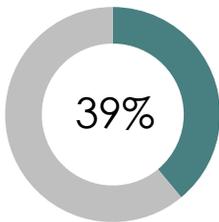


FROM REACTIVE TO PROACTIVE: TRANSFORM OPERATIONS WITH AI

Quality issues and unplanned downtime are some of the most pressing challenges affecting manufacturing operations. These challenges are often addressed in reactive mode as defects or failures arise. Leading manufacturing facilities are leveraging artificial intelligence (AI) to anticipate issues before they happen. This technology allows them to get ahead by adapting operations before defects and failures become too costly to fix. AI is expected to boost average profitability rates substantially and lead to an economic increase of US \$3.8 T by 2035.



"In Manufacturing, for example, faulty machines and idle equipment will become a thing of the past as AI-powered systems deliver constantly rising rates of return due to their ability to learn, adapt and evolve over time. The net result for the sector? A share-of-profit increase of 39%."
- Accenture Research Study 2017

Artificial intelligence technology mimics human abilities to perform tasks. With AI, we can teach machines to see, hear, converse, and reason in order to improve the efficiency of manufacturing operations.

Improve product quality

Use computer vision to automate the quality inspection process and identify good parts with high confidence and speed. Track trends in defects and pinpoint sources of quality issues.

Prevent costly equipment downtime

Anticipate equipment failure by listening to acoustic patterns including non-human audible sound (infrasonic, ultrasonic, etc.) Use AI to detect anomalies that indicate equipment degradation.

Accelerate repair time

Improve mean time to repair (MTTR) and first time fix (FTF) with an AI-powered digital assistant. Proactively provide detailed repair information, including field notes, to help every technician perform like the best technician.

Reduce unplanned downtime

Predict equipment failure with AI to adjust maintenance schedules and tasks. Determine the most cost effective maintenance schedules that would reduce repair cost and extend the life of the assets.

DATA CRUNCH *Lab*



Manufacturing Solutions

At DataCrunch Lab, we leverage the IBM Watson IoT portfolio to help you achieve your operations' goals.

- IBM Visual Insights
- IBM Acoustics Insights
- IBM Equipment Maintenance Assistant
- IBM Prescriptive Maintenance for Manufacturing

Tired of operating in reactive mode?

Contact us to learn how AI can help transition operations from reactive to proactive.

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