As capital projects become more complex, there’s a greater need for digital solutions to help streamline construction budgeting and forecasting. Aecon, Canada’s largest publicly traded infrastructure development company, recognized the need to digitally transform its business. Using outmoded, paper-based estimating tools and traditional spreadsheets was putting it at a competitive disadvantage.

Aecon is in the business of solving client needs, and to accomplish that more efficiently, it sought out an intuitive capital project cost management solution. Ultimately, this 140-year-old company that’s responsible for some of Canada’s most important and renowned infrastructure, chose InEight construction project management software to solve its cost estimating challenges.

By leveraging InEight’s digital benchmarking and bidding tools, Aecon makes use of historical data and spends less time and money building more accurate bids. In essence, the company is able to bid based on facts, rather than by feel.
THE CHALLENGE

As the old adage says, “Time is money,” and Aecon’s skilled estimators were spending far too much time on mundane estimating tasks and not enough time developing a greater understanding of the actual bids. In fact, estimators would take anywhere from a half day to nearly a week to set up a bid in the traditional manner.

The bulk of Aecon’s infrastructure projects are undertaken for provincial governments, and they carry with them different specifications that must be modified on a project-by-project basis. With estimators working on several at once, each with different specs, there’s a greater risk of missing an important item on the checklist when it comes to crews, materials and productivity.

Aecon needed a cost estimating solution that would enable it to gain more intelligence about a prospective bid in less time, while also achieving consistent and fact-based cost breakdowns.

WHY INEIGHT?

Aecon’s partnership with InEight began several years ago when its leaders saw the future of the industry and the need for implementing digital technology to remain competitive.
Mike Albani is Aecon’s vice president of estimating and is in his third decade with the company. He reflects on Aecon’s relationship with InEight and says it all began when it needed to submit a bid on a large tollway project. The company had just purchased multiple licenses of InEight Estimate (known as Hard Dollar back then) and used the intuitive software to build its bid on the tollway project. Aecon wound up winning the job — a critical victory, and one that heralded the start of a long relationship with InEight.

The successful tollway bid came on the heels of a recession in Canada, and Albani remembers it as a project that helped jumpstart Aecon’s growth trajectory. “With that, we just kept using InEight Estimate® through to today.” Now, Aecon has about 175 people across the company using InEight’s project cost estimating tools.

“It’s not just the estimators who are using the tools. It’s purchasing people looking to get into the system, schedulers are in the system, field engineers who are on the jobsites,” adds Albani. Managers are also opening up the projects and reviewing the productivities, material and subcontracting needs.

Albani says InEight’s tools offer some unique features that other project management software developers don’t. “It felt like an estimator had designed the software,” he says, adding that being able to copy and paste inside the tool is differentiating. Line numbers, for example, are automatically generated inside the system. Estimators don’t have to manually adjust or enter those.

“We bid work all over Ontario and across Canada. InEight Estimate allows us to swap out whole resource tables, one for another, just with a few mouse clicks, and that saves a lot of time,” says Albani.

Aecon has used InEight Estimate’s Bid Wizard functionality to increase its estimate entry efficiency. Not only is Bid Wizard saving Aecon valuable time, it’s helping estimators gain intelligence about specific bids in minutes. Work scope is quickly sorted by type of work, and Rough Order of Magnitude (ROM) costs and selling prices, plus man-hours, quantities and specific crews required for each scope, are summarized.

Albani says Aecon often copies from standard, or what it calls “storehouse
estimates.” “We standardized Estimate on provincial specifications. All projects need to follow a set of specifications in some areas that we work in. Once we apply Bid Wizard, we are on a level playing field — everybody is on the same wavelength with the project.”

Albani characterizes Bid Wizard as following a checklist, but one that comes with crews and productivity. “We don’t miss items that can otherwise be missed if we don’t follow a standard.”

Furthermore, field superintendents are seeing strong correlations between how the job is being built, and how it was built in the estimate. “That’s a pretty good feeling,” Albani says. “They tell me, ‘That was a nice bid.’ They got targets that are achievable. It was laid out clearly.”

**PROJECT SUCCESS**

When Aecon examines the benefits of InEight’s project cost management solutions, it sees huge savings in both time and money. Bids using traditional methods took anywhere from half a day to almost one work week to create. Now with the Bid Wizard tool inside InEight Estimate, estimators can create bids in minutes.

“For every 100 bid-build jobs that we bid, we save about one estimator year. And we bid more than 100 per year.”

Or to break it down further, Aecon was able to save as much as four and a half days to set up each project. Thus, it could refocus up to 3,000 estimator hours per year toward analysis of the bids, instead of toiling at mundane bid setup tasks. “It’s like having an extra estimator on staff without the cost of an added salary,” says Albani.

Instead of spending hours, if not days, trying to gain intelligence about a prospective bid, it’s now done in minutes.

With the Bid Wizard, Aecon also achieved predictable cost breakdowns — breakdowns that conform to the scope of a client’s specifications and standards, and are standard among all estimators. The company also saw a consistent understanding of bids by operations teams and more impactful bid reviews.

Minimizing waste and rework is essential in construction, and through the use of InEight Estimate, Aecon is able to align budgets with estimates. When the job is complete, the cost information is not tossed away. It’s brought back full circle and used in future jobs. Aecon
uses InEight Estimate’s benchmarking tool to harness historic data on uncertain types of productivity for work scopes.

Expanding on benchmarking, Albani uses the example of A-team, B-team and C-team productivities. “We have productivity curves for different scopes of work, and each curve is specific to a certain team, A, B, or C. Now, we can say which team is available for the next project and all we have to do is identify that in the ‘job properties’ benchmark setting in the project.” What happens next, says Albani, is those benchmarks get automatically updated inside the bid that estimators can reference. With the use of InEight Estimate, Aecon is bidding future jobs based on facts of its previous performance.

When it comes to other success metrics tied to the use of InEight’s project cost management solution, Albani says it gives Aecon the power to shed the jobs it doesn’t want. “Knowing that upfront, I think that’s the first power of it.” He adds the tool “takes off the rose-colored glasses a little bit and presents more true information.”

Albani summarizes InEight Estimate’s power by saying, “It’s the facts you are working with, not the feel side of things.”

“ It’s like having an extra estimator on staff without the cost of an added salary. ”

**ABOUT INEIGHT**

InEight delivers proven project certainty through advanced technology by helping owners, contractors and engineers visualize, estimate, control, connect and manage all aspects of their capital projects. Developed by construction professionals for construction professionals, InEight solutions deliver project confidence at every phase of the lifecycle, helping minimize risk, control costs, increase efficiency and provide greater visibility for superior project outcomes. A subsidiary of Kiewit, InEight is based in Scottsdale, Arizona, U.S., and is ISO 27001-certified. For more information, visit inEight.com.