



CEAT LTD Digitally Transforms with AWS IoT and Analytics

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Indian tyre manufacturer reduces time to market of innovative new digital initiatives, takes infrastructure deployment from two months to 12 hours, and makes driving safer and smarter with AWS

NEW DELHI—August 17, 2022—Amazon Web Services (AWS), an Amazon.com company, today announced that CEAT LTD (CEAT), one of India's leading tyre manufacturers with sales in more than 100 countries worldwide, is using AWS to drive smart manufacturing and invent intelligent tyres – tyres with sensors which can predict various data points such as load and wear. Using the breadth and depth of AWS cloud capabilities, including Internet of Things (IoT), analytics and business intelligence, and machine learning, CEAT is digitizing factories to unlock manufacturing efficiencies, make data-driven decisions with SAP on AWS, and launch innovative digital services. For example, by using AWS services, CEAT was able to develop a solution that automatically recommends which tyres dealers should order based on history and real-time supply, improving customer experience.

Before migrating to AWS, CEAT's on-premises infrastructure could not scale with the demand for new digital services. As a first step to improve agility and accelerate innovation, CEAT implemented a modern SAP S/4HANA enterprise resource planning (ERP) platform on AWS. Then, using [Amazon QuickSight](#), an AWS service that helps CEAT employees easily understand data, CEAT set up real-time analytics dashboards using factory and enterprise data. Data analytics unlock insights to help the company develop innovative and high-quality tyres for safer journeys, including an intelligent tyre for commercial fleet operators. Intelligent tyres have built-in telemetry sensors connected to the cloud, which records tyre data, including pressure and temperature, to detect leaks and predict tyre failure. This insight minimizes fleet operators' vehicle downtime and prevents road accidents.

To digitize its manufacturing processes, which require 250 raw materials, CEAT connected production machines, like curing presses, to the cloud and built a data lake on [Amazon Simple Storage Service](#) (Amazon S3). This lake securely stores CEAT's structured and unstructured data from across its operations at scale, improving CEAT's view of factory operations and helping line managers closely monitor factory operations. For example, CEAT uses [Amazon SageMaker](#), AWS's service for building, training, and deploying machine learning models quickly in the cloud and at the edge to predict leaks in tyre-curing presses. This prediction decreases tyre waste by reducing factory line stoppages and improving tyre quality.

With AWS, CEAT can now rapidly develop innovative digital solutions for customers. CEAT uses [Amazon Redshift](#), a cloud data warehouse, and Amazon SageMaker for an experimental solution. Using a mobile device, the solution automatically scans stock-keeping unit names and tyre serial numbers, registering warranties and claims via an image upload service. This service makes the warranty and claims registration process smoother and more efficient for customers. CEAT also used Amazon Redshift to pilot a service that automatically recommends which tyres dealers should order based on history and real-time supply, further enhancing the customer experience.

"AWS has helped us deliver a better customer experience by using cloud capabilities, like machine learning, serverless computing, and database services," said Ganesh Bhat, head of digital and analytics (CoE) at CEAT LTD. "With AWS, we can drive smart manufacturing capabilities and create new products, like intelligent tyres, much faster. In addition, we can focus on innovation instead of system maintenance by using the cloud to automate more processes."

"CEAT is making its factories smart with AWS, bringing the best of the cloud to the tyre manufacturing process," said Puneet Chandok, president of Commercial Business, AWS India and South Asia at AISPL. **"With AWS, CEAT can innovate rapidly with the latest cloud technology. CEAT has taken tyre manufacturing to new heights, and the results are showing, as the company continues to delight customers and dealers."**

About Amazon Web Services

For over 15 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud offering. AWS has been continually expanding its services to support virtually any cloud workload, and it now has more than 200 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management from 84 Availability Zones within 26 geographic regions, with announced plans for 24 more Availability Zones and eight more AWS Regions in Australia, Canada, India, Israel, New Zealand, Spain, Switzerland, and the United Arab Emirates. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—trust AWS to power their infrastructure, become more agile, and lower costs. To learn more about AWS, visit aws.amazon.com.

About Amazon Internet Services Private Limited

Amazon Internet Services Private Limited (AISPL) undertakes the resale and marketing of AWS Cloud in India.