

The Long Road to Project Lifecycle Management

By John Geffel

Web-based collaboration solutions for the construction process have been around since the mid-1990s. They started out to be pretty rudimentary, offering little more than the ability to transmit submittals and RFIs electronically, store them in one place, and make them accessible to multiple players in the design and construction chain. Fifteen years ago, even those few features were thrilling. Now, finally, a confluence of circumstances, trends, and advances are coming together to make the reality of true project lifecycle management more than the elusive dream it's been for so long.

decade and a half, software companies have struggled to come up with solutions that could manage the process electronically from design to construction to facilities management. By and large, they have fallen flat.

In some cases, the process to be managed was too narrow, i.e., design but not construction, construction but not design, no ties to back office functions, etc. It wasn't always possible to connect all parties in the construction chain because some of them didn't have the right equipment, training, or willingness to participate.

Sometimes the connection speeds were so slow that it wasn't worth it. Many technological solutions were ahead of the industry. So for entirely too long, peer-to-peer communication—sending e-mails and faxes—was the common way to manage information, so while the exchange of information occurred faster than before, it wasn't any more accurate.

NEED INTENSIFIES

The need for project lifecycle management has existed since day one and has only gotten more intense as financing requirements have gotten more stringent, projects have grown more complicated, and protection against claims has gotten more important. The need also is there for everyone to work together in more collaborative and effective ways to reduce the productivity drains so typical of the construction industry. Ideally, everyone involved in the process of designing, building, and maintaining the project is working together on a common platform, sharing information and using consistent workflows. In addition, all processes ideally are connected to back office functions to allow every stakeholder to manage their business more intelligently, armed with enough up-to-date, correct information to track where they are in comparison to their strategic, operational, and financial objectives.

As solutions have been developing over the years, existing desktop software applications were often taken to the Web as a starting point. Project participants have been frustrated by the obvious caste system reflected by the typical project management software. Tools were design-centric, building-centric, or schedule-centric, with other functions getting short shrift. The result was that these tools were inadequate in the eyes of many stakeholders. They just didn't provide the framework for complete project management.

Looking at all of the individual roles involved, all of the participants need to be on the same page throughout the process.



It's been a bumpy road. What took so long and why is it all coming to fruition now?

The construction industry is unique among producers of tangibles. With very few exceptions, every building, bridge, road, dam, and port is different from the one before and the one after. Because everything is a one-off, the elements, materials, and processes weren't consistent across the board like they were in manufacturing where mass-produced goods lent themselves to standardized processes. In the face of that challenge, for the last

ABOUT the AUTHOR

John Geffel is general manager of Sage's Construction and Real Estate business, developer of Sage Project Lifecycle Management, Web-based collaboration for the project team. For more information, contact Sage at 800.726.6278.

All parties need to be included, all processes accounted for. How many times have problems arisen from contractors not realizing they are not working from the most current plans? How often have the as-builts been scattered around in different places and not complete, making facility management difficult and litigation defense ineffective? A solution that considers the entire lifecycle and all stakeholders eliminates those problems. With wider acceptance and adoption of design-build, the adversarial relationships so prevalent in the construction industry have been turning around. Consensus and collaboration are becoming the new standard.

SOLUTION AT HAND

The industry is now evolving toward the ideal project lifecycle management solution. Collaboration among all parties in the design-construction-facilities management is the guiding light. But the environment for usage and acceptance of such a solution must be in place also, and finally that environment exists. The industry has reached a stage of maturity where information technology is in terms of availability, adoption, and bandwidth. In addition, standard protocols now exist as to how to share information from a technical standpoint.

Bandwidth is now adequate to handle the massive amount of documents, drawings, and data generated for every project. The reduced costs and increased capabilities for data storage online have solved the problem of where to centralize and store information beyond the life of the project. For a long time, subcontractors were the weakest link, as many were not connected to the Web or were not trained well enough to take advantage of it. Now nearly every sub, large and small, is connected and its people

skilled in using e-mail; searching for what they want via Google, Yahoo!, or one of the other search engines; and using common applications.

Building information modeling (BIM) has grown in popularity, adding another key element to the process. In manufacturing, it is possible to build prototypes of products before they are mass produced. In construction, it is a different story. BIM makes up for a physical prototype that isn't feasible to build. BIM works out design specifications and construction processes to proof out that the design is what the owner requires and what the contractor can build rather than waiting to get to the construction phase and then find out that it isn't what the owner had in mind or that constructability is a problem. BIM enables modeling that can include value engineering, time and materials scheduling, and cost elements all in one place. But BIM isn't the whole story, merely a part of the process.

In order to fully realize the benefits of the entire collection of data amassed over the life of a project, plus more efficient integration of the supply chain, integration of project processes and information must be integrated with back-office systems. That has been the missing link, until now.

At Sage, the learned value of integrating workflows within the four walls of a construction company has been realized, along with the understanding that these workflows need to be extended to the larger team. It's a global solution, as most projects involve international currencies and players. Sage Project Lifecycle Management is an available solution to solve the challenge of needing a central hub for all of a contractor's projects, allowing the building team to collectively manage project documents and business as well. ■

COMPETITIVE ADVANTAGE
IT'S ALL IN THE DETAILS

No Idea Too Extreme. No Detail Too Small.
Felling Trailers introduces our *revolutionary Air Tilt Series**.
The towability of a TAG trailer with the versatility of a tilt.

- Air Powered
- No Hydraulics
- Low Maintenance
- Low Load Angle

FT-40-2 TA
(Shown with Optional Ramps)

7° Load Angle Makes Loading Low Clearance Equipment A Quick & Easy Job.

*Air Tilt Series available in 12, 20 & 25 ton models.

FELLING TRAILERS
Quality - Craftsmanship - Pride

1-866-213-2941 • www.felling.com
contractors@felling.com • Sauk Centre, MN

Tally Systems, Inc.
QuickMeasure
Onscreen
Digital Blueprint Takeoff for all trades

Are you struggling with what to do with plans sent to you on CD or downloaded from the internet?

Our QuickMeasure OnScreen program allows you to measure directly from PDF and other digital formats

Call for a free demo!
1 (800) 748-6636

Pure, Simple
Blueprint Measuring
Seamlessly interfaces with Microsoft Excel®

Call for a free demo 1 (800) 748-6636

TALLY SYSTEMS