



NDIA June Manufacturing Division Virtual Meeting

SMART FACTORY TECHNOLOGY UPDATE: ICS/OT CYBERSECURITY

June 2021



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Let's discuss

- 01. Introduction
- 02. Infor in A&D
- 03. KOCH Co-Innovation
- 04. Dragos – ICS/OT Cybersecurity
- 05. The Smart Factory @ Wichita
- 06. Q&A



Dr. Risa Savold

Infor

VP of Industry Strategy
New York, NY



Ashok Kumar

Infor

Sr. Director - Industry 4.0
Novi, MI



Jon Lavender

Dragos, Inc.

Co-Founder &
Chief Technology Officer
Hanover MD



Michael Reynolds

Infor

Sr. Account Executive
Aerospace & Defense
Alpharetta, GA

INFOR AEROSPACE & DEFENSE

30 Years experience in Aerospace & Defense

A global cloud enterprise software leader

Offering business cloud software products for companies in industry specific markets

140

Global offices

NYC

headquarters

17k

employees

#3

Global ERP vendor

3.5M+

Cloud users

\$3.3B

Revenue



Raytheon



Armtec
DEFENSE TECHNOLOGIES



BAE SYSTEMS

Relativity



KONGSBERG

MOOG

emcore®



SAFRAN

CURTISS-
WRIGHT

flex

THALES



TRANS
DIGM
GROUP INC.

Long-term partner



Emerging Technologies and Disruption in A&D



Cloud



Cybersecurity



Augmented
Reality



Integrated
Enterprise



IIoT



Digital
Transformation



Analytics



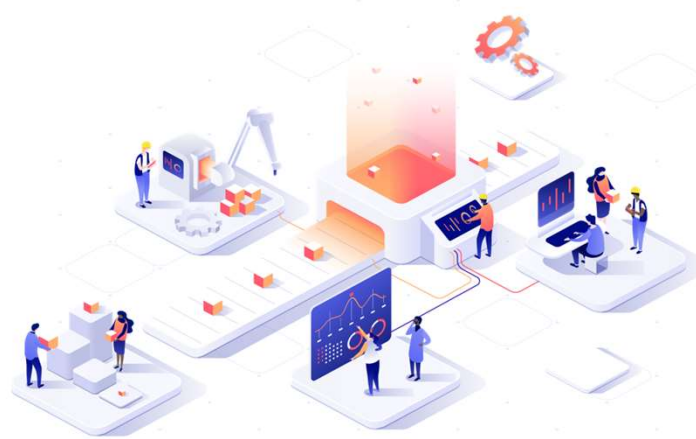
Edge
Technologies



Artificial
Intelligence



Automation



Defining the ways that progressive manufacturers have adopted technology as a core component of their operational strategies

Infor Architecture

EXTENSIBLE PRODUCTS & SERVICES

- No-code/ Low-code Application Development
- Legacy Application Integration
- Services Orchestration
- Sensor Integration

INFOR OS PLATFORM

- Self-service User Portal
- Unified User Experience
- Workflows/Alerts
- Federated Security
- Risk & Compliance
- Data Management
- Document Management
- Process Automation
- Integration PaaS

BUSINESS COLLABORATION & ANALYTICS

- Data Management
- Data Lake
- Business Intelligence & Reporting
- Advanced Analytics
- A.I. & Machine Learning

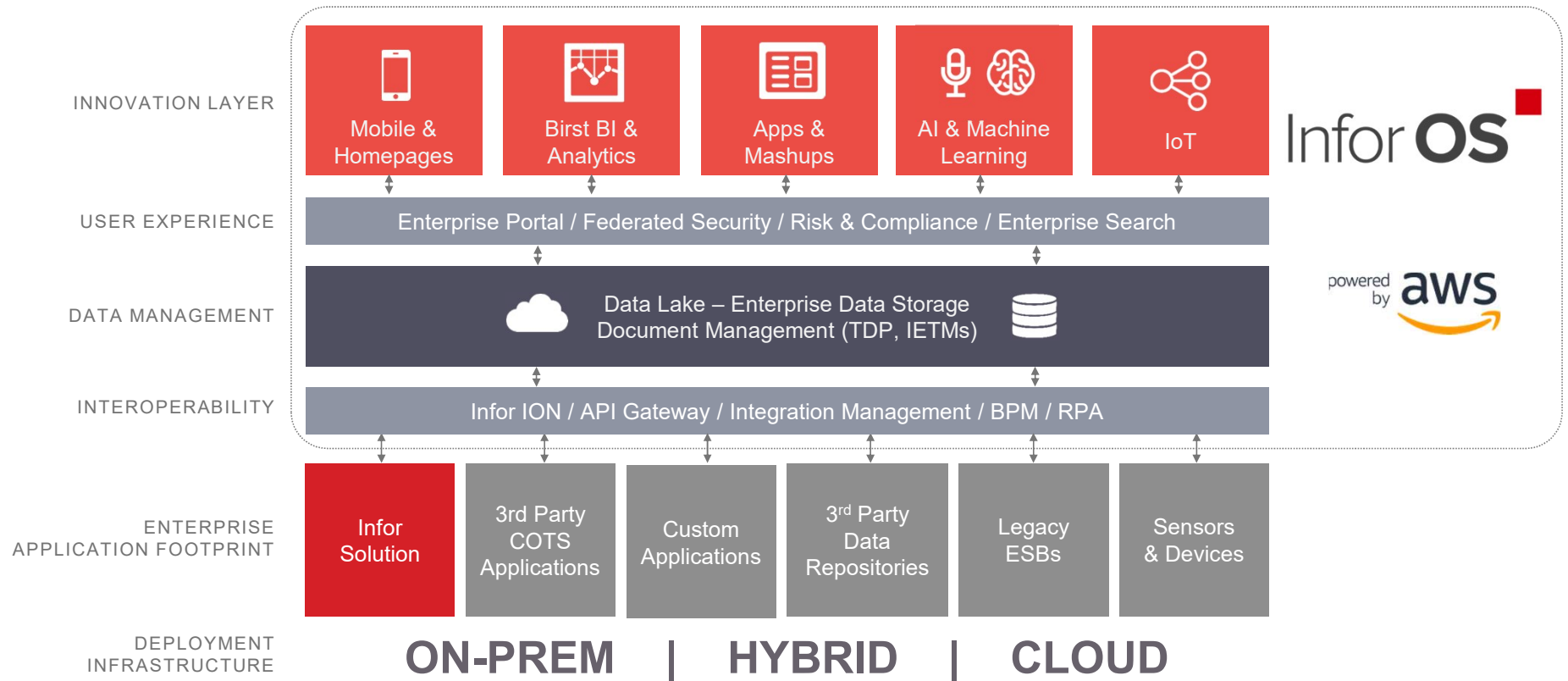
INFOR APPLICATIONS

- Financial Management
- Human Capital Management
- Workforce Management
- Asset Management
- Supply Chain Management
- Warehouse Management
- Manufacturing
- Product Lifecycle Management

AMAZON WEB SERVICES

- World-class IaaS / PaaS
- Elasticity on demand
- High availability and COOP
- FedRAMP-authorized

Infor OS – A Digital Gateway



Built on a leading Government Cloud platform



NIST



Amazon Web
Services GovCloud



Infor OS Platform

- Federated identity service
- Single sign-on
- Enterprise portal
- Role-based user access
- Risk & Compliance
- Secure Integration PaaS

AWS restricts physical and logical
admin access to US Persons

Infor restricts privileged access
to US Persons on US soil



Defense-in-Depth

- FedRAMP Moderate
- NIST SP 800-53/800-171
- CMMC Level 3 ready



True Multi-Tenant

- Rapid deployment & adoption
- **DevSecOps** automation
- Early ROI – fully integrated suite



Scalable

- Elastic storage & compute
- Predictable cost and performance

INFOR AEROSPACE & DEFENSE

Co-Innovation Ecosystem



**Koch Industries, Inc.
(KII)**



**Koch Disruptive Technologies
(KDT)**



Infor Partners & Clients



**Operational
Digital Twins**



IIOT connectivity



PERCEPTO
Drone-based
asset
inspection



**ICS/OT
cybersecurity**



Asset IDM



AR/VR



**KOLO™
Facilities
Management**



STRIDER
Cyber-espionage
solutions



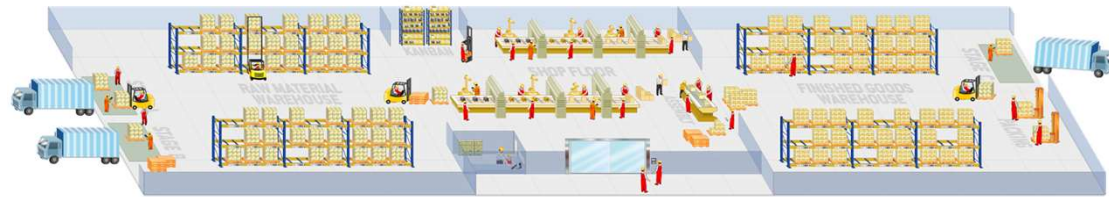
**IoT and 5G
deployment**



**Manufacturing
operations
analytics**



E2E Solution for Asset Management & Security



External
security threats

AR/VR devices

Production
tracking

ICS/OT last mile
connectivity

IoT-equipped assets

Asset and Process
monitoring

OT Operations Security

IoT Device Security

**Critical Asset
Security**

**Root cause
analysis**

**Pre-built analytic
content**

**Corrective
actions**

**Work order
automation**

Prescriptive AI models for each Asset type



Co-innovating to deliver an integrated end-to-end cybersecurity and enterprise asset management platform

- ✓ Command and control center
- ✓ IT/OT convergence
- ✓ Single pane of glass for all data
- ✓ Automated courses of action
- ✓ More efficient, risk-based maintenance
- ✓ Software-as-a-service solution

DRAGOS IS YOUR ALLY

- ✓ Comprehensive Technology
- ✓ Unique Threat Intelligence
- ✓ Expert-Guided Services



THE DRAGOS PLATFORM

ICS/OT cybersecurity technology for comprehensive asset visibility, threat detection and response



ICS/OT SECURITY SERVICES

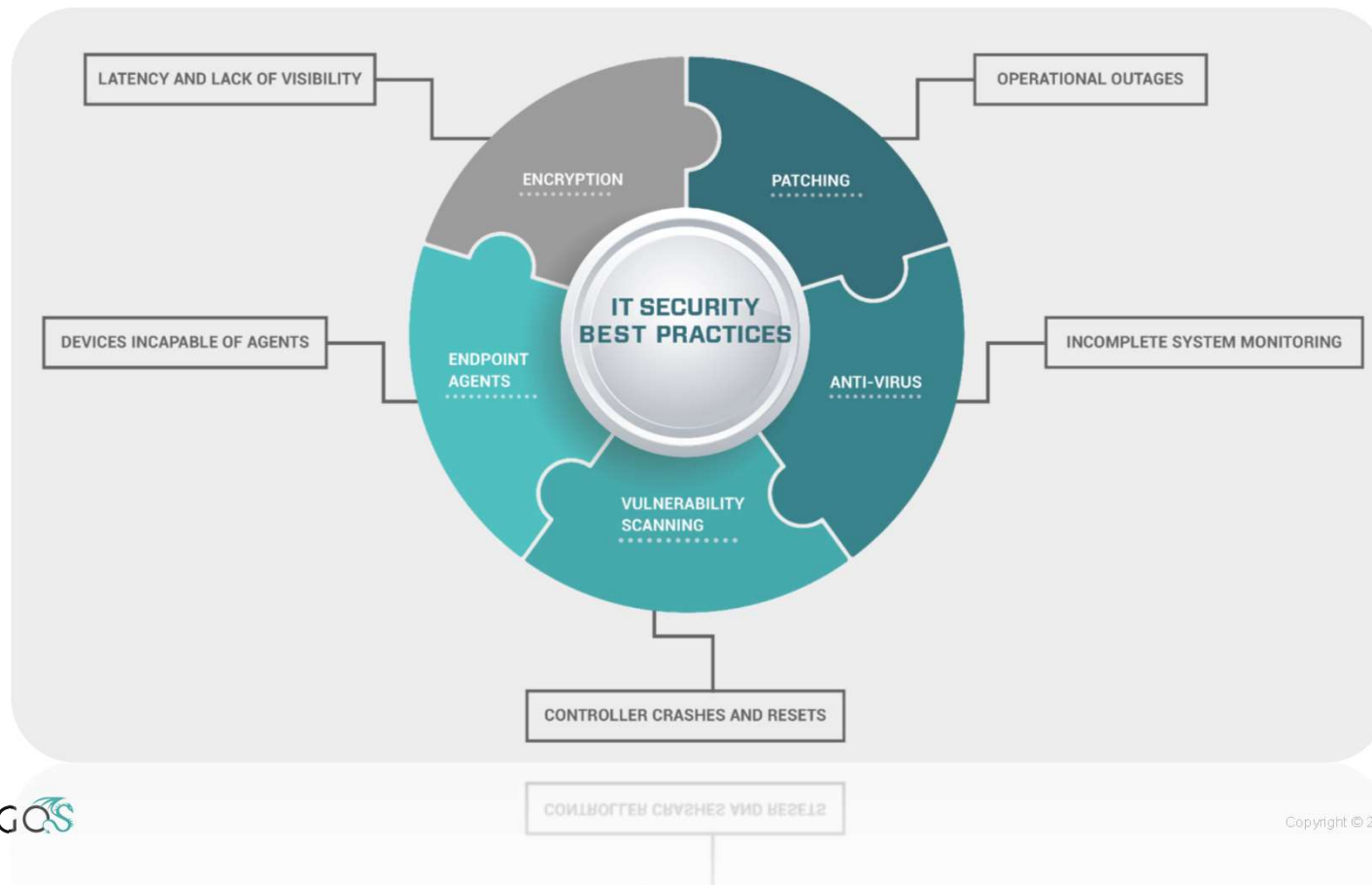
Expert guidance to combat and respond to adversaries via incident response, proactive services, and training



WORLDVIEW THREAT INTELLIGENCE

In-depth situational awareness of the threat landscape via actionable insights and intelligence reports

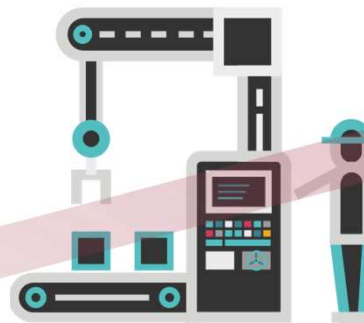
OT cybersecurity is different than IT cybersecurity



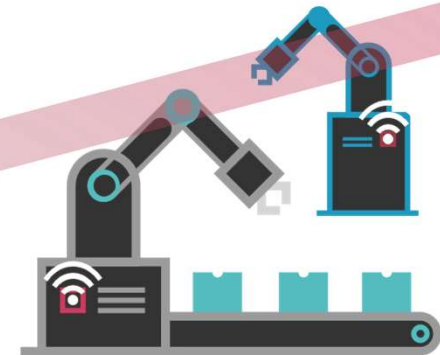
Digital transformation of Industrial Control Systems



STAND-ALONE
3rd INDUSTRIAL REVOLUTION



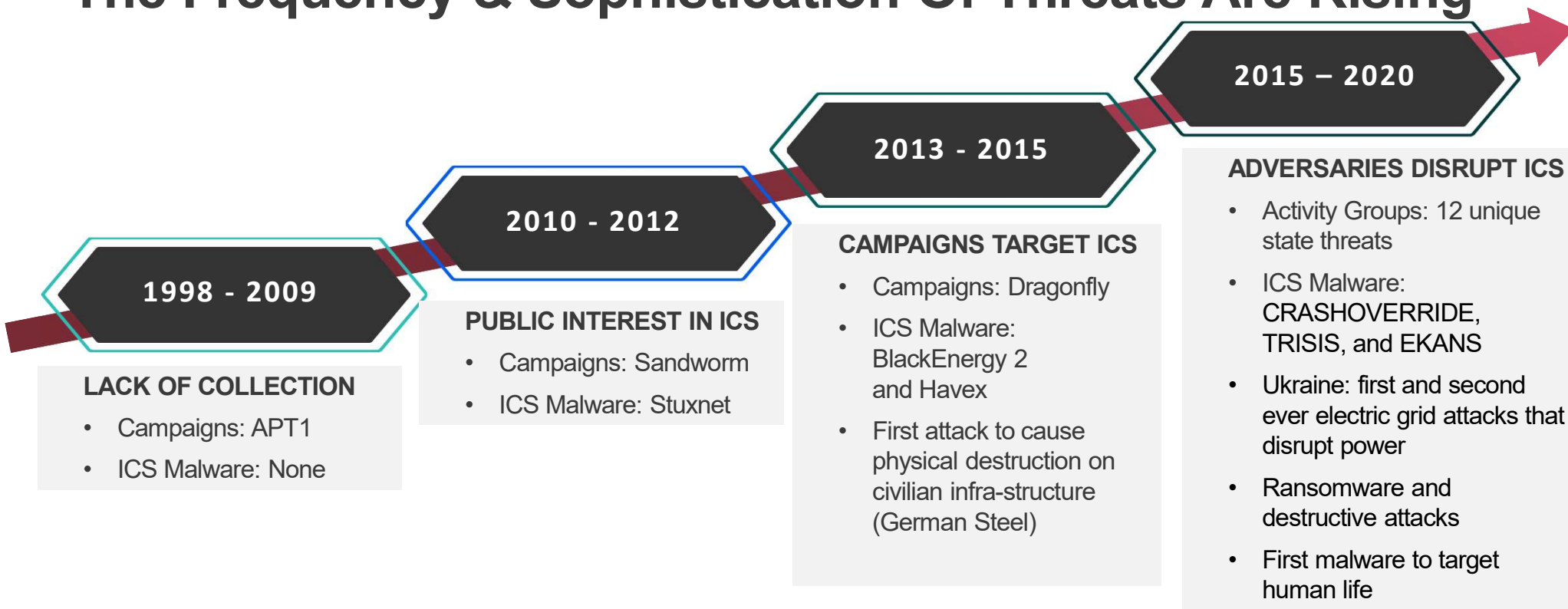
LOOSELY CONNECTED
DCS | SCADA



HIGHLY CONNECTED
4th INDUSTRIAL REVOLUTION

RISK

The Frequency & Sophistication Of Threats Are Rising



Top industrial cybersecurity challenges



ASSET VISIBILITY

What's on my network?
How has it changed over time?



THREAT DETECTION

Am I compromised?
What do I do about it?



VULNERABILITIES

Are my systems vulnerable?
Which ones do I address first?



IT-OT CYBER GAP

How do we do this together?
Who should I partner with?

INFOR AEROSPACE & DEFENSE

Case Study: INVISTA, a Koch Industries, Inc. Company

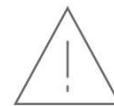
A Secure Digital Transformation Journey



Visibility and Understanding of
Process Control Environment



Awareness of the Threat and
Capabilities to Detect Them



Position themselves to be able to
Recover Quickly and Confidently in
the Event of an Incident

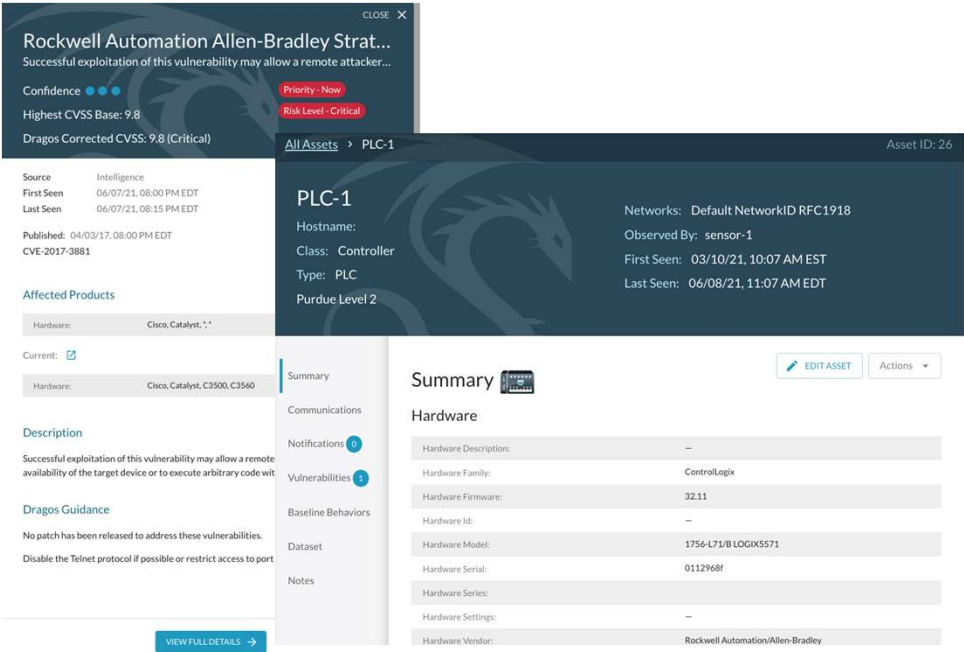
E2E Solution for Asset Management & Security



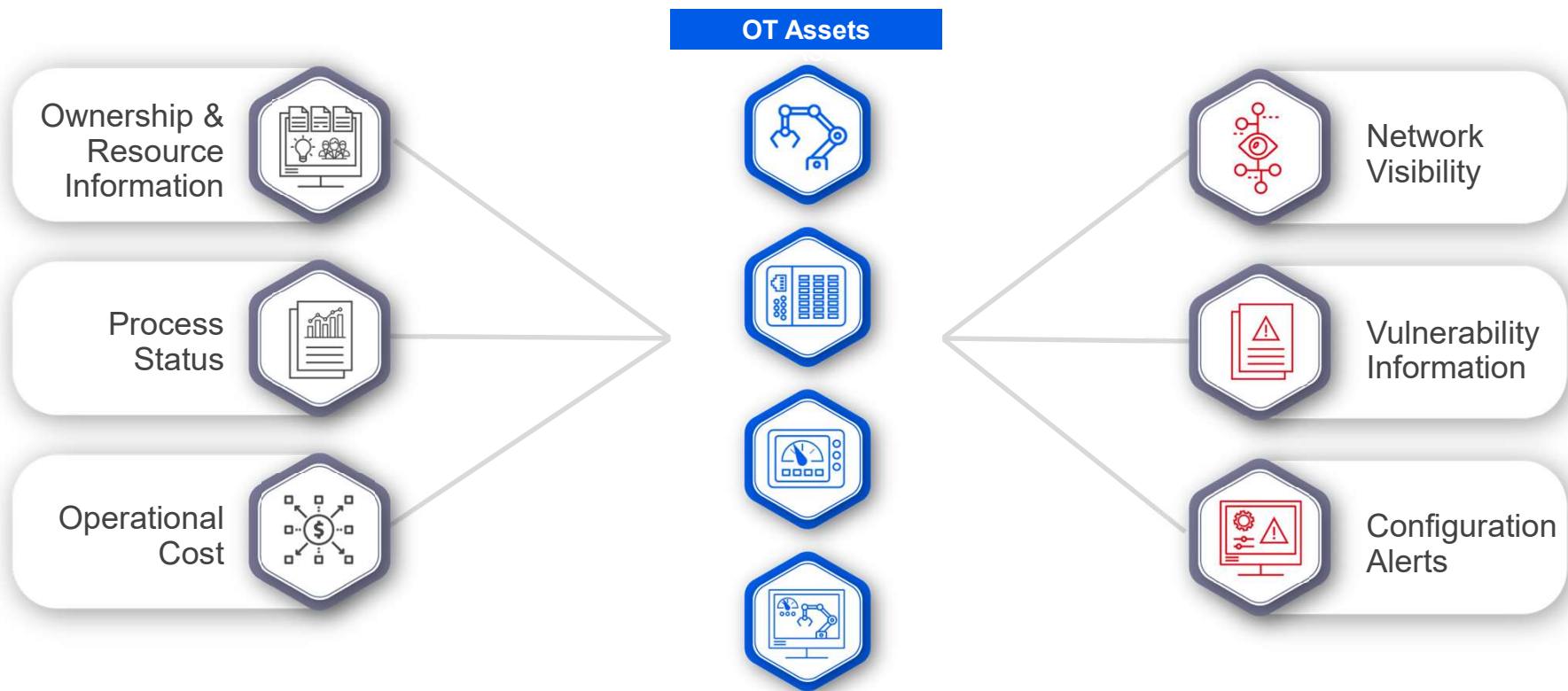
Asset IDM



Dragos Platform



E2E Solution for Asset Management & Security



The Smart Factory @ Wichita

...a place where digital, physical, and experimental worlds merge to showcase advanced manufacturing methods and technologies at the heart of digital transformation.

Opening Mid-September 2021

- 60,000 sq. ft. sustainable space
- Net zero smart building / grid

Evolving use cases and technologies

- Changing every 90-120 days

Curated experience

- Technology, use cases, and digital transformation stage
- Immersive demonstrations
- Design thinking focused workshops

Key Alliances & Founding Sponsors



The Smart Factory @ Wichita: Smart Factory Use Cases

Engineering Collaboration / Digital Twin

Utilizing product performance data to improve design, engineering, and production
Specification Adjustment

Smart Conveyance

Enhancing warehouse material transfers using digital orders and autonomous vehicles
Autonomous Vehicles

Smart Warehousing Solutions

Automating warehouse operations by analyzing inventory distribution and use rates
Warehouse Management System

Plant Consumption and Energy Management

Leveraging contextual data to optimize energy usage and reduce overhead costs
Asset Auto-Idle

Factory Asset Intelligence / Performance Management

Applying data science tools to provide insights around optimizing factory floor operations
Plant / Control Tower

Quality Sensing and Detection

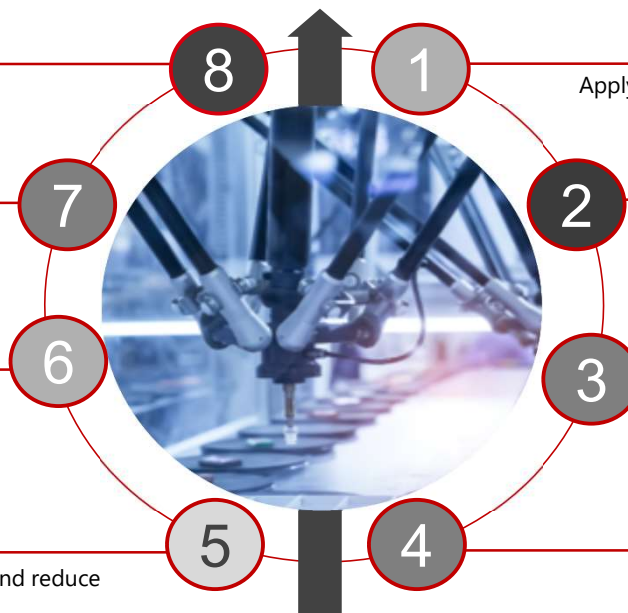
Preventing quality issues real time while reducing the need for human quality inspections
Predictive Quality Analysis Tools

Factory Synchronization and Dynamic Scheduling

Coordinating scarce factory resources for optimized manufacturing and operational activities
Asset Location Tracking

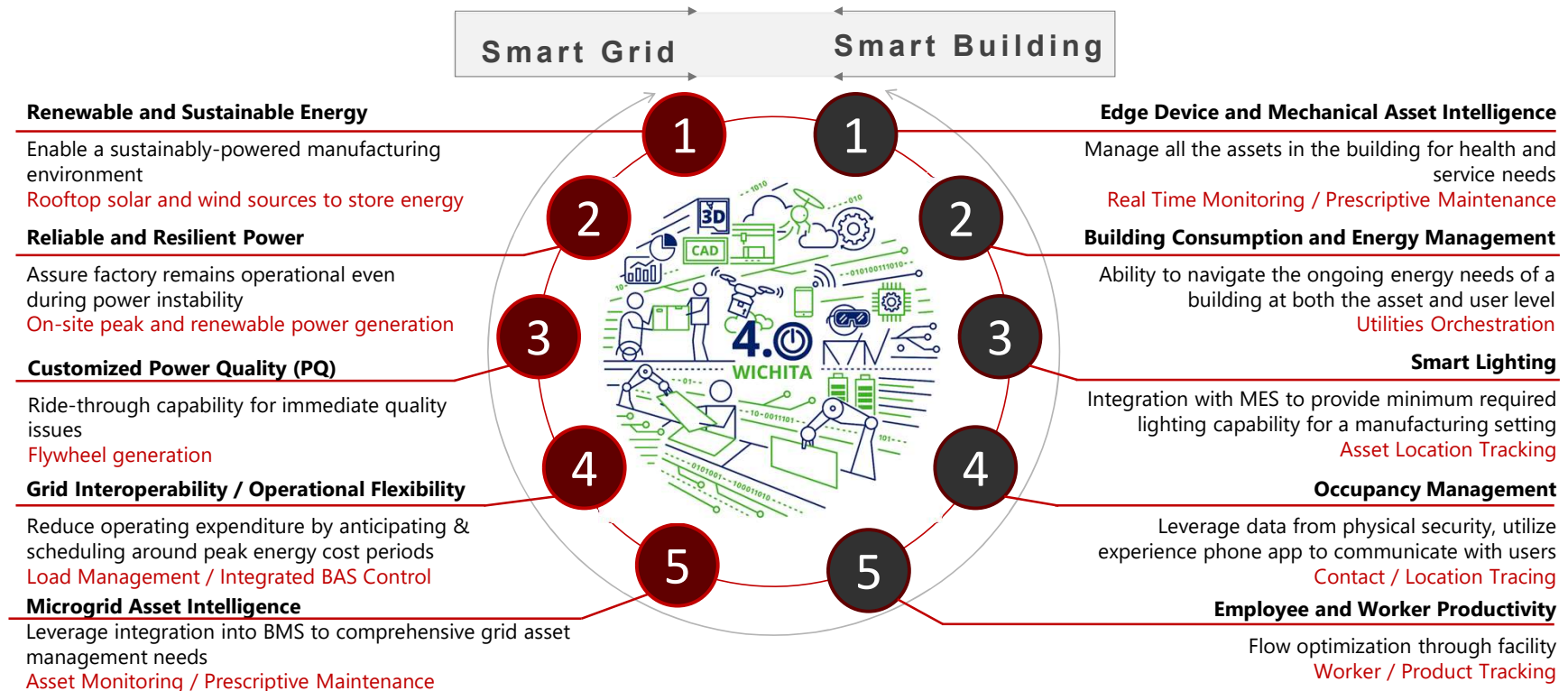
Augmented Workforce Efficiency

Improving workforce efficiency through enhanced technologies and equipment
AR / VR Workforce Training



Infor and Dragos are Founding Sponsors of TSF@W with Deloitte

Smart Grid and Building Use Cases at The Smart Factory @ Wichita



Infor and Dragos are Founding Sponsors of TSF@W with Deloitte

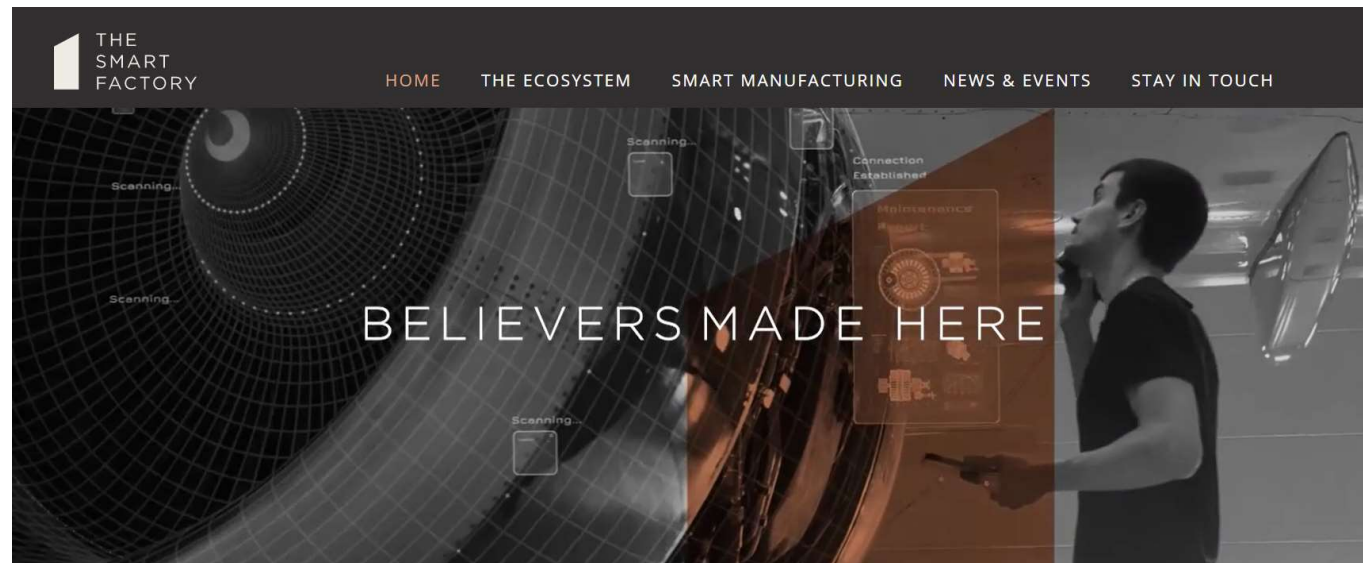
Next steps

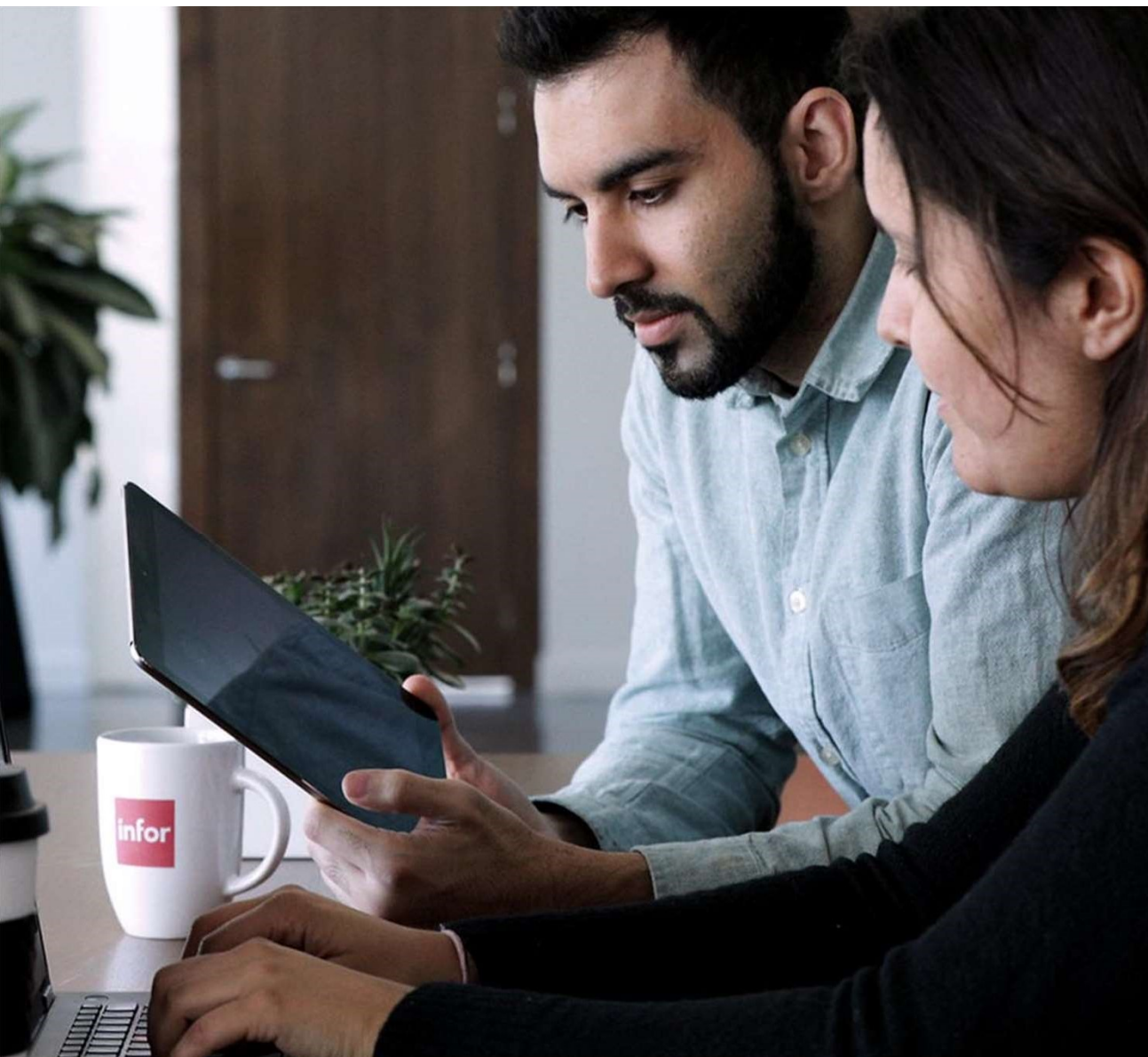
The Smart Factory @ Wichita Tours ...

- The craft of the probable
- A groundbreaking, immersive learning environment with simulations that solve real business problems
- Seeing is believing ...

Co-Innovation with Infor and Dragos...

- Exploring partnership potential
- Business outcomes
- Technology Assessment and joint solutioning
- 2-Day Workshop





INFOR AEROSPACE & DEFENSE

Thank you

Infor is a global leader in business
cloud software specialized by industry.

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