
Improving visitor satisfaction with advanced predictive maintenance



To continue to delight its visitors, a world-leading theme park operator is fixing maintenance issues at its attractions before they even happen.

The context

As a standard-bearer for its industry, a major media and theme park operator is dedicated to surprising and delighting visitors all over the world.

So, when one of its popular attractions is out of service, this has a negative effect on customer satisfaction. What's more, operational challenges can arise from the disruption; and revenues are reduced when visitors can't reach the rides and outlets they'd like.

To make sure its visitors always have a great experience, the company has traditionally taken a costly preventive approach to maintenance. But in today's connected world, the company saw the potential of using real-time data to get a more precise and predictive view of what's happening across its parks.

The challenge

The company needed not only to accurately predict downtime, but to integrate that information into its maintenance teams' schedules and ways of working.

Existing sensors on rides would enable the company to gather high volumes of detailed data on the operational status of each attraction. The real challenge was how to harness all that data and turn it into accurate insights that could be quickly and efficiently acted on by the company's maintenance crews.

Familiar with Atos' work on innovative predictive maintenance solutions in the energy and manufacturing sectors, the company asked Atos to help.

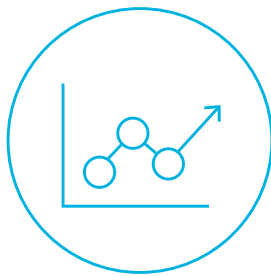
The solution

Atos developed a high-speed streaming data analytics platform that processes around 180 billion data points every hour.

Data passes through multiple artificial intelligence (AI) models to alert engineers of any downtime up to 30 days in advance. Using custom-built dashboards on their mobile devices, engineers can click on each alert to pinpoint exactly when and where downtime is predicted. They can explore historical data and probabilities for faster remediation and prioritization; and they can track key metrics and spot trends over time at an attraction or global level.

With enhanced compute power and storage, state-of-the-art BullSequana S servers and BullSequana Edge devices keep data secure and processing in real-time.

A dedicated Atos team supports the platform while fine-tuning the AI model and adding new features to ensure continuous improvements.



The results

Maintenance procedures have fundamentally shifted, leading to less downtime, lower costs and happier visitors.

Using analytics on ride sensors and motors, together with other data sources, the company can eliminate inefficient preventive maintenance and carry out more highly targeted predictive maintenance.

The maintenance crews' interactive dashboards give them unprecedented access to real-time and historical data to help them diagnose and repair any problems fast.

Plans are in place to scale this powerful platform to more parks around the world and to the company's cruise lines. The team is also exploring more ways to leverage the platform beyond attractions, such as safety and vehicle flow around the parks.



For more information: atos.net/en/industries/media

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