kyndryl

Driving business growth and customer satisfaction with a shift to public cloud

A leading automotive manufacturer



Business opportunity

To manage exponential business growth, a leading automotive manufacturer expanded its domestic operations into a manufacturing hub that exported products worldwide.

The company's legacy datacenter couldn't keep up with the additional workloads, creating latency issues and significantly hindering their vehicle manufacturing and distribution processes across the supply chain.

The leadership team knew a shift to a cloud platform would allow the company to adapt quickly to market changes and maintain customer trust while fostering agility and responsiveness.

Technical challenge

With more than 10 manufacturing facilities, 500+ OEM suppliers and a global distribution model, the automotive leader faced a common challenge: a complex technology estate with serious visibility challenges.

The complexity and inefficiency of the old systems led to slower production cycles and increased downtime, hampering overall productivity. Poor data management capabilities resulted in inaccurate data, affecting production planning and forecasting, often leading to overproduction or underproduction.

Frequent downtimes and reliability issues further disrupted the manufacturing process, leading to delays and reduced output.

Overall, these challenges significantly impacted the automotive manufacturer's ability to manufacture vehicles efficiently and cost-effectively, affecting their competitiveness and market responsiveness.

Our solution

Together, the manufacturer and Kyndryl migrated their systems to AWS public cloud and SAP S/4HANA, allowing them to significantly streamline their manufacturing and supply chain operations. By unifying and optimizing data across systems, the manufacturer was able to enhance product and asset optimization through real-time analytics and insights. The Kyndryldeployed solution included:

- A centralized dashboard, using AWS IoT Greengrass, to pull data from edge and display connected IoT machine uptime, production cycle times, and quality metrics, supporting equipment utilization improvements and enhanced productivity.
- Development and deployment of machine learning models using AWS SageMaker to leverage historical and real-time data from the manufacturing plants to predict equipment failures before they occur.
- → Integration of the S/4HANA system data with AWS data lakes and AI models to create highly accurate demand forecasts by factoring in historical data, market trends, and real-time data from sales and production.
- → Leveraging RFID Inventory Management and S/4HANA integration to provide immutable records of assets throughout the supply chain.

The power of partnership

Working closely with AWS, Kyndryl helped modernize manufacturing operations and optimize the supply chain with AWS and SAP S/4HANA platforms. The migration helped:

- → Unify data across systems, enabling real-time analytics and insights that enhanced product and asset optimization through the AWS platform's scalability and SAP's robust enterprise resource management tools.
- Advance forecasting capabilities within SAP's demand planning, aligned with AWS's powerful infrastructure, ensured better synchronization between production and market demand, allowing the organization to scale operations more efficiently.

What progress looks like

- → Operational cost reduction by up to 40% through streamlined processes and cloud efficiencies.
- Improved Overall Equipment Effectiveness (OEE)
 by 20% via real-time equipment monitoring and predictive maintenance, enhancing productivity.
- → Manufacturing productivity improved by 15% through streamlined workflows and reduced manual intervention.
- → Supply chain visibility improved by 30% by identifying bottlenecks earlier, optimizing logistics and ensuring timely deliveries.
- → Demand forecasting accuracy improved by 25% by better matching production with market needs.



What's your next digital business challenge? Let's tackle it together.

Talk to an expert. —

kyndryl.

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