

IIoT and Predictive Maintenance in Manufacturing

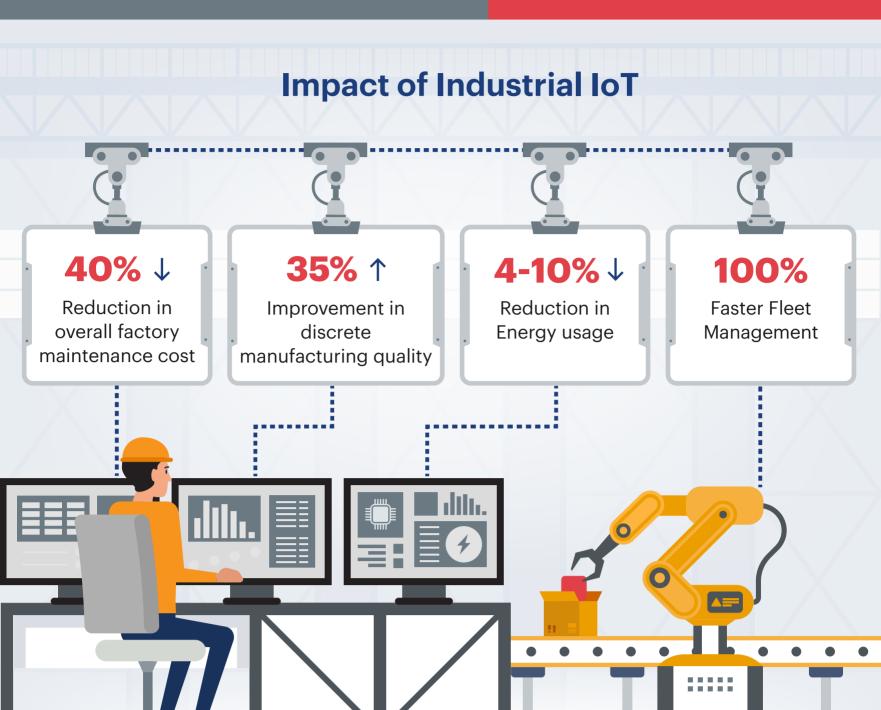
The Industrial Internet of Things (IIoT) is a vital element of Industry 4.0 that harnesses the power of smart machines and real-time analysis for making better use of data, improving performance, operational efficiency, and productivity of industrial processes.

Industrial IoT (IIoT)

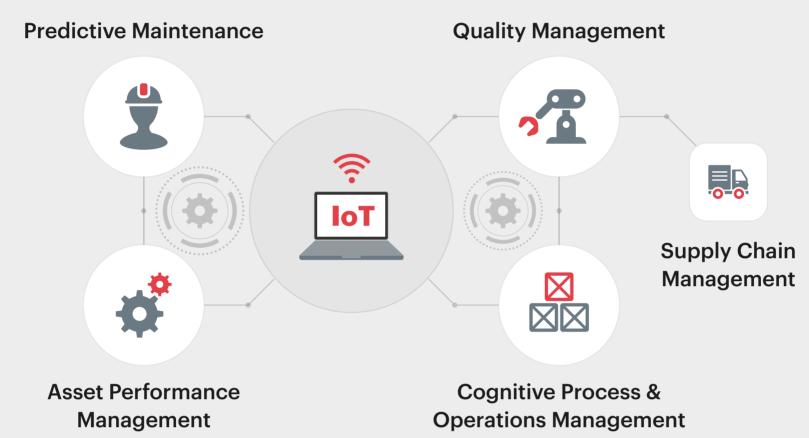
Market Size to become

\$ 263.4 Billion by 2027

Source: Meticulous Research



Top AI Use cases in Manufacturing driven by IIoT



All is extensively used for predictive maintenance by analyzing massive real-time data speedily to predict assets failure intelligently and keep

AI in Predictive Maintenance

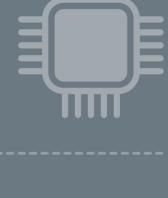
at a check at the performance.

across manufacturing plants globally

Al for predictive maintenance could save

\$0.5 trillion to **\$0.7** trillion

Source: McKinsey



Source: McKinsey, Deloitte

Manufacturing Material resource

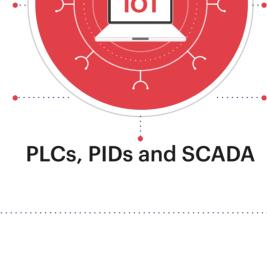
Sensors and actuators

Key Data Sources for Predictive Maintenance

Enterprise resource planning (ERP)

execution systems (MES)

Parts composition



Accelerating Predictive Maintenance

with Data Engineering

Historical equipment usage data

Management systems

planning systems (MRP)

Data Challenges for Predictive Maintenance Solutions Offered by Data Engineering

