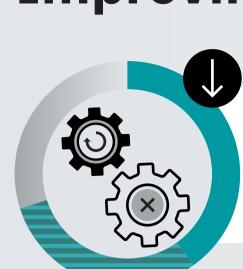


Improving efficiency



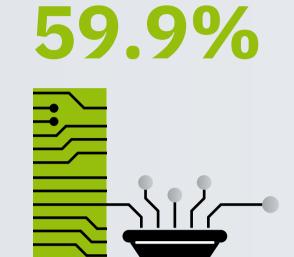
Outdated equipment can spend between 40% and 70% of it's operation time idling.

Using IIoT (industrial internet of things) to monitor machines and directing information to relevant employees has been shown to increase productivity by 24%.

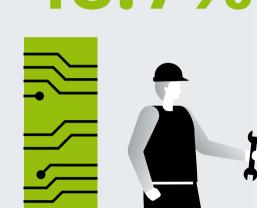


However, studies have shown that adopting technological solutions like AI, IoT sensors, and robotics can **boost the productivity** of their systems by 17–20%.

Share of tasks performed by machines in manufacturing by 2024



Information and data processing 48.7%

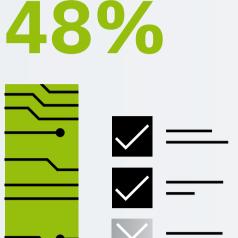


Performing physical and manual work activities

48.6%



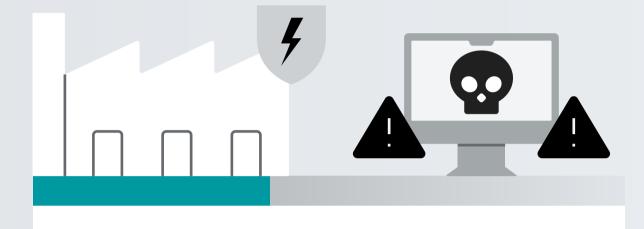
Administering



Identifying and evaluating job-relevant information

Mitigating security risks, minimizing downtime

Automated systems leveraging IIoT can aid in identifying and responding to system failures and inefficiencies quickly.

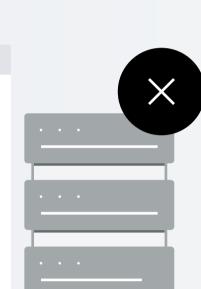


40% of smart factories in all industries have been a victim of cybersecurity attacks in the past year, and over half of 'heavy industry' have faced cybersecurity attacks.

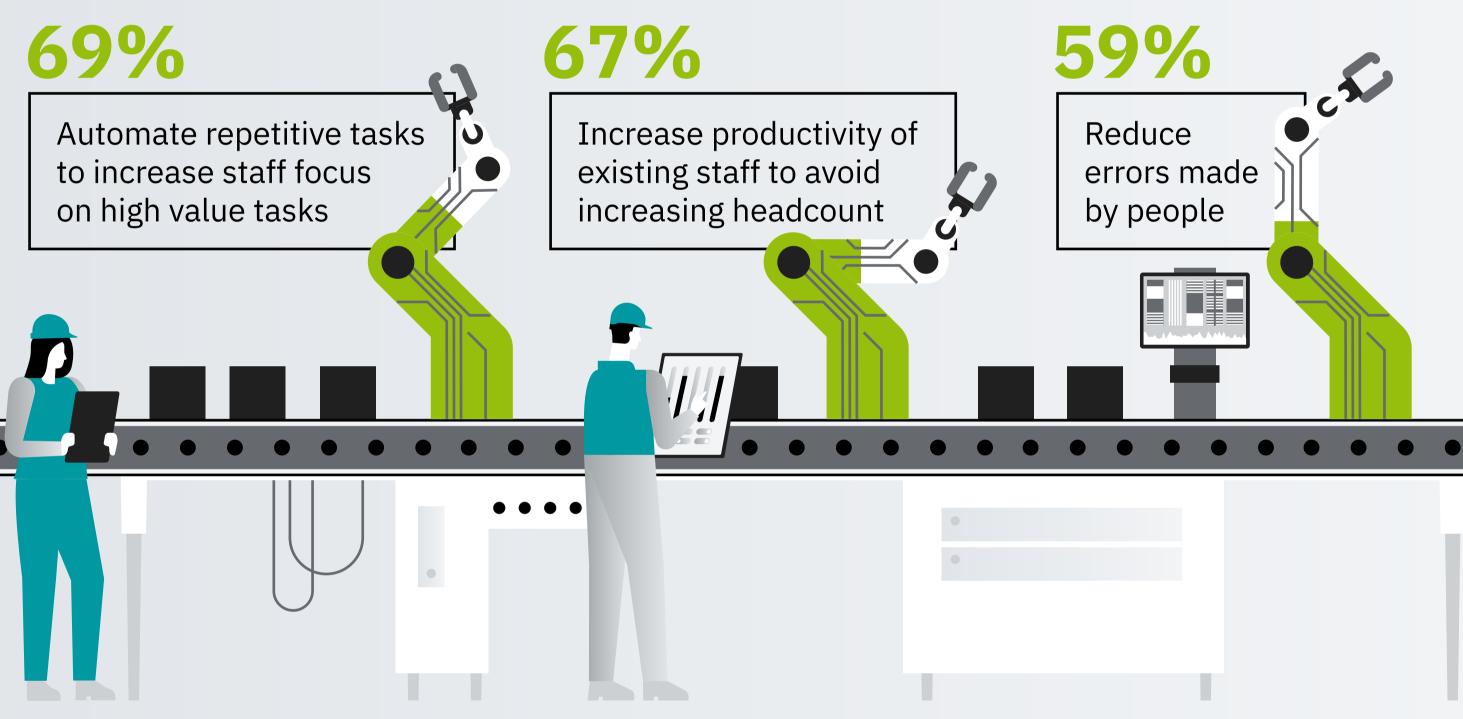


43% of all companies say that in 2023 they will use automation to identify risks and improve security.

82% of companies have experienced unplanned downtime and system errors, which impacts security and safety and costs manufacturers time and money.

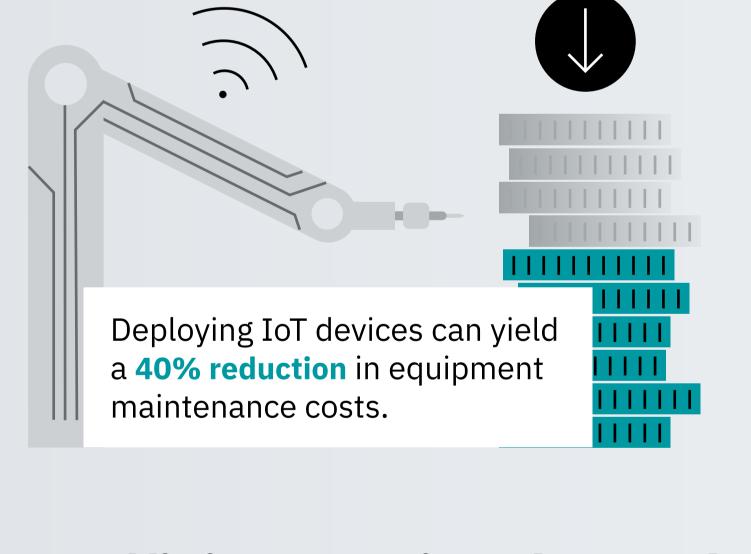


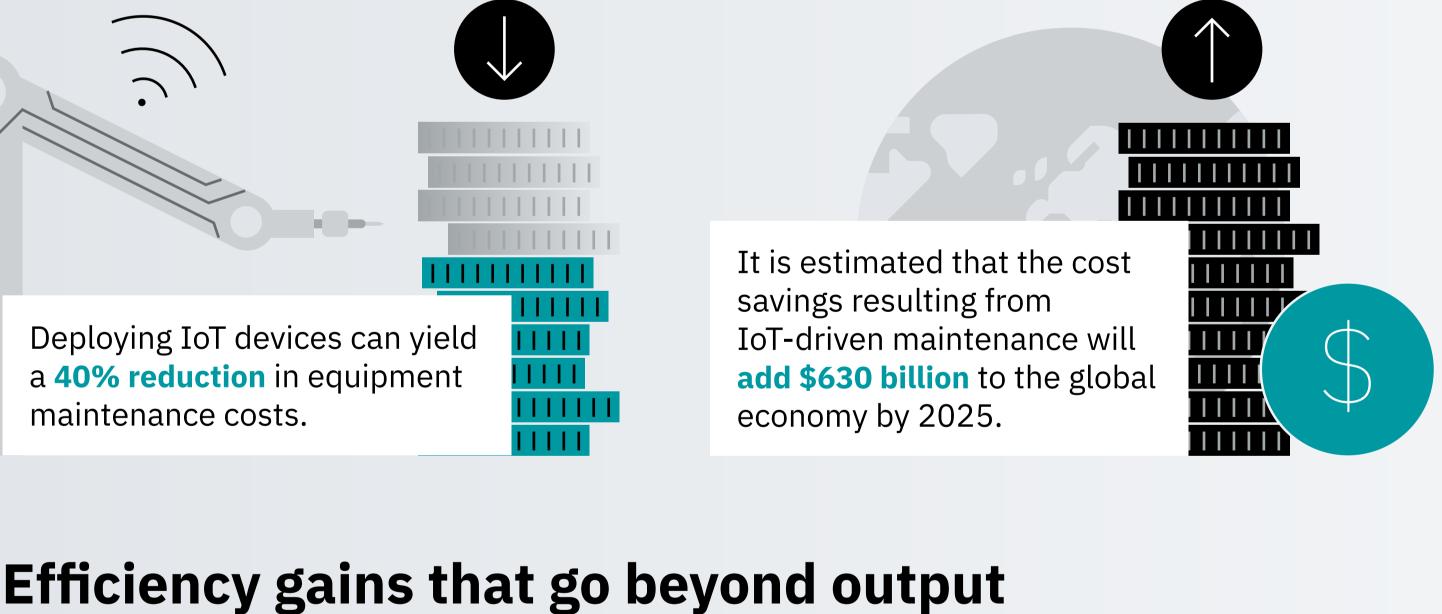
Top motivations to pursue automation



Machine longevity Data from real-time sensors measure machine performance. This data, which

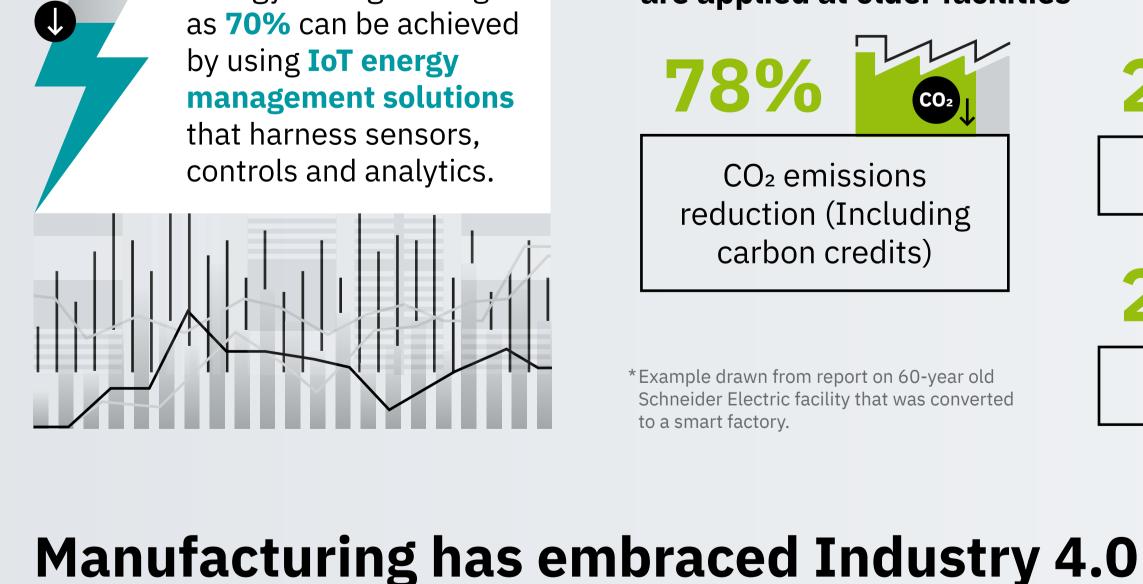
measures factors such as timing, vibration, pressure, and sound, is processed and made into information, where it can be deployed for real-time operational changes.





Globally, as of 2022, energy-related emissions from the manufacturing industry are estimated to be 24%. However, smart factories that utilize advanced

technologies and tools can potentially reduce emissions and energy wastage: Efficiency gains when digital tools Energy savings as high are applied at older facilities*



CO₂ emissions reduction (Including carbon credits)

*Example drawn from report on 60-year old

to a smart factory.

Schneider Electric facility that was converted

Energy savings

Water savings

0

Smart factory initiatives could see US manufacturers triple the labor productivity growth rate from 2019 to 2030 compared to the last decade.

adoption in manufacturing

PHŒNIX

Technology



74% of manufacturing executives

By 2024, half of all key tasks

in advanced manufacturing

industries are projected to

be performed by machines.

technologies to aid manufacturing processes. **Phoenix Contact**

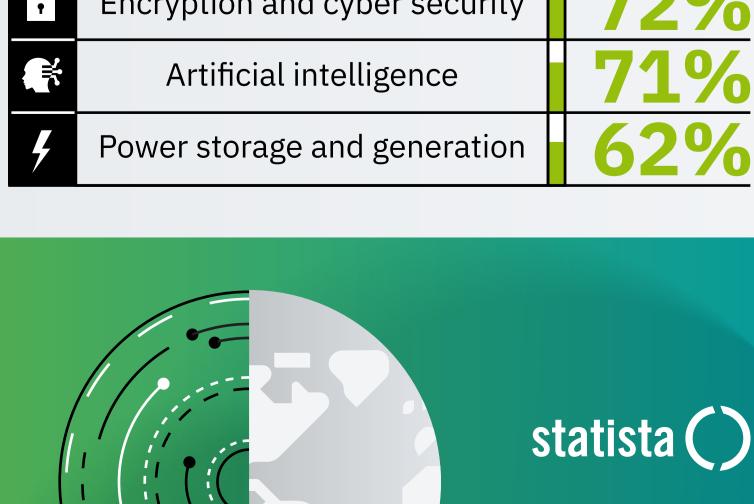
IoT and connected devices Big data analytics Robots, non-humanoid Encryption and cyber security Artificial intelligence Power storage and generation

Cloud computing

focused on advanced AI

Smart Solutions for Data-Driven Sustainability We offer a range of intelligent automation products and solutions that help advanced manufacturers increase efficiency, boost productivity, and streamline information sharing. Our solutions reduce human error

and energy wastage, allowing you to meet



Sources: Deloitte, McKinsey, WEF, Capgemini, CGI, GE, Green Biz, Bosch, Imaginovation Insider, Schneider Electric, Science Direct, GSMA, NIST.