

Digital Prescriptive Maintenance



Challenges

Optimizing Industry 4.0 Aftermarket Services

Machine, product, and vehicle downtime is never acceptable. The new generation of always-connected consumers expect increasingly superior digital experiences. While today's factories include wireless connectivity and sensors to visualize the entire production line, manufacturers still face serious challenges mining data to minimize or eliminate downtime at the first sign of trouble. As a result, while enterprises chase Digital Transformation, many Industry 4.0 initiatives are failing.



Digital Prescriptive Maintenance

Pega Intelligent Automation + AWS IoT = Better Together

With Pega Intelligent Automation and AWS IoT, the core challenges of triggering and orchestrating aftermarket services such as warranty, maintenance, or parts return are addressed through pragmatic, end-to-end intelligent automation. These technologies make business transformation possible across the entire value chain of an industrial enterprise – from product development through the aftermarket phase of moving a product into obsolescence. Together, Pega's low-code platform and AWS IoT's out-of-the-box services help manufacturers turn digital insights on machine health into instant action.

Benefits

AWS IoT and Pega IA provides a compelling digital transformation platform to keep machines and devices operating and vehicles on the road.



Intelligent Automation

Leverage Pega Warranty to orchestrate and automate all aspects of the claims process and significantly reduce your warranty spend.



Financial Impact and Customer Experience

Aftersales generates 20% of revenue, and ~50% of profits for OEMs. Warranty claims impact OEM revenues by 3-4%. Manufacturers average among the lowest average retention rates and return on retention at 67% and 71% respectively.



Automatic Maintenance Case Creation

Deploy Digital Prescriptive Maintenance to automatically create a maintenance case that drives business outcomes faster, improving visibility, productivity and collaboration across the value stream.



Digital Aftermarket Services

Pega Warranty, Customer Service, and Field Service support Digital Aftermarket Services, while AWS IoT provides the foundation of data services, control and connectivity services, and device software.

Pega on AWS

The seamless combination of AWS IoT with Pega Intelligent Automation provides manufacturers the most compelling digital transformation platform to keep machines and devices operating and vehicles on the road. The road to IoT success runs through Intelligent Automation.

Features



Diagnose events before they happen

Digital Prescriptive Maintenance (DPM) proactively optimizes the cost and duty-cycle of devices and systems. The seamless combination of AWS IoT with Pega provides the most compelling digital transformation platform to keep machines and devices operating and vehicles on the road. In one unified environment, sensor data is captured and triaged, then combined with other event or reference information to recommend the right action and orchestrate the outcomes – enabling operations managers and engineers to prevent failures. Technicians can be proactively dispatched to make fixes before the customer is even aware of a problem.



Dynamic Case Management™

Dynamic Case Management maximizes the operational performance envelope by sensing conditions, analyzing and prescribing the next best action for prevention or repair, and even issuing automatic updates of embedded software. Pega makes all the proper notifications and even manages exceptions and escalations. Restore uptime and address claims obligations in warranty that cross organizational silos.

Case Study: Finnish manufacturer Wärtsilä



Challenges

Wärtsilä processes data from thousands of equipment installations. It needed to harness global IoT data, mapping to a normalized data structure to process and analyze for quick, automated feedback. The legacy system couldn't handle the automation needed to preempt performance issues.



Solution

Global equipment data is normalized and fed into the Pega Platform™. A complex rules framework processes sensor data, identifying exceptions that might affect equipment performance. Recommended preventative actions are used to minimize production downtime while proactively increasing maintenance contracts.



Results

By emphasizing sustainable innovation, total efficiency, and data analytics, Wärtsilä maximizes the environmental and economic performance of customers' vessels and power plants to see improved equipment performance and increased reliability, optimized scheduled, and unscheduled maintenance and long-term predictability.

Get started with Pega solutions on AWS

To learn more about how automotive, industrial, and medical device leaders deliver customer-focused aftermarket services, visit us at: pega.com/manufacturing