



MACHINES THAT THINK

IR 4.0 revolutionizes the way business is done



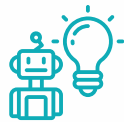
WHAT IS INDUSTRY 4.0?

Following the use of steam in the first industrial revolution, the harnessing of electricity in the second revolution, and robotic automation in the third, the fourth industrial revolution or IR 4.0 marks the digitization of systems. By merging digital and material systems, IR 4.0 allows tremendous improvement in monitoring these systems. When coupled with Big Data and Artificial Intelligence, IR 4.0 vastly enhances an organization, from top-level decision-makers down to operations-level personnel.



Productivity

Sensors equipped on machinery work with AI systems to autonomously drive production and intelligently respond to unexpected discrepancies.



Efficiency

Digital-material systems can work independently with minimal guidance to accomplish tasks faster than ever before.



Agility & Flexibility

Smart systems are able to self-diagnose, self-correct, and self-optimize, allowing for the production of flexibly customized designs.



Competitiveness

Gain the ability to analyze production data and uncover insights on creating newer, better products to maintain competitiveness.



ADVANTAGES OF INDUSTRY 4.0 SOLUTIONS

Preventive Maintenance

Take action before machines break down so you always have optimized production schedules.

Decrease Error Rates

Instead of relying on manual inspection, utilize Image and Video Analytics as well as AI in Quality Control processes.

Product Enhancement

Products manufactured with sensors to detect how they are used. Feedback is then relayed to the engineering department to enhance product features.

Blockchain Manufacturing

Temperature, pressure, and other sensors capture data on how products are made, stored, and shipped to ensure high quality and tamper-free goods.

Proactive Customer Care

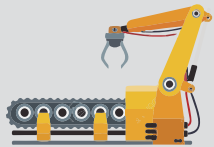
Products sold with IoT-enabled sensors that can detect when components are going to fail. Preventive maintenance can then be carried out.



FUSIONEX IR 4.0 IN ACTION

Based on a project for a global electronic chip manufacturer

1



Fusionex sensors captured vast amounts of data generated by manufacturing equipment

2



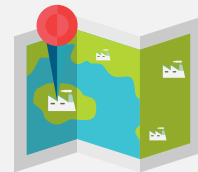
Predictive analytics forecasted when equipment was likely due to fail ahead of time

4



Technician reported preventive maintenance actions performed

3



Automatic alert sent to technician who performed preventive maintenance

5



Based on reports, future equipment failure could be predicted more accurately

6

Downtime minimized, saved millions of dollars' worth of cost, time, and resources