"The difference a managed service makes is life-changing. With Redpanda, you get better performance and great support."

Mikhail Artemev
Senior Backend Engineer, Truecaller

truecaller

Truecaller is the leading global platform for caller ID and spam blocking. Based in Stockholm, Truecaller enables safe and relevant conversations for nearly 450 million monthly active users.

HIGHLIGHTS

CHALLENGES

- High costs of self-managed clusters strained budgets
- Maintenance drained human resources
- Performance bottlenecks hindered downstream services

WHY REDPANDA

- Fully-managed solution removes management effort
- BYOC on GCP protects data sovereignty and compliance
- High-performance data pipeline provides a stable platform for growth

RESULTS

- Savings of 58% on annual infrastructure costs
- Time spent on maintenance reinvested in innovation
- Reliable, cost-effective scaling to support millions of users

INDUSTRY	COMPANY SIZE
Software development	201–500 employees

CHALLENGE

Self-managed clusters stalled growth

When almost 450 million monthly users trust an app to protect them from spam, the app must be fast, responsive, and secure. Those are table stakes for Truecaller, the global leader in caller ID and spam blocking.

Spam analytics and other business-critical services rely on Truecaller's data pipeline for accurate real-time data, which is essential for helping users decide whether to answer a call. The organization's infrastructure team is responsible for the data pipeline, along with ensuring Truecaller's platform remains stable and reliable.

But as Senior Backend Engineer Mikhail Artemev explains, the scale of Truecaller's operations created daunting management challenges for the team.

"To support 450 million users, we have to do everything in a distributed manner," he says. "That comes with a lot of challenges to efficiently scale, providing the same level of service to all our users reliably and securely."

Truecaller runs multiple open-source Apache Kafka® clusters across two regions, with a massive cluster in Asia supporting their most critical pipeline. The setup had become extremely costly in terms of infrastructure.

> "It came with a big overhead of having dedicated people and teams maintaining those clusters," Mikhail says. "It was expensive and unscalable. And if a problem did occur, we were heavily reliant on particular people."

The more time the team spent on cluster maintenance, the more they fell behind on their internal projects. They hit storage limitations with large clusters, which took a long time to resolve and caused headaches for downstream teams and services relying on those clusters.

Performance issues started to develop, and they had low visibility of their overall deployment. And, because the existing self-managed clusters weren't especially user-friendly, teams used various web UIs to make sense of the data, doubling the learning curve.

With various upcoming projects in H2, the infrastructure team needed to find a way to free up their time. The question was: would a managed option be a better fit for the business?

A fully-managed solution to drive future scale

When evaluating alternatives to self-hosted clusters, Truecaller set some basic criteria. Any solution would have to:

- be a fully-managed service
- perform better than their existing self-managed clusters
- support future scale

Redpanda Cloud's fully-managed service includes provisioning, 24/7 monitoring, and maintenance — including security patches and fixes. With manual and time-consuming processes off Truecaller's plate, the team would have peace of mind while freeing up their time for high impact work. Plus, with Bring-Your-Own-Cloud (BYOC), Truecaller could run Redpanda in their GCP environment, allowing the company to comply with data locality and privacy regulations.

While the primary advantage of switching to Redpanda was moving to a hassle-free, fully managed solution, Redpanda also brought other benefits to the table. Its full compatibility with the Kafka API lets the team keep using the same tooling they already know. Engineers can conveniently create topics and configurations within the Redpanda Console without relying on the infrastructure team.

In Redpanda, Truecaller found a high-performance enterprise data streaming solution that would reduce latency and boost efficiency compared to their existing setup. Combined with a 99.99% availability SLA and cost savings from Redpanda's Tiered Storage, Truecaller could improve performance and operations while lowering costs.

> **We spend almost no time dealing with cluster maintenance anymore. We don't update it. We don't fix it. It is all done by the Redpanda team, who are very responsive."**
>
> **Mikhail Artemev,** Senior Backend Engineer, Truecaller

To top it all off, the Redpanda team delivered early value during deployment. They initially didn't support one of Truecaller's required availability zones, but quickly added it when asked.

Mikhail praised Redpanda's partnership during the migration, saying, "Redpanda's support team was especially helpful throughout all stages of migration. From cluster deployment to coding assistance, they were competent and always there when we needed them."

RESULTS

A renewed focus on growth, not maintenance

With Redpanda, Truecaller gained a high-performance, fully managed service that **saves 58% on annual infrastructure spending**. By eliminating management and reducing costs, the infrastructure team now has more time (and resources) to spend on initiatives that move the company forward.

Change can often be abrupt, but Redpanda's compatibility with Kafka APIs made for a seamless transition for developers. The change in the platform's newfound performance, however, was noticeable.

> "Our latencies dropped by almost half, which is just perfect."

The low latency combined with high data availability makes Redpanda a scalable solution capable of supporting Truecaller's continued growth. As a result, millions of Truecaller users now have the most accurate, up-to-date information when deciding whether to answer a call — and that makes communication safer for everyone.

> **"**
>
> The biggest benefits of working with Redpanda are the operational cost savings, their reliable services, responsive team, and deployment options that allow you to put Redpanda where you actually need it."
>
> **Mikhail Artemev,** Senior Backend Engineer, Truecaller

Disclaimer: The views expressed in this case study are personal and may not represent those of Truecaller and its employees.

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