ptc

LIVEWORX

A NEW ERA IN PRODUCT LIFECYCLE INNOVATION

FROM PILOT PURGATORY TO INDUSTRY 4.0: INDUSTRIAL CONNECTIVITY HAS NEVER BEEN SO EASY

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DIGITALLY TRANSFORMING YOUR ENTERPRISE CAN PROVIDE MANY BENEFITS

Streamlined process flows

for enhanced operational efficiency

Enhanced staff experiences

with greater visibility and control of machines and operations

Benefits of Digital Transformation

Converged IT and OT

for more insight across machines up to the enterprise

Reduced costs

with more control of supply chain, machine performance and downtime, and operations

Improved customer experience

with higher quality control and improved production

BUT IMPLEMENTATION IS COMPLEX, COSTLY, AND CAN DISRUPT THE FACTORY'S OPERATIONS

IT and OT is siloed; factory is not positioned to handle changes without disruption to operations

Comprised of many disparate machine types with different programmer interfaces

Abysmal cross-machine and cross-factory communication

Only basic data utilization

Different automation equipment protocols and proprietary software that are not interoperable

Manufacturing enterprise today

THERE IS A HUGE OPPORTUNITY FOR ENTERPRISES TO BENEFIT FROM LOCAL PROJECT-BASED DATA

Valuable machine data can be used not only locally, but across the enterprise for greater decision-making insights, improved operational control and efficiency, and new business opportunities with IT and OT convergence

SaaS

Cloud Server

Machinery

IoT Sensors

Computer monitor access

Machine Vision

Factory to factory communication

Enterprise-level IT/OT access across facilities
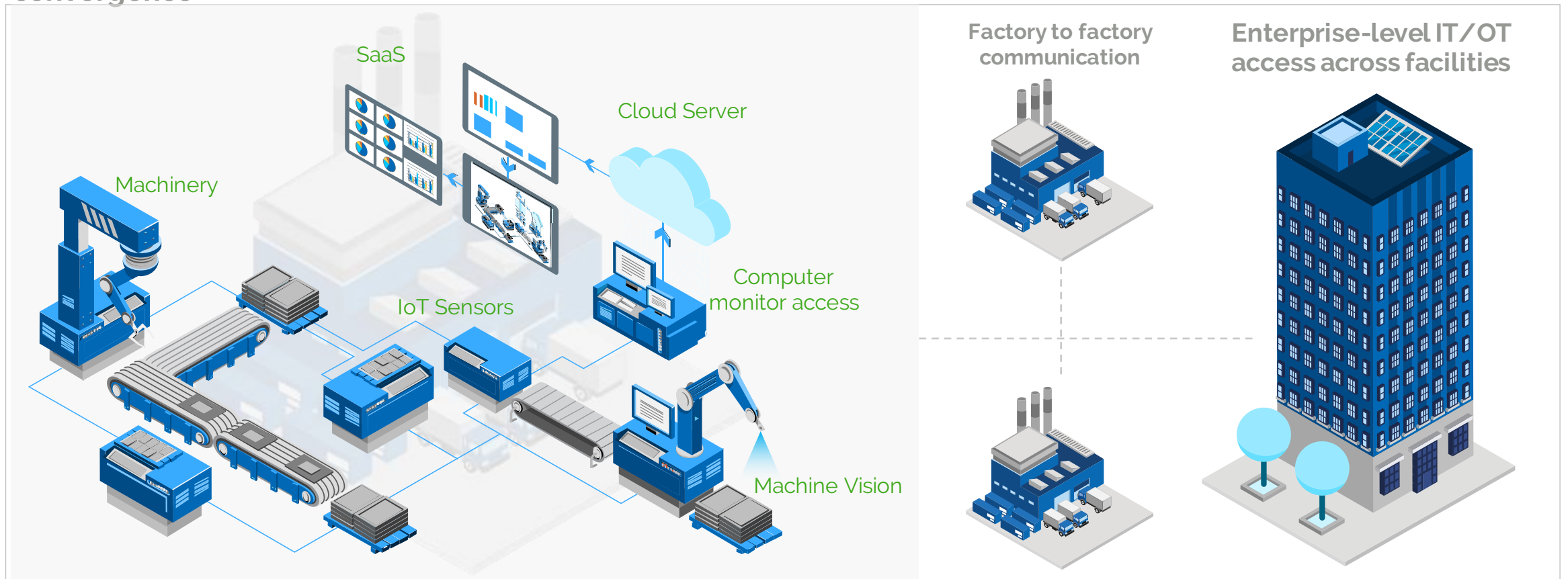
TOGETHER, WE'RE STREAMLINING DIGITAL TRANSFORMATION IMPLEMENTATION
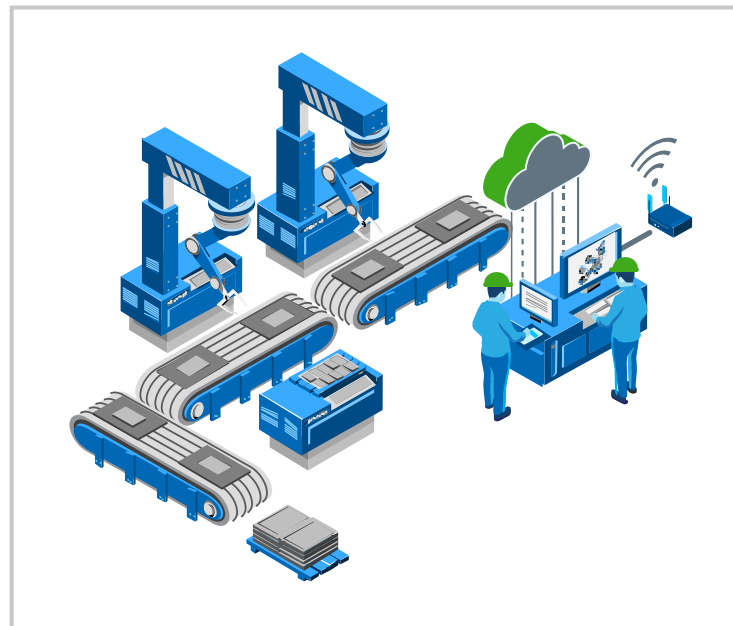
Bringing industry experts with proven solutions

Our growing partner network has the experience to understand your use case needs and solve them with high quality solutions.
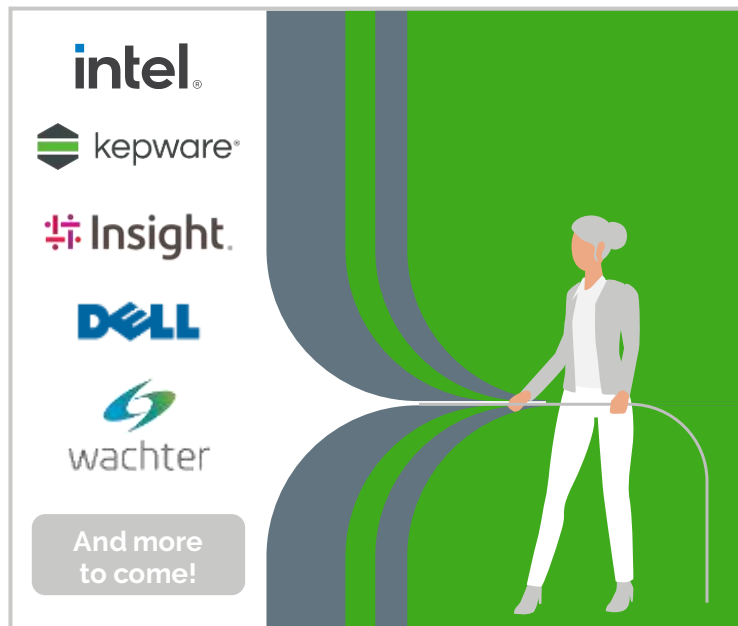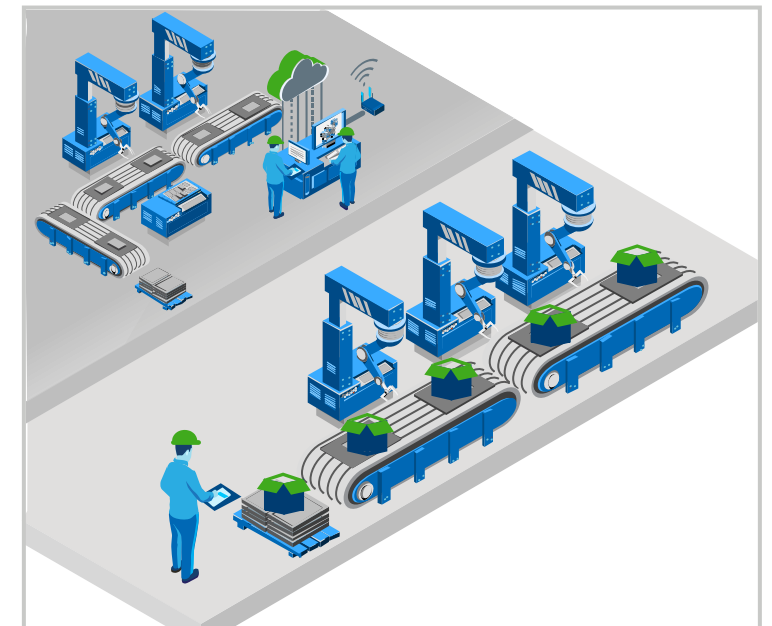
Implementing a tailored solution for you that addresses your needs

Our partners will work together to implement a seamless, cohesive solution.

With as minimal disruption to the factory as possible

So that you can continue your operations while we work in the background for you.

intel®

kepware®

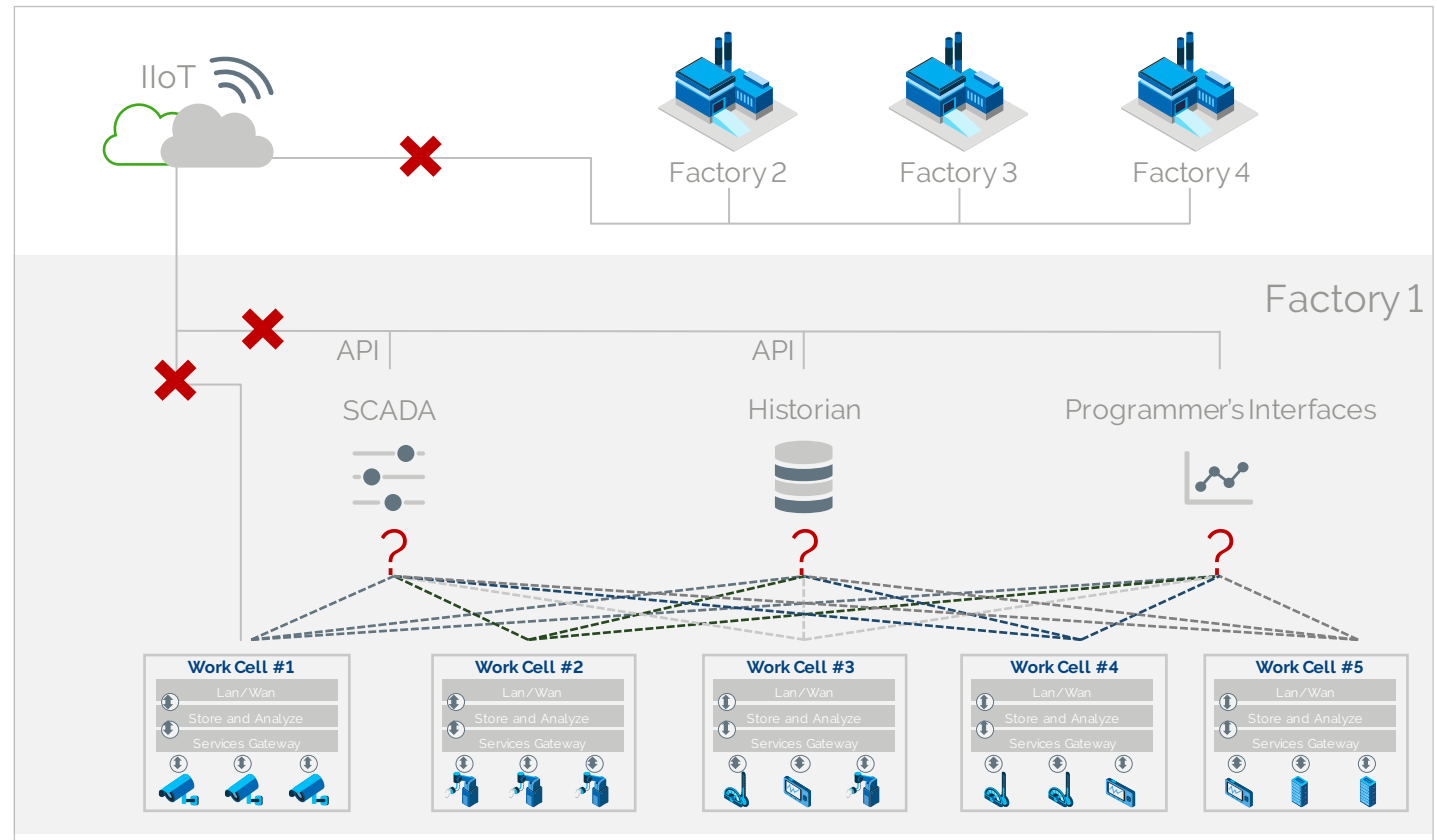Insight.

DELL

wachter

And more to come!

THE DATA CHALLENGE: INDUSTRIAL COMPONENTS SPEAK MANY LANGUAGES

Today's factory systems and components use many disparate protocols to share data, making it complex and tedious to transform cross-factory data into actionable insights

Challenges and hurdles of creating a foundation for digital transformation

- Machines lack interoperability; designed to operate in siloed data constructions

- Unique encryption and decryption standards

- Machines have proprietary protocols and software

- Communication between operational cells and across factory plants and up to the top enterprise level is extremely challenging and costly

KEPWARE: THE FOUNDATION FOR HARMONIZING YOUR DATA

Kepware makes it easy to connect, understand and analyze data from all systems across the factory floor, and even across factory locations — to generate fast, actionable insights to automate and improve all aspects of operations.

Kepware
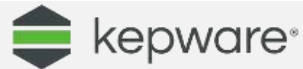
- Provides the foundational interfacing software for cross-machine and cross-factory communication

- Unlocks decryption/encryption access across facility systems

- Kepware has a library of 150+ drivers – unlocking equipment protocols with a universal translator

- Enables interoperation between siloed machines

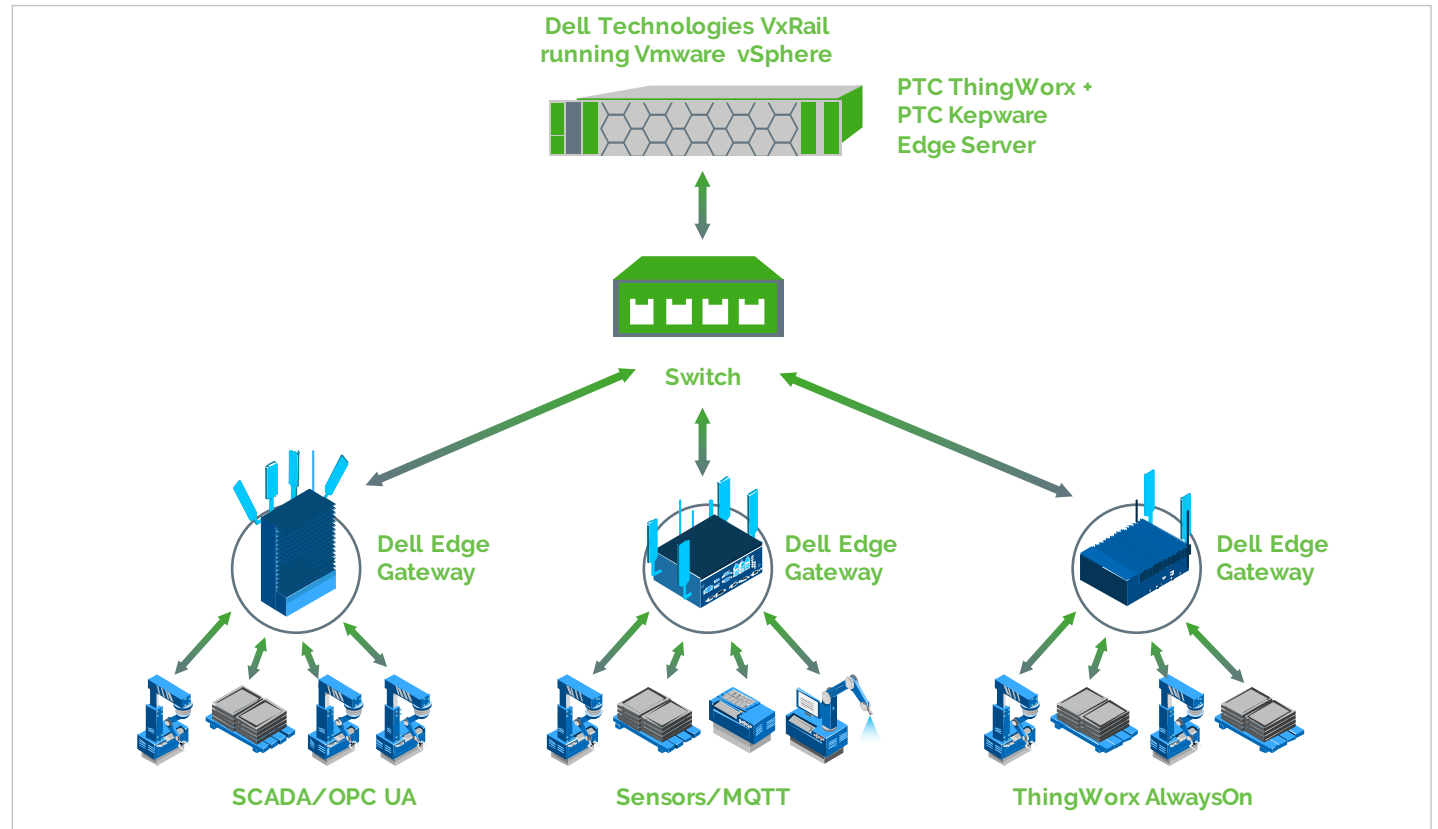- Future proofs any new advancements in your factory floors
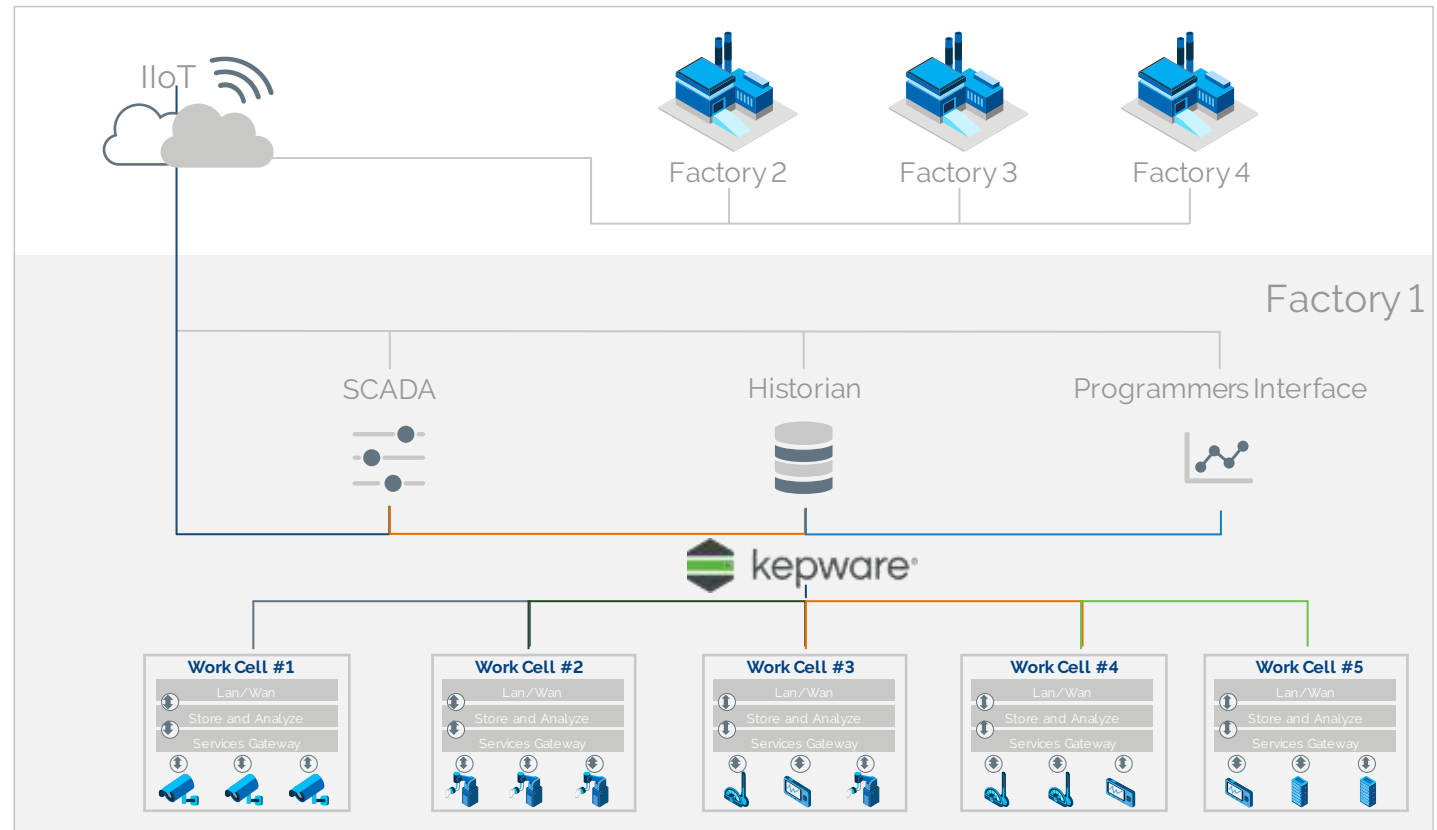
DELL'S ENTERPRISE EDGE SOLUTIONS PROVIDE BEST-IN-CLASS BUILDING BLOCKS AND INFRASTRUCTURE FOR YOUR NEEDS

Dell's gateway offerings provides manufacturers with faster insights close to the source, when needed, for a more empowered manufacturing facility

Dell

- Deliver near-real time insights by collecting and processing data closer to the endpoint for quicker decision making

- Provides decentralized computing infrastructure with enhanced security and processing speeds

- Offers modular elements to work around your use case needs

Dell Technologies VxRail running Vmware vSphere

PTC ThingWorx + PTC Kepware Edge Server

Switch

Dell Edge Gateway

Dell Edge Gateway

Dell Edge Gateway

SCADA/OPC UA

Sensors/MQTT

ThingWorx AlwaysOn

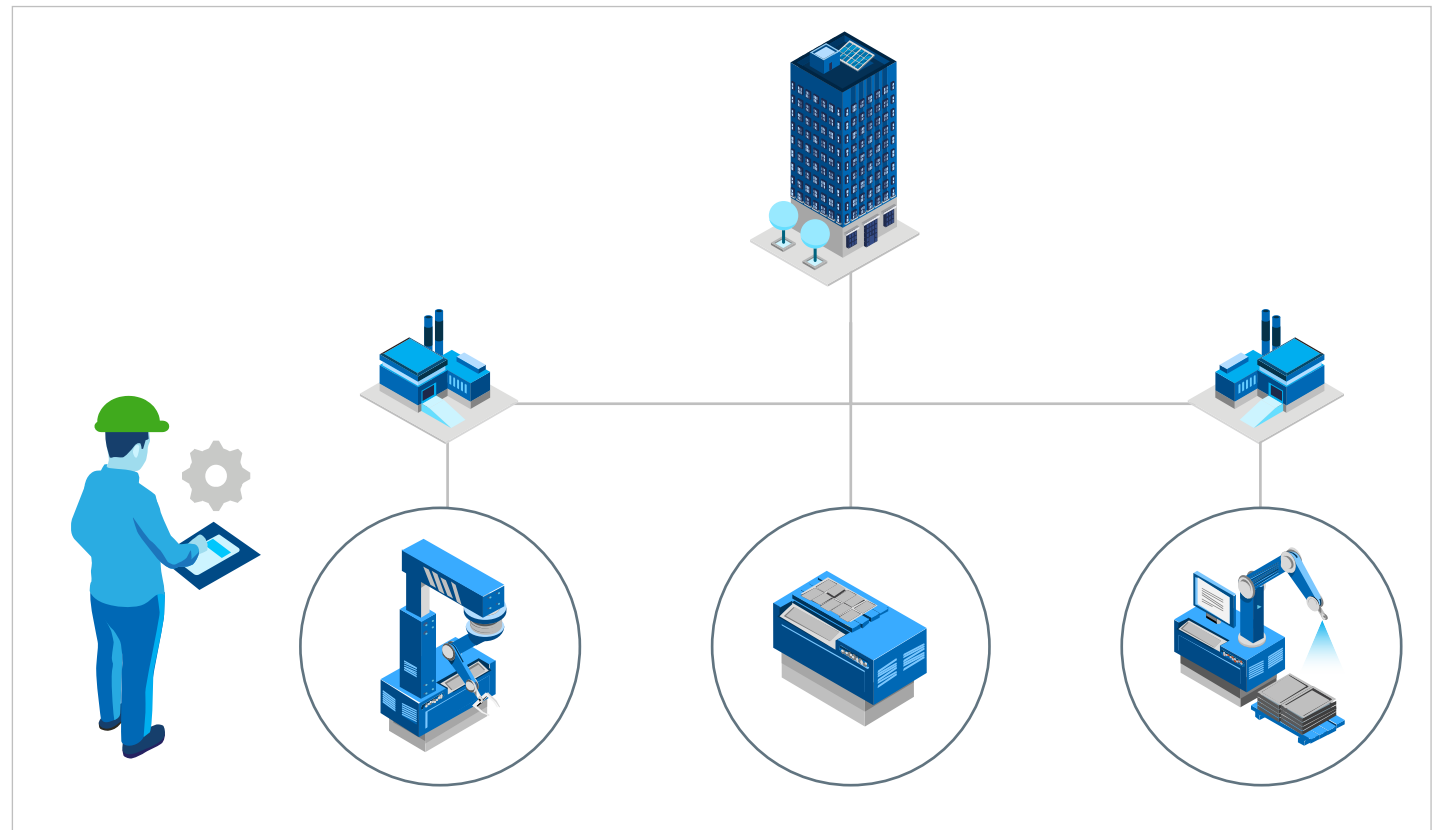Learn more about Dell Manufacturing Edge Solutions

WACHTER OPTIMIZES YOUR OPERATIONS AND MAXIMIZES UTILIZATION ACROSS EVERY FACILITY POINT

Wachter OT technicians are on the plant floor analyzing and assessing the optimal development strategy and ways to utilize your machinery and data

Wachter

- Operational Technology Systems Integrator
- Provides consultation and implementation services, as well as best practice expertise
- Develops instrumentation and networking strategies
- Brings disparate controls together to correlate disparate data
- Provides post implementation support and services
- Maximizes data utilization from machines and hands off to Insight for analysis and visualization

Learn more about Wachter solutions for manufacturing

INSIGHT DELIVERS SMOOTH END USER EXPERIENCES

Insight's deep IT expertise helps manufacturers manage and navigate the growing amounts of data from endpoints with a seamless user experience
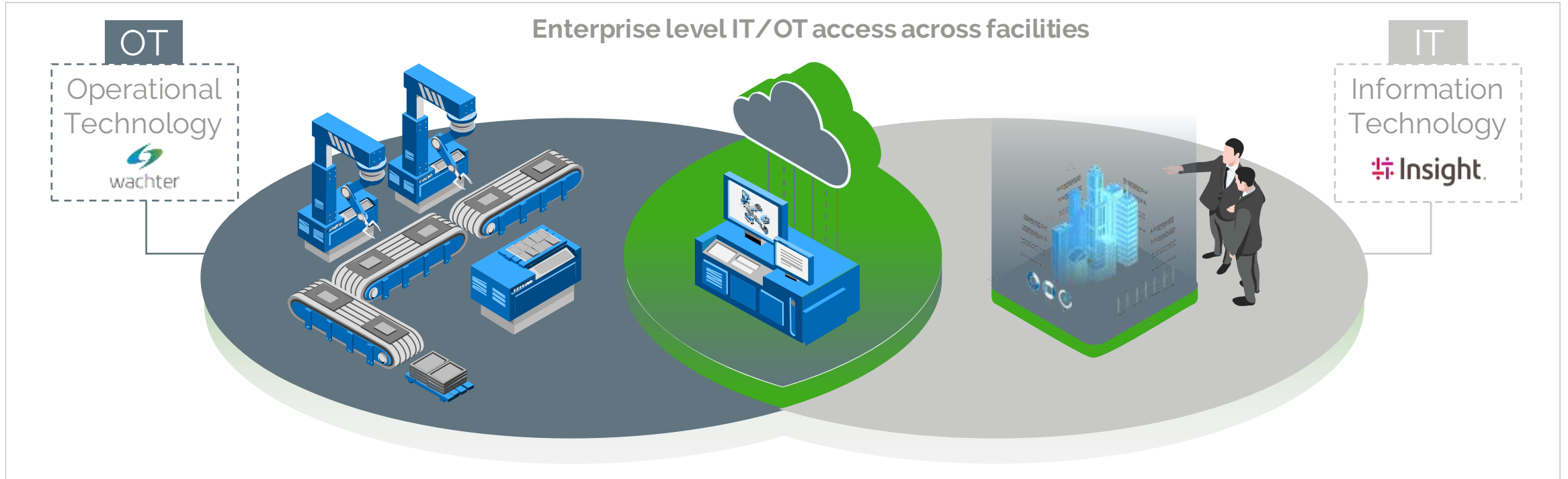
Insight

- Delivers a holistic data management and visualization experience

- Manages information technology infrastructure

- Empowers users with insights and analytics with an easy-to-use dashboards

- Provides data visualization at various altitudes, enabling management with better decision-making insights

- Offers post implementation and data management services

Learn more about Insight solutions for manufacturing

WACHTER AND INSIGHT ARE BRIDGING IT AND OT TO CREATE A MORE CONNECTED FACTORY

OT

Operational Technology

wachter

Enterprise level IT/OT access across facilities

IT

Information Technology

Insight

IT/OT convergence helps enterprises

Address broader and deeper aspects of their business through data driven insights

Reduce costs, downtime, and bottlenecks in supply chain

Enable scalable solutions across facilities

INTEL'S MANUFACTURING EXPERIENCE ENABLES US TO SHARE OUR EXPERTISE TO HELP YOU IN YOUR JOURNEY

From the sensor to the edge to the cloud, Intel delivers a wide range of resources and compute to enable intelligent solutions for your use case needs

As a manufacturer ourselves

We understand the challenges of elevating your manufacturing technology infrastructure. We have the experience to help you in your digital transformation journey. Along with our product portfolio, we are providing:

Intel Advisory

- Leadership guidance and support
- Capitalize on…
  – Research and development
  – Best in class manufacturing processes and quality, along with..
  – World class global supply chain management
  – Sustainability

Intel and partners
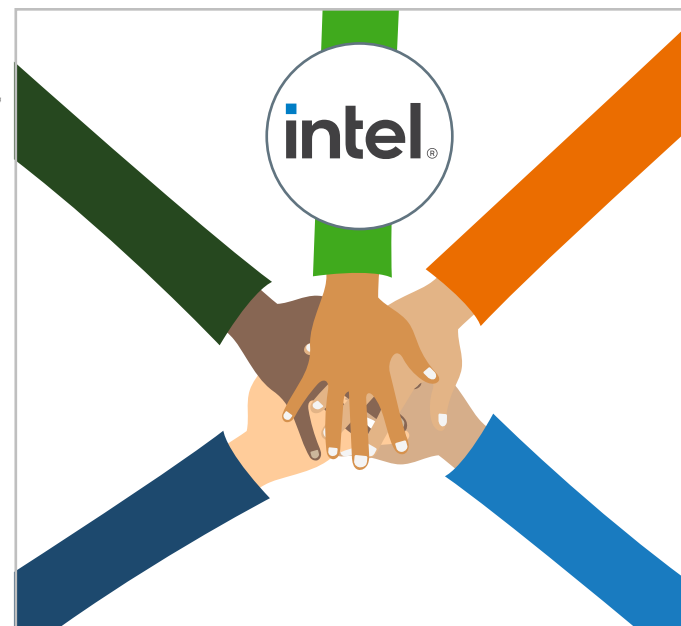
And more partners to come…

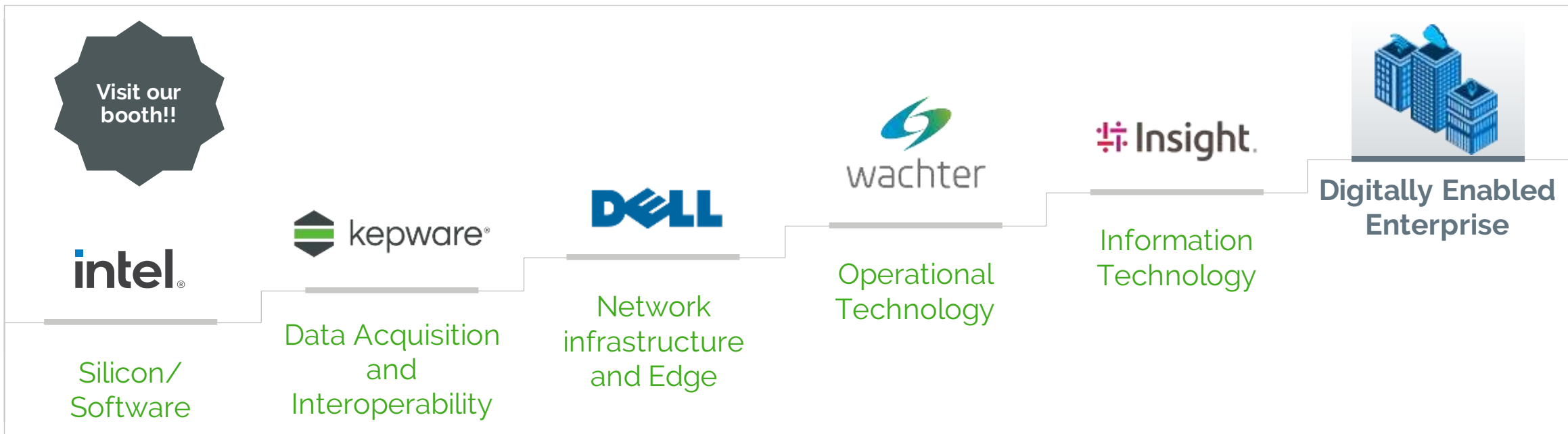## HOW CAN WE HELP YOU IN YOUR DIGITAL TRANSFORMATION JOURNEY?

Step One: Discuss your business needs, objectives, and challenges. What are your current pain points?

Step Two: We assess your infrastructure, OT and IT systems, machinery, and current technologies.

Step Three: We begin creating a blueprint to your digital transformation journey.

OUR COALITION HAS THE EXPERTISE AND EXPERIENCE TO CONNECT YOUR FACILITIES TO THE ENTERPRISE

Visit our booth!!

intel

kepware

D&LL

wachter

Insight

Digitally Enabled Enterprise

Silicon/ Software

Data Acquisition and Interoperability

Network infrastructure and Edge

Operational Technology

Information Technology

Industry experts

Proven solutions

Simplifying transformation

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