Redpanda

CASE STUDY

Deepomatic scales Al vision with real-time data streaming

12x

FASTER CUSTOM FEATURE SHIPPING 95%

OF CUSTOMERS
USING DATA STREAMS

0

DATA LOSS INCIDENTS

"Working with Redpanda allowed us to start with event streaming without thinking about it, and with a fully managed service, our team can focus on innovation rather than maintenance."





Deepomatic is an AI-based computer vision platform for image recognition and analysis that provides unparalleled visibility into field operations for telecommunications, utilities, and green energy companies.

HIGHLIGHTS

CHALLENGES

- Monolithic services were too rigid to scale
- Limited data access slowed development
- Endless patching and troubleshooting

WHY REDPANDA

- · Easy to onboard and use across teams
- Seamless implementation of real-time data streaming
- Fully managed services reduces hiring costs

RESULTS

- Freedom to build and easily scale new microservices
- Enhanced data access across teams increases autonomy
- Teams can ship in-demand features in days, not months

INDUSTRY

Software development, Manufacturing

COMPANY SIZE

50

CHALLENGES

Monolithic architecture slowed feature development

Technicians in telecommunications, utilities, and energy sectors shoulder a heavy burden. They maintain the critical services and infrastructure essential to everyday life, often on a large scale across major cities and rural regions.

Deepomatic, a lean scaleup based in Paris, France, launched a pioneering platform to help technicians in these fields perform their jobs more effectively and reduce errors. The platform uses Al-powered image recognition to deliver real-time data to technicians on their mobile devices and provide insights to the back office, expediting troubleshooting and enhancing quality control.

Speed and flexibility are non-negotiables for Deepomatic, but the team struggled with the rigidity of their monolithic services and database architecture as they built features on top of features. They used a complex API to access data, which burdened the database with heavy traffic and created barriers to splitting the monolithic architecture.

"We were facing multiple problems. It was hard to build new services and slow to build new features because it was difficult to access data," says Juliette Tisseyre, VP of Engineering at Deepomatic. "We needed to split components, but it was challenging because there was a lot of data we needed to share across the team."

So, Deepomatic set out to find a data streaming solution that would help them transition to microservices, break up the APIs, uncouple their web app and databases, and improve the scalability of their architecture.

WHY REDPANDA

A seamless switch to real-time data streaming

Using Redpanda's simplified streaming data platform, Deepomatic's engineers could break down their monolithic services and separate their front/read APIs from the operational ones. This resulted in a more flexible and scalable architecture that was infinitely easier to maintain and deploy.

"Redpanda brings us so much in terms of capabilities and flexibility. It lets us be more innovative," Juliette says.

Redpanda's training materials, documentation, and online workshops significantly helped Deepomatic's team understand how the technology worked and what they could do with it.

"It was quite easy for the first user to integrate Redpanda, and it was simple to onboard engineers as we introduced it to the whole team," Juliette says. "We have software engineers, solutions engineers, and DevOps engineers coming onto the system, and everyone who has worked with Redpanda is very happy."

Choosing a managed solution was important to Juliette because it would significantly reduce costs and give her team more time to focus solely on building their product. Thanks to Redpanda's fully managed clusters, the team only needs two DevOps specialists to maintain the whole cloud infrastructure. Plus, a fully managed service means the small team can spend their time supporting their growing AI platform rather than patching or troubleshooting.



My experience working with the team has been amazing. Every time we had questions, they were available to us. It's more like a partnership than a vendor-customer relationship."

Juliette Tisseyre, VP of Engineering, Deepomatic

Redpanda 3

RESULTS

12x faster feature shipping and seamless scaling

By partnering with Redpanda, Deepomatic removed the roadblocks when developing custom features for enterprise customers, enabling the Deepomatic team to optimize their services and drastically reduce feature development time from six months to two weeks.

"Every time we ship a new feature or microservice, we can do it much quicker with Redpanda. We can be far more agile and flexible, and we can respond to demands for features within days." Juliette says.

Now, Juliette sees a future where teams can quickly aggregate data, build data pipelines, and ship cutting-edge features to meet their customers' needs sooner. And, with democratized data, Deepomatic's solution architects can easily create microservices using Redpanda without relying on the engineering team.

"Before, there was a lot of friction trying to decide who can access the data and figuring out ways to modify data without blocking other tasks," Juliette explains. "Redpanda provides a single source of truth. It's easy for everyone to connect to it and use the data they need. It gives everyone more autonomy."

The ripple effect of this seamless workflow has been undeniable. For example, in the use case of fiber optic activation, Deepomatic typically performs real-time photo analysis using AI to check for equipment degradation. This analysis could take up to 20 seconds, making their field technicians wait around for the results. Developing an async solution would've taken months, but using Redpanda, a solution engineer built a stream-based microservice in just a few days. Now, field technicians can get the data they need within single-digit seconds, while the back office gets the full equipment assessment in near real time.

With Redpanda in its corner, Deepomatic finally has the stable, reliable, and flexible infrastructure needed to innovate at scale.



The ROI of having Redpanda is great! We can build new features for our enterprise customer solution without impacting our existing product. It's a huge win for our team."

Juliette Tisseyre, VP of Engineering, Deepomatic

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