

#### Защита инфраструктуры промышленных предприятий. Взгляд Тренд Микро

Nurlan Adayev

#### Who we are?

#### A world safe for exchanging digital information

- Cybersecurity focused for 30+ years
- Profitable since going public in 1998, with over \$1.5B in sales (FY2019)
- 500,000+ commercial customers
- 6700+ people passionate about security across 65+ countries



Eva Chen, CEO and Co-founder of Trend Micro



## Our experience

#### Research

OT, IOT, AI, 5G research Research advanced technology and publish reports





Vulnerability research Over 1400 advisories in 2018, over 5500 to date



#### Technology

#### TXOne specializes in OT

A joint-venture corporation with Moxa inc. which focuses on OT security to offer purpose-built products.



#### Proven Technology

Named a Leader in the Gartner Magic Quadrant for Endpoint Protection Platforms, Aug 2019

**Leader** in Gartner Magic Quadrant for Intrusion Detection and Prevention Systems, January 2018



#### Customer



#### Global Market Share

The market leader in server security

since 2009





## Background to progress of Smart Factory

Drive the digitization in the manufacturing industry

Since 2011 Industry4.0 (Germany)

Since 2012 Industrial Internet (USA)

Since 2017 Connected Industries (Japan)

What manufacturers want to realize ?

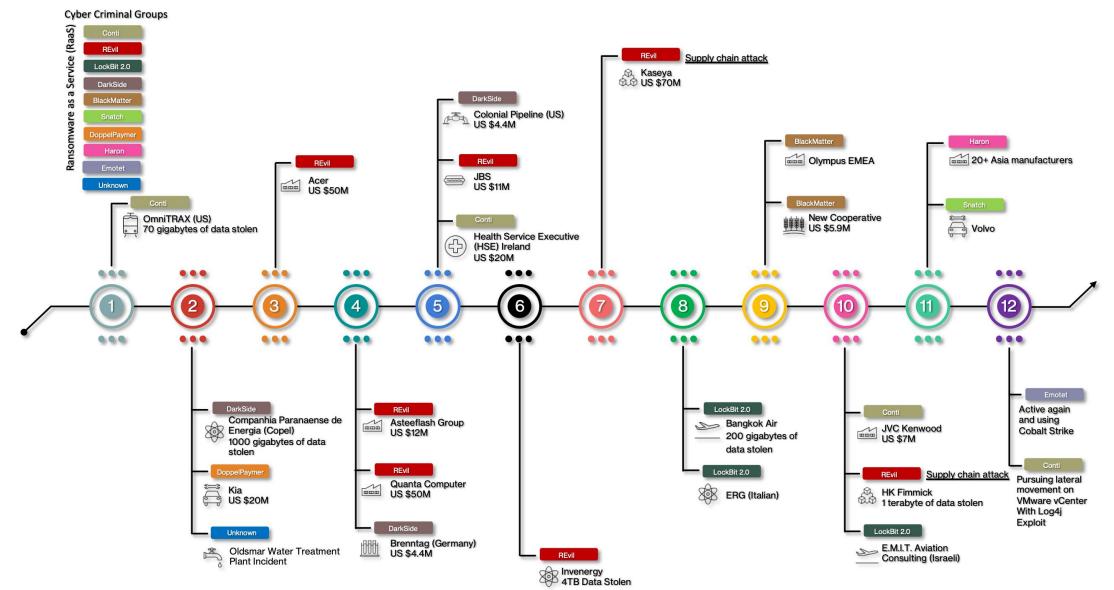
Visualization of operation status

Preventative maintenance

Production plan optimization



### The ICS Cyber Attack View from 2021



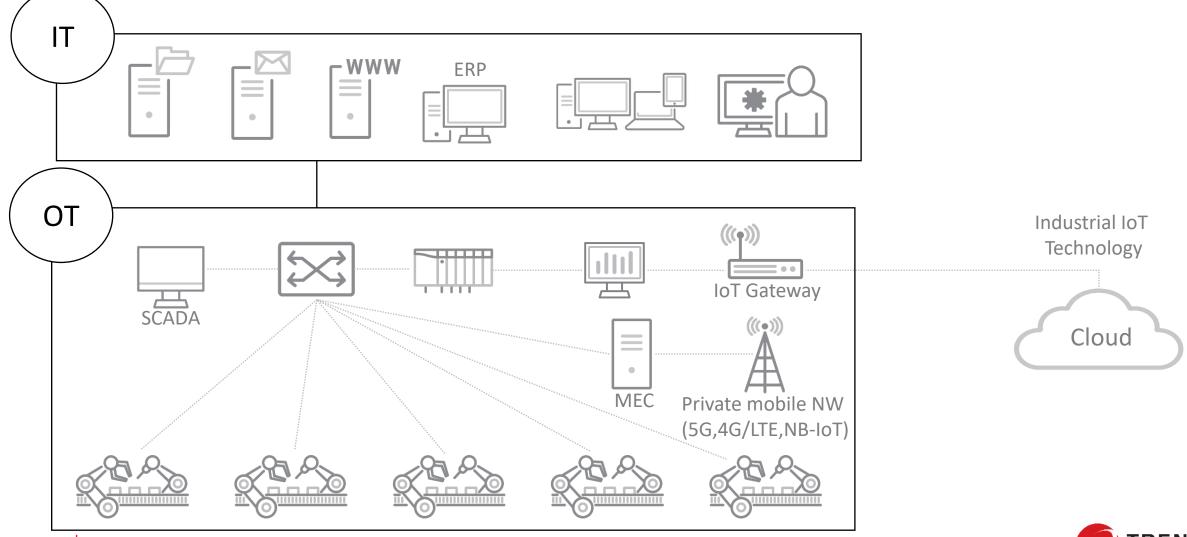
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#### Business/Production risks caused by cyberattack





## Factory environment evolution

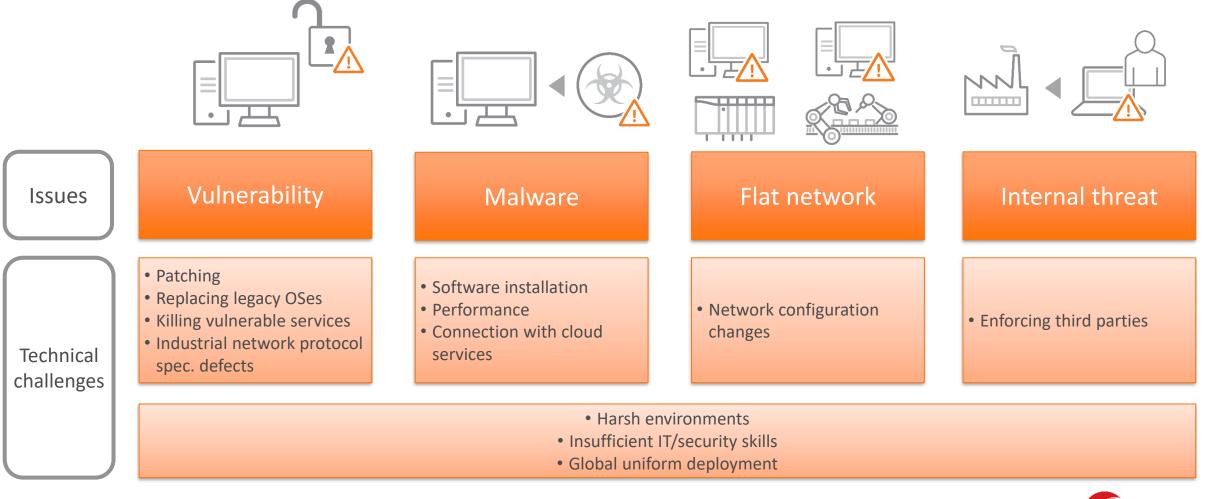


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#### Security issues and technical challenges







## **Keep Operations Running**

## Protect against cyberattacks by "Fortification of manufacturing system"



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## Why Trend Micro

We help you keep operations running with minimal TCO through support at all phases – prevention, detection, and response – over a long period of time.

IT/OT/IoT integrated Threat Intelligence and solution

Single vendor global support

**Sustainability** 



#### Unified security platform for OT with IT and CT - Three different technologies and One platform

PURDUE REFERENCE ARCHITECTURE	IT/Enterprise network Industrial DMZ Site operation & control	IT Centric solutions Endpoint, on-prem, VMs, Cloud, network		<u>XDR &amp;</u> Professional
	& control     Image: Control       Supervisory     Image: Control       Image: Control     Image: Control       Image: Control     Image: Control	OT Centric solutions Industrial endpoint/network (PLCs, HMIs, edge devices, IoT gateway, outside laptops, etc)	CT Centric solutions Mobile private networks (Private 5G)	<u>services</u> soc/csirt



#### **OT Centric Products**

#### Industrial Endpoint Security

#### Industrial Network Security





## IT & CT(5G) Centric Products

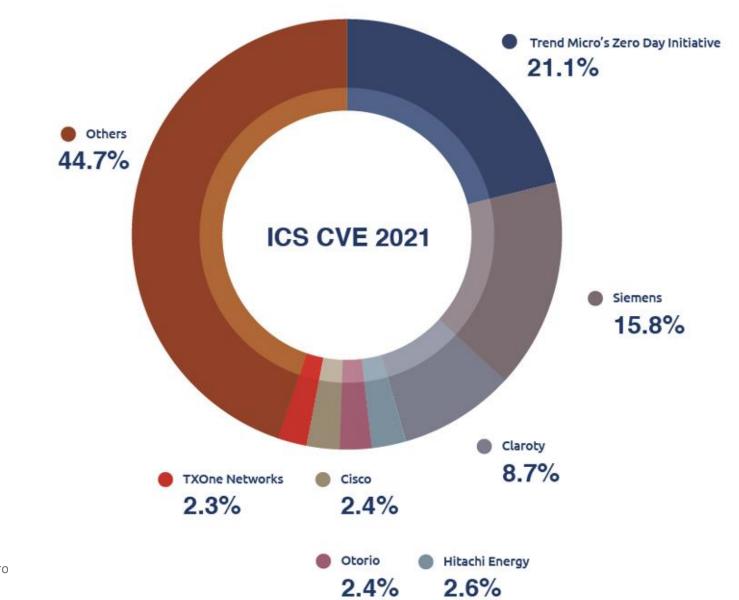
20	IT Centric				
L	Endpoint, Cloud Security		Network Security		CT Centric
	Apex One	Cloud One	TippingPoint	Deep Discovery	Mobile Network Security
	SW SW	And a start of the	HW	HW	SW 5G
	Automated, insightful, all-in-one protection	Automated, flexible, all-in-one solution for hybrid cloud	Next generation IPS appliance	Network-wide detection of targeted attacks	Comprehensive security for 5G environments
	<ul> <li>Inspect USB storage before bringing it in for secure data exchange</li> </ul>	<ul> <li>Prevent threat intrusion via internal DMZ</li> <li>Prevent misconfiguration of cloud environment</li> <li>Vulnerability visibility of OSS in source code repositories</li> <li>Streamline DevSecOps</li> </ul>	<ul> <li>Prevent vulnerability attacks from IT to OT and from one site to another, connecting to secure data exchange and minimizing affected area</li> </ul>	<ul> <li>Enable early anomaly detection</li> <li>No system impact due to SPAN port connection</li> </ul>	<ul> <li>Device visibility with zero-trust access</li> <li>Protect Data Network and Edge Computing</li> <li>Prevent unauthorized access, vulnerability attacks</li> </ul>

## Ref: Threat Intelligence in IT/OT/IoT

Fast solution delivery with early detection of new threats and vulnerabilities



#### CVEs Identified in 2021 ICS-CERT Advisories by Contributor







# THE ART OF CYBERSECURI

Trend Micro deployment shifts over time—from on-premises to SaaS-based solutions. **Created with** real data by artist **Stefanie Posavec.**