



PwC IoT Solutions

Case Studies



pwc.pl/CTech



Large Oil & Gas Provider

Pump downtime prediction

Issue: Client wanted to utilize sensor data on variable speed induction motors and multi-staged centrifugal pumps to predict catastrophic failure events and optimize service routines and control settings

Action: PwC leveraged sensor data, expert knowledge on pump and motor physics, and algorithms to develop analytics engine; and developed post-processing algorithm to cluster types of inefficiencies and failure modes

Benefit: The resulting model predicts ~70% of significant downtime events with a low occurrence rate of false signals, allowing for intervention prior to failure where economically sensible



Leading Industrial Construction Machinery Company

Aftermarket technology enabled solutions

Issue: Client exploring opportunities for aftermarket technology-enabled solutions for industrial OEM.

Action: Developed range of potential services and assessed each for value creation and capture, across different products. Also developed approach to deliver services through dealer network with a tiered Service Offering structure and optimized operating model.

Benefit: New commercial service offer. Data-driven insights that helped dealers acquire customers, grow lifetime value, retain them and/or enhance their loyalty and advocacy.



Worldwide Automotive Manufacturer

Connected car for improved driver engagement

Issue: Client is exploring new ways to improve consumer engagement, service revenue and optimize product development through connected car and digital mobility services

Action: Defined service opportunities and pricing structures for telematics based services. For example, using predictive analysis of car sensors and dealer repair reports in real-time to predict failure, and forecast need for producing/ordering spare part and for improving product. Combined with CRM/demographic data further enables prediction of future needs and preferences (features, timing of new purchase) by customer segments

Benefit: New revenue models, improved vehicle relationship management (remote diagnostic, preventive alerts etc.) leads to enhanced customer experience, and enables dealers to proactively target customers with specific needs to achieve higher conversion rate.



Leading Airline Services

Predictive aircraft maintenance

Issue: Client had large volume of aircraft fault sensor data and log data, but was not extracting potentially valuable signals from the data to prevent mechanically caused delays.

Action: By combining aircraft sensor data and maintenance log information, PwC developed a robust predictive model that allowed the client to proactively intervene to reduce mechanically caused cancels and delays.

Benefit: Multi-million dollar cost savings across the selected fleet

Contact us



Mirosław Lach

CEE IoT Expert

miroslaw.lach@pwc.com

+48 572 729 586



Artur Kotow

Microsoft Practice Director

artur.kotow@pwc.com

+48 502 851 867

pwc.com

©2020 PwC Advisory spółka z ograniczoną odpowiedzialnością sp. k. Wszystkie prawa zastrzeżone. W tym dokumencie nazwa „PwC” odnosi się do podmiotu lub podmiotów wchodzących w skład sieci PwC, z których każdy stanowi odrębny i niezależny podmiot prawny. Dowiedz się więcej na www.pwc.com/structure.

