

Galent



System Optimization

for a Global Energy Conglomerate
Using IoT and AI-Driven Analytics

A global power technologies and energy systems conglomerate sought to enhance the reliability and efficiency of critical equipment across its diverse customer base. The challenge was to minimize downtime, reduce operational costs, and optimize system performance. Using AI and machine learning, we developed a predictive maintenance solution to monitor equipment performance in real time and data analysis using IoT sensors to predict potential failures before they occur.

The result?

Proactive interventions, operational excellence and, improved energy efficiency, helping the client meet the evolving demands of a digital world.

Client Challenges



Inefficient Maintenance Processes:

Reactive and scheduled maintenance approaches led to unnecessary costs and unplanned downtimes.



Data Overload:

Large volumes of data from IoT devices and sensors lacked actionable insights.



Diverse Operating Conditions:

Assets in different environments required tailored solutions, adding to the complexity.

Strategic Interventions

AI-Powered Predictive Maintenance:

We leveraged AI tools that analyzed IoT sensor data to identify patterns and predict potential equipment failures. By leveraging machine learning, the system provided early warnings, enabling proactive interventions.

Dynamic Asset Optimization:

Using AI algorithms, we optimized asset performance by monitoring usage patterns, energy consumption, and environmental factors. This enabled the client to maximize equipment lifespan and efficiency.

Centralized Data Intelligence:

We integrated disparate data sources into a unified platform. Advanced analytics tools provided actionable insights, allowing for better resource allocation and decision-making.

Customizable AI Models:

We developed AI models tailored to specific operating conditions and client needs, ensuring accurate predictions and recommendations for diverse industrial environments.

Key Outcomes

30%

Reduction in Maintenance Costs:

Predictive insights minimized unnecessary maintenance and avoided costly breakdowns.



40%

Improvement in Equipment Uptime:

Proactive interventions reduced unplanned downtimes significantly.



20%

Increase in Operational Efficiency:

Dynamic optimization enhanced asset performance, leading to better energy and resource utilization.



Streamlined Data Management:

Centralized data intelligence improved decision-making across operations and retention.



This strategic partnership helped the client transform asset management for its industrial clients, drive innovation, reduce costs, and enhance reliability in complex systems.

Client Testimonial

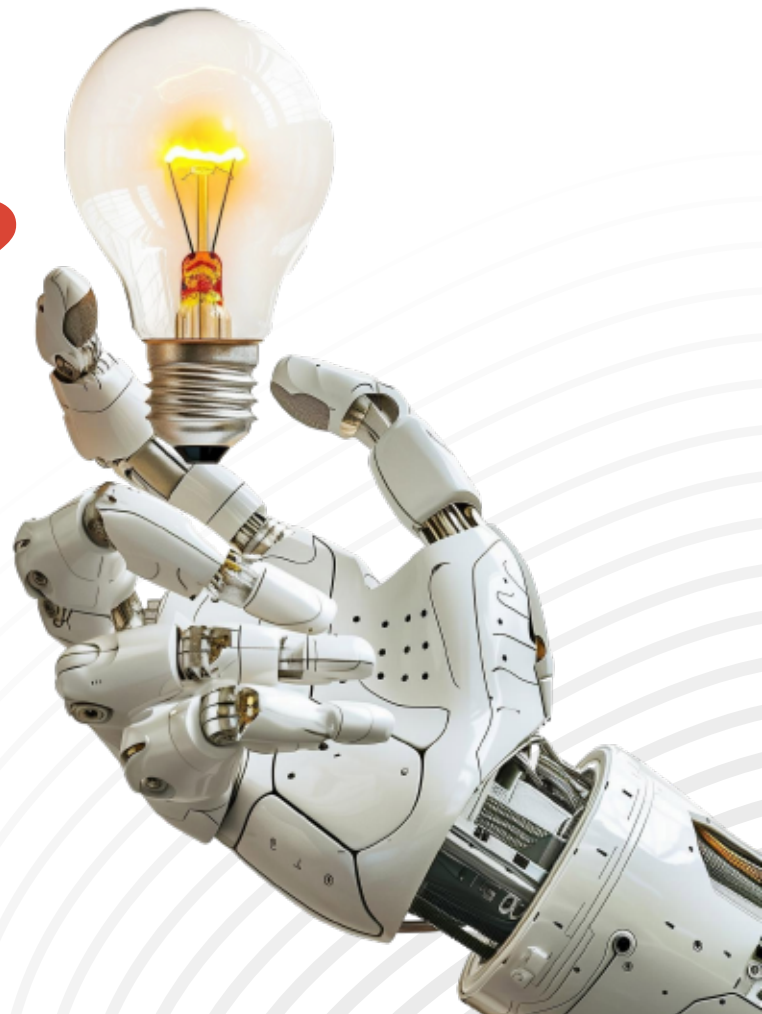
"Galent's AI expertise has been instrumental in transforming how we manage assets for our clients across industries. Their proprietary tools provided us with predictive insights and dynamic optimization capabilities that were game-changing. We're thrilled with the results and look forward to continuing our partnership."

Want to know more?

Visit our website to explore how Galent is driving innovation with **AI-powered solutions.**



Galent



Partner with Galent

Galent is an AI-native digital engineering firm that offers practical and business outcome-based services. It integrates digital engineering, workforce services, and consulting into a unified, enterprise-ready solution. See how at www.galent.com or follow us [@galenthq](https://twitter.com/galenthq)

Partner with us to unlock AI's potential for your organization. Contact us at info@galent.com or scan the QR code to connect with us directly.



Delaware

8, The Green, Suite 5997, Dover,
Delaware 19901,

Mississauga

90 Burnhamthorpe Road West, Suite 1400,
Mississauga, Ontario, L5B 3C3,
Canada

New Jersey

109, Bloomfield Avenue Iselin,
New Jersey 08830,

Chennai

4th Floor, Tower 2, TVH Beliciaa Towers, 94,
MRC Nagar,
Chennai 600028,
India

Texas

950, East State Highway, Suite
160, Southlake,
Texas 76092,

Bangalore

2nd Floor, Sandhya Raju Building, No. 2728,
80 Feet Road, 3rd Stage, Indiranagar,
Bengaluru 560038
India



Galent