

Connected Factories

A modular service offering helps manufacturers uncover and visualize continuous insights to cut costs, improve productivity and design next-generation products.

Industry 4.0 is ushering in a new era to gain greater visibility and insights with interconnectivity, machine learning and real-time data. The promise is real. Envision the possibilities. What if you knew the state of everything in a factory and could sense, act and learn from its data. What problems would you solve? Reduce COGS? Minimize throughput constraints? Increase asset utilization? Are you ready to get started?

Our offering

Cognizant's Connected Factories offering eliminates data siloes and creates a unified view of performance through a scalable, future-proof data platform and the digitization of physical assets. It relies on a proven toolkit that uses OnePlant™ and APEX as reference models, based on best practices and design principles from **50 Fortune 500 clients**. It leverages partnerships with best-of-

breed internet of things (IoT) platforms, gateways, sensors, and analytics, as well as manufacturing execution, product lifecycle and quality management systems.

Cognizant works with you to:

- 1. Assess:** Using the Cognizant OnePlant™ Framework, we conduct a maturity assessment, help scope desired outcomes, identify the optimal technology and architecture, and create a phased roadmap to achieve predefined metrics. This fixed-duration, fixed-price engagement minimizes costs by leveraging existing investments and equipment, introducing sensors and adaptors wherever possible and advising on ways to reduce CapEx.
- 2. Develop and Deploy:** We leverage our Asset Performance Excellence Framework to deliver a Lighthouse project to prove the value of a Connected Factory prototype. We then deploy



Our clients have seen up to 55% improvements in productivity and as much as 40% reductions in maintenance costs through Connected Factory initiatives.

IoT leaders anticipate that their IoT use cases will **boost their gross profits by 13% over the next three years** three times as much as IoT laggards.

— McKinsey Digital: What separates leaders from laggards in the internet of things.

and scale the solution into full production and sensor-enable physical plant assets for proactive remote management. We map edge data to operational technology and enterprise systems, where machine learning can aid in faster decision-making across factory floor operations.

- 3. Sustain and Adapt:** Our IoT Nerve Center managed service refines knowledge models for continuous improvement and scalability across plants. It is available on an output-based pricing model or on a pod-based fixed capacity basis.

Benefits

The connected factory unifies and visualizes operational data to meet changing market needs. Manufacturers can use insights from their factories to make better technology choices, cut implementation costs and unlock value.

Results include:

- 15%–30% average reduction in plant operating costs.
- 45%–55% increase in labor productivity through assistive technologies for faster execution and increased accuracy.
- 10%–40% reduction in maintenance costs and 30%–50% cut in downtime.
- 10%–20% reduction in cost of quality by minimizing scrap and waste.

Getting started

An **Advisory Assessment** evaluates your current technologies and processes to identify inefficiencies and opportunities for improvement. We scope your desired outcomes, benchmark your current performance and estimate the impacts of each improvement area. We then deliver a phased roadmap that identifies the optimal technology and architecture to deploy in a pilot.

CASE STUDY:

Diversified global manufacturer

Our client needed to improve its 60% labor efficiency and 10% scrap rates and to automate its data gathering and monitoring for operational equipment effectiveness.

Within two years, we identified critical improvement areas and partners, created a reference architecture and deployed the solution in 16 plants. We helped create a Center of Excellence for “smart factory” and workforce upskilling, and plan to deploy the solution to 20 more plants.

We will deliver \$25–\$30 million in value over 36 months, with a target of \$300–\$500 million by 2022.

Why Cognizant?

Companies look to our more than 25 years of experience in engineering IT/OT systems to accelerate their capabilities. We bring together teams of industry domain, software and embedded engineering, IoT and AI specialists to design, deploy and manage solutions that continuously leverage manufacturing data insights. As a primary developer for AWS, PTC, Microsoft and Aveva technologies, we have unique insights into helping clients select and deploy the right solution.

To learn more, www.cognizant.com/IoT

RECENT ACCOLADES

Cognizant named ISG Global Leader in IoT Transformational Services—Manufacturing IoT
HFS Research ranked Cognizant #14 in Top 50 Engineering Firms



Cognizant (Nasdaq-100: CTSH) is one of the world’s leading professional services companies, transforming clients’ business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 193 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.