OT cybersecurity challenges: Industry perspective and trends

Manufacturing industries across the globe are facing cybersecurity challenges in the OT environment due to the rapid uptake of the internet of things (IoT), analytics, artificial intelligence (AI) and cloud.

Based on our analysis of cybersecurity data of OT organisations, we find:

74% have experienced a cybersecurity intrusions in the past 12 months.

64% OT leaders admit, keeping up with change is their biggest challenge.

45% are limited by a shortage of skilled labour in the OT cybersecurity domain.

Source: PwC industry research

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OT cybersecurity maturity framework

Boundary defence: Build a first line of defence against outside threats by network segmentation and controlling access across networks.	Minimises damage caused by a successful cybersecurity attack.
Foundational controls: Gain visibility into assets, vulnerabilities and threats. Develop mechanisms to prevent, respond and recover.	Equips organisations with information to respond to a cybersecurity attack.
Integration of controls: Deploy an effective security operations centre (SOC) by integrating security solutions with Security information and event management (SIEM), configuration management database (CMDB) and other logs. Transform supply chain risk management.	Accelerates an organisation's ability to respond and recover.
Sustain the outcomes: Deploy governance and compliance frameworks. Continue to enhance threat intelligence and conduct tabletop exercises.	Equips an organisation to prevent, detect, respond and recover.

Building OT security maturity comes with its challenges

A cohesive strategy to implement OT cybersecurity maturity at all levels
Enhancement of cyber resilience so that key assets and operations survive a cyberattack through unified incident response, vulnerability management, asset management and access management controls
Strong governance and collaboration among all cybersecurity stakeholders (IT and OT) and plant teams
Ability to quickly identify cyber incidents of critical significance across all business verticals
Future-proofing with state-of-the-art IT and OT cybersecurity capabilities which cover affiliates and vendors
Creation of a culture of integration, collaboration and unification for IT/OT domain security

The PwC advantage:

How can PwC India help?

Predict, prepare and respond to risks with PwC

OT security transformation	OT security policies, procedures and governance
OT security risk assessment	OT SOC
OT asset, threat and vulnerability detection deployment	OT network security
OT secure remote access	OT security resilience programme

Capabilities that set us apart

Unparalleled experience with large enterprises and similar services

We have cybersecurity partnerships with some of the largest groups in India and globally. We are currently running remote SOCs for 45+ clients.

Team of SMEs suited to your requirements

We bring together an international team of cybersecurity SMEs, including ex-CISOs, defence personnel and forensic specialists who have extensive experience in their domains.

Our cyber set-up (SoC, research, forensics labs)

We have state-of-the-art cyber research facilities backed by a big data platform for analysis and pattern matching. We also have a state-of-the-art forensics lab with a mobile version to carry out on-field analysis.

Largest pool of certified security professionals

Our cybersecurity team consists of CISSP, CISA, CISM, IEC 62443, SSCP, GCWN, EnCase and ArcSight certified personnel. We have the largest pool of qualified and certified cybersecurity resources.

Strategic alliances and thought leadership

We have strategic partnerships with all major service providers ranging from cloud service providers to cybersecurity original equipment manufacturers (OEMs) to facilitate deep knowledge transfer and possess best-of-breed solutions.

Global leader in cybersecurity and largest in India

We are recognised as a global leader in cybersecurity by Gartner, Forrester, the Kennedy Vanguard and others.

About PwC

At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 151 countries with over 360,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com.

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