elastic | oi

SUCCESS STORY

BRAZIL | TELECOMMUNICATIONS | ELASTIC OBSERVABILITY

Oi achieves 100% monitoring coverage of business-critical systems and reduces deployment time by 75% with Elastic Observability

100% monitoring coverage of business-critical systems

Eliminates blind spots and ensures complete observability of the fiber ecosystem.

Cuts monitoring deployment time by 75%

Reduces monitoring setup time for new, high-complexity services and products from two months to two weeks.

Strengthens security with AI-powered threat detection

Automated anomaly detection identifies suspicious activity before it escalates.

As one of Brazil's largest telecommunications companies, Oi operates a complex IT infrastructure, ensuring millions of customers have seamless connectivity every day. From billing systems and CRM platforms to real-time network monitoring, every layer of the business relies on observability to detect issues before they impact service quality. However, as Oi's digital transformation accelerated, so did the challenges of managing its monitoring systems.

With a mix of legacy on-premises environments, private cloud deployments, and modern applications, Oi's IT teams struggled with disconnected monitoring tools, slow deployments, and manual processes that consumed valuable resources. Setting up observability for new services could take up to two months.

To make the process faster and more efficient, Oi turned to Elastic Observability to simplify monitoring, automate alerting, expand monitoring capabilities and resources (such as APM, Synthetic Monitoring, and Machine Learning), and deliver the real-time insights the company needed to scale its operations. By integrating Elastic, Oi not only streamlined its monitoring processes, but also laid the foundation for a predictive, AI-driven observability strategy that would shape its future cloud operations.

Oi replaces disconnected tools with Elastic's unified platform

According to Oi Team Leader - IT Rubens Patrick, who coordinates the company's observability and SRE (Site Reliability Engineering) team, before Elastic, Oi's IT teams relied on manual processes to set up and manage observability across their infrastructure.

Each monitoring deployment required custom configurations, manual script adjustments, and validation cycles that stretched over months, limiting the effectiveness of monitoring.

Elastic transformed this approach by unifying the monitoring of all Oi's fiber services, providing a centralized, automated, and AI-driven platform. With these changes, it became possible to deploy fully operational monitoring environments in a fraction of the time, ensuring visibility across all levels of the infrastructure. The tool's usability enabled more collaborative work with the operations teams, who began to take a more active role in the monitoring process.

> Before Elastic, setting up a new monitoring request could take up to two months. With Elastic, we reduced that time to two weeks — just one sprint cycle — a 75% improvement.

Rubens Patrick
Team Leader - IT,
Oi

Oi also eliminated its reliance on manual workflows by adopting Elastic, automating the creation and management of alert rules. Previously, analysts had to manually configure over 250 system queues. With Elastic, this process is now fully automated, ensuring that alerts dynamically adapt to real-time performance data.

How Elastic Observability helps Oi improve broadband sales monitoring

One of the biggest challenges Oi faced was ensuring full visibility into broadband sales performance. The company relied on two major CRMs to track these sales, one based on legacy infrastructure and a newer cloud-based system.

When Oi launched a new broadband product, the transition between these two systems created gaps in sales tracking and performance monitoring. Oi's observability team was responsible for ensuring the entire sales pipeline was monitored before going live in production, detecting potential disruptions in real time and supporting the launch of new customer services.

With Elastic Observability, Oi is able to monitor sales volume and detect systemic issues in lead tracking, providing critical insights to senior leadership. Before Elastic, these insights were fragmented across different platforms, requiring manual reconciliation to piece together a full picture of sales performance.

Now, with a unified dashboard that integrates sales metrics and system logs, Oi's leadership can quickly identify drops in sales and determine whether the cause is a technical issue or another business factor.

This tracking also uses an AI tool to monitor sales variations—by channel, by payment method, and most importantly, at each system stage of the sales process, segmented by transaction type.

> The level of monitoring required to quickly identify the source and type of failures was a challenge we were able to overcome using Elastic.

Rean Machado
Technology Efficiency Manager,
Oi

How Oi uses Elastic Machine Learning to stop security threats in real time

Beyond sales performance, Elastic Security has played a crucial role in enhancing Oi's cybersecurity strategy. One critical example is how Oi uses Elastic's machine learning (ML) capabilities to detect intrusion attempts in a legal system that requires strict compliance with security regulations.

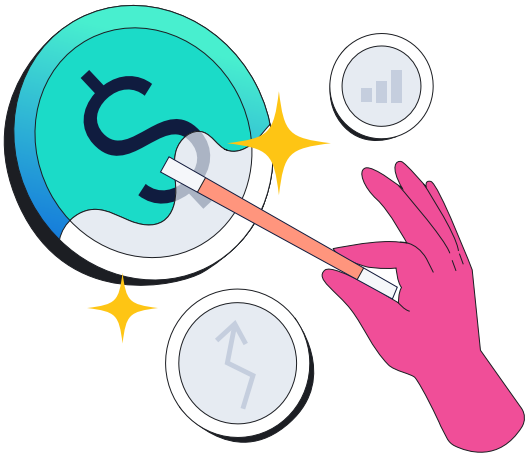
Oi's IT teams deployed Elastic's anomaly detection models to monitor access patterns, tracking failed login attempts and other suspicious behavior in real time. The result was a proactive approach to security monitoring, where potential threats were detected before they escalated into actual breaches.

In this case, Elastic's data visualization capabilities in Kibana provided clear insights into attack patterns, allowing Oi's operations teams to strengthen their collaboration with the Information Security department, protect systems, and prevent new attempts. With Elastic, they quickly identified this scenario, which was causing environment degradation, and the operations team was able to act promptly by engaging the Information Security team.

This shift from reactive to proactive security monitoring has significantly improved Oi's ability to protect its most critical applications, ensuring compliance with regulatory standards while maintaining system resilience.

Achieving 100% monitoring coverage and maximizing framework utilization

Another significant challenge Oi faced was ensuring full observability across its most critical applications. Before Elastic, many systems remained partially or completely unmonitored, leading to delays in issue detection.



With Elastic, Oi achieved 100% monitoring coverage across all essential applications in its fiber ecosystem, ensuring complete visibility into the performance of its most critical services. This level of monitoring enabled teams to track, analyze, and optimize each critical system in real time, reducing downtime risks and increasing service reliability.

Beyond coverage, Elastic also enabled Oi to maximize the utilization of its monitoring framework, increasing adoption from just 25% before Elastic to 98% after implementation. This improvement meant that nearly all of Oi's available monitoring resources were being effectively leveraged, ensuring that observability became an integrated part of IT operations rather than a reactive add-on.

Turning system monitoring into a business advantage with Elastic

For observability to drive real business value, it must go beyond technical teams and provide insights that support executive-level decision-making. One of the most powerful aspects of Oi's Elastic implementation was its ability to deliver clear, actionable data to leadership teams, allowing them to make informed strategic choices based on real-time system performance.

Before Elastic, C-level executives lacked full visibility into the impact of infrastructure decisions, relying on delayed reports and disconnected analytics from multiple monitoring systems. With Kibana and Canvas dashboards providing real-time insights, executives now have instant access to system health, performance metrics, and risk assessments, enabling faster, more confident decision-making.

Elastic has also transformed how Oi leverages data analytics to improve service reliability and operational efficiency. By integrating machine learning-powered anomaly detection, Oi's teams can now detect irregular patterns before they turn into system failures.

With real-time log analysis and customizable dashboards, IT teams can correlate historical trends with current system behavior, helping them identify recurring issues, predict potential disruptions, and optimize system performance over time.

> The biggest delivery wasn't just the time savings and ease of implementation, but the analytical side of the project. With Elastic, we can deliver real-time insights that support strategic decision-making.

Rubens Patrick
Team Leader - IT,
Oi

The training and expertise that made Oi's shift to Elastic seamless

Beyond technology, one of the critical components of Oi's success with Elastic was the guidance and expertise provided by Elastic's consulting and training programs. Transitioning from a highly manual, multi-tool monitoring setup to a fully automated, AI-driven observability platform required a strong change-management approach.

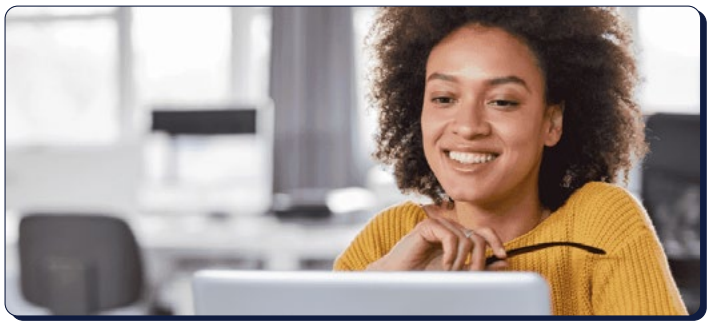
Elastic's training ensured that Oi's teams were equipped with the skills and best practices needed to take full advantage of the platform, reducing the learning curve for engineers and enabling a smooth transition from legacy systems.

Consulting sessions also played a key role in helping Oi optimize its Elastic deployment, from fine-tuning machine learning models to automating complex workflows. This hands-on collaboration accelerated Oi's ability to scale observability across its organization, ensuring that every team — from IT operations to security — could extract maximum value from Elastic's Search AI Platform.

The next step for Oi moving to AI-powered predictive monitoring

With Elastic now at the core of its observability strategy, Oi is focusing on expanding its AI-powered monitoring capabilities while fully transitioning to Elastic Cloud. Before the move to Elastic, integrating on-premises systems into the company's monitoring stack took between three to six months, as engineers had to develop custom connectors and manually configure data ingestion pipelines. With Elastic Cloud, this process now takes less than a month, dramatically accelerating Oi's results.

The next phase of Oi's observability evolution includes further adoption of machine learning models to detect anomalies and predict potential system failures before they occur. By using Elastic's AI-driven analytics, Oi aims to move beyond real-time monitoring into a predictive observability framework that proactively ensures service reliability.



> We always maintained high expectations for the implementation of Elastic to monitor our services. Ensuring the customer experience and the reliability of our IT systems has always been a non-negotiable goal. Adaptability to new businesses, rapid failure detection, and the quick activation of IT operations teams have always aimed to guarantee the experience of both our internal and external customers. The operations board maintained its focus on service quality, and monitoring combined with observability became a key pillar for sustaining high levels of system availability.

Alexandre Furtado
Director of IT Infrastructure and Operations,
Oi

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

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