

Success Story

Team Augmentation partner for a US based manufacturing execution system provider

Customer

Leading
Manufacturing
Solutions Provider

Country

USA

Industry

Manufacturing

About The Client

Based in the USA, the client is a leading provider of B2B services specializing in the creation of connected manufacturing systems. They leverage the latest technologies to enhance quality, speed, and efficiency within complex manufacturing environments. The client is committed to providing solutions that drive operational improvements and meet the evolving needs of their customers in the manufacturing sector.

Technology Stack



Business Situation

Our client has established a long-standing reputation for providing technology solutions to several manufacturing businesses. Their diverse portfolio includes aerospace and defense, electronics, medical, nuclear, and shipbuilding, solidifying their position as an industry leader. As the demand for innovation increased, so did the challenges associated with scaling their platform.

This shortfall was primarily due to the skills required in modern technologies that were required to evolve their solutions to the next level. This gap hindered their ability to innovate, integrate new features, and maintain competitiveness in a market that increasingly values cutting-edge, tech-driven solutions. Consequently, their growth and potential to deliver more sophisticated, efficient, and user-friendly products were significantly constrained.

The client was looking for a technology team with diverse skillsets that could act as an extended arm of their existing team. The objective was to roll out new features and capabilities faster in order to maintain the competitiveness in the market. Our client evaluated multiple technology teams from various organizations however, after a thorough evaluation processes, they handpicked a team from Unthinkable Solutions. Their key reason was our team's impressive skillset in modern technology and the ability to quickly understand their technology landscape and processes.

The key requirements were to:

- ✓ Gain a thorough understanding of the client's current systems, workflows, technology stack and ensure seamless integration with their existing processes.
- ✓ Update and enhance the existing platform to support new and advanced features.
- ✓ Develop and implement a range of new features to improve the user experience and operational capabilities.
- ✓ Enable real-time monitoring and insights to facilitate quick decision-making and operational efficiency.
- ✓ Design an intuitive and seamless user interface to enhance user engagement and satisfaction.
- ✓ Develop various features such as dashboards tailored to different roles such as planner supervisors, QA technicians, and shop floor technicians.

The Solution

We provided the client with a dedicated team of highly skilled professionals, each possessing expertise in the technologies crucial for their operations. Unthinkable's team quickly adapted the client's existing operations, seamlessly collaborating with their team to gain a comprehensive understanding of their systems, protocols, and strategic objectives.

Post this, we focused on developing various features using a robust tech stack including React.js, Node.js, and MongoDB. Some key features developed were:

The Solution

Dashboard: We developed a comprehensive dashboard to provide users with real-time insights and monitoring tools. This feature enabled users to track key performance metrics, visualize data through charts, and access critical information at a glance. The dashboard was designed to be intuitive, allowing users to customize their views based on their specific needs. With this tool, decision-makers could quickly identify trends, detect anomalies, and make informed decisions to improve operational efficiency and productivity. Multiple dashboards were created for different roles such as planner supervisors, QA technicians, shop floor technicians, production control expeditor, and many more, ensuring that each user had access to relevant data tailored to their specific responsibilities.

Switch dashboard: The switch dashboard was designed to provide flexible tracking and control over various operational views. This feature allowed users to seamlessly switch between different dashboards tailored to specific functions or departments. This adaptability ensured that users had the most relevant data at their fingertips, improving their ability to manage multiple aspects of the manufacturing process efficiently and respond to changing conditions in real time. The switch dashboard also facilitated the easy transition between different user roles, providing personalized views for different team members.

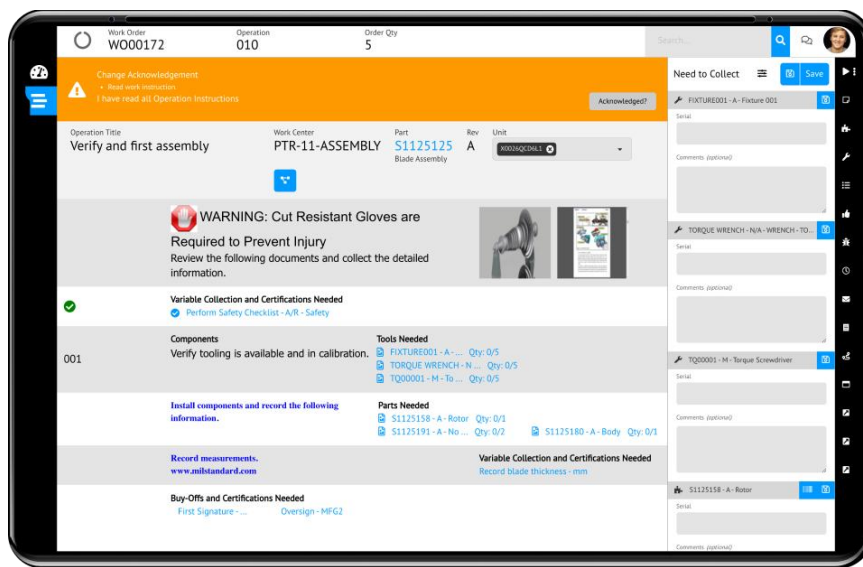
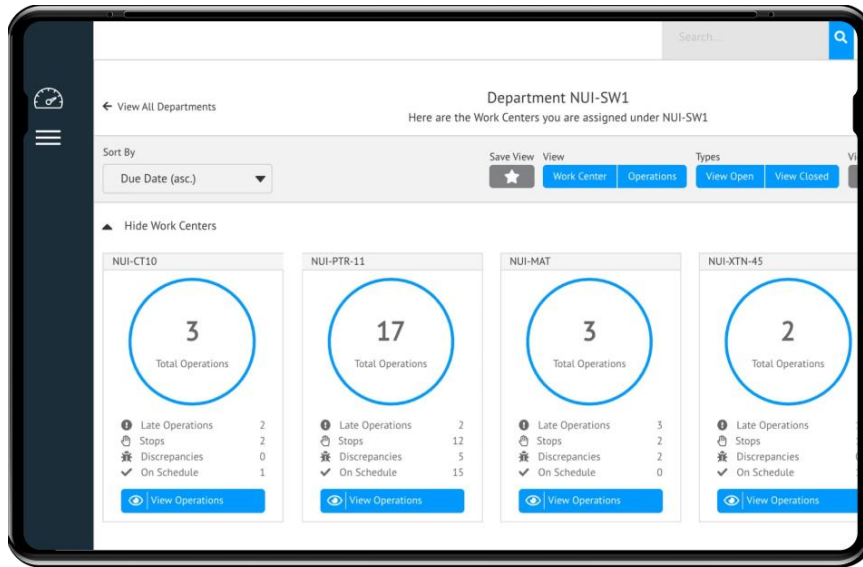
Configurator: The configurator tool was implemented to allow users to customize and manage different manufacturing processes. This feature provided a user-friendly interface for setting parameters, configuring workflows, and optimizing operations based on specific requirements. Users could create and save multiple configurations, test various scenarios, and make adjustments as needed. The configurator enabled a high degree of flexibility and control, empowering users to tailor their processes to achieve maximum efficiency and meet the unique demands of their production environment. It also supported the creation and management of location-specific plans, work orders, and tasks, ensuring that all aspects of the manufacturing process were streamlined and well-coordinated.

Multi-session: We developed support for multi-session capabilities to enable users to handle multiple operations simultaneously. This feature allowed users to open and manage several sessions concurrently, ensuring that they could multitask without any performance degradation. A user could monitor ongoing production, update inventory records, and review quality control data all at the same time. This capability enhanced overall productivity by reducing downtime and enabling users to respond more quickly to emerging issues or new tasks, thereby streamlining their workflow. Multi-session support was crucial for maintaining the efficiency of complex manufacturing operations, where numerous tasks and processes needed to be managed concurrently.

The Impact

With our team augmentation, the client's manufacturing platform witnessed significant improvements in operational efficiency and feature development. Our experts seamlessly integrated with the client's existing team, quickly addressing the technology gaps and enhancing their platform's capabilities. By efficiently leveraging our expertise, we accelerated the rollout of new features and optimizations, ensuring timely delivery even during peak workloads. The enhanced platform now supports real-time insights, intuitive user interfaces, and advanced functionalities, leading to improved productivity and user satisfaction. Our collaboration enabled the client to overcome skill shortages, maintain competitive edge, and streamline operations, all while meeting challenging deadlines and achieving high-quality outcomes.

Product snapshots



Is there a digital platform you want to build or take to the next level?

Setup a personalized consultation with our technology expert.

Let's Talk