

Enabling an Increasingly Mobile Workforce



A key challenge in delivering large-scale, long-term construction projects is effectively managing project information. Project teams must understand the risks and costs associated with delays and errors due to mismanaged project information, manual administrative processes, and workflow inefficiencies plaguing the project lifecycle. While project teams are distributed, the key to successful project delivery is streamlined collaboration across locations, firms and disciplines.

One of the greatest barriers to successful collaboration is efficient field operations. Although mobile adoption within the AEC industry is increasing, companies do not have an effective solution to manage the data being captured in the field. This creates unintended difficulties in areas such as administrative site tasks, site management, team collaboration and making timely decisions. Newforma's Project Information Management (PIM) solution creates an environment where data, processes and people are connected to overcome common obstacles when working in the field.

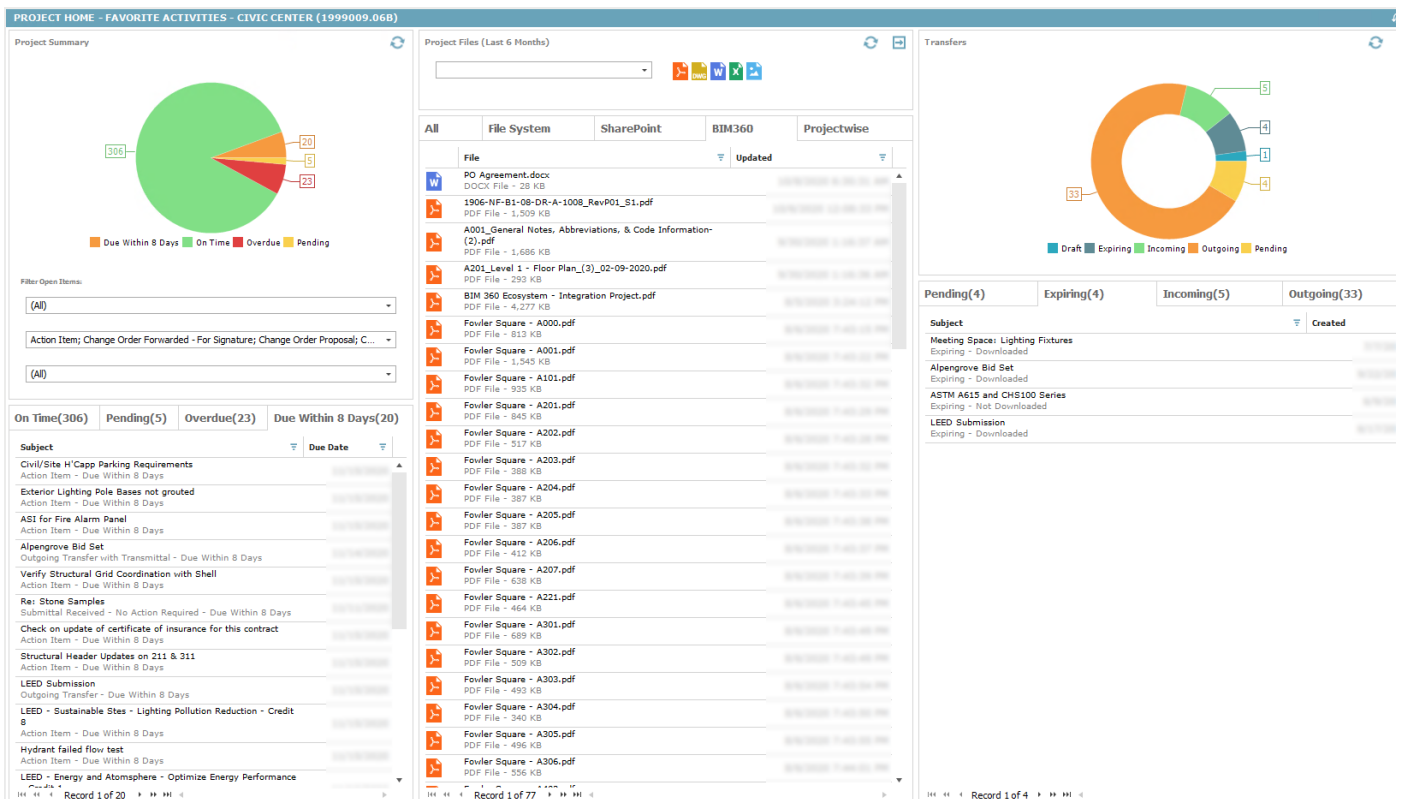
Michael O'Toole, senior associate at WSP, was tasked with making project teams more efficient.

Site Observation Reports

It's common for project team members to conduct site observation reports on paper, while trying to document progress with a mobile phone (or even a digital camera). The problem is the manual task of transcribing notes, downloading pictures to be formatted into a document or spreadsheet template, and then distributing to the team. This manual process leaves room for inevitable human error, and if information is not shared immediately, project progress can be halted.

Creating Punch Lists

Like site observation reports, team members can utilize outdated methods such as conducting punch lists using a notebook and taking pictures with a mobile device or camera. The tedious process is time-consuming and may delay contractors from finishing work to closeout a project.



Managing Client Expectations

After your work in the field, clients expect answers about site progress. When you're pulling information from multiple sources, and it's not accessible by the whole team, you have to spend time searching for answers, creating the "all eyes on you" stressor. You always want to keep your clients happy because you want the next job.

Project: New Balance Headquarters

WSP provided mechanical, electrical and plumbing (MEP) engineering services for the 14-acre mixed-use development at Boston Landing, which contains numerous buildings such as the New Balance Headquarters and Boston Bruins training facility. This was a challenging project given the complexity, but also for its location: on the Massachusetts Turnpike, notoriously known for daily gridlock traffic.

While constructing the New Balance Headquarters in Brighton, Mass., the team was spending too much time waiting for uploads and downloads of large BIM files. Additionally, punch lists could not be finalized and distributed until engineers returned to the office, which created communication delays to contractors, impacting the project schedule.

Leveraging Newforma, the team could easily capture, finalize and distribute punch lists and other reports through the solution's mobile applications. Integration of the applications on the project eliminated wasted time

travelling back to the office for manual data entry, and the construction team was notified as soon as the engineer completed the site visit.

"When we're out in the field, we need to get back to the office to share information with the rest of the team," says O'Toole. "You face several obstacles such as traffic, the painstaking process of pulling together a report and trying to decipher your handwritten notes in the field. If you're working with other project teams also using Newforma, it strengthens the collaboration, which is vital given the pace of design iteration on BIM projects. We've cut about 30 percent from the time it takes to receive, log, and respond to RFIs and Submittals."

Solution

As one of the world's leading professional-services consulting firms, WSP has engineered some of the tallest and most energy-efficient buildings in the United States. Continuously tackling complex challenges with innovation, creativity and passion; yet with vast capabilities come bigger teams, projects and risks. An effective PIM solution is essential. In addition to improving field collaboration, it minimizes the risk of essential information slipping through the cracks, causing delays, cost overruns and potential safety issues on the project.

For more than a decade, WSP has depended on Newforma. "As project information and collaboration increase, we're equipped to keep pace and grow using Newforma," concludes O'Toole.

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