



CASE STUDY

Dave Steel Company

Trimble Construction One & Tekla PowerFab suites deliver real-time project insights and remove administrative burden



Running a Better Business Series





Connected Trimble Solutions Fuel Dave Steel Company's Data-Driven Strategy

Dave Steel Company has been fabricating structural steel for American industry since 1929. Starting with a small shop in Asheville, N.C., the company went on to play a pivotal role during World War II, manufacturing components for the landing ships that carried American GIs to the beaches of the Philippines and Normandy. After the war, Dave Steel Company served commercial and industrial customers throughout the eastern United States.

Today, the privately-held steel construction company—with the help of its sister companies within the Walters Group—works on a variety of projects throughout North America. Services include: estimating, design-build and design-assist projects, steel fabrication, detailing, coatings and steel erection. The company champions its people and places safety as its number one priority. It is also deeply embedded in the communities it serves—from noteworthy charitable ventures to delivering Meals on Wheels.



Before

- A mix of disconnected software and external processes made functions like job costing and purchase orders time consuming efforts.
- The company lacked of real-time insights into project data.
- Upkeep of on-premise systems took up valuable IT resources and incurred additional asset management costs.
- The company could not take advantage of modern software features and workflows.

After

- Dave Steel Company now has a truly connected construction and fabrication process, with real-time data capabilities, automated workflows and cross-functional collaboration between the back office and the shop.
- The company benefits from reduced internal IT footprint, while realizing robust data security and storage features, automatic software updates and backups and more.
- Fluid workflows connect its Trimble Construction One and Tekla PowerFab solutions with accurate, timely and uniform data.
- Company has greatly reduced in administrative time spent reconciling data across functions.



Challenge

For a data-driven company like Dave Steel Company, success boils down to a simple concept: the more accurate, timely and insightful data it has at its disposal, the more productive, adaptive and profitable it can be. Of course, while the concept is simple enough, to find the right solution, it needed an assist in the form of a technology upgrade.

A Trimble Viewpoint client since 2015, Dave Steel Company has leveraged the construction management software to streamline its accounting, project job costing and other back-office management workflows. It has also relied on Tekla's PowerFab suite to project manage its fabrication processes.



Our migration to the cloud occurred over a weekend. It started on Friday and when everyone came back Monday morning, we were in the cloud. For the end user, there was very little difference.

 Babette Freund, Executive Vice President, Dave Steel Company



Accuracy and Speed

Dave Steel Company needed to share data between Trimble Viewpoint solutions and Tekla PowerFab faster and more accurately to make real-time project and business decisions.

"The more we handle and touch material, the more expensive it becomes to fabricate. As our VP of operations and production says, 'we don't get paid to move material.' The same is true of data—the more we have to touch data, the more susceptible the data becomes to error and expense."

However, the company was using an on-premise version of its Trimble Viewpoint solutions, meaning it couldn't tap into cloud-based, real-time data and connections between its accounting and fabrication management disciplines.

It also meant software updates, database management and other in-house functions consistently tapped Dave Steel Company's own IT resources. Furthermore, the company was relying on a mix of data from a number of software programs (including Tekla's PowerFab suite of products) deployed throughout the entire organization.



Challenge continued

Often, the data between systems had to be rekeyed from spreadsheets or paper forms. This duplicate entry took so much time that the company started looking for a better solution.

"We were at a point with our SQL server where we needed to make a decision as to whether we were going to upgrade or move to the cloud," said Dave Steel Company Executive Vice President Babette Freund.

The company did a cost-benefit analysis that included upgrading operating systems, backup capabilities, day-today functions and workflows, data security and internal IT resources and needs.

"When we compared all of those things, we realized we could take existing hardware that we were using for SQL, repurpose that hardware, and not have to upgrade it. It just seemed like a win-win for us to move to the cloud," Freund said.



Solution

By upgrading its operations to the connected, cloud-based **Trimble Construction One**, Dave Steel Company saw clear opportunities to address each of its challenges. Trimble Construction One's real-time data capabilities, robust data security and storage features, automated workflows and cross-functional collaboration applications have allowed the company's users to operate with the most current and accurate information at their fingertips.

The transformation to the cloud took a lot of planning, but the implementation process was seamless, Freund said. "Our migration to the cloud occurred over a weekend. It started on Friday and when everyone came back Monday morning, we were in the cloud. For the end user, there was very little difference—nothing new they had to learn."



Now that we have a production software that communicates with the accounting software, we are able to better analyze, course correct and evaluate potential efficiencies.

 Babette Freund, Executive Vice President, Dave Steel Company

7



Connected Results

Dave Steel Company took advantage of a connected data experience across its entire operations. The company's use of <u>Tekla PowerFab</u>, a suite of software solutions designed to help steel fabricators streamline data and processes for control and visibility throughout structural steel workflows, has helped provide further real-time visibility. Now, the company can connect much more Tekla PowerFab data to its back office Trimble Construction One solutions with far less manual administrative efforts or data rekeying.

One key area where these new real-time workflows had an immediate impact was with purchase orders. Freund said that prior to Trimble Viewpoint/Tekla data connection, the company had to write an internal program to import purchase orders from PowerFab into Trimble Construction One. While this workaround worked, Freund said there was still a good amount of manual labor required to ensure clean imports each time.



Solution continued

Time is Money

"Now, with this connected data experience, the import is relatively seamless. We also see great value in the PO receiving export/import process. This should greatly reduce manual paperwork processing as we transition our invoice approval process from a paper/manual process to the Trimble Viewpoint approval process," she said.

Additionally, Dave Steel Company can now bring powerful, real-time job cost capabilities into its Tekla PowerFab workflows. "Our job costing prior to (Trimble Construction One) was spreadsheet based—and believe me we had a lot of spreadsheets. Now, the information is much more accessible and easy to obtain," Freund said. "Again, that goes to time and accuracy. Anything that costs you time, costs you money and anything that costs you money costs you profit."



Solution continued

The Power of Digital

Another advantage of the cloud comes from the mobile applications that the company can deploy. For instance, being able to access Tekla PowerFab on tablet devices on the company's shop floor has removed paper from its processes, solving two key challenges:

"We're a fab-shop. What do we do? We weld. What are we welding with? We're welding with fire. So how dangerous is it to have a bunch of drawings laying around the shop? Right out of the gate, we've eliminated a huge safety hazard," Freund said. "In our industry, work is very fast-paced, and things are constantly changing. We always have revisions—whether its change orders, design changes, timing, coordination, etc. How expensive is it to fabricate from the wrong drawing? It's \$10 if you catch it in detailing. It's \$100 if you catch it in the shop. It's \$1,000 if you catch it in the field. Where are you most likely going to catch mistakes? In the field. It can get very expensive."



Results

Moving to Trimble Construction One and taking advantage of connected, real-time data opportunities across the company's Trimble solutions is helping boost productivity and free up resources throughout Dave Steel Company's operations.

"The success of our business is dependent on information from the production floor and information from accounting. Both information streams are equally important in determining efficiencies and opportunities for additional successes," Freund said. "Now that we have a production software that communicates with the accounting software, we are able to better analyze, course correct and evaluate potential efficiencies."



The best decisions are based on data and the riskiest decisions are based on intuition. Any time you can maximize technology use and combine that with empowering your team to not just do a job or push a button, but truly understand what they're doing and why, you've given yourself a competitive advantage.

 Babette Freund, Executive Vice President, Dave Steel Company

Cloud Technology Advantage

Freund said moving to the cloud and upgrading its technology capabilities will give the company a number of intangible competitive advantages moving forward. End users have much more time to focus on their actual work versus paperwork. This is also true for the company's IT team, which can now focus on improvements in other areas rather than continually performing software updates and data backups.

Reducing the number of software commitments and working more closely with a single vendor also has its distinct advantages, Freund said. "If we're going to move to a single-source vendor, we want to make sure that vendor is constantly evolving with our business and the way our business changes. Trimble is certainly doing that and we appreciate that."

Of course, there's also the power of more informed project teams and management teams.



Decisions Based on Data

"The best decisions are based on data and the riskiest decisions are based on intuition. Any time you can maximize technology use and combine that with empowering your team to not just do a job or push a button, but truly understand what they're doing and why, you've given yourself a competitive advantage. This means your team is invested in their jobs and empowered to ask questions, or will provide their own insights into how we can do things better."

Learn more about Viewpoint

Trimble Construction One

Learn more about Tekla

Telka PowerFab

Tekla EPM Tekla EPM Go



©2021 Viewpoint, Inc. All Rights Reserved.

Viewpoint.

ABOUT TRIMBLE CONSTRUCTION

Trimble is developing technology, software and services that drive the digital transformation of construction with solutions that span the entire architecture, engineering and construction (AEC) industry. Empowering teams across the construction lifecycle, Trimble's innovative approach improves coordination and collaboration between stakeholders, teams, phases and processes. Trimble's Connected Construction strategy gives users control of their operations with best-in-class solutions and a common data environment. By automating work and transforming workflows, Trimble is enabling construction professionals to improve productivity, quality, transparency, safety, sustainability and deliver each project with confidence.

For more information, please visit Viewpoint.com



ABOUT TEKLA POWERFAB

Unleash the power of truly connected steel fabrication management with Tekla PowerFab. Manage your entire fabrication process in one easy-to-use software suite. Visualize, communicate and share relevant information in your operations - including other project parties. Utilize powerful mobile tools for project and operations level productivity. Tekla EPM covers all your production needs from estimating and purchasing to project management, inventory and production control. Tekla EPM Go enables real-time paperless production operations and visualization, also on mobile devices. Tekla Structures EPM Modeler offers powerful model-based estimation workflow, as well as scheduling, reports, construction sequencing and more. Trimble Connect Business Premium allows viewing and real time visualization that can be shared with all project parties.

©2021 Viewpoint, Inc. All Rights Reserved. Viewpoint[®], Vista[™], Spectrum[®], ProContractor[™], Jobpac Connect[™], Viewpoint Team[™], Viewpoint Analytics[™], Viewpoint Field View[™], Viewpoint Estimating[™], Viewpoint For Projects[™], Viewpoint HR Management[™], Viewpoint Field Management[™], Viewpoint Financial Controls[™], Viewpoint Field Service[™], Spectrum Service Tech[™], ViewpointOne[™] and Trimble Construction One[™] are trademarks or registered trademarks of Trimble Inc., Viewpoint, Inc., or their affiliates in the United States and other countries. Other names and brands may be claimed as the property of others.

