

ENTIRE PLANT MAINTENANCE & WAREHOUSE MANAGEMENT TRANSFORMS FROM RIGID TO FLEXIBLE WITH 18 NEW MOBILE APPLICATIONS

CertainTeed (Saint-Gobain) built 18 mobile solutions with low-code app development, automating warehouse management functions, and transforming their SAP plant maintenance solution into their own digital vision.



CERTAINTEED

COMPANY SNAPSHOT

Part of Saint-Gobain, CertainTeed is North America’s leading brand of exterior and interior building products, including roofing, siding, fencing, decking, railing, trim, insulation, gypsum, and ceilings. In business for more than 110 years, CertainTeed focuses on the responsible development of innovative and sustainable building products. At CertainTeed, innovation is a tradition.

ABOUT NEPTUNE SOFTWARE

Transform your IT team into a Rapid Innovation Powerhouse.

Neptune Software is a global company with more than 550 customers and 2mi end-users that is dedicated to empowering enterprise IT teams to drive business results. The Neptune DX Platform empowers ABAP developers with the most-native digital experience toolset for SAP use-cases from which to drive fast, critical results. Future-proof your SAP-centric landscapes, in whatever way suits you, to quickly enable users with leading-edge enterprise apps that change the way they do business. Visit our website at: www.neptune-software.com

USERS	1,000 plant maintenance & 250 warehouse management end-users
INDUSTRY / SECTOR	Manufacturing / Industrials
SAP VERSION	SAP ECC 6.0, EHP5 Support Pack 9
DEVICES	Samsung Tab Active 2 devices with RAM mount accessories for plant maintenance, ruggedized Zebra devices mounted on forklifts for warehouse management
IMPLEMENTATION TIMELINE	9 months

CHALLENGE

High volume operations across 65 plants stilted by long walks to a desktop

The Neptune Software journey started with a standardization and mobilization of Warehouse Management processes. Due to the success of this project and the ability to own and drive innovation with the Neptune DX Platform, CertainTeed quickly progressed to Plant Maintenance mobilization which is currently on-going even in times of COVID.

When you process more than 125,000 work orders a year across 65 plants, efficiency is key. Fast, easy access to plant maintenance documents – pictures, bill of materials, work orders, PMARS, and the like – makes a big difference in efficiency and ultimately the bottom line.

At CertainTeed, keeping the plants operating smoothly doesn't allow time for quarter mile jaunts between the job site and the dedicated computer workstation to access the SAP Plant Maintenance solutions. Plus, there's risk of information not getting documented in the system in the first place, which makes it harder to accurately assess processes, workflow, and output.

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We needed to eliminate the need to use a computer terminal to get work done,” said CertainTeed's Digital Manufacturing Director David Halpren. “The high volume of orders we process meant that we needed a more efficient way to access and add data to our SAP PM module where work was happening.
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It's a scenario that was ripe for a mobile solution. And that's exactly what CertainTeed set out to deliver using Neptune Software's modern rapid application development platform and its SAP edition (Module Planet 8). The solution provided CertainTeed with full mobility and out-of-the box offline capabilities that helped them quickly digitize plant maintenance and warehouse management solutions.

With the **Neptune DX Platform, being an SAP-certified app development platform and embedded within the existing ABAP stack, CertainTeed would be able to design, build, integrate, deploy and maintain SAP Fiori apps in a fraction of the time it would take with custom Fiori development** or other development platforms — accelerating the delivery of its mobile solutions with the most-native application development platform for SAP-centric use cases.

APPROACH

Modern low-code application development helped to launch new mobile apps with flexibility

An effort to bring all operations on SAP, completed in 2019, paved the way for even greater enhancements that would help make work easier. That same year the new mobile warehouse management solutions were also activated. For the plant maintenance effort, the company's Plant Maintenance Business Process counsel sought to **take their standardization journey even further and enhance the user experience for plant maintenance with mobile apps, which would need to operate on rugged devices** able to operate in subzero temperatures.

The new plant maintenance apps would be used to process work orders and manage photos and documents.

Mobile and offline warehouse management capabilities were also introduced in 2019 to streamline work processes across CertainTeed's plants, including processes to manage picking products and scanning bar codes, using ruggedized Zebra devices on VC980s mounted on the forklifts.

“Forklift drivers had inefficient paper processes and had to get on and off their trucks many times a day, which also could impact their safety,” said David. “With more than 200 trucks a day at our bigger plants, we knew there had to be a better way to work.”

Interestingly, CertainTeed's training and go-live efforts needed to be completed virtually when in-person visits to the plants had to be cancelled due to global health restrictions during the COVID-19 pandemic. The team adapted rapidly, quickly changing gears to provide online training and virtual launches that were conducted in just three days.

As a result of their flexibility, users – some of whom had never used a tablet before – were able to get up to speed quickly via training videos and online conference calls.

Launching the new apps is simple. “Once each plant completes a simple five-step stage gate process, they're basically ready to go live,” said David. “We can easily roll it out to all of our plants with just a little training.”

“With this approach, each gate has a set of prerequisites that need to be completed to determine if the plant is ready for the tablet rollout,” said Subash Mohanvel, Senior Manager, Digital Manufacturing at CertainTeed. “This may include having WiFi setup, hardware procured, training tablets readiness, and the like. Once those stages are complete, we spend approximately two days in training. Then the rollout happens. A training app helps support remote deployment via How-To guides, documents and other videos to help the user if they run into issues.

RESULTS

Neptune Software's mobile apps are a game changer for daily work

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The new apps have been a game changer in terms of daily work, with users able to accomplish tasks on-screen on their tablets and immediately, right where they are!
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“Users appreciate the ability to quickly access work orders, equipment, and part information from anywhere on site.”

The increased efficiency and visibility are making a big difference. “Our workforce can be more efficient in their jobs and they are more likely to put accurate data points in their work assignments, so more and better data is being captured and stored for improved analytics as we move forward. They can even access work instructions from the tablet, where before, those were hard to find,” said David.

With Neptune Software, CertainTeed has been able to **standardize work entry and execution and eliminate paperwork orders across its maintenance departments** and reduce the time it takes to get work done.

“A plant maintenance project like this has a lot of moving parts, building functionality compliant with the tablet, working with our industrial firewall as well as our firewall to SAP,” said David. “Plus, it needs to support offline work. **The Neptune DX Platform has given us the ability to transform the entire backbone of our SAP plant maintenance solution into our own vision of the process.**”

CONCLUSION

“Neptune Software gives you the flexibility to do almost anything and basically rebuild functionality. It was a great experience to be able to connect those dots and to turn something rigid into something flexible. Ultimately, Neptune Software's app development platform made our digitization journey a good experience.”

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CertainTeed was able to launch 7 plant maintenance apps in 6 months after having previously successfully launched 11 warehouse maintenance apps.
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