



CASE STUDY

Streamlined Management for Every Stage of the Construction Process

As one of the least technologically-integrated industries today, the field of construction holds untapped potential for digital transformation. The technology is already out there—and companies who don't embrace them will be quickly outpaced.

LTIMindtree's Connected Construction platform integrates machinery sensors, worker wearables, geospatial data, and other IoT and cloud-based devices to provide end users with a streamlined user interface to enable informed business decisions that accelerate revenue growth and drastically increase productivity.

Unlock Growth Through Connected Construction Technologies

Accelerated by the growing pressures and market forces like unprecedented labor shortages, inflating materials costs, and persistent supply chain volatility, forward-thinking organizations know that investing in digital transformation will be the foundation for sustained competitive advantage. Connected construction ecosystems leverage IoT devices and integrated sensors with sophisticated AI-powered analytics and geospatial insights to gain real-time visibility, resolve complexities and drive productivity across their operations. The connected construction platform is purpose-built Industry 4.0 solution that provides a single platform to harness and synthesize data intelligence across the entire ecosystem.

Managing Every Stage of Construction

Careful execution of pre-construction processes can prevent costly delays and budget overruns further on in the process. During construction, the aspects of materials and project management, equipment efficiency - along with maintaining worker safety—require attention in real-time to keep work from slowing.

The work isn't done when construction is complete, either. Get broad and deep insights to help stakeholders manage critical post-construction processes, including as-built documentation, augmented reality assisted maintenance, field operation management and so on.

Asset NxT

Get real-time visibility to a wide range of industrial equipment, machines, vehicles and systems. We leverage IoT technology to build a network of connected assets, where high-value data is linked and processed in real-time. AI-powered algorithms convert data into insights for a variety of applications, from equipment performance to perfectly timed preventive maintenance. Access to these new insights delivers benefits, such as improved equipment availability, optimized fuel, energy consumption and so on.

Worker NxT

Identify, hire, onboard, train and protect highly qualified and productive workers with the ease of smart technologies. Even in tight labor markets, our solution connects our clients to qualified workers and provides intelligent tools for onboarding, training and management. Once workers are on the job, our solution collects and analyzes real-time data to ensure worker safety and augment physical and cognitive abilities. Our platform also streamlines and digitizes costly and repetitive, but important tasks, such as attendance tracking, skills assessment and safety assurance.

Material NxT

Manage materials across your supply chains in real-time—from manufacturing facilities to installation sites—with our fully integrated track and trace solution. Materials labeled with RFID tags, bar codes or QR codes build a network of helpful data, presented through intuitive dashboards that make it easy to accurately monitor material availability, location, utilization and reconciliation. Our platform gives our customers the visibility they need to efficiently schedule crews, optimize ordering and inventory levels, view inspection data, manage returns, track project costs and make strategic decisions that improve project outcomes.

GeoSpatial NxT

Whether you are using location intelligence for strategic business planning or coordinating construction and maintenance activities in the field, our offerings bring real-time location insights to help optimize efficiency, improve safety and reduce costs. We leverage advanced technologies across the entire location information value chain - data collection, processing, analysis, visualization and integration with various enterprise systems - to generate spatial insights our customers need to augment decisions in a quick and cost-effective manner.

Insight NxT

Autonomously derive intelligence from connected ecosystems of workers, machines, locations and business operations to refine production processes, improve worker safety, boost efficiency and ultimately increase revenue. Predictive and prescriptive analytics tools turn raw data into actionable insights that our clients use to drive informed business decisions, including the deployment of Industry 4.0 initiatives, enhanced with advanced AI and ML technologies. Insight NxT offers prebuilt integrations for a variety of internal and external data sources, greatly simplifying data onboarding and speeding up deployment.

Project NxT

Profitably managing large-scale construction projects requires new ways to resolve workforce, supply chain and material pricing challenges. You need one consolidated platform to manage it all, not a series of point solutions that make your work more confusing. The Project NxT platform integrates data from every aspect of a project—materials, workers, job progress and costs—to provide you with real-time visibility and control. Knowing precisely when materials will be delivered, deploying workers at just the right moment and tracking the costs and progress of every project will put you in control and improve your profitability.

Turn Industry 4.0 into a Growth Engine

Want to know more about how the Connected Construction platform is part of a holistic approach to a profitable Industry 4.0 transformations? [Visit us](#) to learn how LTIMindtree is enabling organizations to engage customers like never before, anticipate their needs, and respond with incredible speed and precision.

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700+ clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by nearly 90,000 talented and entrepreneurial professionals across more than 30 countries, LTIMindtree—a Larsen & Toubro Group company—combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit www.ltimindtree.com.