Enabling monitoring & predictive maintenance for future trains

TCS, created a strategic and innovative Google Cloud based landing zone to host the new train applications which are based on Internet of Things (IoT) and Data Analytics to optimize train maintenance and monitoring.

The challenge

In its continuous focus on providing a sustainable transport to Danish passengers, DSB has awarded Talgo to operate on the domestic Intercity routes and on the international line connecting Denmark with Germany. With the new trains there is also a need for an effective ecosystem with IoT integration to address coach monitoring, predictive maintenance and to achieve operational excellence.

The solution

DSB procured trains from Talgo that use IOT device data for preventive maintenance and operations management. TCS built a secure and robust landing zone on Google Cloud to host the Talgo applications. After integration with their existing on-prem infrastructure and employing centralized logging, TCS now manages operations support for DSB.

The result

TCS helped DSB with a fast pace setup of the Google Cloud platform, which will onboard the technology systems from new trains. With proactive monitoring and operational stability, the framework addresses the needs related to multi cloud connectivity, detailed network monitoring at various levels, and better cost management with big query enabled billing.

TCS created Google Cloud-based landing zone to host Talgo applications, based on Internet of Things (IoT) and Data analytics to optimize train maintenance and monitoring. TCS further helped in setting standards, best practices, digitization strategy, governance, , compliance, and enhanced security.



About DSB

Danske Statsbaner (DSB) is the largest Danish train operating company. It is an independent public corporation owned by the Danish Ministry of Transport. DSB is responsible for passenger train operations on most of the Danish railways, has more than 195 million passengers every year.

Vertical/horizontal solution: Manufacturing & Industrial

Primary project location: Denmark



About Tata Consultancy Services Limited TCS is an IT service, consulting & business solutions organization that has partnered with global businesses in their transformation for over 50 years



Products Google Cloud Platform