

Expertise

Video Intelligence

lloT

## Unlock the Transformative Power of Smart Manufacturing

## **CDW Manufacturing Solutions**

## Future-proofing manufacturing operations

CDW understands your organization is under more pressure than ever to remain competitive in the face of rising material costs, supply chain issues, skills shortages and rapidly changing markets. Besides the need to improve quality and profitability, maximize efficiency, and prevent costly downtime, there's the need to boost cycle times and increase visibility.

Ensuring the right technology is in place to meet these challenges spans a variety of disciplines and crosses multiple areas of responsibility on both sides of the IT/ OT divide within a manufacturing organization, which can leave many organizations wondering where to start.

CDW can help you bring IT technology and OT manufacturing together to make a real difference for your processes and your people. CDW knows manufacturing, and we're here to help you gain a competitive edge, improve customer experiences and scale to meet your goals.



**Our Approach** 

Video Intelligence

### **Expertise**

## Access Valuable Expertise for Any Stage of Your Business

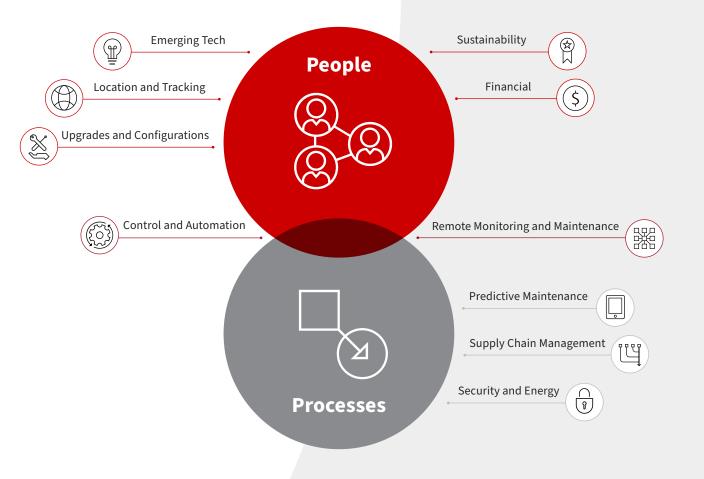
#### Advisory and consulting services

Whether you're looking to grow your operations, modernize your infrastructure or adopt emerging technologies, CDW has the expertise and partnerships to merge your OT environments with next-gen IT solutions for real-time insights to reduce OEE, improve throughput, improve safety and increase efficiency.

**CDW advisers and consultants** apply industry and technical experience, knowledge, resources and partner relationships to help you drive efficiencies, address issues, prepare for an organizational change and expand services to meet virtually every manufacturing challenge. We empower you to stay on the cutting edge of technology and discover the solutions that make the most sense for your organization.

CDW understands that manufacturers must manage people, processes and industrial assets using technology intentionally and strategically to support all. By effectively balancing these goals, manufacturing IT teams can create a high-performing organization that is well positioned to meet the challenges and opportunities of the future while maintaining operational assets to improve overall equipment efficiency (OEE).

In fact, the top two internal obstacles manufacturers face today are "attracting employees with desired skill sets" and "deploying and integrating new technology."<sup>1</sup>



Protection



Trust at scale

CDW Advisory Services

help with IT and OT

and engineers who

understand both IT

**Unmatched** expertise

are experienced in your

vertical and backed by

CDW's 1,200 solution

partners, 50+ partner

advisory boards and 20+ partner early field trials

Our manufacturing experts

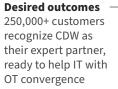
our consultants

and OT

convergence through

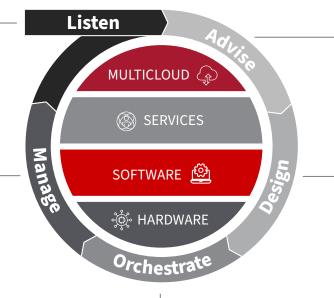
## Expertise

## Full stack. Full lifecycle. Full outcomes.



#### **Continuous operations**

- Operations centers with 24/7 support and monitoring are available in over 6 languages
- CDW Managed Services have an NPS 60+ score



Expertise

**Our Approach** 

#### **Proven quality**

- Delivery is available across 157 countries from over 1 million square feet of distribution space
- CDW Professional Services have an industry-leading NPS 70+ score

## Our approach

We understand that there's no one-size-fits-all approach. Your solution needs to be future-focused. As your organization grows, your digital transformation should remain seamlessly scalable. CDW experts help you mature and scale solutions that drive your business objectives without slowing down innovation.





#### Smart Manufacturing

Expertise

**Video Intelligence** 

**Our Process** 

lloT

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#### **Video Intelligence**

## **Get a Clear View of Your Operations**

#### Video intelligence technology

CDW's video intelligence technology enables you to be preventive and predictive, enabling a much quicker and more informed response — helping reduce risk, improve ROI and enhance efficiency.

Video intelligence technology combines cutting-edge video cameras with machine learning and analytics to provide you deeper insights into operations. With enhanced video intelligence, you can optimize processes, enhance quality and improve safety.

#### **Problem solving**

Rather than manually reviewing video to determine the cause of an issue, intelligent solutions can significantly decrease forensics time by querying for specific activities and employees. In fact, Agilent Technologies, a manufacturer of advanced solutions for laboratories, used video intelligence and AI to reduce their defect rate by 49% in less than four months.<sup>2</sup>

#### Safety

Video intelligence provides immediate automated analysis of what's happening in the moment and where it matters. Real-time insight can alert plant managers to an incident or accident as it unfolds on the factory floor, facilitating rapid intervention. The Indiana Safety and Health Achievement Recognition Program reports that after adopting a digital focus, production lines at its sites have seen a 70% reduction in the injury rate.<sup>3</sup>



reduction in injury rate on production lines was reported by the Indiana Safety and Health Achievement Recognition Program after adopting a digital focus

#### Security

IP-based video cameras strategically located throughout the plant and perimeter protect against unauthorized access. Image analytics identify and alert security personnel to visitors, employees and unknown individuals. Mobile access to video streams provides constant situational awareness for security personnel. This ensures a much higher level of security and a stream of data that can be used to predict threats before they occur.

#### Efficiency

Video intelligence can predict when critical equipment will require proactive maintenance, enabling your organization to handle it as scheduled downtime instead of incurring an unplanned outage or idling the production line or plant. Cameras also enable visual inspection of raw materials prior to production and verify quality, inventory and packing of finished goods for distribution.





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**Our Process** 

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#### **Video Intelligence**

## **How CDW Guides You Through the Process**

A thoughtful, well-designed approach to enhanced video intelligence is important to keep pace with evolving needs.

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Assess and evaluate the current state of the environment.



Develop a clear strategy for how video intelligence can deliver both security and business value.

Choose the most appropriate video management architecture and cameras.



Coordinate an end-to-end implementation to realize the vision of enhanced video intelligence.

Extend the value of video intelligence to more areas of operations. CDW experts will work closely with you to help identify your video intelligence needs and map your path to success.

- Explore the benefits from thermal, low-light or highresolution cameras and the features you need to meet your operational, safety and security goals.
- Integrate the video analytics you need, ranging from intelligent video search to real-time and predictive analytics to object, pattern, motion and facial recognition.
- Determine whether a cloud-based or on-premises system fits your needs and choose the system that integrates best with your other IT and OT systems. In addition, we help secure all your video data whether in flight or at rest wherever it's stored.
- Evaluate your existing network to identify potential trouble points and overall effectiveness. We ensure that you have the right switches, routers and security protocols for both the network and devices in place to support multiple Power over Ethernet devices and seamless real-time video streaming.





lloT

## **Get Valuable Insights Direct from Your Assets**

#### Industrial Internet of things (IIoT)

CDW's IIoT solutions help you monitor sensors, assets and systems that collect, exchange and analyze real-time insights for predictive maintenance, improved quality control, supply chain optimization and enhanced safety.

Expertise

AI, edge computing and digital twin technologies are accelerating IIoT transformation for enhanced efficiency, reduced costs and improved product quality. Are you getting everything you can from IIoT?

#### Increased efficiency and productivity

IIoT enables real-time monitoring and automation of manufacturing processes. Data from sensors and connected devices is analyzed to optimize production schedules, reduce downtime and enhance overall equipment efficiency.

#### **Predictive maintenance**

Data from IIoT devices can help monitor the health of machinery and equipment in real time, enabling predictive maintenance, minimizing unexpected breakdowns and downtime, and extending the lifespan of assets.

#### **Enhanced quality control**

IIoT enables continuous monitoring of production quality by collecting data at all stages of the manufacturing process. This data can help identify defects or variations in real time so remediation can be immediate.

#### Supply chain optimization

IIoT provides greater visibility into inventory, production and delivery. This helps manufacturers manage resources, reduce lead times and ensure timely delivery.

#### Improved safety and compliance

Workplace safety is improved by monitoring environmental conditions, equipment status and worker activities. With AI added, automated alerts and safety protocols can be triggered, reducing risk and ensuring compliance.

#### Collaboration

IIoT can facilitate real-time collaboration across organizational boundaries through a tightly integrated IT/OT process and data exchange.







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**CDW IIoT Solutions** 

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#### **CDW IIoT solutions**

CDW is established in IIoT deployment solutions within the manufacturing sector. With over 50 combined years in the OT manufacturing space, our experts understand the nuances of integrating automations with new and legacy manufacturing equipment.

Through our customized process, customer-centric approach and manufacturing industry expertise, CDW can help you find the perfect solutions for your unique needs and challenges.

- Condition-based monitoring to lower maintenance costs, improve asset performance and longevity, and maximize yield.
- **Prescriptive maintenance** to reduce repair costs, minimize downtime, maximize output and improve for mediation efficiency.
- **Operational efficiency** for improved automation, enhanced practitioner collaboration, and reduced manual data entry and errors.
- Asset performance optimization to maximize highvalue asset output balance, reliability, performance and cost.
- **Operational intelligence** to optimize systems for maximum KPI performance, quickly adjusting to changing conditions.



#### Transformation workshops

CDW's unique business-first approach to IIoT solutions helps you assess your business goals with transformation workshops, creating a roadmap to success before determining the IIoT products and services to best match your goals.



#### Cloud consulting

CDW Cloud Consulting can help future-proof your IIoT data solution with the expertise you need to map out a cloud strategy that prioritizes your needs and goals. We partner with 80+ industry-leading cloud vendors and offer recommendations that work with your OT requirements and budget.





#### Protection

## **Future-Proof Your Manufacturing Operations**

#### CDW 5D Security Assessment for Manufacturing

Operational systems and production lines are mission-critical for your organization. Historically, monitoring and securing these areas has been straightforward and outside the realm of IT. However, as digital tools proliferate from sensors to automation, new operational vulnerabilities are emerging. Is your manufacturing environment fully secure?

#### Clarify your risks, solidify your security

More than

76%

72% of attacks targeting OT originated from IT.<sup>4</sup> A popular vector for these attacks is IoT devices — where OT and IT processes meet. The responsibility for protecting against these threats is often passed between teams with little resolution. Only 12% of organizations say their IT and OT teams are aligned, and 39% say the relationship between the two teams on cybersecurity is "frictional."<sup>4</sup>

A 5D security assessment bridges this alignment gap and provides clarity into your infrastructure and risks. By identifying key vulnerabilities, CDW can help your organization plan for scalable, secure management.

The CDW 5D Security Assessment gives you a clear view into your organization's IIoT and OT risks and ensures your organization can protect against security threats for years to come.

of industrial operators say their organizations have experienced a cyberattack in their OT environment.<sup>4</sup>



#### Detection

Discovering your specific business requirements and assessing asset detection, data monitoring, event detection and asset inventory as well as identity and authentication control



#### Defense

Defending the future state of the organization, including a review of your adversity operations plan, incident recovery plan, rapid-response roundtable and a quarterly executive review

# CDW 5D

Security Assessment for Manufacturing

## Definition

Defining organizational roles and responsibilities, policies, alert thresholds, change management processes and a risk management plan, plus prioritization of assets and a financial impact analysis



#### Decision

Deciding on the tools and the planning and asset lifecycles, including a review of the organizational role assignments, training, an internal communication plan, network segmentation plan and tool selection



#### Deployment

Deploying tools and assets with a focus on segmentation, policy configuration and enforcement, analysis, and refinement



Expertise

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**Managed Services** 

### **Managed Services**

## Get Continuous Support from Our Experts

#### **CDW Managed Services for Manufacturing**

CDW offers ongoing support and managed services to maintain and optimize manufacturing infrastructure. This includes training for local and remote staff, proactive monitoring, and IIOT management — all while ensuring networks and systems are secure and efficient.

You can rest assured that your organization is continuously compliant and securely managed, so your team has the time needed to pursue priority initiatives. Boasting a robust team of certified experts, CDW can scale to satisfy the most demanding service-level agreements.

**CDW Managed Infrastructure Services.** CDW helps you scale your OT environment and infrastructure to improve productivity and elevate your production line.

**CDW Managed Security Services.** We help optimize your risk management strategy to better protect your data and brand.

**CDW Managed Cloud Services.** Our cloud-certified consultants, architects, engineers and Cloud Solutions Center simplify the complexities of cloud management.



## **Customer Success Story**

## Regaining 30% of a team's time for strategic initiatives

Briggs & Stratton, a leading manufacturing company, needed to free up internal staff from maintenance tasks so they could focus on moving the business forward. CDW delivered a managed services solution to support the company's infrastructure improvements. Now, 50% of its team's time is spent on strategic capabilities **up from 20%.** 



Expertise

## Make amazing happen.

#### Partner with the global experts in manufacturing solutions

With one of the largest technology partnership portfolios in the industry, CDW supports a wide array of technology choices along with the expertise to help you evaluate the solutions that will empower your organization.



Let us help you unlock new opportunities to enhance, optimize and future-proof your manufacturing operations. Contact your CDW Manufacturing account manager or visit <u>CDW.com/manufacturing</u>.

Sources:

<sup>1</sup> Rockwell Automation, "State of Smart Manufacturing Report," March 2024
<sup>2</sup> McKinsey, "How manufacturing's Lighthouses are capturing the full value of AI," April 9, 2024
<sup>3</sup> Structural Building Components Association, "AI Used to Mitigate Workplace Safety Hazards," April 2024
<sup>4</sup> Palo Alto Networks and ABI Research, "The State of OT Security," March 2024

