

# IT-OT converged secure network transformation



# Business drivers of IT-OT convergence

IT-OT Convergence framework - propositioned around the synergy of Cisco's networking, security and automation portfolio combined with the managed services expertise of HCLTech, offers unique business accelerators to simplify the digital transformation journey across industries.

## Make Money



### Reduce defects

Increase revenue by enhancing overall product quality and reducing defects



### Faster time to market

Reduced new product development time cycle



### Maximize OEE (Overall Equipment Effectiveness)

Improve yield by improvement in equipment availability and reduction in downtime

## Save Money



### Workforce productivity

Enhances worker effectiveness through real-time situational alerts



### Lower inventory

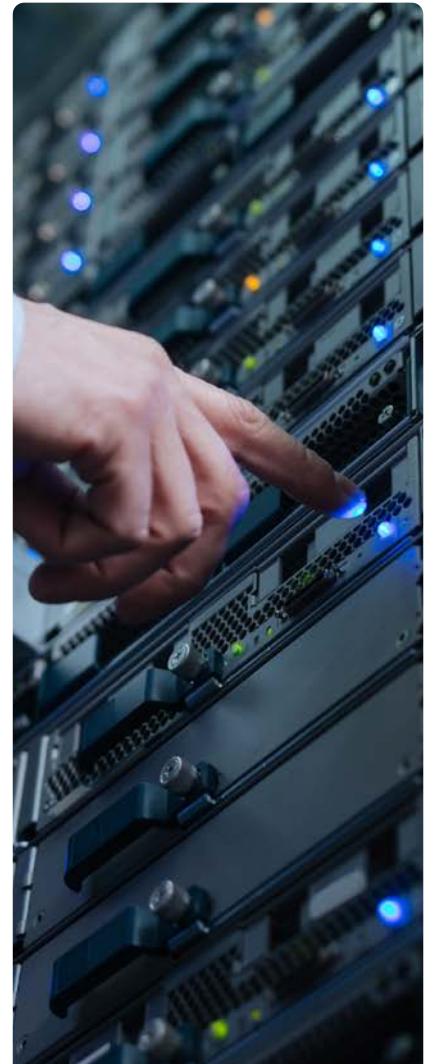
Minimizes cost by enacting an efficient inventory system



### Reduce energy

Minimizes cost through energy monitoring and optimal usage

## Stay out of trouble



### Mitigate security threats and risks

Protect operations against cyber-attacks; mitigate the risk of data loss; mitigate the risk of counterfeit parts in the supply chain

# Key challenges necessitating IT-OT convergence



Complexity in orchestrating processes and actions across systems



Connectivity bottlenecks (many protocols)/siloed systems



Data distributed across multiple domains and systems



Real-time data intelligence



Predictive capacity



Lack of visibility/blind spots



Vendor lock-in (need for integration development)



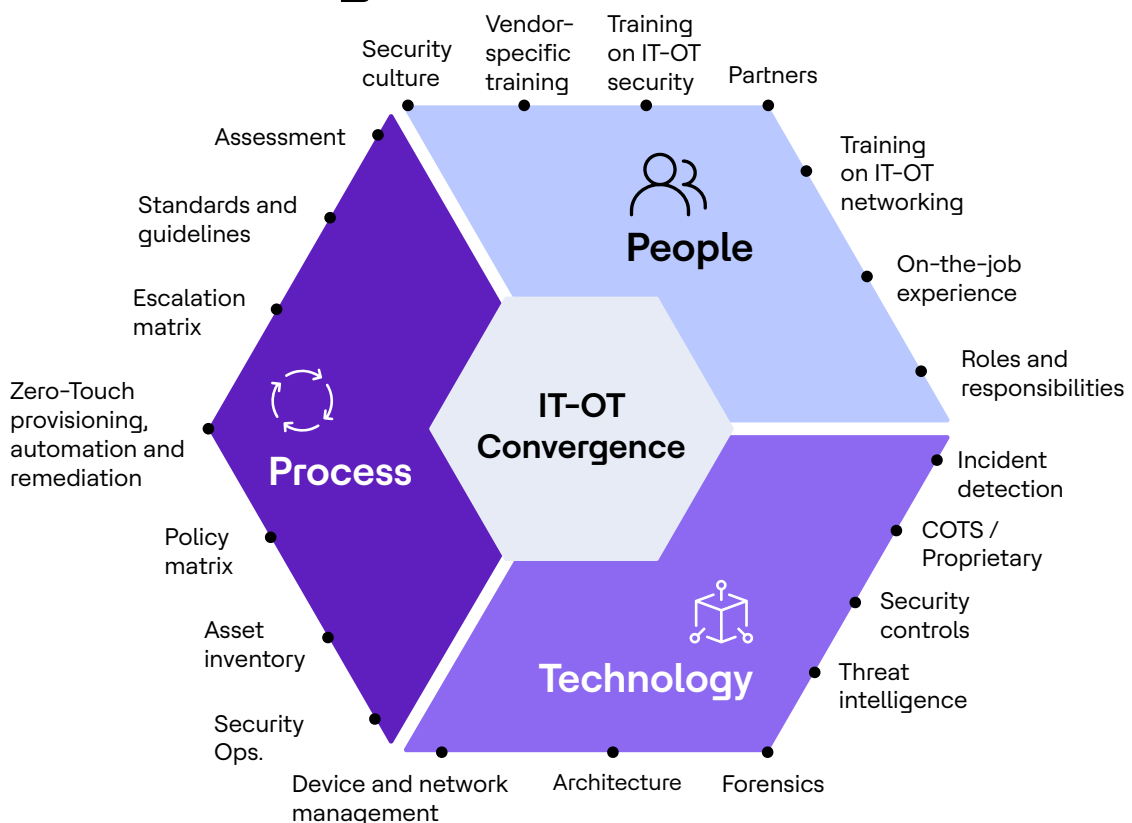
High costs of trouble resolutions



Vulnerability to cyber threats

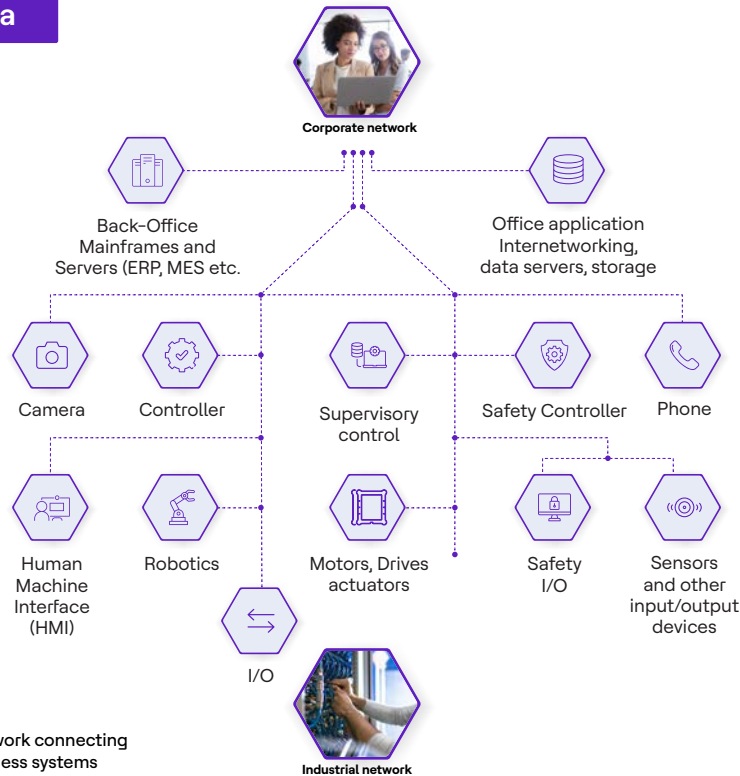
IT and OT capabilities are increasingly becoming inextricably linked in delivering key business KPIs across industries. More and more, business outcomes rely on the ability of operational systems seamlessly converging with higher-level IT business management applications to bring forth tangible value propositions. Hence, an orchestrated IT-OT approach is becoming essential for business and mission success, and infrastructure resiliency. In a digital world, IT-OT convergence and modernization efforts must be aligned and grounded around an automated architecture created around IT-OT network convergence and security convergence to achieve the target business transformational goals.

# HCLTech's proposition for IT-OT convergence



# Secure IT-OT network convergence powered by HCLTech's managed services

## Redesigning OT infra



## Securing the OT network



### Asset discovery

Identify all your industrial assets to build the right security strategy



### Network segmentation

Build your IDMZ (Industrial demilitarized Zone) and isolate your zones to avoid attacks to spread



### Live threat detection

Detect IT intrusions and abnormal OT behaviors to maintain process integrity



### Integrated IT / OT SOC

Gain a holistic view on security events to ease investigation and remediation

Gain visibility on your OT to build and enforce the right security policies from IT

## HCLTech's managed services for secure IT-OT converged networks



### IT Asset(s) in OT Space

- Devices / OS
- Inventory
- EPP (Endpoint Protection Platform Security)
- Patching
- Licensing
- Remote connectivity



### Network

- Firewall
- Switches
- Routers
- Wireless



### Edge Plane

- Cloud connectivity
- Datacenter
- Gateways



### Machines

- HMIs
- Actuators
- Sensors



### Controllers

- PLC (Programmable Logic Controllers)
- RTU (Remote Telecontrol Units)
- Embedded controllers
- VFD (Variable Frequency Drives)

## Security Services / Event Monitoring and Secure Operations Center

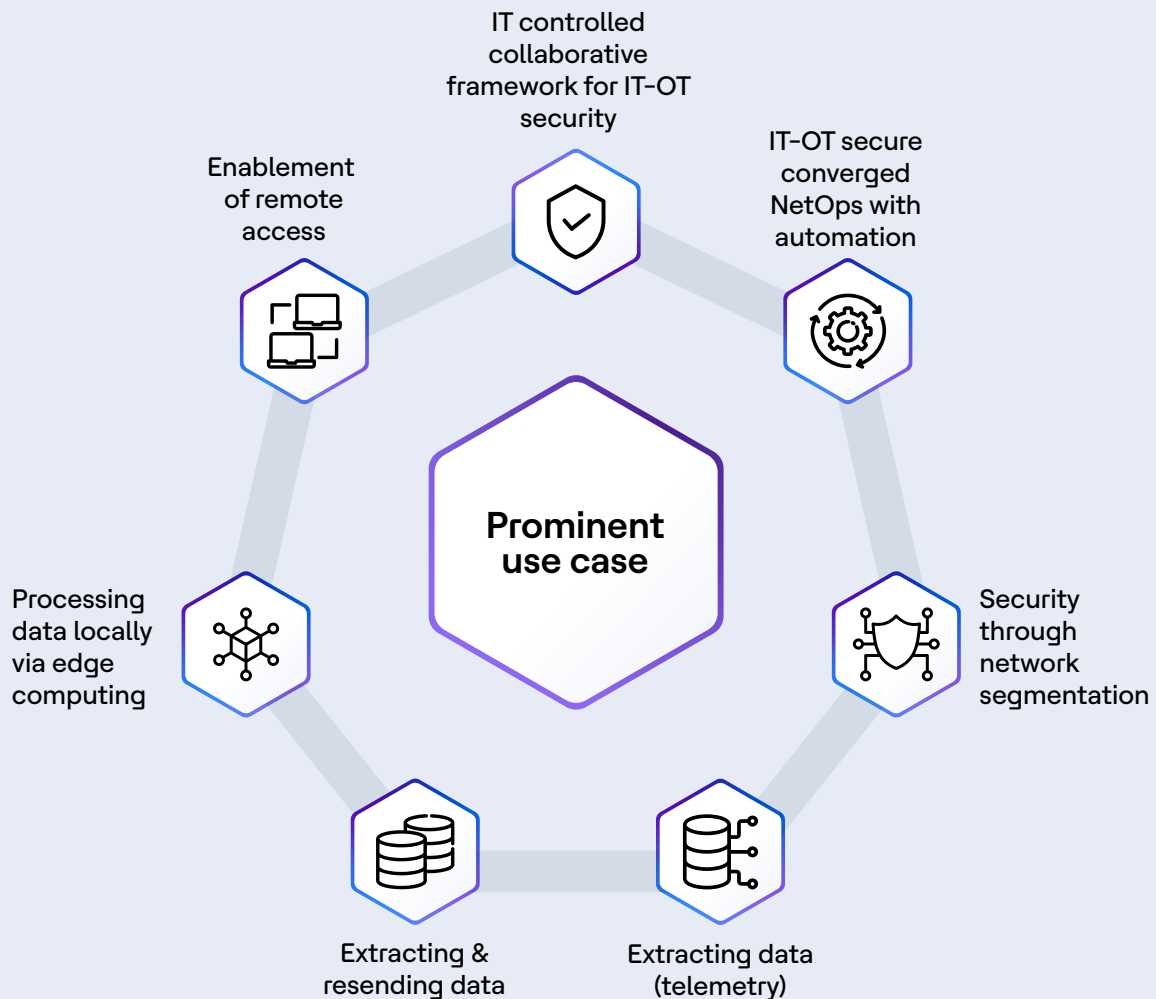
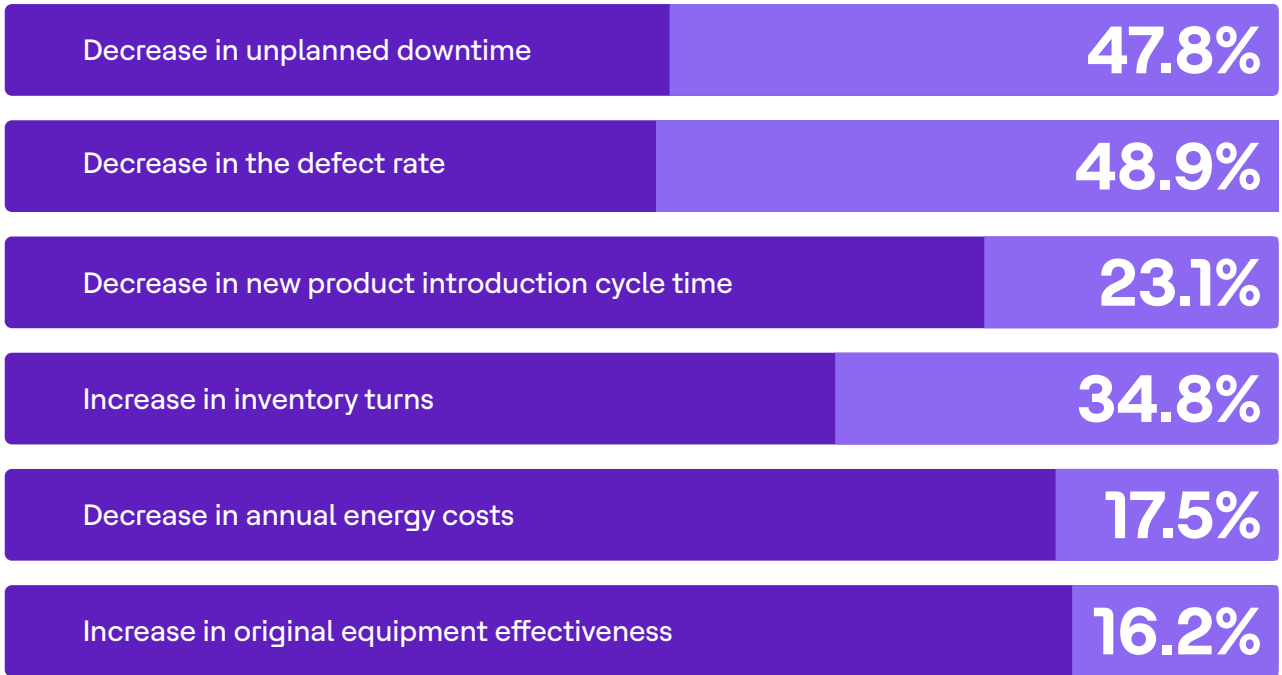
The aggregate of IT/OT network convergence, computing and cybersecurity components that deliver clear business outcomes and a management framework

# Business outcomes of HCLTech-Cisco IT-OT convergence proposition

Target Objective	Solution Requirement	Cisco	HCLTech via 3 <sup>rd</sup> Party	HCLTech's IPs	Partners	
Maximize OEE	Connected factory network Connected machines Plant floor virtualization Analytics	Cisco IT & OT network & security product portfolio and automation tools along with a comprehensive set of tested CVDs (Cisco Validated Design) for industry verticals - Manufacturing, Extended Enterprise, Utilities & Renewables, Smart & Safe Cities, Roadways & Intersections, Public Transportation, Ports & Terminals, Mining and Oil & Gas - provides a vertical-based deployment template.	IoT Platform, MES, PLM, CAD/CAM, SIEM / CMDB, Log Monitoring and Management, Patching Management System	Plantwide Network for Secure Seamless Operation & Business KPI Monitoring	SDA (Cisco DNAC+ISE)	
					HCLTech	
Reduce Defects	Factory wireless with RTLS			Multiple Plants Connectivity Infra through SDWAN	HCLTech's NetBot	
Faster Time to Market	Factory wireless Analytics				nucleus	
Lower Inventory	Factory wireless Analytics			Managed SD-WAN Services	DRYICE iControl	
Reduce Energy	Sustainability Management Platform IoT intelligent platform Connected machines Factory network Energy Usage Optimization				HCLTech TIS 2.0	
Workforce Productivity	IoT intelligent platform Connected machines Factory network Platform on Real - Time Insights			Hybrid and Multi-Cloud Integration and K8s Service Automation	Multi-Cloud Integration and Observability	DRYICE AI & Intelligent Automation
						VelocITy
Reduce Risk	Factory (OT) security Integrated IT-OT Security SIEM and Log mgmt.	Apps/ Platforms: Insights, Infra and Data Ingestion Management + Business Performance KPI	HCLTech's IoTWoRKS Platforms			Cisco ThousandEyes
						Real-Time Manufacturing Insights (RMI)
						Net-Zero Intelligent Operations (NIO)



# Key business outcomes

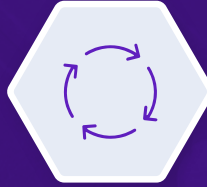


# Why HCLTech?

Clearly defined HCLTech's SIO (Smart integrated operations) model on industrial network operations



Strong HCLTech IP's to facilitate AIOps and automation based managed services delivery



Multi-cloud framework based on HCLTech's CloudSMART



Integrated value delivery through HCLTech 'Industry NeXT' framework - a cognitive ecosystem approach to facilitate adaptive and flexible business models



Strategic 360-degree partnership with Cisco for 25+ years



"Cisco Global Gold Provider" recognition enhances our credibility of Cisco products



Range of solutions and offerings covering Cisco's broader partnership ecosystem



Established relationships with leading global OT OEMs like Siemens, Rockwell, Fanuc, Honeywell and PTC, among others



# HCLTech | Supercharging Progress™

HCLTech is a global technology company, home to 219,000+ people across 54 countries, delivering industry-leading capabilities centered around digital, engineering and cloud, powered by a broad portfolio of technology services and products. We work with clients across all major verticals, providing industry solutions for Financial Services, Manufacturing, Life Sciences and Healthcare, Technology and Services, Telecom and Media, Retail and CPG, and Public Services. Consolidated revenues as of 12 months ending September 2022 totaled \$12.1 billion. To learn how we can supercharge progress for you, visit [hcltech.com](https://hcltech.com).

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