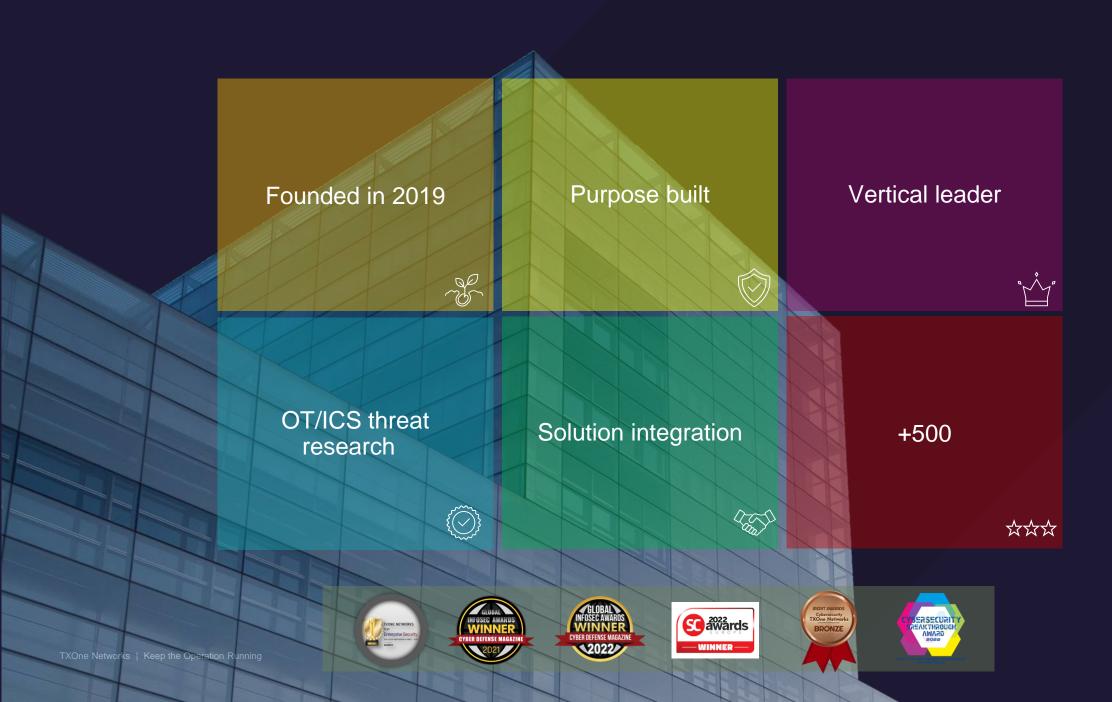


### **TXOne Networks**

# OT Cybersecurity Approach for Digital Transformation Era









# Worldwide offices Hsinchu, Taipei R&D center H.Q.

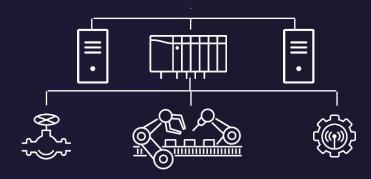


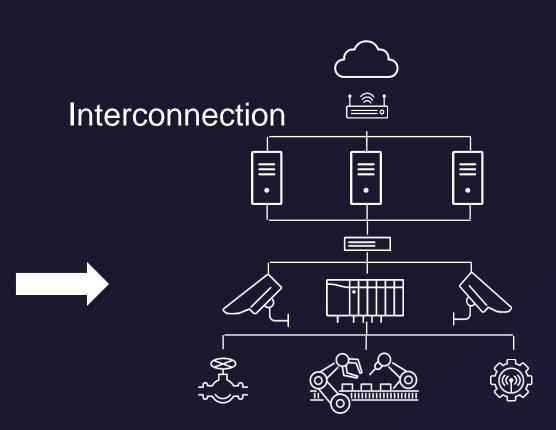




# OT is in the spotlight

Air-gapped Isolation





More attack surfaces



### The rapid change in OT

#### **Staying Competitive**

Friend become enemy. Avoid extinction

#### **Technology Adoption**

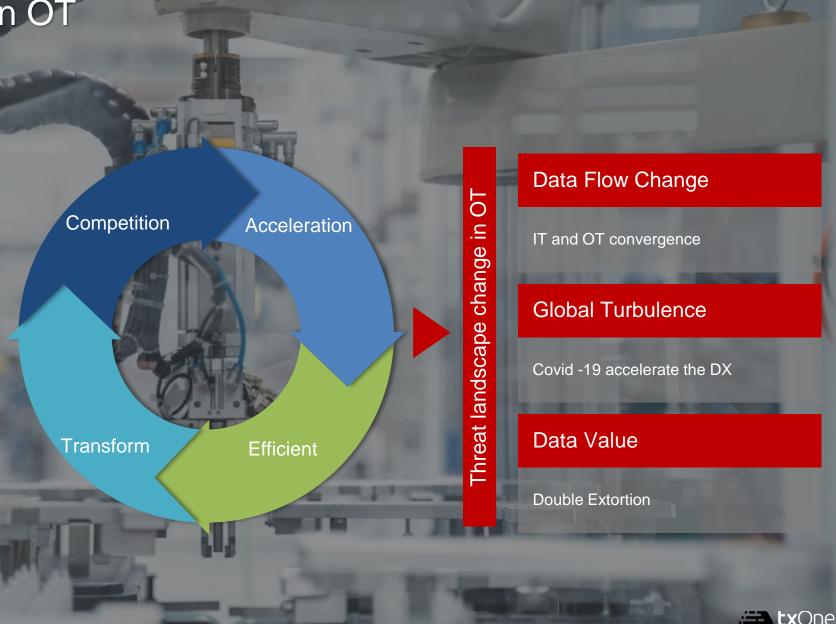
Highly adopt IT technologies for data, connectivity and computation

#### Digital Experience

Data flow change. Contexture data presentation

## Exploring new business model

Based on data, MTO (Make to Order), ATO (Assemble-to-order)







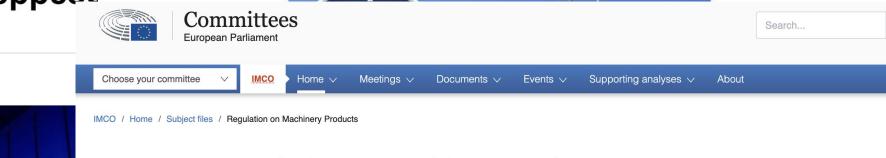
Danny Lee, Bloomberg News



VIDEO SH US administration announces Chemical Action Plan to expand public-private cybersecurity partnership

TECHNOLOGY Company News News Wire OCTOBER 31, 2022

**Boeing Subsidiary Jeppese** By Cyberattack







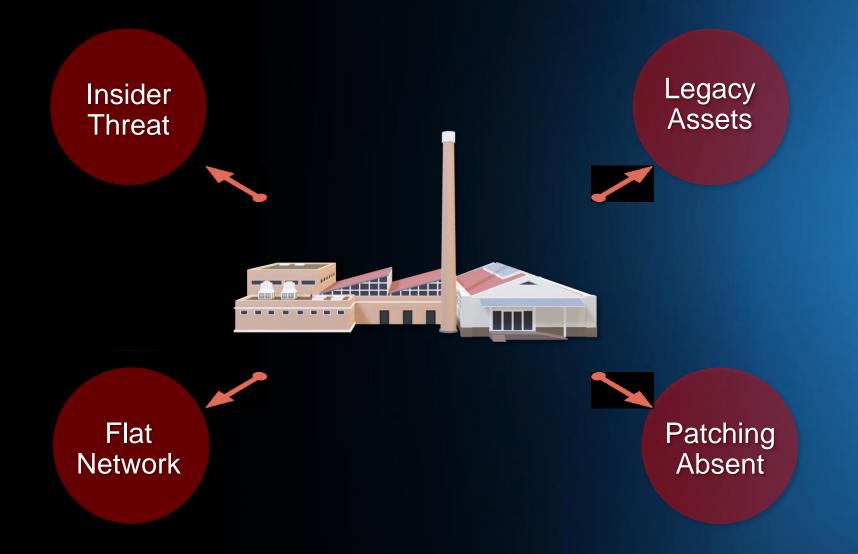






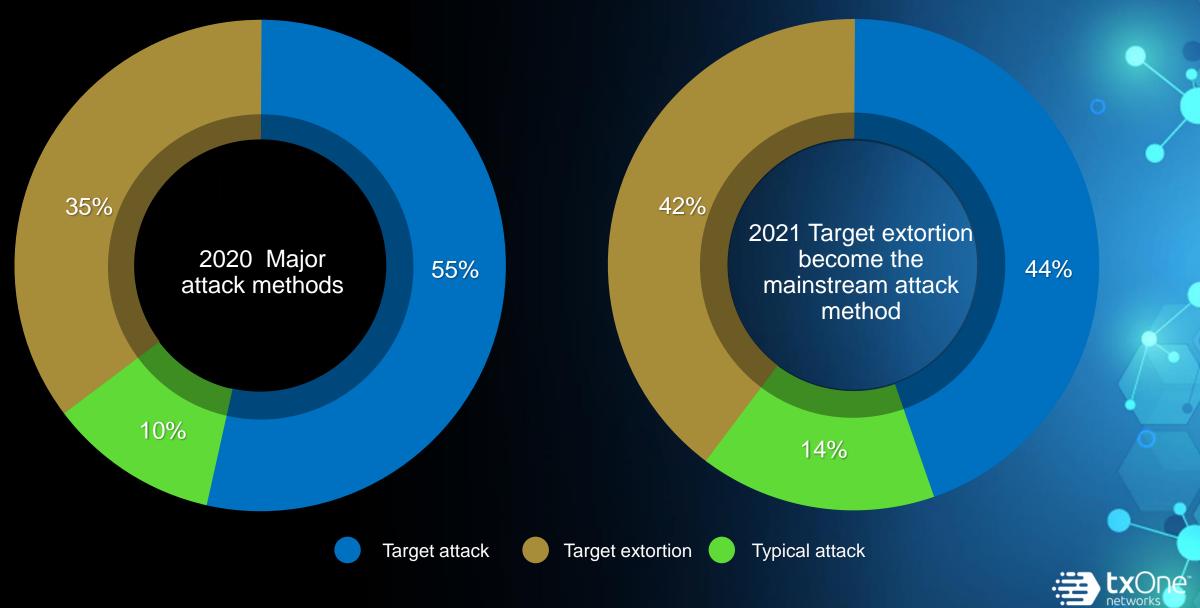


# Why OT/ICS is so vulnerable

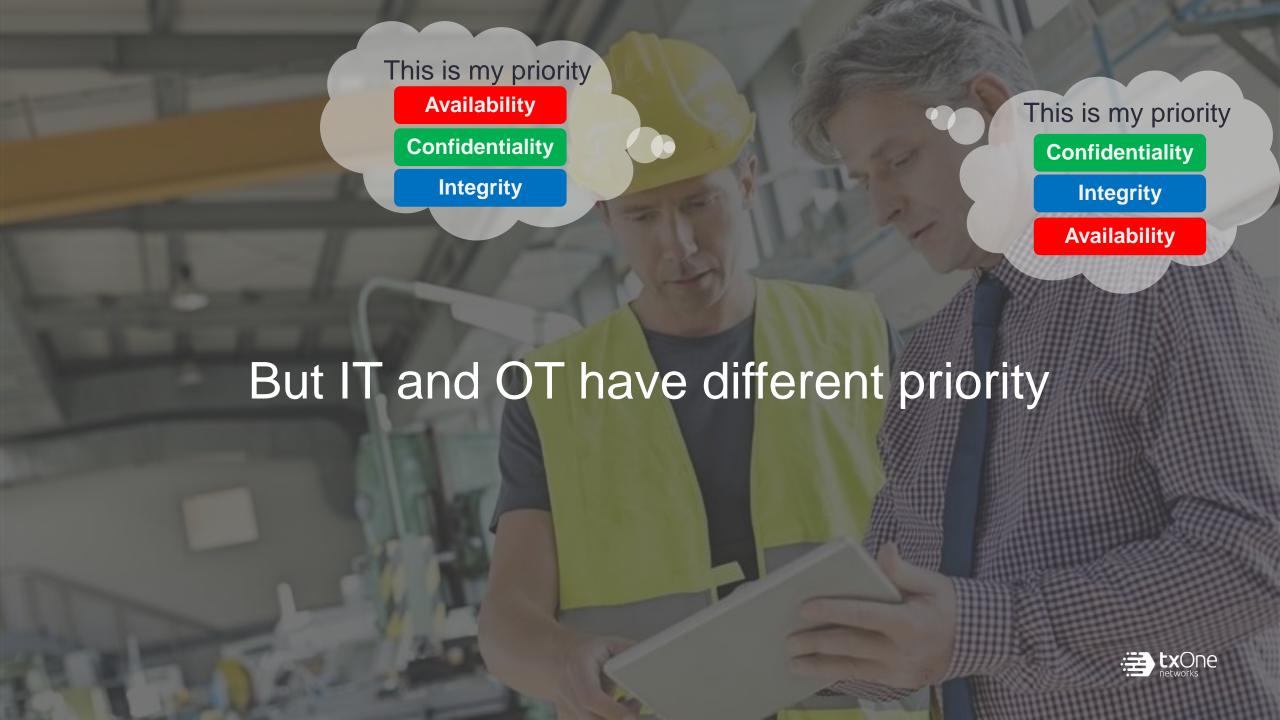




# Attack method change - Extortion becoming mainstream



Source: Trend Micro Taiwan CSIRT



# IT-based solutions can't help

No support for legacy assets

Require constant update

Lack of OT network protocols support

Not helping but killing





#### The clear and present dangers in OT cybersecurity



- Russia's war on Ukraine
- US vs. China relation
- SBOM, Zero Trust



- Maintain productivity
- Resources utilization
- Vertical specific
- IEC 61850
- NERC CIP
- NIS2



- OT on the target list
  - Cyber criminal
  - State sponsors



• >2.72 Million globally



Supply chain security



Secure assets operation



Regulation

3

Security adoption and monitoring



Risk mitigation

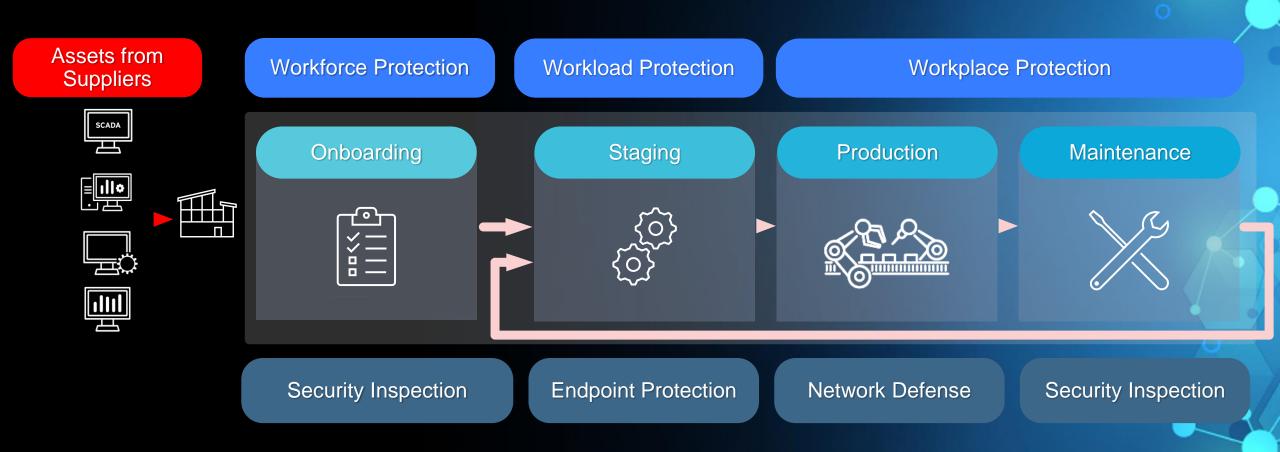


Less complex solution

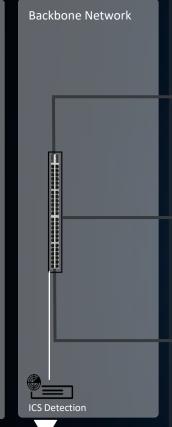




# Asset Lifecycle Protection



### Outsider Historian Attack **OPC Client** Firewall TXOne Edge Fire SCADA OT AD Level 3.5 DMZ Level 3

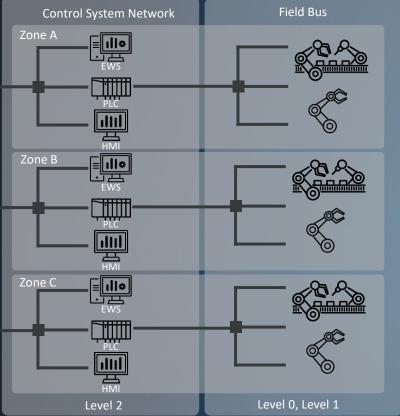


"ICS Detection" solution monitor the traffic between shop floor and control center for

- Asset visibility (in most cases)
- Can't detect cross zone attack (Blind)
- Can't prevent/protect insider attack

#### **Shop Floor Security Protection**

Cross Zone Attacl



- 1. Secure shop floor deeply into the OT by effective segmentation and segregation (when perimeter defence fails)
- 2. Provide asset, protocol, and control command visibility on the shop floor (which could be blind to ICS Detection)
- 3. Provide Protection and Enforcement (while ICS Detection only detect)





Insider

Attack

## Best practices ICS/OT Cybersecurity – OT Zero Trust



containment

lateral movement

operational

txOne networks

inspection

### Thank you for your attention

Keep the operation running!

cj@txone.com

