StackState

Tie all of the critical information together to get a single, unified view of the environments supporting trading applications.

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The rail operator NS International provides sales and service of international inter-city and high-speed train connections to Belgium, France, Germany, and Switzerland. Based in the Netherlands, it is part of the Dutch Railways, also known as the Nederlandse Spoorwegen (NS). The organization operates on the busiest railway network in the world and transports about 1.2 million people every day, with an annual revenue of five billion euros.

🌐 Public Transport   📍 The Netherlands

Double the number of travelers

In 2012, NS International suffered a reputation loss after on-boarding a new highspeed train that, ultimately, never went into long-term operation. This was negatively impacting the customer experience. They set an ambitious goal: to double the number of international travelers by 2030. To achieve this, the company had to change its mindset and focus on improving the customers' journey.

## Making use of data to optimize customer experience

To optimize the customer journey, data analysis and data science became crucial for measuring the indicators and outcomes of experiments and regular business. NS set up multiple business-oriented growth teams in a T-shaped profile, supported by seven different DevOps teams. Their hybrid on-premise and cloud IT landscape were monitored by several monitoring solutions - Logz.io, Elastic, Nagios, AWS Cloud Watch, and Google Analytics.

The challenge: reduce time to market

NS International was rapidly experimenting and scaling new solutions to deliver the best customer experience. The real problem was shortening the time to market of new initiatives within this complex IT landscape. Platform operations needed to be super-efficient so the majority of the IT resourcing could instead focus on development inside the DevOps teams. To support the rapid experimentation of new initiatives, the DevOps and business-oriented growth teams needed to perfectly align.

The following questions had to be answered:

- How to create a shared understanding of the entire IT stack across teams and tools
- How to create a rapid feedback loop from the business team to the DevOps team?
- How to get more control over critical business processes?
- How to decrease "mean time to discover" and "mean time to repair" for major incidents?
- How to predict the business impact caused by IT: towards pro-active monitoring?
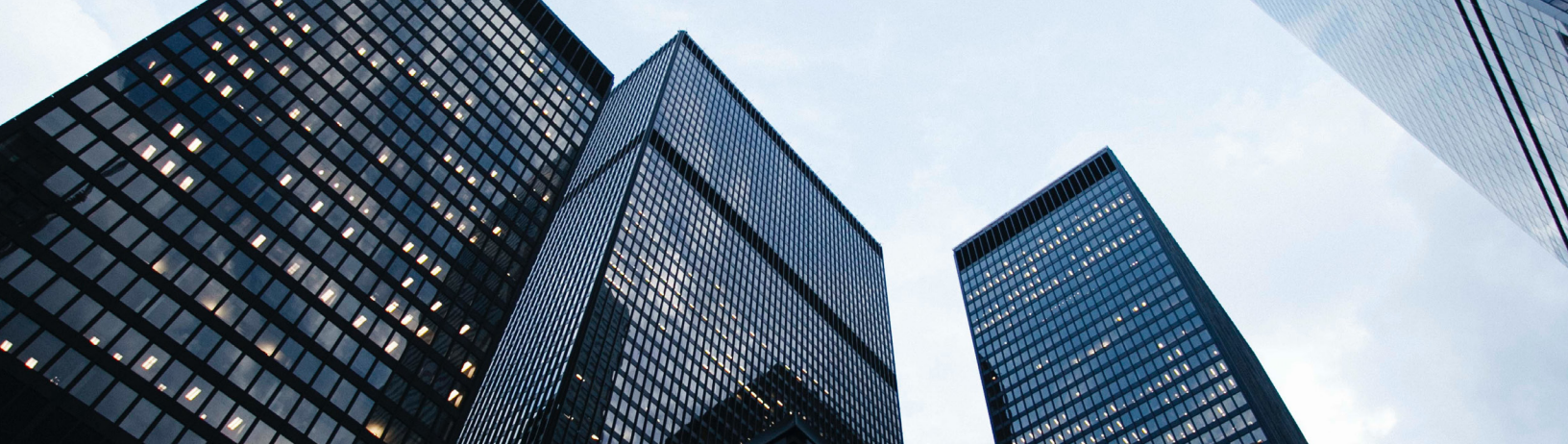
Bringing all data together into one platform...

In order to answer these questions, it was imperative for NS International to break down the silos between data generated and stored within their current environment. That's where StackState comes in: all of the monitoring data from their existing systems comes together within StackState's observability platform. With this data, StackState generates full-stack visibility and shared understanding across teams and tools.

"StackState acts as a lens where our data is focused on a single cross-domain perspective and analysis. This ensures higher productivity and rapid experimenting across our Business- and DevOps teams, while maintaining stability and business performance. "

Pascal Reijnders - Head of IT at NS International

... and using these insights to improve productivity and efficiency

StackState delivers cross-domain actionable insights to the DevOps and growth teams, improving team efficiency and productivity. NS International accelerated its root-cause analysis with StackState, which results in a significantly lower Mean Time to Discover (MTTD) and Mean Time to Remediate (MTTR). StackState's own tracing agent enables end-to-end insight and performance analysis, generating the broadest context possible to make faster (business) decisions.

Google Analytics is integrated into StackState as a top-level business metric. This ensures that the DevOps teams understand the impact they have on important business metrics, for example, the impact on tickets sold per hour.

This enables rapid experimenting of new initiatives while maintaining stability and business performance throughout the organization, with fast feedback loops across teams. As a result, they minimized downtime and increased revenue.