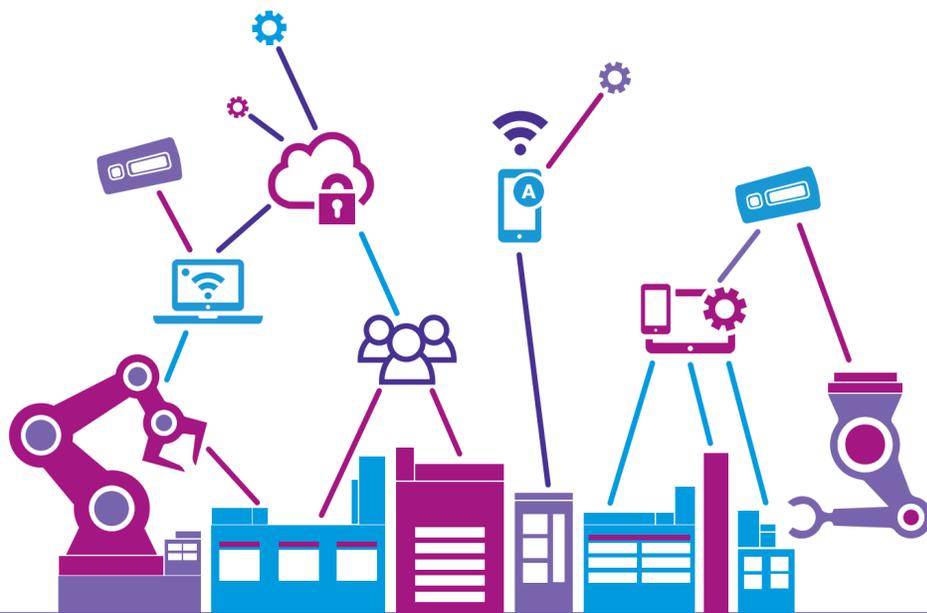


The rise of smart factories and the cybersecurity risk they pose

The rise of smart factories will help the manufacturing industry considerably, as digital technology such as automation can lead to greater efficiency and accurate reproducibility, leading to optimum product quality with minimum waste.

But, these connected devices expose a greater risk for hackers to remotely attack all aspects of the supply chain. As these threats increase, manufacturers need to ensure they are protecting their systems in the correct way to minimise unauthorised access.



The future of the factory

Digital transformation trends in manufacturing



IoT & Industry 4.0



AI & machine learning



Robots



Improved efficiency



Data and analytics

Smart factory adoption per industry by 2020:



Electronics



Industrial manufacturing



Aerospace



Engineering & Construction



Automotive

The risks...



48% of manufacturers have been subject to a cyber-attack

50% said 'yes, we have sustained financial or other business losses'



91% of manufacturers are investing in digital technology

35% consider cyber vulnerabilities inhibit them from doing so fully



25% of cyber-attacks will target Internet of Things devices by 2020



62% of manufacturers have invested in cyber security training

12% do not have any technical support in place to assess cyber-attacks



50% are reviewing their cyber-security due to GDPR

Risk management



MFA

can be used to protect applications such as ERP systems and to protect your CRM

Jump host

can be protected with MFA onto the control network



This will separate MES from PLM and ERP



ISO 27000

series of security standards have been issued to help businesses manage their data assets

Sources:

Information Age. 2018. The Internet of Things: The security crisis of 2018. [ONLINE] Available at: <https://www.information-age.com/internet-things-security-crisis-123470475/>

Moschip. 2018. Smart Factories Infographic. [ONLINE] Available at: <https://moschip.com/wp-content/uploads/2018/05/Smart-Factories-infographics-final-1.jpg>

EEF. 2018. Cyber Security for Manufacturing. [ONLINE] Available at: <https://www.eef.org.uk/resources-and-knowledge/research-and-intelligence/industry-reports/cyber-security-for-manufacturers>

Forbes. 2017. Top 5 Digital Transformation Trends in Manufacturing. [ONLINE] Available at: <https://www.forbes.com/sites/danielnewman/2017/03/08/top-5-digital-transformation-trends-in-manufacturing>

Abbreviation Glossary:

MFA: Multi-factor authentication - a security system that requires more than one method of authentication from independent categories of credentials to verify the user's identity for a login.

ERP: Enterprise resource planning

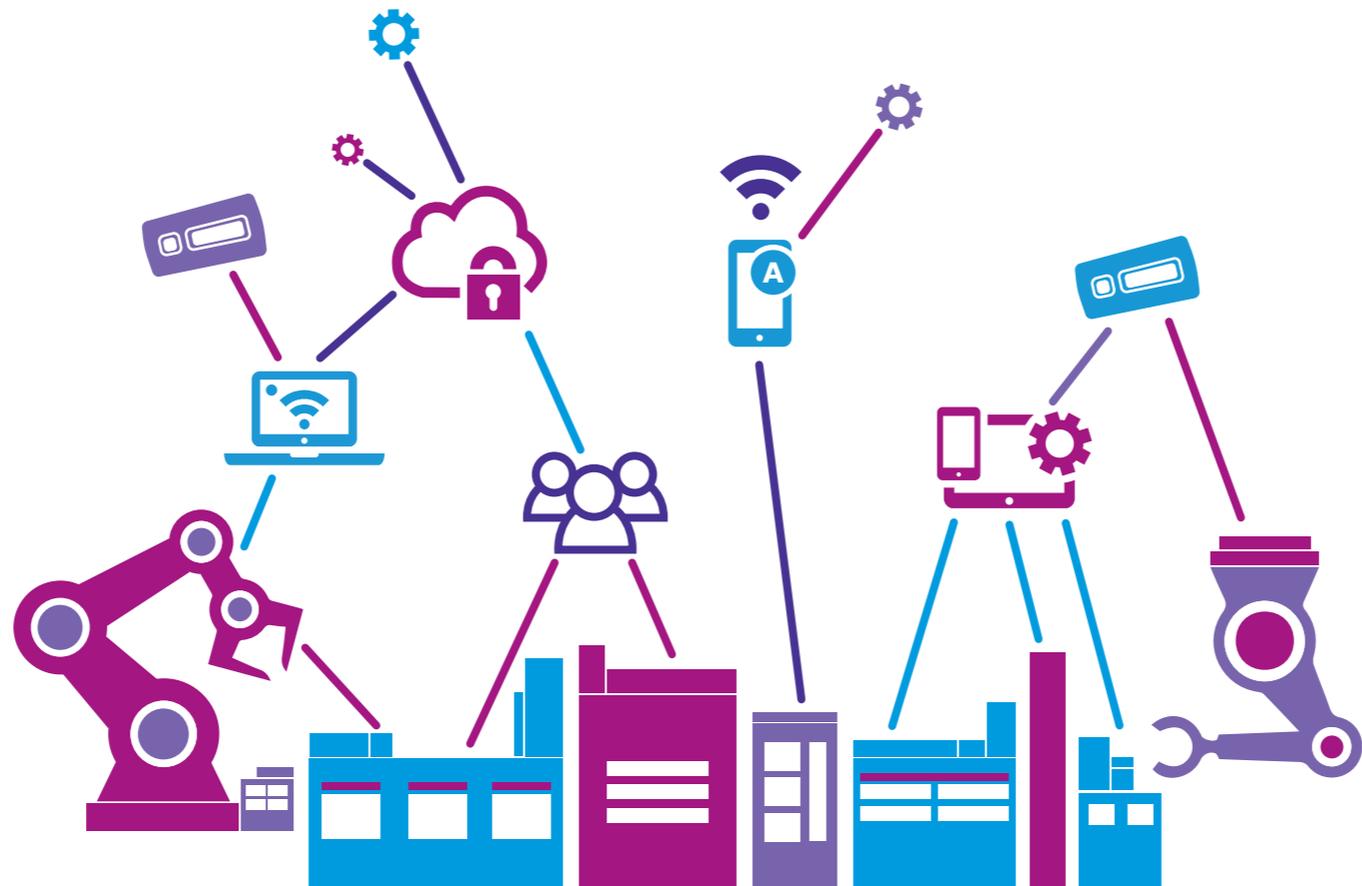
MES: Manufacturing execution system

PLM: Product lifecycle management



swivelsecure

www.swivelsecure.com



The future of the factory

Digital transformation trends in manufacturing



IoT & Industry 4.0



AI & machine learning



Robots



Improved efficiency



Data and analytics

Smart factory adoption per industry by 2020:



Electronics



Industrial manufacturing



Aerospace



Engineering & Construction



Automotive

Risk management

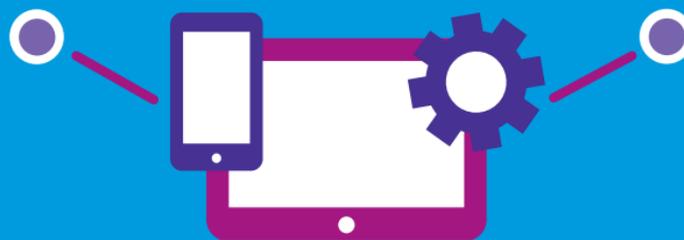


MFA

can be used to protect applications such as ERP systems and to protect your CRM

Jump host

can be protected with MFA onto the control network



This will separate MES from PLM and ERP



ISO 27000

series of security standards have been issued to help businesses manage their data assets

The risks...



of manufacturers have been subject to a cyber-attack



said 'yes, we have sustained financial or other business losses'



of manufacturers are investing in digital technology



consider cyber vulnerabilities inhibit them from doing so fully



of cyber-attacks will target Internet of Things devices by 2020



of manufacturers have invested in cyber security training



do not have any technical support in place to assess cyber-attacks



are reviewing their cyber-security due to GDPR