

By Joe McKendrick

# S.M. WILSON: EMBRACING the WEB

When harsh weather slows progress at one of S.M. Wilson's construction sites in the Midwest, other parts of the project are affected as well. Material shipments don't arrive as planned, subcontractors have to be rescheduled, workers may not make it in or have to leave early, and project costs need to be recalculated and adjusted. However, thanks to the collaboration platform provided by Primavera Expedition Professional, S.M. Wilson's project teams and site superintendents can access and share the same up-to-the-minute information to keep projects on track and within budget, no matter where the site is located or how stormy it gets.

S.M. Wilson is not your ordinary construction management company. The company, in business since 1921, has consistently ranked among the top contractors in the St. Louis area and around the country. The family-owned company provides a complete range of services, including construction management and design/build for clients in the retail, healthcare, education, commercial and industrial sectors. At any given time, the company simultaneously manages between 50 and 60 projects, adding up to a projected \$350 million in total value. The company's annual revenues for the past five years have averaged between \$200 and \$350 million.

#### A LITTLE HISTORY

In 2001, the company standardized its project management work on Primavera Expedition, replacing a patchwork of databases, spreadsheets and paper-based documents. The system soon became an indispensable tracking tool and repository for projects of all sizes – from a \$50-million new high

school and a middle school renovation for Alton Community School District in Alton, Ill., to construction of a \$290,000 catheterization lab at Blessing Hospital in Quincy, Ill.

But although the company's project teams were reaping the benefits of Primavera, dealing with the underlying network software was another story. The company was relying on a standard client/server architecture that was, and continues to be, common to Windows networks. This meant that along with Primavera, each end user needed to install and run software that turned their desktop PCs into Windows terminals that linked into the company's network and central server. While end users enthusiastically embraced Primavera, the underlying network software created a "maintenance nightmare," relates Jamie Berzon, Expedition administrator for S.M. Wilson. "We had many, many, many annoyances trying to deal with our network." For example, what should have been simple print job commands often created bottlenecks on the network. Software

upgrades had to be administered machine by machine for almost two hundred end users, and there were the inevitable compatibility issues with other locally installed programs. Further, various iterations of critical project data were scattered among end users' machines.

So, when Primavera released the browser-based version of Expedition in 2003 – Expedition Professional – S.M. Wilson was ready to move on from the constraints of its underlying client/server software.

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tion storage now takes place on the server, rather than on end users' PCs. Site superintendents working in disparate locations across the Midwest now have access to the same information as project managers and assistants in the main office. "We began by getting our superintendents into Expedition Professional," says Berzon. "Many now do their daily logs, print contact lists, print meeting minutes, and print and track RFIs from the field through Expedition."



Elementary school cafeteria, Carlinville Community Unit School District Number One, Carlinville, Ill

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Information on change management, contract management, payment tracking, issues management, cost control,

#### OLD TO NEW AT CYBERSPEED

role-based project control, document control, field administration, reporting tools, job cost management, and safety management can be accessed from any job site with a networked computer.

The actual conversion to the all-Web-based version of Primavera took place in just two days, Berzon recounts. The upgrade CD arrived on a Wednesday, and the new system was up and running by Friday of the same week. "The conversion was easy," she says. "Converting the databases and applications took less time than any other conversion that we had ever done. Primavera tech support also made a really big difference. They walked me through every question we had."

The rapid pace at which the upgrade unfolded, however, presented some issues in user adaptation. As with any overnight implementation, especially from a Windows to an all-Web interface, there was some discomfort among people who were accustomed to storing documents on their own machines, explains Berzon. "We had no testing environment, and went live immediately. Some users complained at first, but after taking the time to abandon their 'old' ways and embracing the new, they all love it."

To smooth the process, Berzon created an internal user guide that detailed the ways in which various processes would be incorporated into the new system. Also, weekly meetings with employee groups aided information sharing. "At this point, if you were to ask any of our existing users if they would go back, they'd say 'no,'" Berzon says. "New employees we've hired since

the conversion can't even imagine what it was like before. It's very user friendly, and they pick it up right away."

#### MORE THAN EXPECTED

Berzon and her colleagues expected to be able to quickly leverage the new ease of use and more efficient administration that the Web-based version promised. However, they quickly realized additional benefits that enhanced the productivity of the company's business units. For example, Primavera enabled project assistants to increase the number of projects they handled. "Our project assistants are now handling up to 27 percent more jobs than they previously did, which is an indicator of better efficiency," Berzon says. "Our job

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numbers are increasing, but the size of our project staff hasn't increased. That's an efficiency that we can clearly see."

In the past, project managers and engineers had to key, re-key, and continually verify complicated project information. Today, the Primavera solution's highly intuitive Web-based interface prompts end users through the data entry process, while drawing on key project data stored in the central repository. "Our project assistants have started actually taking away some of the data entry work that project engineers and managers used to have to do because of the complexity of it," Berzon states. "This frees up the project man-

agers' time to handle the fires they should be handling – change management issues, for example – and allows our engineers to spend more time with our customers.”

### GIVING STRUCTURE TO CHANGE

The Web implementation also served as a catalyst for more comprehensive change management – an issue that can cut deep into construction management margins. Primavera prompts end users to log all change requests through a centralized change management repository before they become change orders. “Our users never really used formal change management before,” says Berzon. “They would go directly into change order modules and write change orders. There was no tracking of issues or of proposals as they came in from subcontractors. The Web version took away that ‘loophole.’ Now, you can’t go directly to ‘change orders’ if you haven’t first been in ‘change management.’”

S.M. Wilson project team members are also making full use of Primavera’s daily reports feature, which enables site superintendents to enter in an accurate record of daily occurrences, such as weather conditions, work completed, field force and visitors, and materials delivered on site. The system also makes the information immediately available to the rest of the company. “Before, most of our daily logs were handwritten by the superintendents,” says Berzon. “They’re not 100 percent compliant yet, but now we probably have about 30 of our 80 superintendents doing all of their daily logs in Primavera. That’s something we didn’t have available to us before. Now, project managers have access to information they need if there’s a conflict, a severe weather delay, or other matters. They don’t have to try



Council chambers, City of Chesterfield Government Building, Chesterfield, Mo.

to reach the superintendent.”

### BRINGING THE OUTSIDE IN

Berzon plans to begin extending the Primavera system to outside users as well – a task that is relatively easy with a Web-based system. The software includes a role-based interface through which all internal and external project team members can access data on changes, status and cost. “We’re pushing to get

greater customization options for projects. The company has also recently begun tracking project insurance information within Primavera. “We used to track insurance in an Access database. Why not do that in Primavera as well?” Berzon asks. She also plans to begin deploying the software’s project safety module, and is currently overseeing an effort to integrate the solution into the company’s financial accounting system.

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*– Jamie Berzon, Expedition administrator, S.M. Wilson.*

more architects and owners involved in our system online,” says Berzon, explaining that in Primavera, data is protected by a set of comprehensive security options that help create custom profiles for each project team member – including third parties such as designers, engineers and subcontractors.

### NEW OPTIONS

Earlier this year, S.M. Wilson upgraded to the latest release of Expedition Professional, which brought even more robust administrative features and

Moving to the Web has dramatically cut maintenance and support time for S.M. Wilson. Working on a central server makes upgrades easy – Berzon says that she installed the latest service pack in about an hour.

With a staff of 80 office employees, and almost as many outside computers, including a regional office, she says, “That in itself is worth the conversion.” •

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