

Utilities: 3 Essential Actions for CIOs to Enable Intelligent Operations

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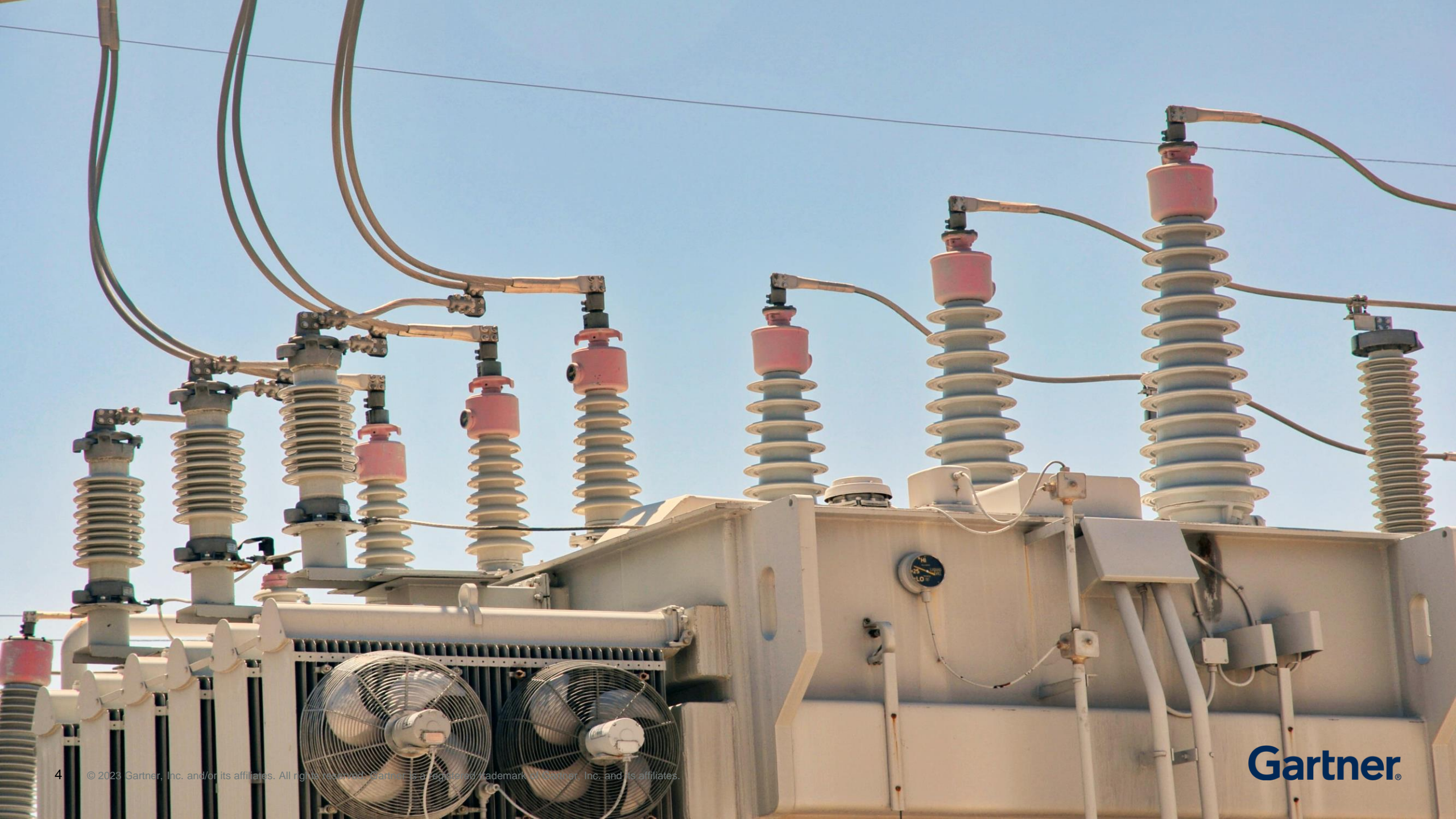
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We All Have Legacy “Brownfield” Assets



But We Are Already Deploying Intelligent Assets







**As assets become intelligent
... how will we operate them?**

3 Essential Actions

1. Adjust your asset technology strategy.
2. (Re)design asset capabilities.
3. Reposition technology for intelligent operations.

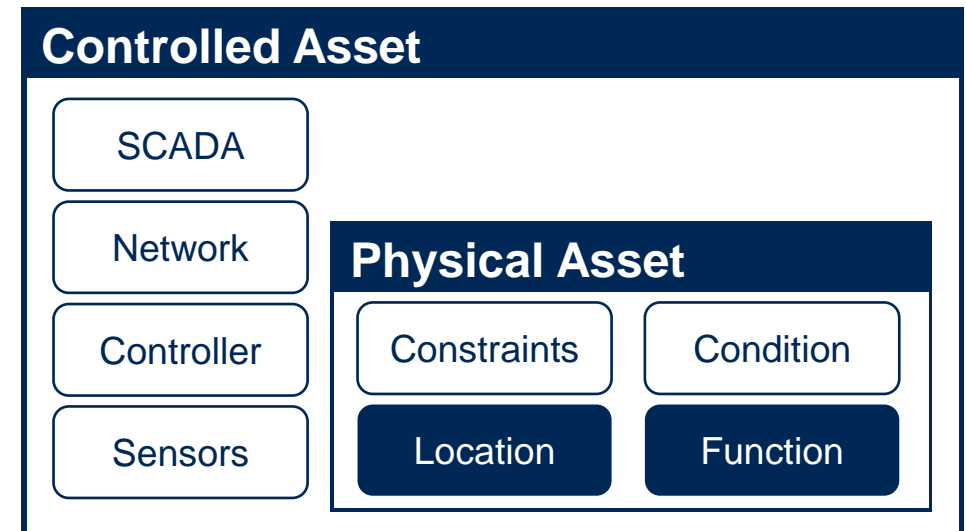
Reduce OT Asset Risk

1

Asset Management of Secondary Plant

- Manage Operating Envelopes
- Version Manage Configurations
- CMDB of Code Base of the PLC
- Relationships of Sensor to Asset

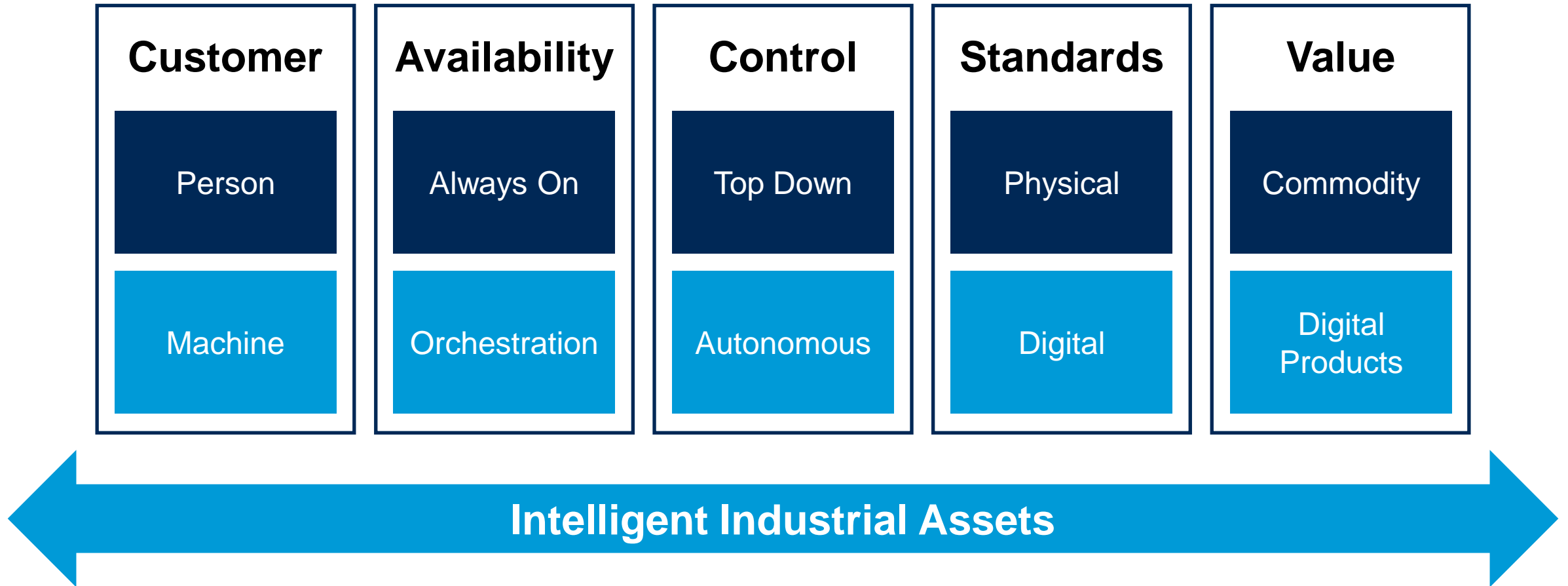
Asset Management of Primary Assets



SCADA = Supervisory Control and Data Acquisition

Digital-Enabled Changes

1





Intelligent Industrial Assets

Virtualize the underlying hardware capabilities.

New Asset Capabilities

1



Multivalue

- Reliability
- Efficiency
- Revenue



Adaptable

- Hyperautomated
- Connected
- Smart Contracts



Lean and Fast

- Cyber-Physical
- AI-Driven
- Advantaged IP



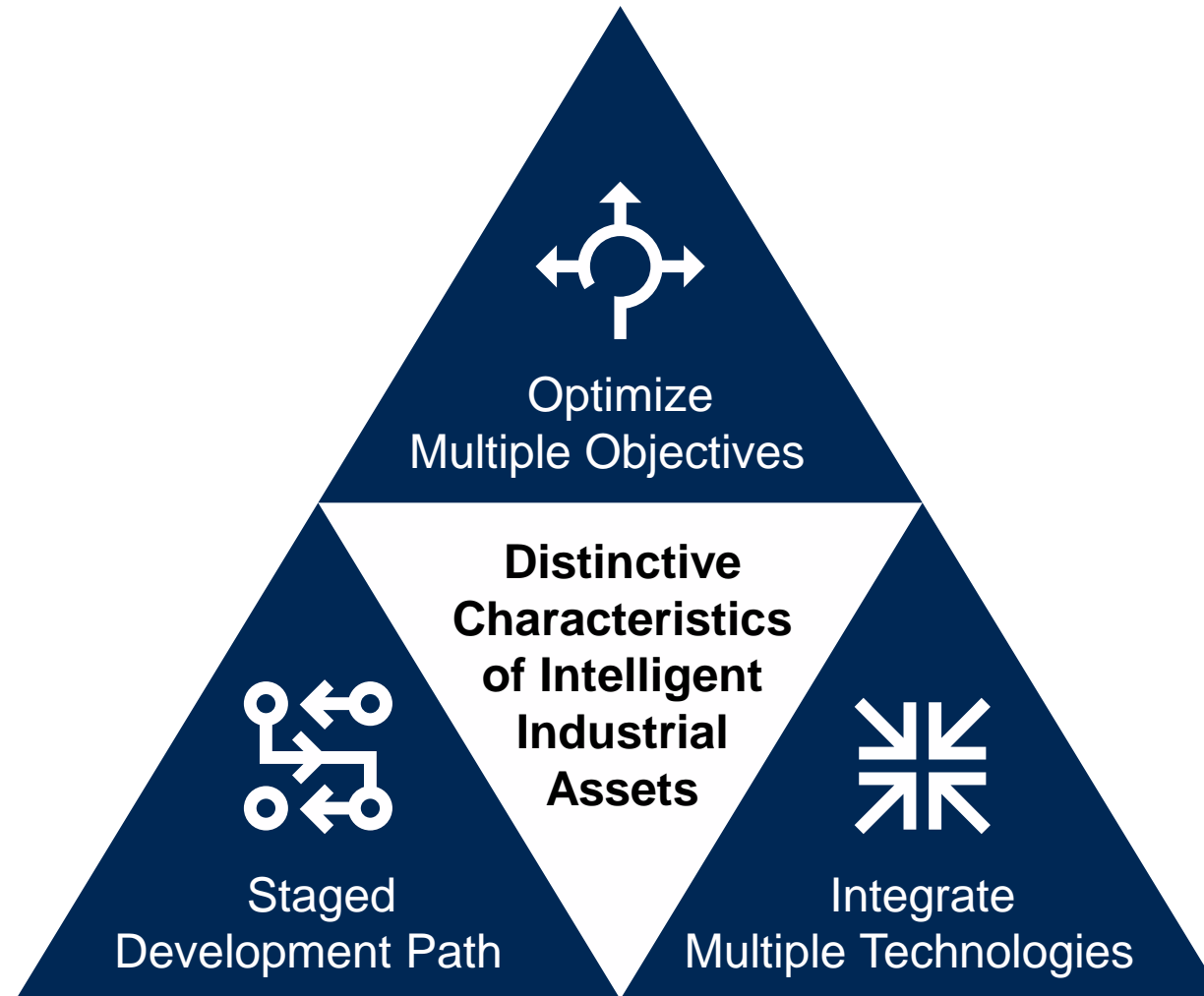
Full Life Cycle

- Upgradable
- Composable
- Low Cost

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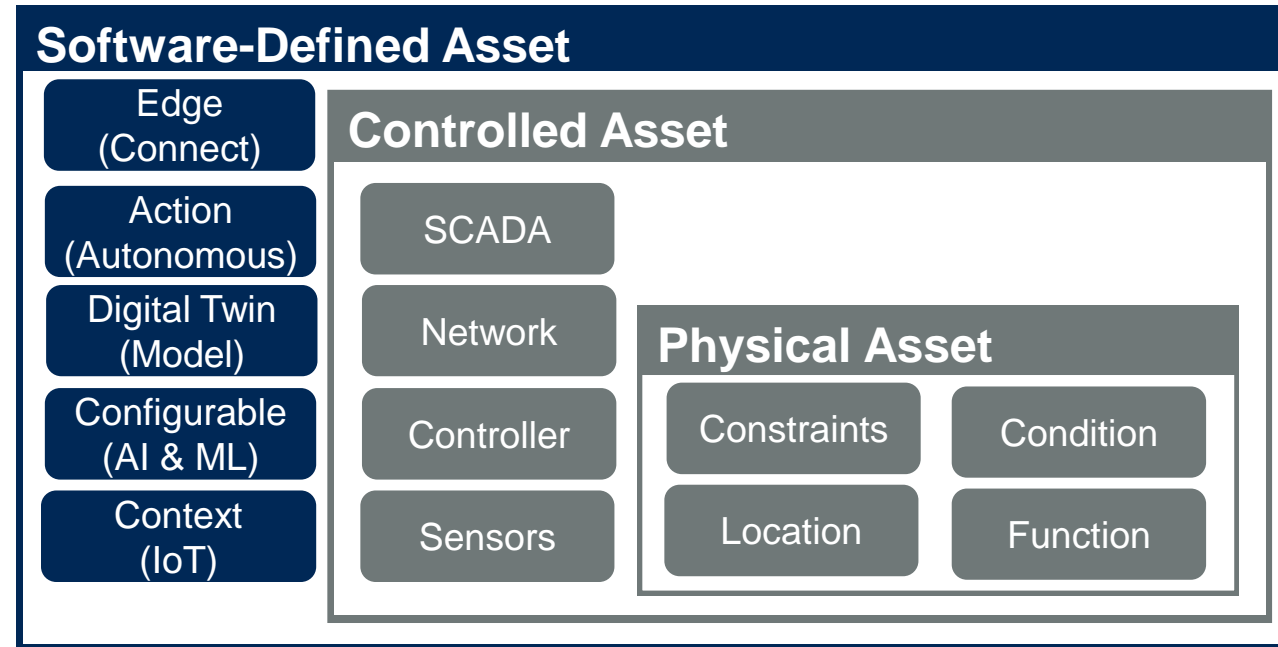
Re(design) With Fusion Teams



Source: Gartner

Software-Defined Assets

Integrate Multiple Technologies



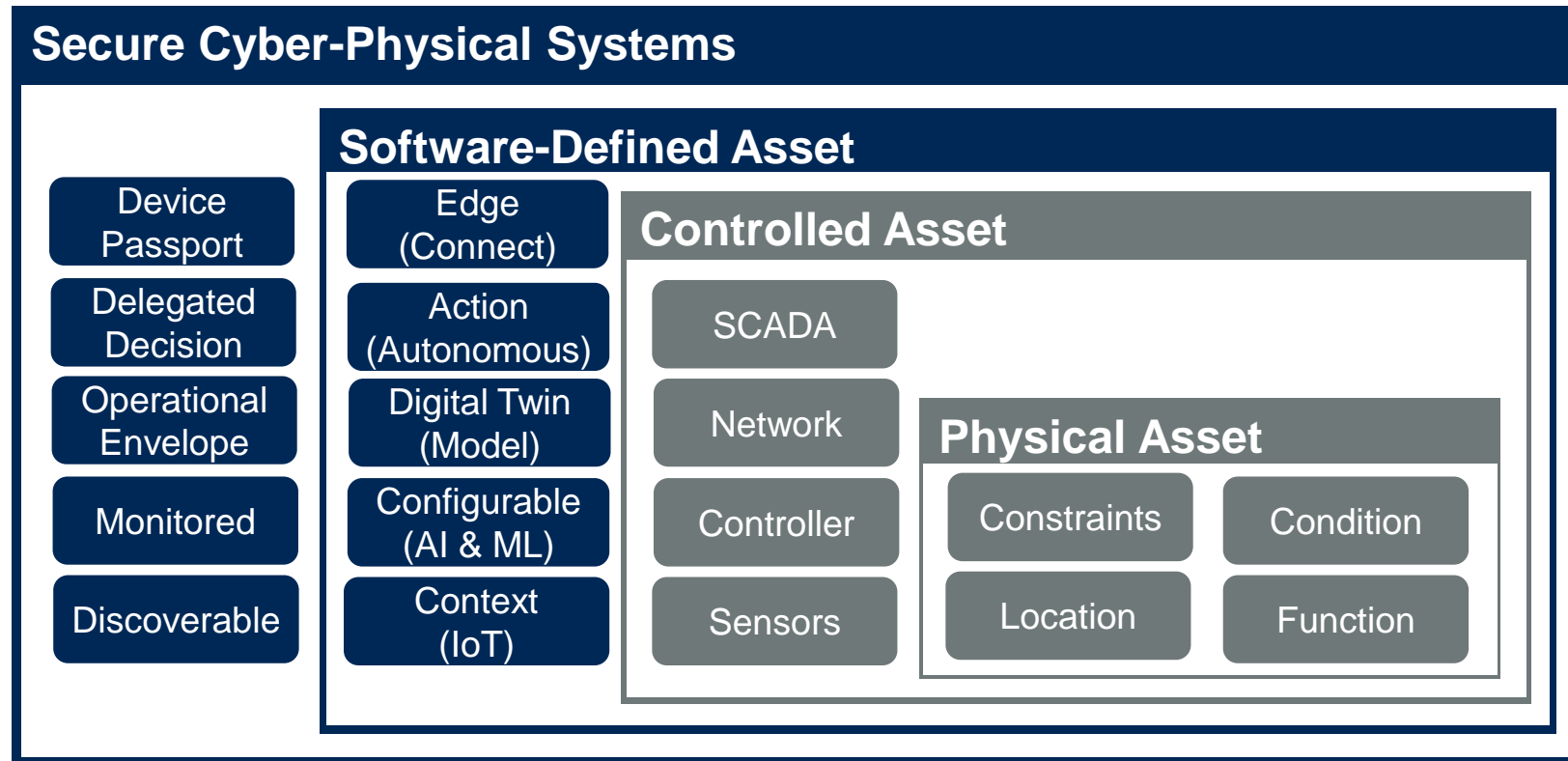


Integrate Multiple Technologies

Model-based system engineering with modular, encapsulated interfaces.

Securing Cyber-Physical Systems

2



Securing Cyber-Physical Systems

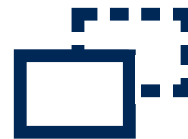
Run

Legacy OT systems



Differentiate

“Retrofitted” CPS through IT/OT convergence driven by competitive or productivity needs



Innovate

Intelligent industrial assets autonomous by design

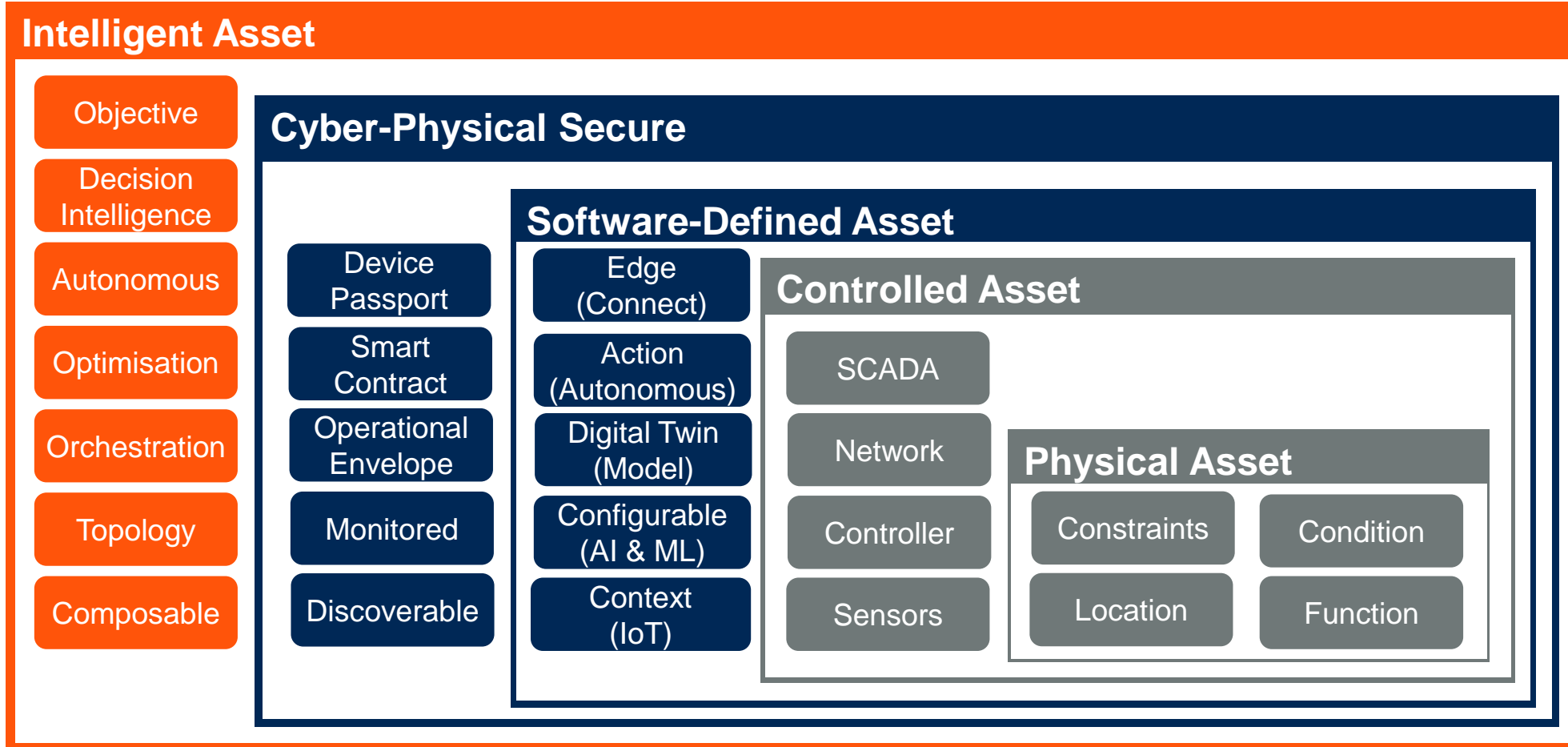


Engineered to Last

(Predictable, reliable, standards-oriented, rigorous governance)

Engineered to Change/Grow
(Exploratory, adaptable, flexible, federated)

Model-Based Engineering by Fusion Teams





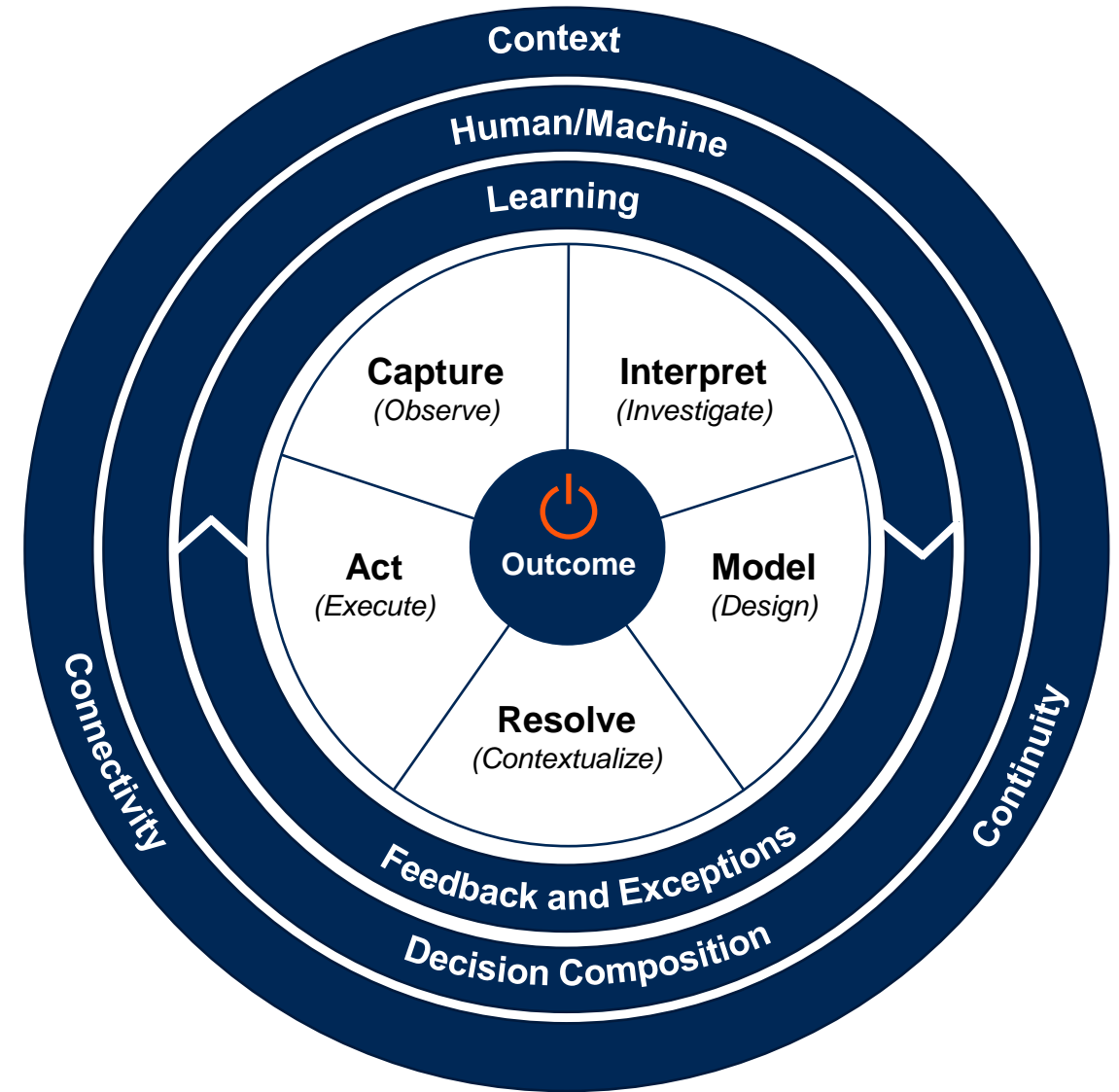
Drive Decision Intelligence

You can't optimize unknown decisions.

Invest in Decision Intelligence

Optimize Across:

- Design Envelope
- Performance Envelope
- Contractual Permissions
- Operations
- Market



Design = Safety + Regulation + Market + Grid Codes



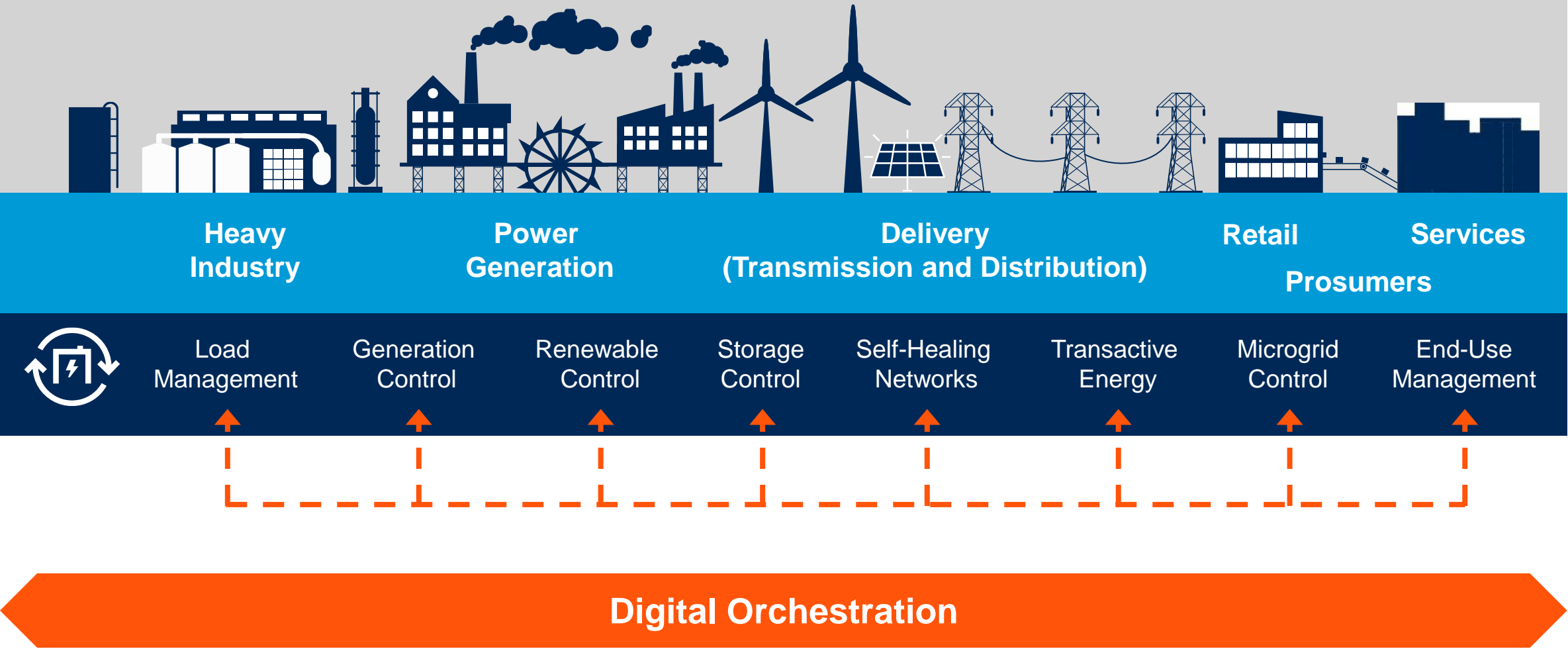
Invest in Cyber-Physical System Security

Zero trust, from the asset up.

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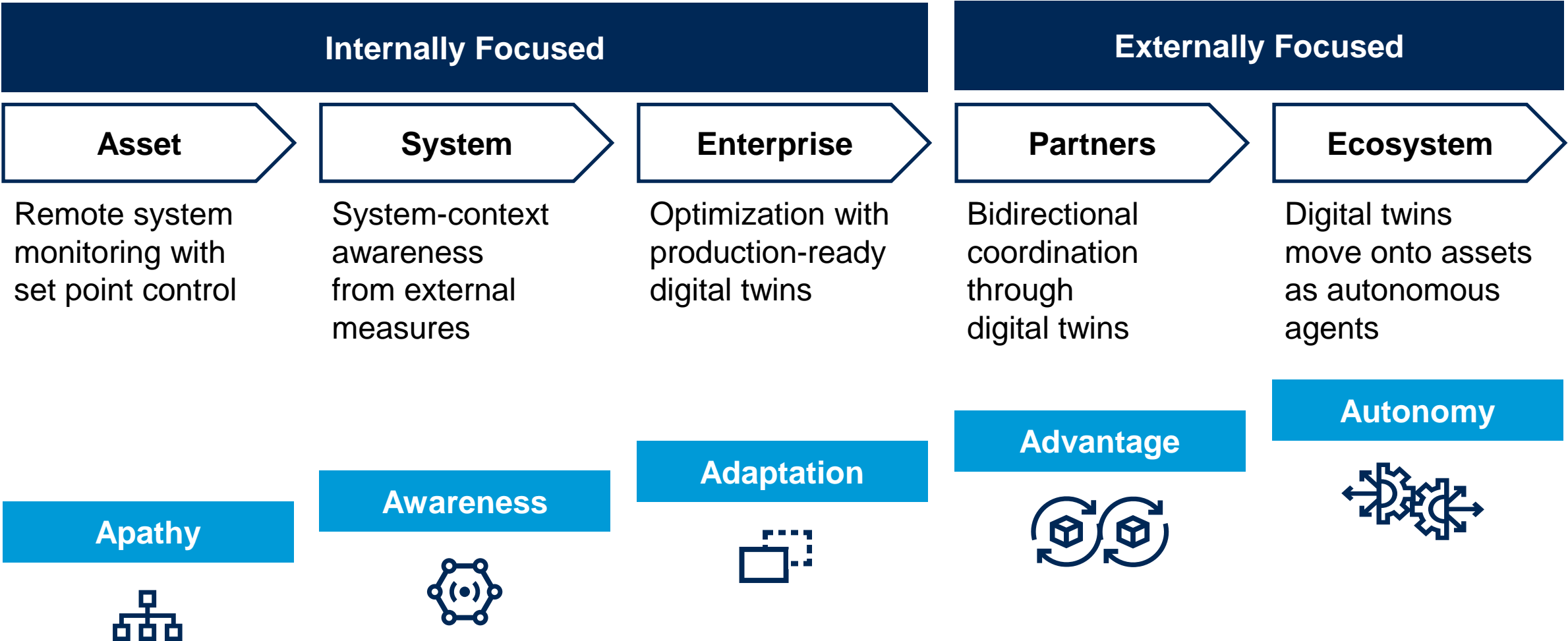
Reposition the Role of Technology





The Future Is Smart Digital Intelligent

Stage Your Journey to Intelligent Operations



Action Plan for Intelligent Industrial Assets

Monday Morning:

- Start a dialogue — is there a strategy gap that ignores intelligent assets?
- Benchmark where you are — how big is the challenge?

Next 90 Days:

- Establish joint ET/IT/OT governance.
- Define and design intelligent industrial asset classes.

Next 12 Months:

- Invest in systems to manage intelligent industrial assets (OTAM, DI).
- Govern decisions that intelligent operations will delegate to assets.
- Don't do it alone! Consider a country-specific industry alliance for industry cloud platform initiatives that are vendor-agnostic and resilient.

Recommended Gartner Research

- 🔍 [Quick Answer: What Are Intelligent Assets and Why Are They Important?](#)
Rich McAvey, Lloyd Jones and Alfonso Velosa (G00777407)
- 🔍 [Quick Answer: What Are the Digital Checkpoints to Achieve Intelligent Operations?](#)
Lloyd Jones, Rich McAvey and Lauren Wheatley (G00785693)
- 🔍 [6 Top Practices for Winning the Race Toward Intelligent Assets](#)
Rich McAvey, Lloyd Jones and Alfonso Velosa (G00766176)