



Solution Overview

Delivering Smart Manufacturing Solutions into Life Sciences

Leverage digital technologies for faster, better and leaner results

The past decade has been marked by powerful innovations in the life sciences industry. Life sciences manufacturers are making molecules and delivering personalized treatments for patients faster than ever before, and digital technologies are supporting them through this transformation, enabling the launch of GMP-compliant medicines at an accelerated pace.

At Cognizant, we work with clients from molecule discovery to commercial launch, i.e. from Phase I and II clinical manufacture in the lab environment, through to Phase III and into commercial manufacture in a GMP factory to deliver competitive advantage.

Digital transformation – driving business outcomes and value

Cognizant helps life sciences manufacturers achieve their digital transformation objectives by designing and retrofitting sustainable facilities to support the accelerated launch of new molecules by delivering on the promise of Manufacturing 4.0. Our “connected by intent” data mindset focuses on building smart IT and OT system connections right from the design phase and drives immediate value for businesses. Our site services help clients establish, maintain and enhance GMP manufacturing for long-term operational excellence.



Accelerated launch

The accelerated pace of industry and patient expectations means the industry has an increased responsibility to launch molecules faster, in order to reliably get medicines and treatments to patients quicker than ever before. By digitizing and connecting systems, manufacturers can derive the insights needed to make “Right First Time” (RFT) decisions.



Sustainability by design

Life sciences organizations continue to focus on improving the sustainability of their manufacturing processes, and we support their sustainability initiatives by focusing on the reduction and reuse of carbon, energy, water, solvent and waste with sound design principles coupled with digital monitoring to drive continuous improvement across the entire supply chain, including Scope 3 emissions.



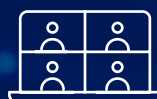
Cost effectiveness and capacity expansion

The demand for new molecules requires improved yield, capacity, cycle time and batch release time. Using lean manufacturing principles, we are able to reset the cost base for materials, labor and energy through various levers including capital spend avoidance and inventory reductions.



Data-driven decision making

We help enhance information that is vital for flawless execution by providing contextualized and meaningful data in the moments that matter. We take a unified platform approach across IT and OT systems, and our “connected by intent” philosophy helps create a seamless flow of data interconnectivity across all layers of business operations and manufacturing, providing a single source of truth to drive business improvements through data-driven insights.



Collaborative culture and simplified ways of working

Collaboration is essential to our clients' success. Speed, agility and capability are enhanced through partnerships from R&D to NPI and commercial launch, and also with OEM vendors and CMOs. We work to harness positive cultural change, and we facilitate a tech environment where employees in R&D labs and GMP manufacturing facilities experience simplified ways of working and are served the right information at the right time to make the right decisions.

Our Offerings

Batch Automation

We help maximize efficiency in manufacturing and lab processes through improved visualization, enhanced control and superior quality while maintaining strict adherence to GMP and ISO 9001 standards. Cognizant has been delivering and supporting value-based digital automation solutions to the life sciences industry for the last 25 years. We partner with clients to implement automation systems from conception through to production, upgrading systems in line with GAMP guidelines, followed by complete end-to-end lifecycle management and support.

Data Infrastructure and Intelligence

We help life sciences organizations leverage Manufacturing 4.0 strategies to transition from data scarcity to data abundance through comprehensive data collection, contextualization, visualization, advanced analytics and seamless integration with cloud platforms. Our expertise enables clients to access data from a single source of truth while implementing global real-time data management (PI) system rollouts

to achieve exceptional operational efficiency and excellence. Cognizant is an AVEVA endorsed systems integrator.

Manufacturing Execution System (MES)

We help optimize manufacturing operations with a Manufacturing Execution System (MES) designed to minimize time and errors. By consolidating data, simplifying handling, and accelerating batch releases, our advanced MES solutions improve efficiency, boost productivity, reduce costs and mitigate human error risks in production environments.

Digital Labs

We help drive lab processes seamlessly by implementing paperless, digital solutions with lab informatics, robotics and advanced data analytics. We work with clients to create and upgrade digital labs, focusing on improved connectivity, data integrity and audit readiness. Our cutting-edge solutions accelerate new product introduction and reduce release times, optimizing overall lab efficiency.

One trusted partner for digital transformation across life sciences manufacturing and labs

- We provide a comprehensive portfolio of life sciences manufacturing solutions. Our team has deep life sciences expertise, and we have been working closely with our clients for more than 25 years to achieve a shared vision of advancing science and improving patient outcomes.
- We empower life sciences manufacturing organizations with cutting-edge digital transformation solutions that rapidly advance their business objectives.
- Our expertise enhances system performance, streamlines supply chains and bolsters Manufacturing 4.0 and Digital Lab initiatives, ensuring seamless operations and GMP compliance.
- By prioritizing speed to value, sustainable innovation and data-driven strategies, we provide real-time insights for business transformation.

Key statistics

2,000+

engineers and consultants in our Life Sciences Manufacturing Group

3M+

engineering hours delivered each year

1,500

manufacturing projects each year

170+

Working with over 170 life sciences companies globally

350+

manufacturing sites and 1,000+ manufacturing lines



Why Cognizant?

Cognizant's Life Sciences Manufacturing group provides end-to-end digital transformation solutions to the life sciences industry that keep systems running, improve supply chain efficiencies and support clients' Manufacturing 4.0 initiatives. We specialize in delivering solutions and services across batch automation, data infrastructure and intelligence, MES, lab automation, CSV and digital technologies to manage, control and optimize manufacturing. Our team has deep life sciences expertise, and we work closely with our clients to achieve a shared vision of advancing science and improving patient outcomes.

Cognizant's global network comprises more than 30,000 skilled life sciences professionals who work across global delivery centers in 37 countries to deliver and support our clients' digital transformation initiatives.

Through automation, MES, cloud, data and digital technology solutions, we support our clients from project conception through to completion, across the entire manufacturing lifecycle. Our suite of solutions enable better connected IT and OT systems and more informed, data-driven decision making—all while adhering to Good Manufacturing Practices (GMP).

To find out how Cognizant can help life sciences manufacturing organizations move into the digital age, **contact us today.**



**Life Sciences Manufacturing
Solutions | Cognizant**



Cognizant (Nasdaq-100: CTSI) engineers modern businesses. We help our clients modernize technology, reimagine processes and transform experiences so they can stay ahead in our fast-changing world. Together, we're improving everyday life. See how at www.cognizant.com or [@Cognizant](https://twitter.com/Cognizant).

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