

**Case Study | CEIT**

# PROVIDING REAL-TIME DECISION MAKING ON THE SHOP FLOOR

**THE CLIENT WAS LOOKING FOR A MANUFACTURING EXECUTION SYSTEM (MES) PARTNER. THEY WORKED WITH TATA TECHNOLOGIES TO IMPLEMENT A MES SOLUTION THAT OFFERED A FLEXIBLE, BUILD-TO-ORDER PRODUCTION PROCESS.**

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## THE CHALLENGE

The automotive manufacturer needed a partner who could help them overcome:

- A lack of process visibility and traceability.
- A lack of control over the entire production process.
- Extended manufacturing cycle times, resulting in slow time-to-market.
- An inability to track products or make business decisions in real-time.
- Poor visibility into order, machine and operator status.

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## THE COMPANY

The United Kingdom's largest automotive manufacturer, known for its premium all-wheel drive vehicles, luxury sports saloon and sports car marques.



## THE SOLUTION

- Offered a flexible, build-to-order production process, allowing for late specification changes. It features real-time scheduling, sequencing, broadcast and order management to effectively meet delivery dates.
- Enabled changes to production process specifications within the manufacturing constraints – in terms of both product options and process. This ensured that the overall production schedule remained feasible and customer order due dates were met.
- Combined the capability of both SCADA and MES functionalities. It provided real-time visibility into production with graphics, alarms and trends.
- Provided dynamic resource scheduling of customer orders with enterprise resource planning (ERP) integration. An execution manager with document authoring and broadcast management information provided instructions to each work cell.
- Supplied a solution that can handle 30,000 orders in process, accept 4,000 bodies and seven models across the facility, and make 50 million decisions per second at 1,200 tracking points and 120 automated decision points.

## THE RESULT

# 100%

Visibility into orders and processes



10% improvement in quality



90% build to schedule



10% improvement in productivity

## ABOUT US

Tata Technologies is a global engineering and product development IT services company that is focused on fulfilling its mission of helping the world drive, fly, build and farm by enabling manufacturing companies across the automotive, aerospace and industrial heavy machinery verticals realize better products and drive efficiencies in their businesses. There are two components to our value proposition – managing and delivering outsourced engineering services and products for our manufacturing clients, and helping them identify and deploy technologies that are used to conceptualize, design, validate, build, test, benchmark and realize better products. For more information, visit [www.tatatechnologies.com](http://www.tatatechnologies.com).