

Optimize Field Service and Parts Inventory, Push Remote Updates, and Improve Customer Satisfaction

IoT Use Cases for Service and Support

- **Predictive Monitoring and Service** –Monitor connected products and assets for threshold anomalies with predictive analytics and provide real-time alerts to move from reactive to condition-based maintenance and increase service levels.
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- **Remote Service** – Expand real-time product and asset monitoring with embedded diagnostics to enable remote access and service including bi-directional file transfer to increase product and asset uptime and reduce on-site service calls.
- **Connected Service Parts Management** – Collect and analyze configuration, usage, and location data from connected products and assets to increase parts inventory forecast accuracy, enable proactive demand forecasting, and optimize inventory levels.
- **Connected Field Service** –Combine real-time and historical asset data to deliver contextual work instructions via augmented reality experiences or connected applications for increased technician efficiency and first-time-fix rate.

Common IoT Metrics for Service / Support:

- Availability; uptime
- Non-compliance events per year
- Service cost; warranty cost; first time fix rate
- Complaints; response time; resolution time
- Customer Lifetime Value
- Product quality; returns



Caterpillar is a global leading manufacturer of construction and mining equipment, diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives.

Built on the [ThingWorx Platform](#), Caterpillar is looking to combine service documentation and real-time sensor data into augmented reality

experiences that deliver contextualized instructions to field service technicians.