



Kaspersky Industrial
Cybersecurity
Conference 2024

Industrial Cybersecurity in the Era of IT-OT Convergence

Welcome Address



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Cybersecurity
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kaspersky

IT-OT Convergence Landscape



Information Technology (IT) systems manage data and communication environments



Operational Technology (OT) systems control physical processes in industrial environments





- ⚙️ Digital transformation and Industry 4.0
- ⚙️ IoT integration
- ⚙️ Cloud Computing
- ⚙️ AI and Data Analytics
- ⚙️ Cybersecurity Concerns

- ⚙️ Enhanced Efficiency
- ⚙️ Real-Time Data Insights
- ⚙️ Improved Predictive Maintenance
- ⚙️ Improve Cybersecurity Posture
- ⚙️ Increased Flexibility and Scalability
- ⚙️ Enhanced Innovation
- ⚙️ Sustainability and Compliance



Historical Context of OT Attacks

- Discovered in 2010
- First known digital weapon
- CI targeted and compromised
- Exposed significant OT system vulnerabilities
- Raised awareness of potential cyber warfare



Stuxnet

Need for Security for OT

Incident Response Planning

Understanding Attack Vectors

IT and OT Collaborations

Awareness and Training

Regulatory Compliance

OT Attacks are **NOT NEW**

Implications of OT Attacks

- Safety Risks
- Operational Down Time
- Data Loss and Theft
- Regulatory Consequences
- Reputation Damage
- Financial Loss

Why ICS is Important

- Increased Vulnerabilities
- Operational Continuity
- Critical Infrastructure Protection
- Data Integrity and Confidentiality
- Real-Time Monitoring and Response
- Advanced Security Strategy



International Standards

IIEC 62443
Industrial automation and control systems (IACS)

ISO/IEC 27001
International standard for information security management systems (ISMS)



Cybersecurity Laws and Data Protection

Cybersecurity and Data Protection Laws China, Malaysia, Singapore, Thailand, India

Data Protection Laws in Japan, Hong Kong, South Korea

Compliance to Safeguard

- Risk Mitigation
- Enhanced Security Posture
- Legal and Financial Implications
- Operational Continuity
- Stakeholder Trust

Impact of Data Protection Laws

- Data Handling Requirements
- Data Breach Protocols
- Increased Security Measures
- Cross-Functional Collaborations
- Technology Adoption



Present Trends

Enhanced Security
Protocols

Artificial Intelligence and
Machine Learning

Collaboration and Training



Future Outlook

Continued Integration

Advanced Threat Detection

Regulatory Evolution

Resilience and Recovery



Challenges in IT- OT Convergence



Cultural Differences

Legacy Systems

Security Vulnerabilities

Lack of Standardisation

Data Management

Skill Gaps

Operational Efficiency

Real-Time Decision-Making

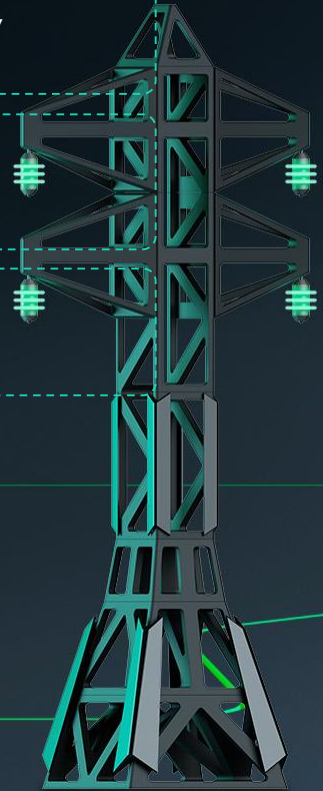
Cost Reduction

Pressure to Maintain Operational Continuity

Innovation and Agility

Enhanced Security

Compliance and Risk Management



Comprehensive Security Approach



Processes

Risk Assessment

Incident Response
Planning

Change Management

Compliance Monitoring



People

Awareness Training

Cross-Department
Collaboration

Role-Based Access

Threat Intelligence Sharing



Technologies

Unified Security Solutions

Endpoint Security

Network Segmentation

Advanced Analytics and AI



Mono-Vendor Versus Multi-Vendor Approach

◀ Mono-Vendor ▶

◀ Multi-Vendor ▶

Pros

Simplified Management

Seamless Integration

Unified Support

Cons

Vendor Lock-in

Limited Customisation

Single Point of Failure

Seamless Communication

Adaptability to Change

Cost Efficiency

Pros

Flexibility in Customisation

Reduced Risk of Lock-in

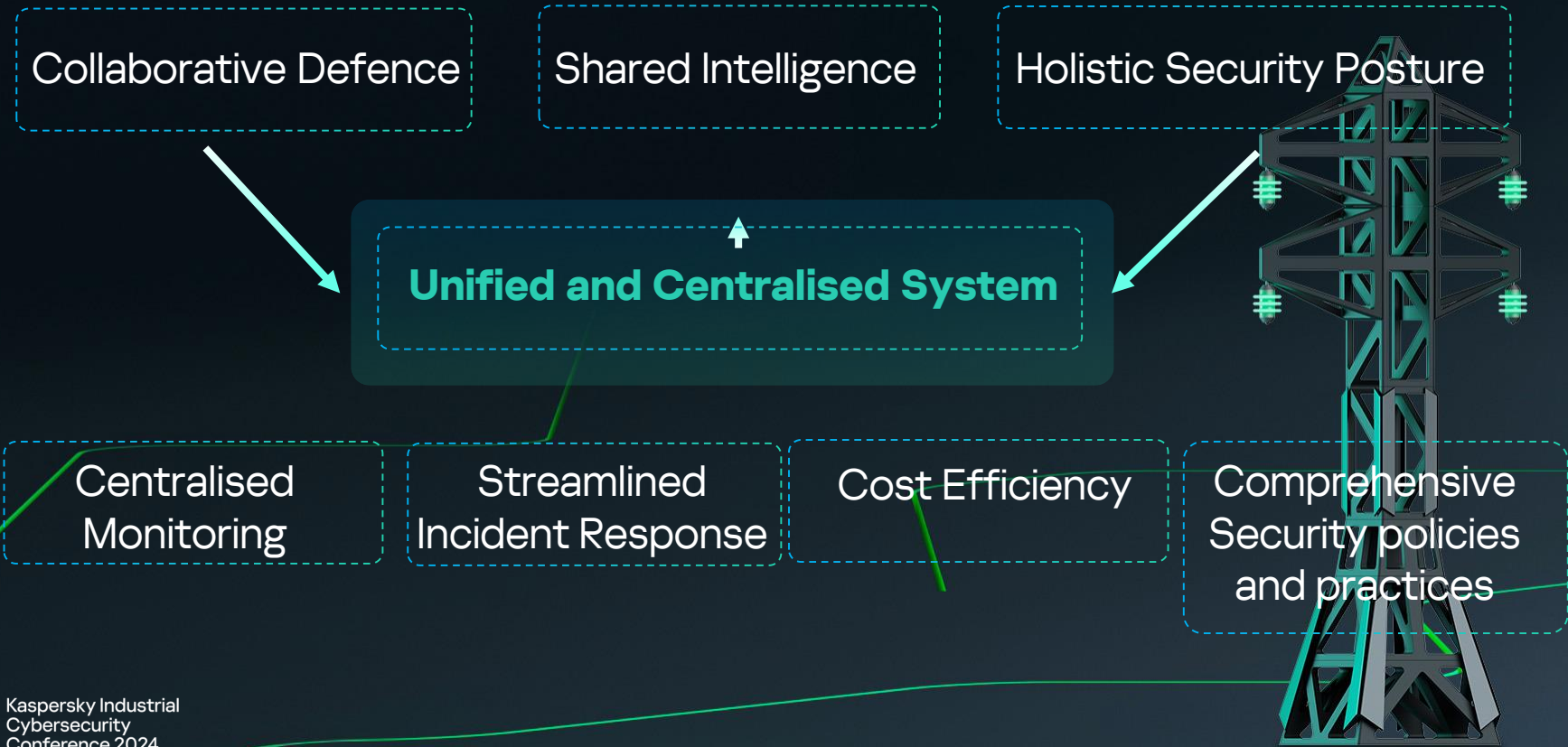
Innovation

Cons

Integration Challenges

Complex Support Structure

Higher Costs





Increasing IT-OT
Convergence



Integration Increases
Risks and
Complexities of Risks



Comprehensive and
Holistic Cybersecurity
Strategies and Solutions
are Essential



Together We Build A Safer World



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