



Jacobs Engineering Leverages Intellect for Construction Project Management

White paper

As the construction industry continues to recover from the recession, firms must adopt strategies to hone their competitive edge and be profitable in the post-recession construction era. Jacobs Engineering leveraged Business Process Management (BPM) software platform to support improved collaboration, efficiency, decision making and compliance.

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Technology is playing an increasing role in the construction and building industry – it's being integrated into smart building structures and is also being adopted in the field to create efficiencies and support collaboration on the job site and with all stakeholders. Increasingly, BPM is being leveraged as an essential tool to improve quality and communication to ensure projects stay on schedule and on budget.

With annual revenues exceeding \$8 billion, Jacobs Engineering Group Inc. is one of the world's largest and most diverse providers of professional technical services, offering full-spectrum support to industrial, commercial, and government clients across multiple markets. Its services include scientific and specialty consulting as well as all aspects of engineering and construction, and operations and maintenance.

When Jacobs Engineering was contracted to manage the construction of a 14-mile sewer tunnel as part of a \$2 billion wastewater treatment plant project for King County, Wash., it struggled to use an online construction management system prescribed for the project, which hindered productivity and required constant management intervention.

In Search of a Better Solution

After months of frustration, Project Manager Anthony Pooley was able to garner consensus to source another solution that would better meet the project's process management and documentation requirements. Pooley looked at a full range of solutions but many didn't offer the flexibility, customer control, speed of deployment, and workflow capabilities needed. After seeing a demo of the Intellect BPM platform, Pooley liked the solutions functionality and extensibility; when Intellect offered to model some of his processes and a few days later came back with a working model, he was sold.

Intellect was successfully integrated and deployed into the live project, already under way, in only 2.5 months. With the solution, Pooley built modules to support many varying workflows to support a wide range of essential construction operations.

One such module supports lifecycle management for design drawings. Another module supports the receipt, review, approval and payment of thousands of contractor applications for time and materials. This mitigates late payment fees, keeps track of payments against work orders with "not to exceed" thresholds, and also ensures timely payments are made so contractors stay cash-flow positive; essential to keep projects rolling.

Another module supports compliance activities – supporting recording and/or monitoring of specific information and its distribution to key stakeholders to ensure compliance requirements are met. Similarly, a permitting application manages permitting activities to track and renew permits as needed and/or support the submission of additional information to maintain permits.

Another module Pooley developed digitizes and automates safety observation reporting – an effort to monitor and manage safety conditions on the job. The module ensures behaviors are documented, assigned for review and follow up actions, and that reporters receive feedback to close the loop and provide improved responsiveness. A record of safety observation provided needed audit trails and documentations to attest to proper safety oversight on the job.

A risk register module automates the risk review process, ensuring the best people to evaluate each risk factor are assigned to do so, at the appropriate intervals needed.

Intellect: Delivering Value

“In any large construction project, there’s a complicated web of relationships that must be supported and processes managed within various internal and external constraints,” said Pooley. “The Intellect BPM platform provides the requisite flexibility to support a wide range of processes in the construction industry, which is beneficial given there are so many repetitive tasks that must be tracked for quality and cost purposes.

“Everyone wants to go digital but they don’t know how to do it and they don’t have the tools to do it. What Intellect has, is what everyone [in the construction industry] needs. You’re only limited to whatever processes you can dream up,” said Pooley.

Many digital project management solutions are essentially electronic filing cabinets with a few forms attached and maybe three to four pre-programmed workflows to choose from. “The Intellect solution gave us the power and extensibility to support all our processes, as opposed to having to tailor our processes to meet the constraints of the software,” he said.

Jacobs Engineering leveraged Intellect to capture myriad benefits including:

- Analysis and streamlining of core business processes, to eliminate bottlenecks and optimize operational performance.
- Improved management of suppliers and contractors.
- Streamlining of invoicing processes, contracts, CAD drawings, and the provision of materials – shorten payment times to take advantage of invoice discounts.
- Improved decision-making, record keeping, and compliance.
- Improves adherence to schedule and budgets/avoid overruns for improved customer satisfaction.
- Ability to ensure employees, contractors and suppliers are aware of and adhere to the correct standards of health and safety on site.
- Definition of processes, procedures and best practices in place around the use of equipment, and the handling of materials.



- Improved assessment of risk, identification levels of unacceptable risks, and more control over elimination of risk factors.
- Improved communication/collaboration with clients/owners.
- Ability to leverage the power of mobility with mobile apps for scenarios such as repairs or safety observation reporting.

Interested in gaining improved efficiencies in your Building, Construction and Engineering operations? Contact us at 800.558.6832 or 310.439.9680, email sales@intellect.com, or visit us on the web at: www.intellect.com.



About Intellect

Intellect, formerly known as Interneer, is a leader in [SaaS BPM software](#) that empowers business people to innovate with Smart Enterprise Apps. Intellect's new Intellect 8 BPM platform offers the industry's most advanced capabilities for connecting apps, people and processes.

Intellect's award winning Intellect 8 BPM platform enables non-programmers to create, use, and manage a wide variety of enterprise apps with built-in forms, data, workflow, and highly customizable reporting – all with the ability to integrate with legacy enterprise applications. Intellect offers a user friendly drag-and-drop interface that requires no programming or software coding, enabling organizations to quickly improve business automation, operational productivity, employee efficiency, compliance, customer engagement and self-service.

Intellect business apps can be deployed as a native mobile app in minutes on any iOS and Android device. Native mobile apps are critical for organizations that require secure, enterprise-grade mobile apps that function even when internet connectivity is lost.

Hundreds of customers, including [Circle K](#), [Jacobs Engineering](#), [FirefightersFirst Credit Union](#), [Silliker](#), [American Specialty Health](#), [Georgetown University](#) and [Host Hotels](#), rely on Intellect to build and manage business apps that automate business processes, optimize operations, and enhance revenue generation. To learn more, please visit www.intellect.com.