



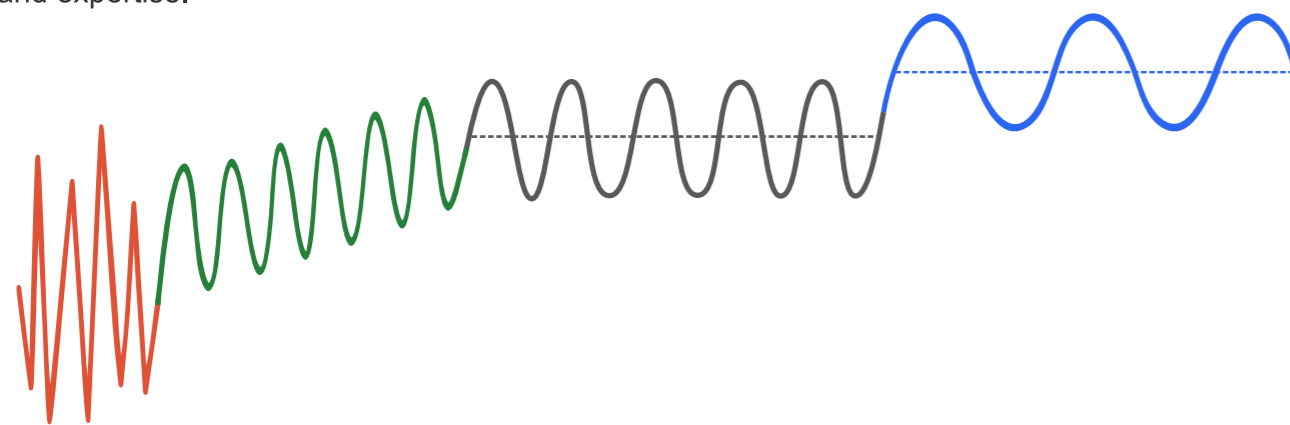
Forbes Marshall Digital

#BeyondConnectivity

Key performance indicators in manufacturing operations include process efficiency, plant uptime, safety, energy efficiency and environmental impact. On-the-ground experience through our own interactions with thousands of plants indicates that over time, plant performance deteriorates.

	Desired	Actual
Process Efficiency	Consistency in process parameters, productivity and quality	Variations in process parameters, bottlenecks in productivity and varying rejection rates
Uptime	>95% uptime at the product, equipment and plant level	<60% uptime at the product and equipment level
Safety	Zero accidents	Safety hazards prevalent across the system
Energy Efficiency	Benchmark specific energy consumption	21% average energy reduction potential across plants
Environmental Impact	Low emissions, effluent and water footprint	Potential to reduce water consumption, effluent and emission discharge

This gap between desired and actual performance across KPIs is due to many factors, including dynamic process variations, equipment downtime, operating practices and a lack of awareness and expertise.



Unattended KPI	Right Products	Operations Over Time	Beyond Connectivity
High variability, significant opportunity to optimise	An efficient plant built for your needs, aimed at being a benchmark plant in your industry	Plant performance impacted by operating practices, production loads, and other variables over time	Reduced variance, 24x7 detection of any failure, quicker resolution, actionable insights, prediction for maintenance or failure

Sustaining plant performance requires a combination of:

- **Diagnostics:** Real time monitoring provides visibility on KPI variations / deviations
- **System Upgrades:** Rectifying system design and installing the right products improves performance
- **Data Analysis:** Extracting value from data by analysing the reasons for KPI variations and providing corrective actions helps reduce the frequency and band of variations
- **Operations and Maintenance Practices:** Prescriptive and proactive maintenance of products and equipments ensures >95% uptime

Beyond Connectivity

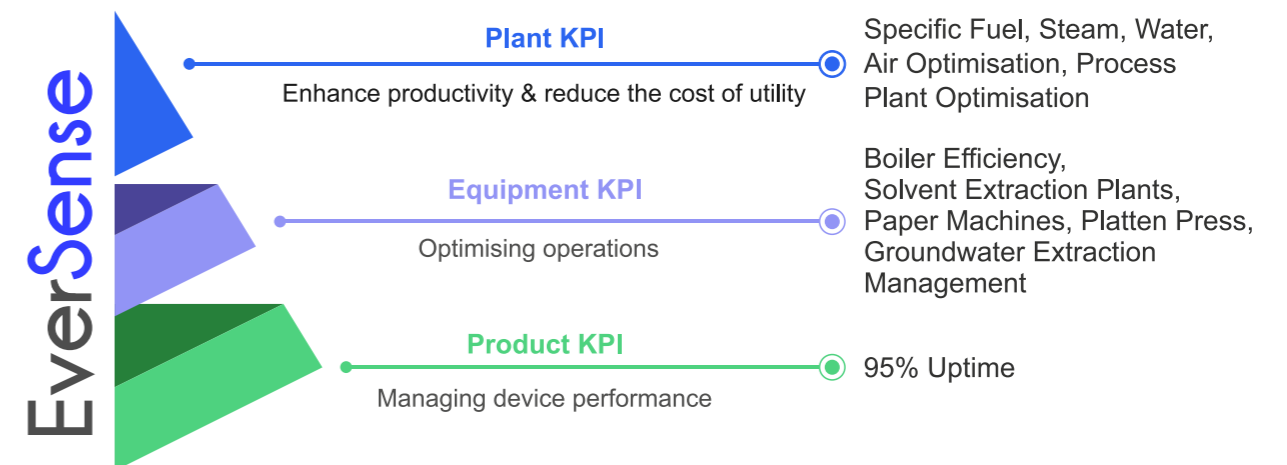
Our process and utility expertise, combined with being digitally present in your plant 24x7, along with our diverse product basket and wide physical reach ensures Forbes Marshall Digital truly goes #BeyondConnectivity.



Scan to watch the video

Today, through 24x7 digital connectivity with our customers' plants, our engineers leverage real time data coupled with site visits to identify the root cause of performance variations and provide timely corrective actions to deliver more consistent and efficient performance across the plant.

Our digital solutions impact uptime and reliability, productivity, efficiency, safety and environment across 3 levels: Plant, Equipment and Product.

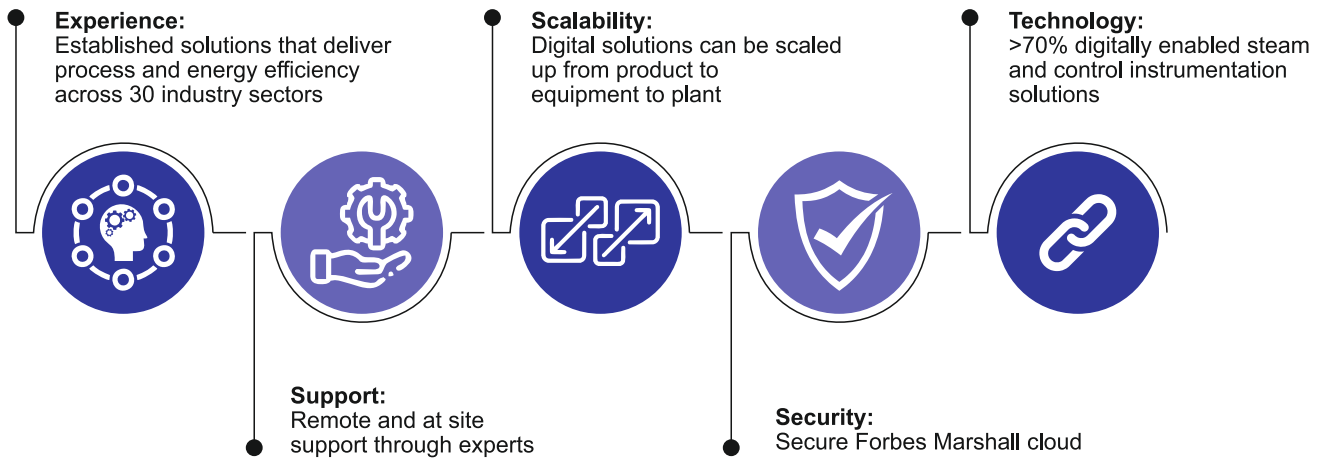


At the product level our digital solutions focus on sustaining >95% uptime. Specific product data is analysed to remotely monitor health and diagnose issues, enabling proactive maintenance and reducing downtime.

At the equipment level our focus is on delivering more efficient and precise operation. We offer specific solutions for boiler efficiency, solvent extraction plants, paper machines, platten press and groundwater extraction management.

At the plant level our solutions focus on improving and sustaining broad KPIs like specific energy consumption, specific water consumption, air energy factor, plant condensate recovery factor, etc.

Our Strength



Our Digital Presence



Monitoring every minute
500 Plants
1,200 Assets
7,500 Parameters



Across
Automobiles
Food & Beverage
Metal and Mining
Paper and Corrugation
Plywood and Laminates
Pharma and Chemical
Power Plants
Rubber
Sugar
Textiles
Water, AAC Blocks



Delivering
7-10% Steam Reduction
3-5% Productivity Improvement
1-3% Boiler Efficiency Improvement
From 70 to 90% Uptime Improvement
1% Water Savings
2% Power Savings
10-15% Energy Savings



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