



AI-PROFICIENT
Artificial Intelligence
for improved production efficiency,
quality and maintenance

Technologies that Drive Smart Manufacturing in 2022

Manufacturing is clearly going down the path of information and automation

Global size of smart manufacturing market





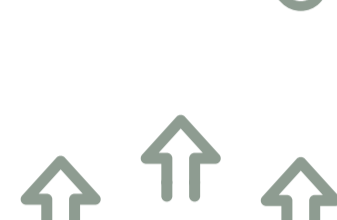

2021: \$249.56 billion



2022: predicted to rise to \$277.81 billion

Robotic Process Automation






Automating software tasks to simplify the manual work of employees:

- Back-office tasks 
- Accounts Receivable/Accounts Payable tracking 
- Vendor management 
- Inventory management 

Conversational AI can automate customer service, troubleshooting, and reporting services for employees

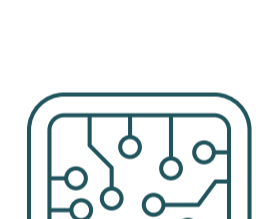


Artificial Intelligence and Machine Learning

Complex AI and machine learning algorithms can keep machinery running longer, and find ways to make factories highly productive while generating the least cost

-  Predictive maintenance with the use of special IoT sensors
-  Quality Assurance
-  Non destructive testing
-  Generative Design
-  Improved Supply Chain Management: Cognitive Supply Chains




Digital Twins

The concept of a digital twin digitises the testing process of how to set up a production line:

- Digitising factory floor into a non-static simulation based on real-time data from sensors 
- Rearranging & modifying easily the pieces of the production line 
- Finding the most optimal layout 

Cloud Technologies



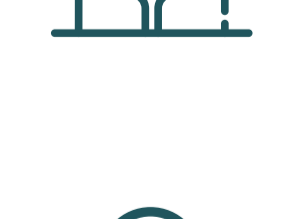

Manufacturers are moving to storing data on cloud:

-  Secure data access from anywhere
-  Cost reduction: less fees for IT support and storage hardware at production sites
-  High scalability: more easy to add storage if needed

Tip: Attention to cloud infrastructure security for data protection!

Internet of Things (IoT)

The use of sensors in factories has helped to power AI applications

- Predictive maintenance 
- Digital twins 
- Automated power management 
- Computer vision-powered quality assurance 

IoT technologies have become more popular in industrial spaces because of advances in **wireless connectivity technologies**

Source: Smart Manufacturing Trends 2022

Contact Us

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