

PLM Speeds Development to Transform Solar Power Tracker Technology



ABOUT THE COMPANY

Nexttracker, a Flex Company, is one of the fastest-growing cleantech companies in solar today. Nexttracker leads on technology development of next-generation solar power plants with smart solar trackers, energy storage solutions, and TrueCapture™ advanced control software that yields additional energy, optimizes performance, and reduces costs for project and plant owners. Nexttracker is globally recognized for delivering intelligent and connected energy systems for over a thousand solar power plants worldwide. Its breakthrough technologies enable plant owners to harvest the sun more efficiently, at lower costs, and with more flexibility.

AT A GLANCE

Vision

Renewable energy powers the world—delivering clean, affordable power to all

Mission

To be the world's leading energy solutions company delivering the most intelligent, reliable, and productive solar power for future generations

Growth/Scale

Increased global manufacturing capacity by 200% in one year

Best Thing About Arena

"We are more automated and that automation through Arena PLM helps us lead on innovation in the renewable energy industry."

Bottom-Line Impact

Instant product development collaboration with global teams 24/7

Key Benefits

- Cut review and approval times by nearly 60%
- Eliminated time-zone delays with global partners
- Accelerated product introductions by 25%

BUSINESS CHALLENGES

As the number one solar tracker supplier worldwide, Nexttracker has doubled its global manufacturing capacity to 300 megawatts per week to serve expanding customer demand.

Rapid growth, coupled with the need to collaborate with a global team, meant Nexttracker needed to modify its product development practices. The company did not have a single source to track and manage its engineering design and development processes. Product information was tracked manually in workbooks, spreadsheets, and personal file folders, requiring too much reliance on tribal knowledge. With normal employee turnover, process and design information would be lost. “We had to be able to iterate quickly on designs, track changes, and link related product information to scale and speed marketability,” stated Ratana Lee, Senior Manager, NPI Master Archivist for Nexttracker.

“**Arena PLM has changed the way to design and get products to market. It is the well-oiled machine that complex, global product companies need to run their business. We have a much faster and transparent process that allows for better visibility to identify where obstacles lie and helps us become even more efficient.**

—Ratana Lee, Senior Manager, NPI Master Archivist



THE SOLUTION

Nexttracker was searching for a better way to manage product information with distributed teams, enable automated approvals, and provide better tracking and accountability. In addition, the company needed the ability to integrate to its design and enterprise resource planning (ERP) systems. Arena's cloud-based product lifecycle management (PLM) solution checked all the boxes. It made internal and external team collaboration simple while providing seamless integration.

Lee was hired to drive adoption of PLM. “Using Arena's cloud-based PLM system to centralize product information and automate design and development processes has accelerated innovation,” said Lee.

“We can pass information instantly from our engineering systems to Arena and then to our manufacturing systems to expedite the end-to-end new product introduction processes.” Arena is used by design, operations, quality, marketing, and even some executive teams to drive faster review and approvals. “We have over 300 internal team members and more than 200 supplier partners using Arena PLM across five countries—the United States, Australia, India, Mexico, and Spain,” said Lee.



"We have daily changes and updates driven by our engineering and quality teams. We continually add new suppliers to improve our ability to source and release high-quality products fast."

Nexttracker has been able to automatically push the necessary product information to Oracle® NetSuite immediately upon release to support the sales, purchase order (PO), and manufacturing processes. Information flows from their engineering design systems, SOLIDWORKS® and OrCAD®, into Arena to minimize wasted cycle times and improve accuracy of information.

Nexttracker's contract manufacturing (CM) partners are scattered throughout the U.S. and India. "Our CMs can go into Arena PLM and securely access the exact information they need. Arena enables us to synchronize product information in ERP, so our teams in India can service customers in their region and the U.S. location can service customers in their region," noted Lee. "We always get positive feedback from our suppliers on the ability to check drawings, revisions, compare against POs or sales orders, and start work without delay."

With Arena's PLM platform, Nexttracker is taking advantage of the quality management capabilities to create quality records connected to the underlying product record. By processing first article inspections and form, fit, and function (FFF) information in Arena

Quality, Nexttracker's team can link parts that need to be tested. Nexttracker uses the quality system to create and process nonconforming material reports (NCRs) and corrective action reports (CARs).

Nexttracker developed a mobile app that is connected to Arena to help field service teams that have limited web connectivity and are impacted by harsher conditions. This speeds the collection of field service information and the creation of NCRs—giving the quality team earlier visibility.

KEY BENEFITS

Facing harsh weather conditions and climate change, Nexttracker must rapidly design and develop highly durable products that can perform well over a 30-year life span. Reliability, performance, and uptime (availability) are paramount in the design and development of these products. "Arena PLM enables us to instantly access product documents, part fixes, changes, replacement parts, and product design history anytime. We can respond immediately during development, or after our products reach customers, to deliver and maintain high-quality solar tracker products around the world," said Lee.

With Arena, Nexttracker realizes these strategic benefits:

Accelerated product launches

- Real-time access for global partners eliminates time-zone delays, translating to 25% faster launches
- Centralized product record helps double the number of CM partners to speed production
- Review and approval times are cut by nearly 60%

Improved accuracy

- Product and quality information are managed together in a single system
- Automated passing of information between CAD and ERP eliminates data entry errors
- Outdated email communication for sharing drawings and product information can be eliminated