



<https://t.me/learningnets>



PROJECT

ENG

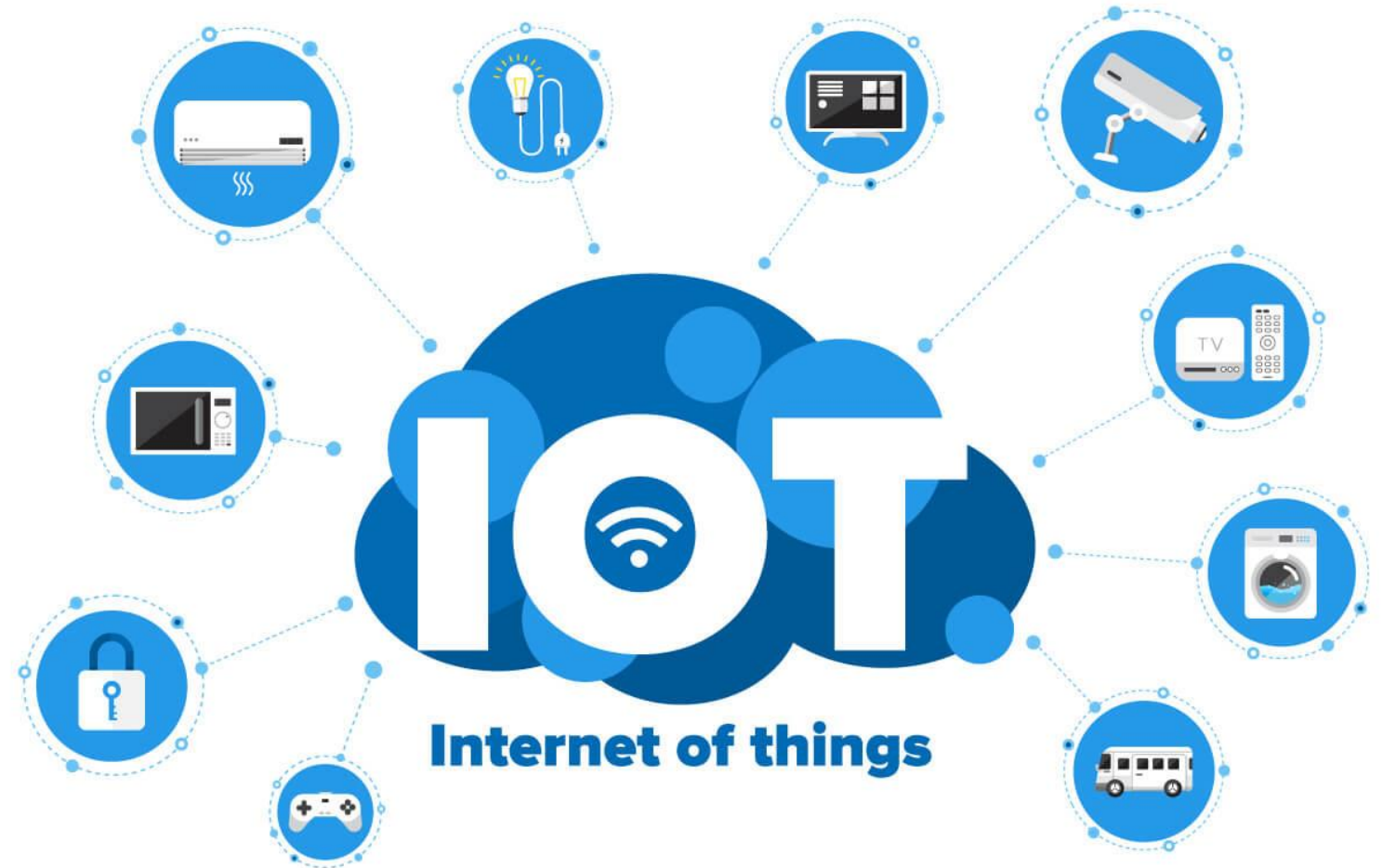
PRO

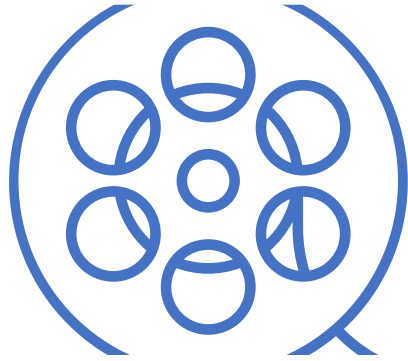
CYBER SECURITY FOR INDUSTRIAL CONTROL SYSTEMS

By Project **ENG PRO**



Industrial Internet of Things (IIOT) Overview

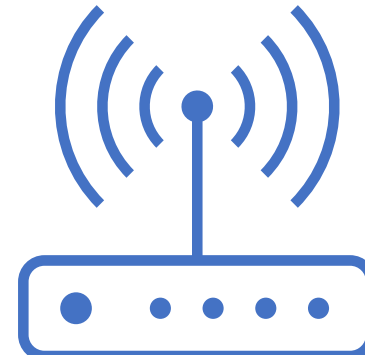




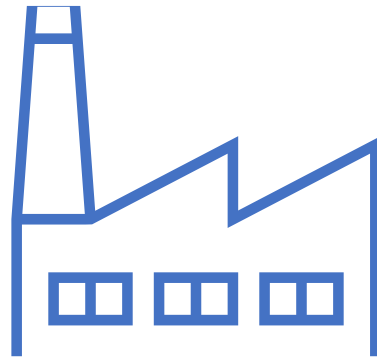
**1. Sensors and
Devices:**



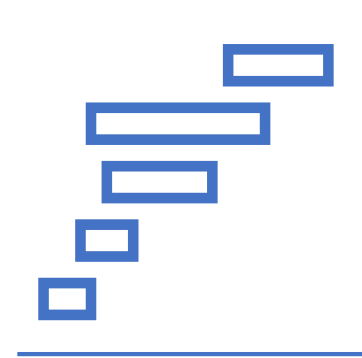
**2. Networked
Connectivity**



**3. Internet
Integration**



**4. Enhancing
Industrial Processes**



**5. Business
Applications**

IT / OT Convergence

IT

Data and the flow
of digital information

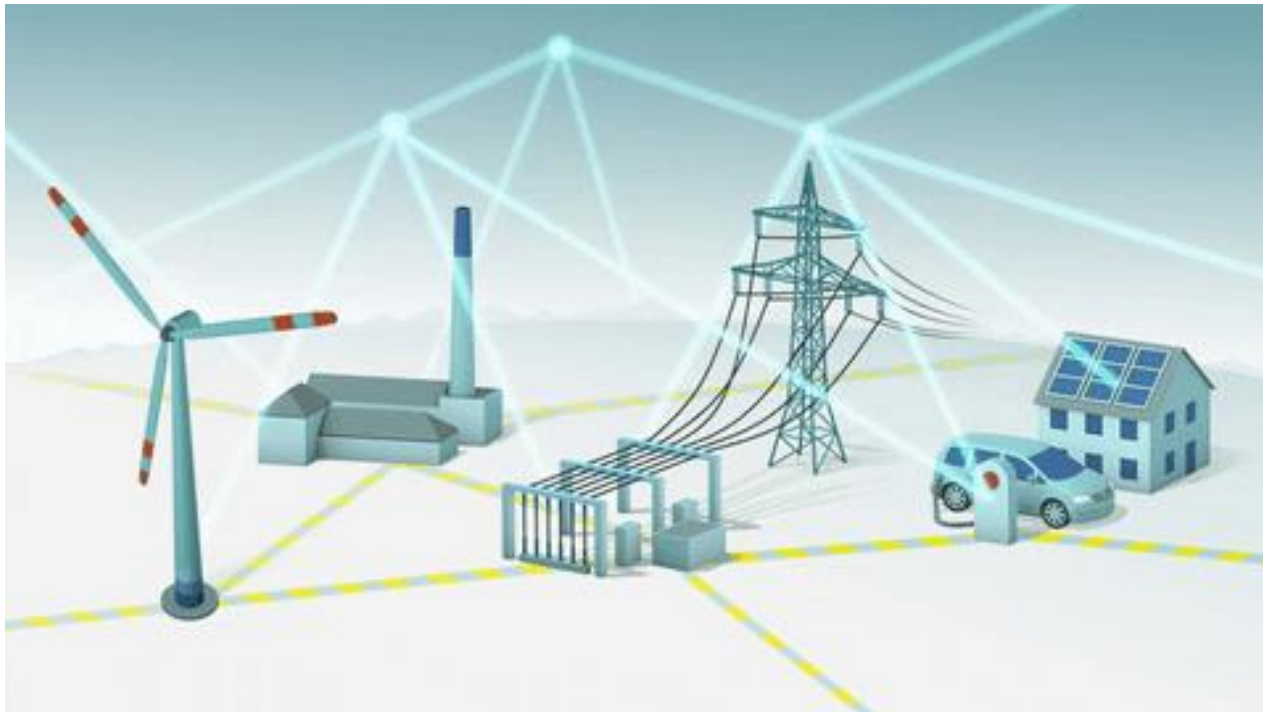


OT

Operation of physical processes
and the machinery used
to carry them out



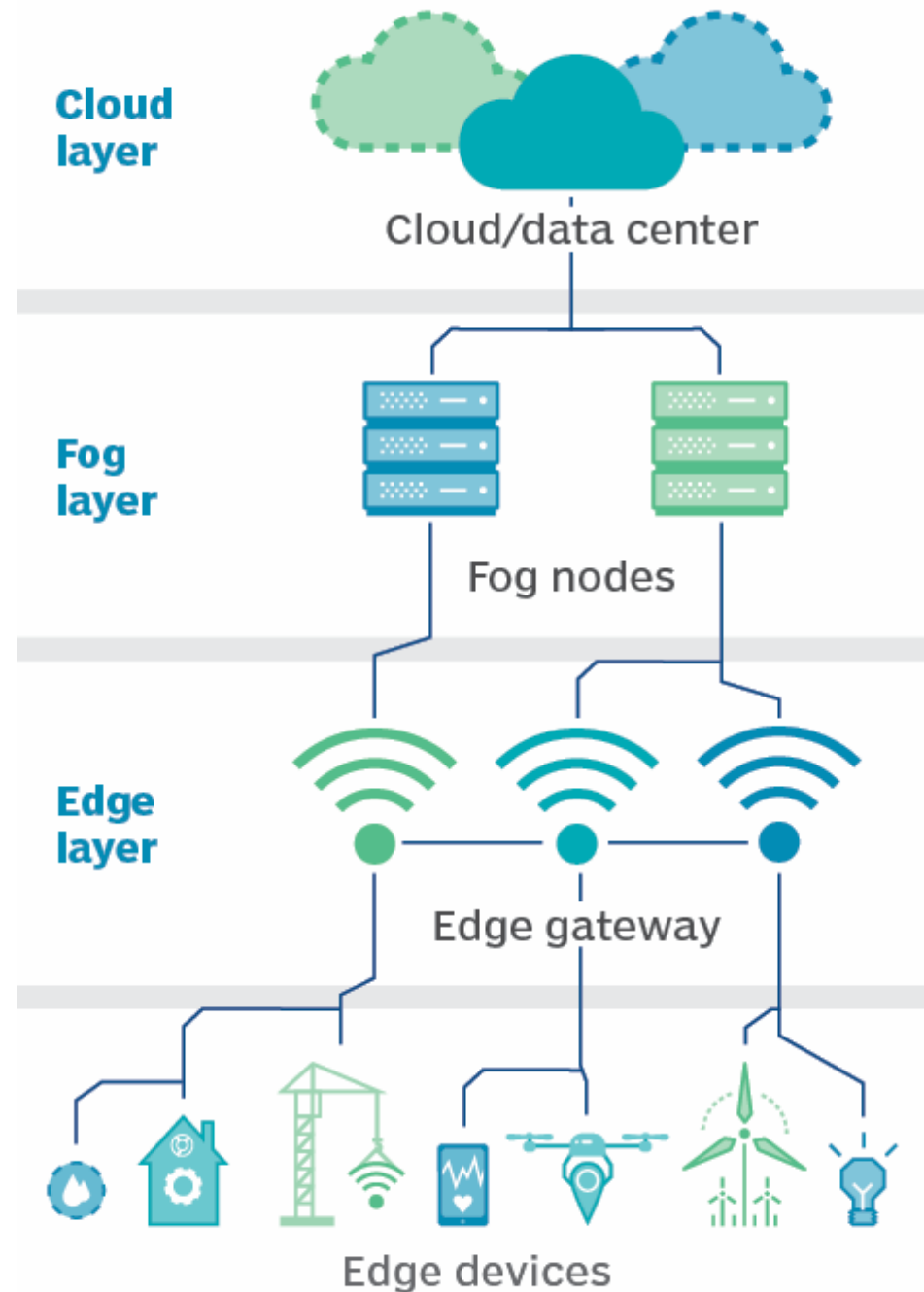
IoT Consortium



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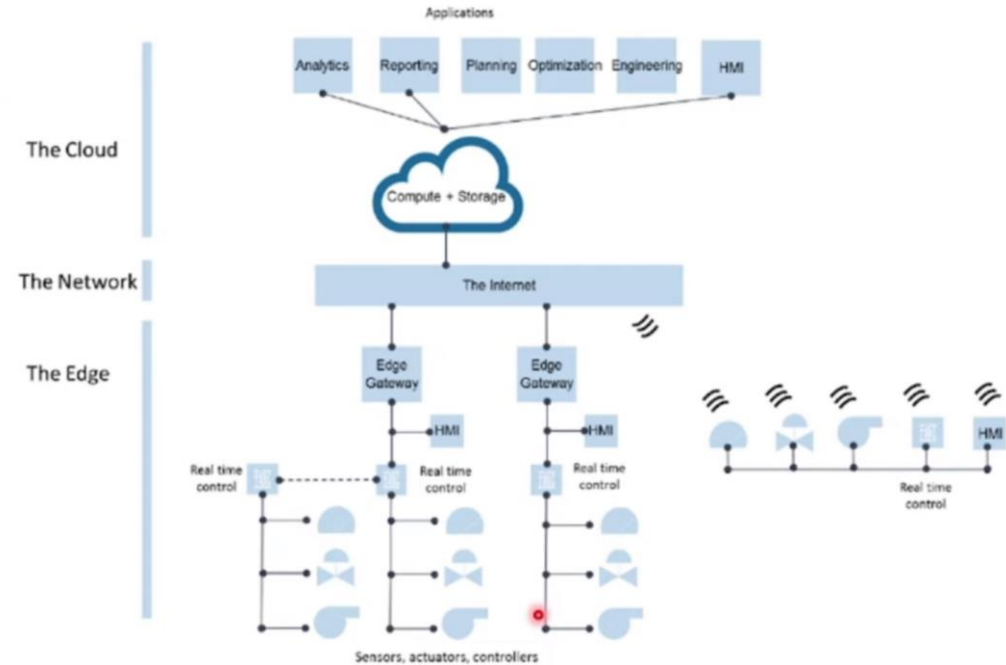


IIoT Network Architecture



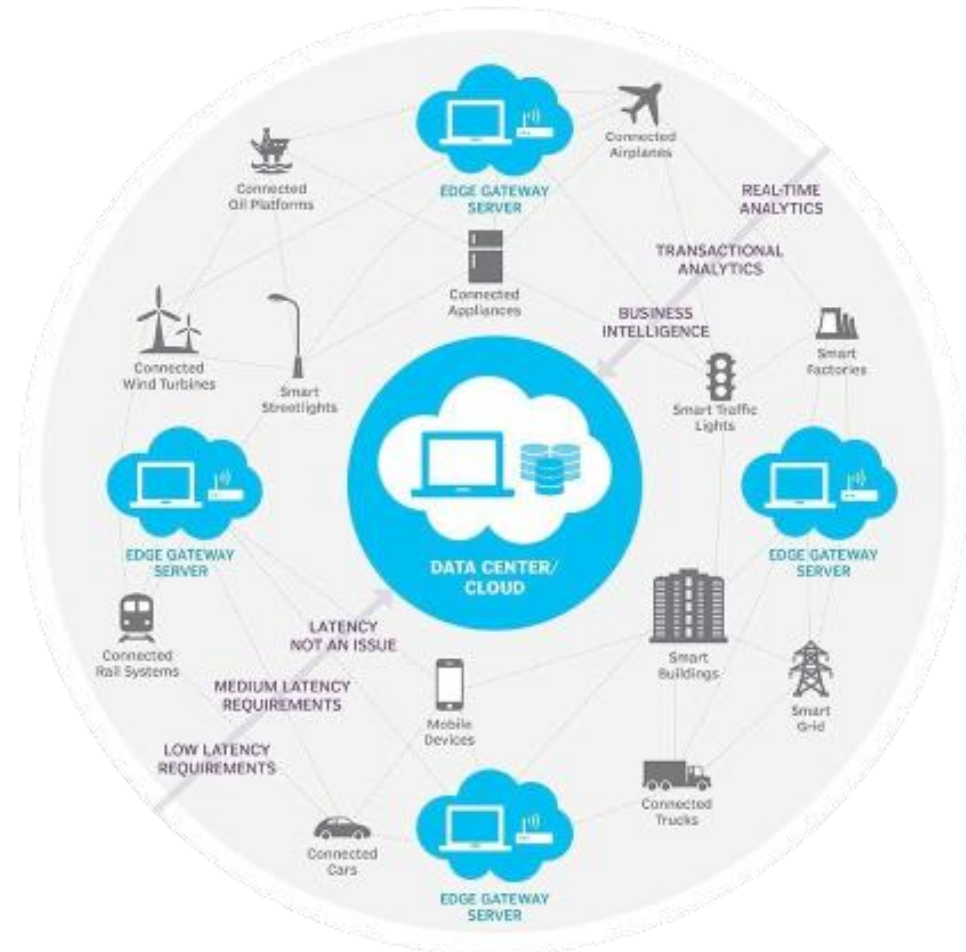
Additional Layers

Layers	Description
Content Layer	User Interface Devices (e.g. computer screens, stations, tablets, smart glasses, smart surfaces)
Service Layer	Applications, software to analyse data and transform it into actionable information.
Network layer	Communications protocols, Wi-Fi, Bluetooth, LoRa and cellular.
Device Layer	Hardware: CPS, machines & Sensors



Edge Computing

Edge computing is a fundamental concept in IoT (Internet of Things) and IIoT (Industrial Internet of Things) that involves decentralized computing infrastructure. Unlike traditional centralized computing, edge computing distributes computing resources and application services along the communication path between data sources and the cloud.

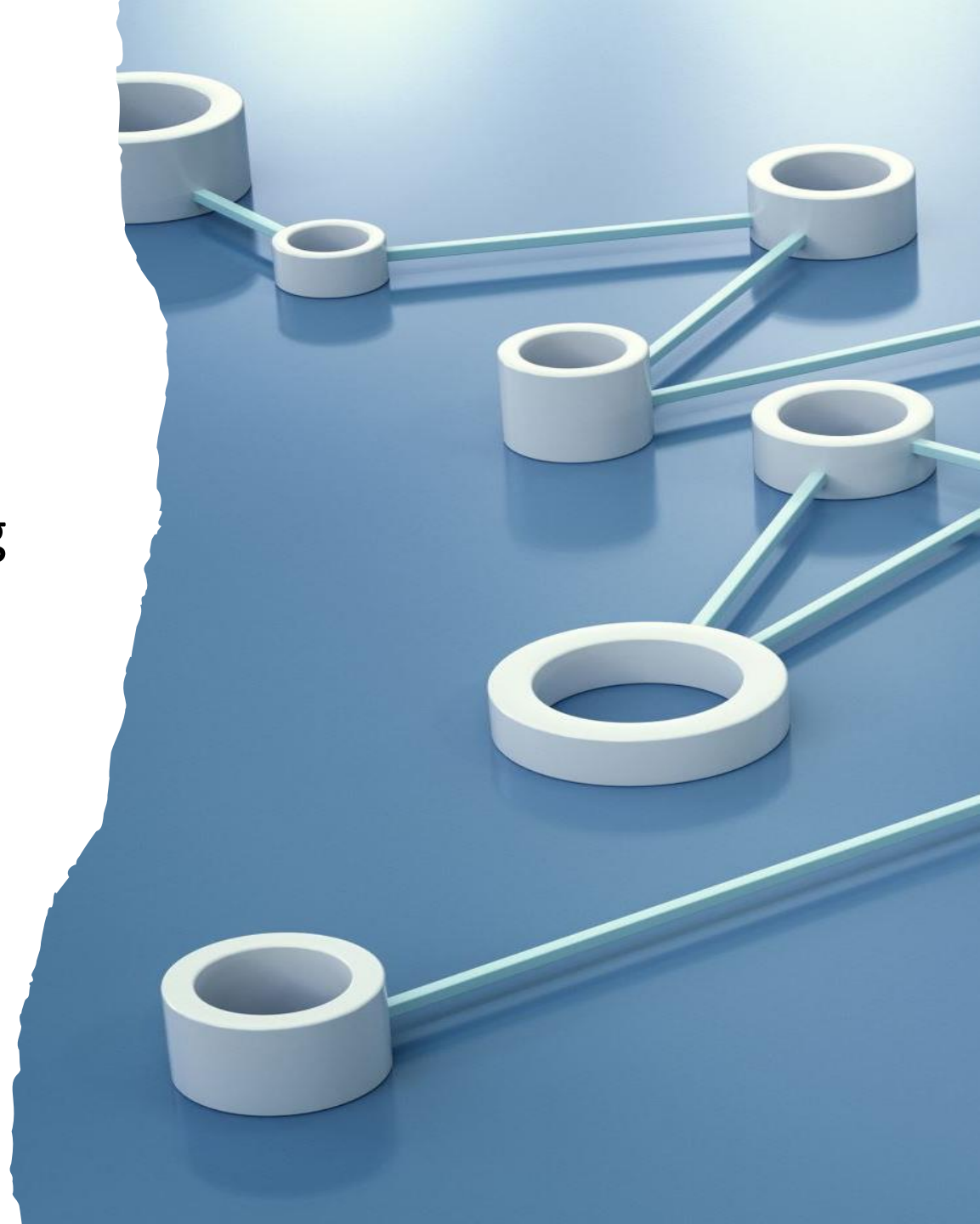


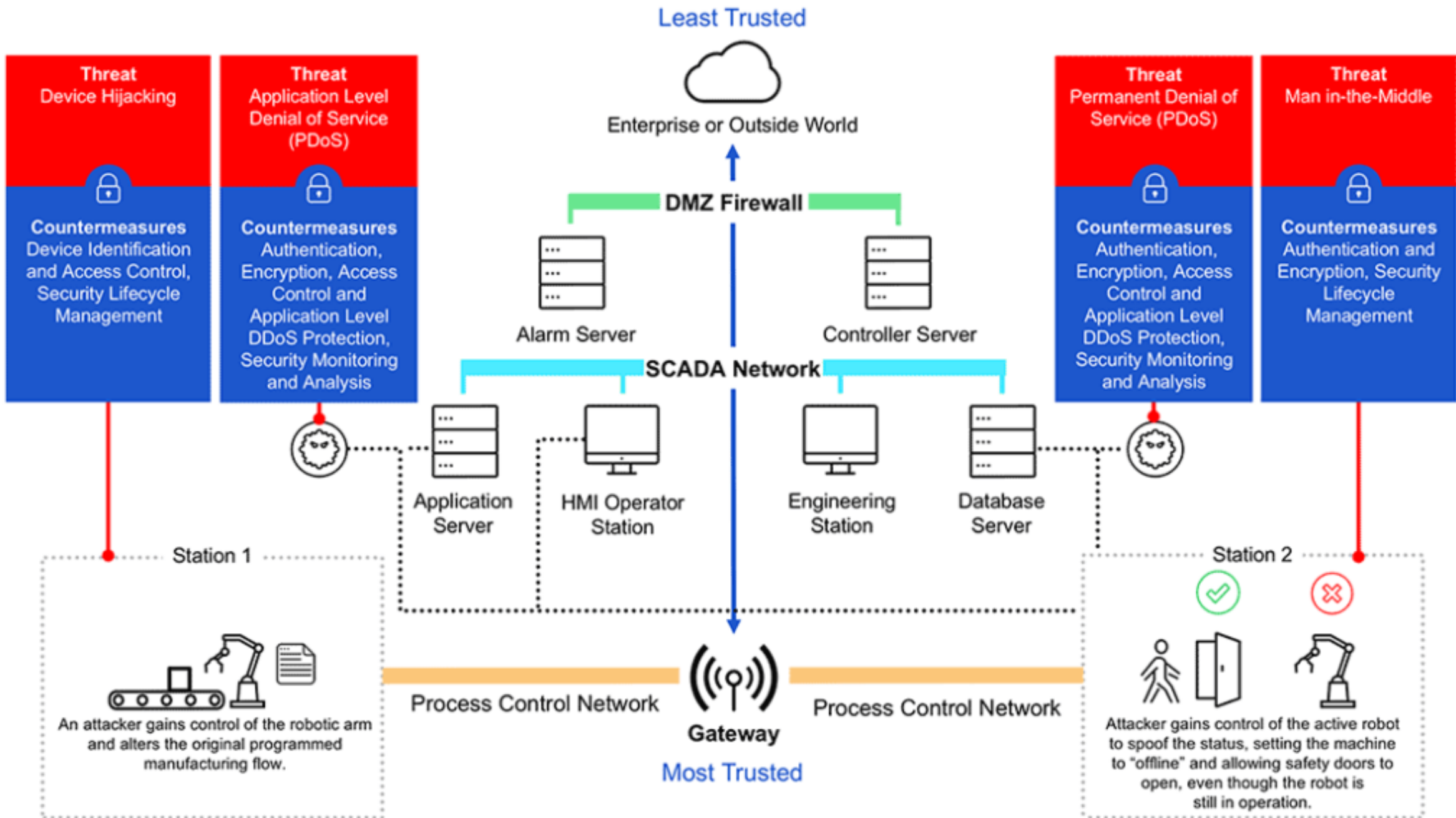
Edge Computing

Peer-to-peer networking fosters collaboration and information sharing among devices

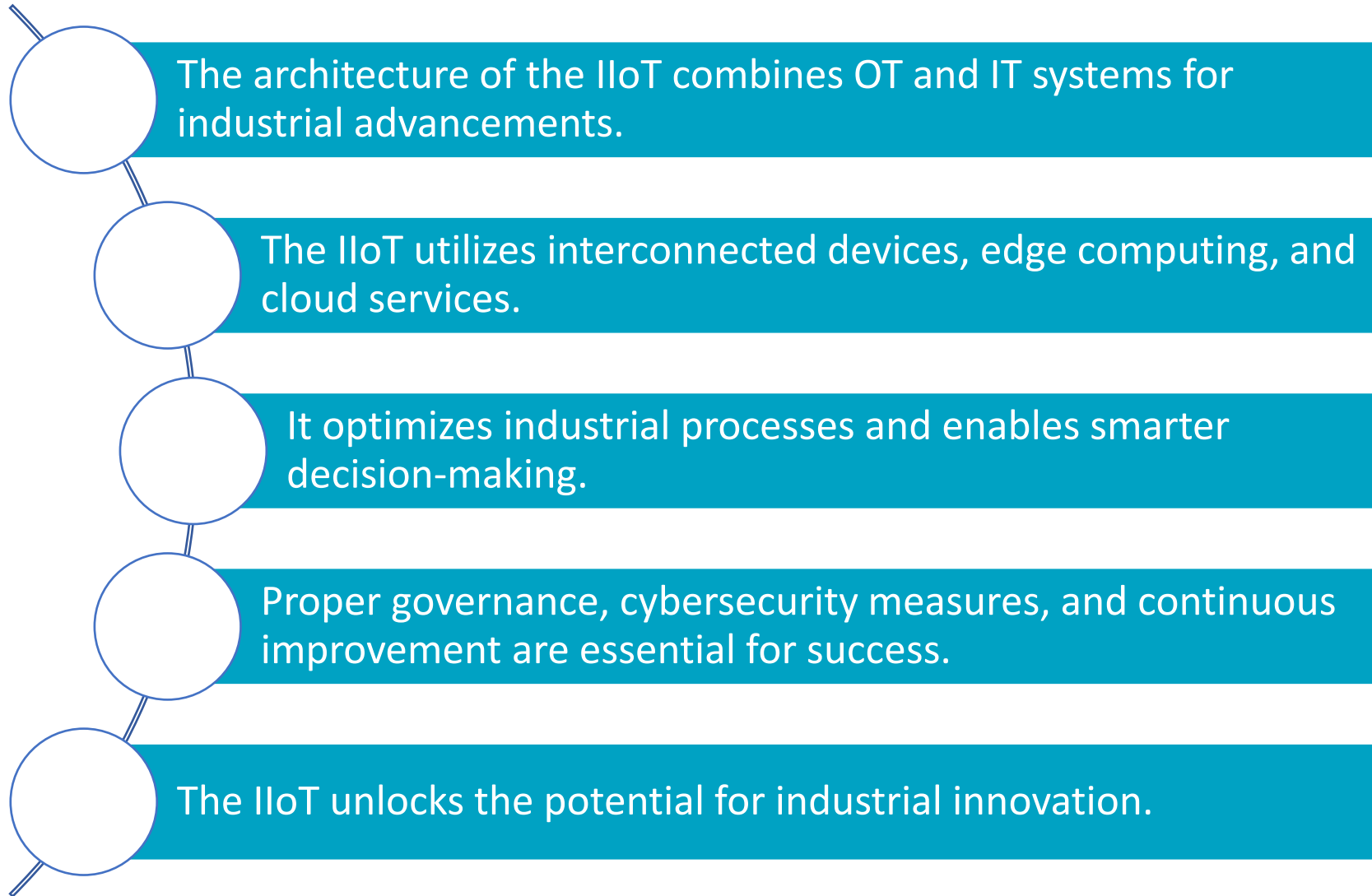
improving object recognition

identification capabilities





Wrap Up





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