



Unleash the Power of Advanced Networks

## Cognitive Factory Workshop



### Manufacturers Business Goal

Enterprise customers seek increased operational productivity and improved business outcomes by deploying and investing in private 5G networks. Most deployments consider Private 5G as a standalone project, focusing primarily on connecting a few sensors or autonomous guided vehicles. Neglecting to leverage advanced network service capabilities to address specific productivity, safety, and operational challenges of the modern factory results in projects stuck in the POC stage and slower adoption because there is no ROI in a pure connectivity play.

Enabling manufacturers to transform their plant operations into the cognitive factory involves making new programmable network capabilities accessible to sensors, devices, and controllers through simplified APIs. This empowers developers to create valuable network-aware applications and speed time-to-market of innovative solutions. By improving business outcomes through reduced operational expenses and enhanced return on investment (ROI) from technology deployments, the manufacturing industry can transition to real-time, scalable, connected systems and enterprise solutions. Ultimately, this approach manufacturers' adoption of private advanced networks, leading to more efficient and competitive operations.

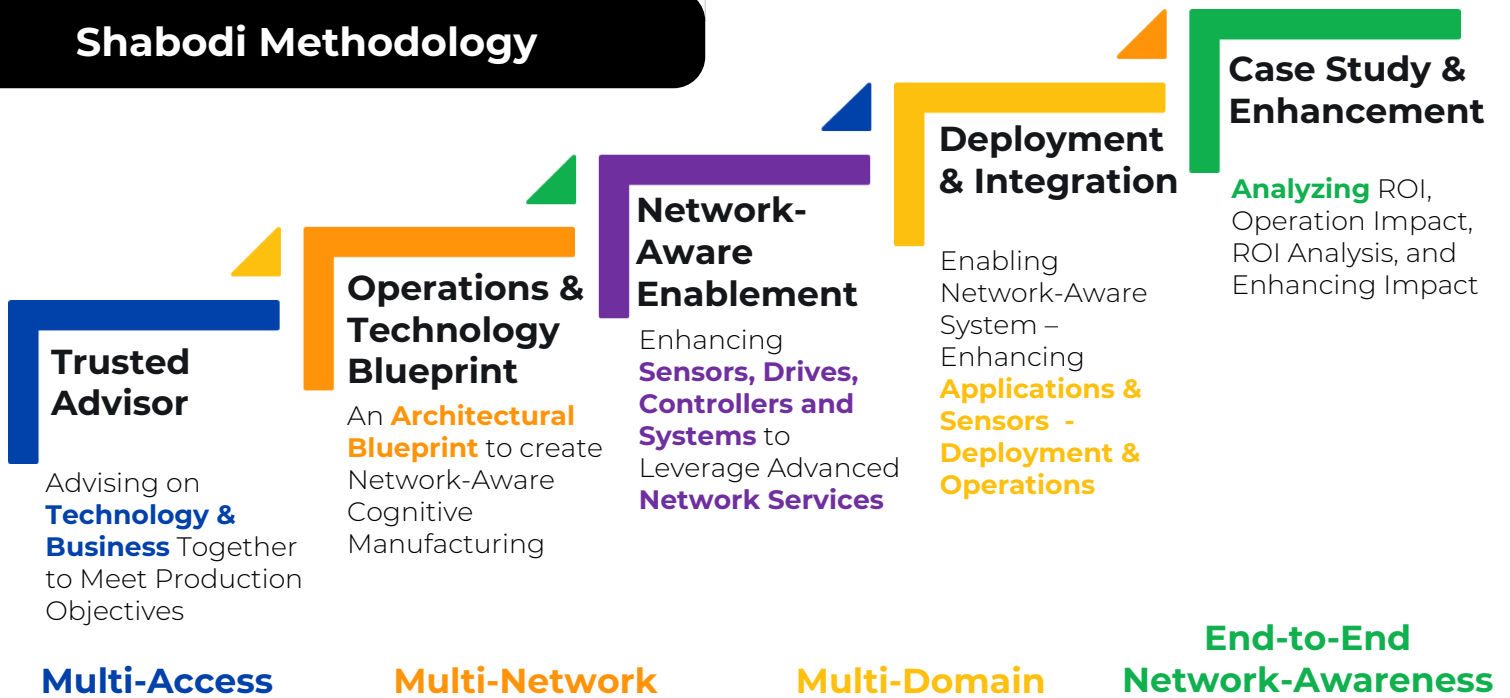
### Network-Aware Cognitive Factory Blueprint

Private 5G networks, when integrated with existing enterprise networks like Wi-Fi, wired, cloud, and satellite, offers opportunities to substantially increase factory automation, efficiency, and safety.

Shabodi's Cognitive Factory Workshop follows the structured methodology shown below. This proven approach starts with understanding your business objectives and creating an architectural blueprint that aligns the technology, people, and processes and brings network awareness to business-critical applications with our industry-first Network-Aware Application Enablement Platform (AEP).

After building the technology blueprint, Shabodi will work with your IT and OT teams and our partner ecosystem network operators, system integrators, network equipment providers, and application developers to enable an integrated private network deployment. This system will connect equipment, facility sensors, and OT systems in your current industrial environment to ensure that business-critical application performance is guaranteed and that your advanced network is optimized and not over-engineered.

## Shabodi Methodology



## Architectural Blue Print

As part of our Cognitive Factory Workshop, Shabodi conducts a factory visit to collect information on all relevant plant operations and requirements. Leveraging extensive experience delivering similar automation projects, we will rapidly develop use cases, high-level solution architecture, and project plans to meet your business operations goals. Shabodi's team of advanced network experts will use our proven methodology to achieve actionable results and faster ROI for plant operators.

## Methodology Process

- Capture the plant operator's key business challenges
- Identify current technology, security, network, and interoperability requirements
- Conduct a site visit to understand current process workflows and systems
- Review the plant assembly lines targeted for automation
- Prioritized use cases, benefits, and implementation strategies using Private 5G connectivity integrating with other existing networks and policies
- Conduct a risk assessment and establish mitigation strategies tailored for integrating 5G-based IIoT solutions
- Define tools and frameworks for developing IIoT adoption roadmaps aligned with industrial objectives
- Establish IT/OT network and security architecture, starting with the Purdue model and enhancing it to incorporate SDWAN and cloud technologies
- Recommend overall architecture

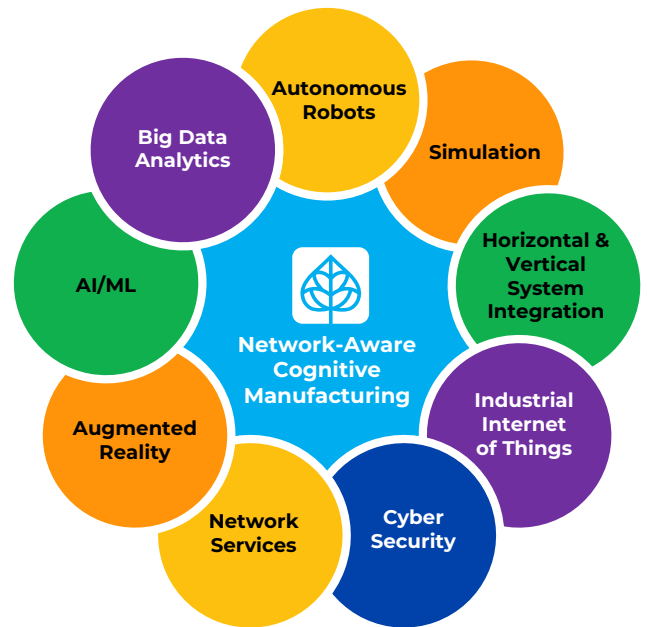
## Cognitive Factory Blueprint Benefits

Interconnectivity of sensors, controllers, systems, and platforms utilize data, compute, and advanced networks to:

- **Accelerate Your Industrial Automation** initiatives leveraging Industrial IoT (IIoT), artificial intelligence (AI), edge computing and other Industry 4.0 technologies.
- **Streamline Operations** with network-aware applications and automation.
- **Enhance Quality & Improve Business Outcomes** guided by our IIoT, networking (cellular, wired, wireless), and software expertise.
- **Reduce Operational Costs** including energy and systems operations
- **Minimize Capital Costs & Enhance ROI** by improving application performance and optimizing the utilization of your advanced network deployment.
- **Leverage Our Strong Partner Ecosystem** to develop an end-to-end advanced network solution.

## Who Should Participate?

- IoT and Automation Leaders
- Manufacturing and Supply Chain Managers
- Operational Technology Teams
- Network and Technology Planning Leaders
- IT/OT Security teams



## Workshop Process

1. **Contact Us:** Contact us to schedule a free consultation call.

[Contact Us](#)

2. **Pre-Discovery Call:** a pre-discovery call will be schedule to understand the current projects that are underway and learn about your digital transformation agenda.
3. **Advanced Network Plan:** Shabodi will provide a detailed advanced network rollout plan focusing on the Network-Aware Cognitive Factory blue print.

*Note: This data sheet is a guide and does not constitute a contractual agreement. Specifications and features may be subject to change, and refer to the statement of work for the complete scope.*