

Capital Program Management Software for the Building Lifecycle

Customer Case Study

AECOM

AECOM Uses Proliance® Software to Establish Program Management Best Practices and Deliver Unsurpassed Financial Reporting to Clients Around the Globe

AECOM (NYSE: ACM) is a global provider of professional technical and management support services for a broad range of markets, including transportation, facilities, environmental, energy, water and government. With approximately 45,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global experience, local knowledge, innovation and technical excellence in delivering solutions that enhance and sustain the world's built, natural and social environments. A *Fortune 500* company, AECOM serves clients in more than 140 countries and has revenue in excess of \$8.0 billion.

Since it was launched as an independent company in 1990, AECOM, which is headquartered in Los Angeles, California, has become one of the largest providers of professional technical and management support services in the world. The company has evolved and diversified through organic growth and acquisition activities that significantly broadened the its business lines and geographic reach. AECOM ranks number one overall on the *Engineering News-Record Top 500 Design Firms* list, ranks number one in multiple categories on that same list and holds several top spots in the *ENR Top 150 International Design Firms Sourcebook*.

AECOM is one of the largest program management firms in the world and has been entrusted with the management and control of hundreds of major capital programs totaling nearly \$340 billion across all continents and market sectors, including transportation/infrastructure, environmental, facilities, mining and minerals and energy.

When AECOM first adopted project management software in 2002, the company purchased Prolog® Manager from Meridian Systems. At the time, AECOM needed a solution to help develop standardized processes to support its project management/construction management projects. After an in-depth due diligence process, Prolog was chosen because it was the best fit for the company's needs.

As AECOM's global business grew and evolved, the need for a more robust, scalable and accessible enterprise project management information system (PMIS) emerged. "AECOM is engaged in very large programs with high capital values that can last five, ten or even 15 years," explains Associate Vice President of AECOM's PMIS Solutions Team, Kim McAvoy. "We started looking for a solution that was more suitable for our global program management engagements."

In 2004, Meridian had introduced Proliance software, a Web-based Infrastructure Lifecycle Management (ILM) solution that allows organizations to optimize the Plan-Build-Operate project lifecycle for complex capital projects, construction and real estate programs, and extensive facility portfolios. "Proliance was an easy-to-customize solution that would allow us to adapt our processes to the individual client's needs," McAvoy recalls. In addition, the fact that Proliance is a true web-based solution was



"When you're dealing with a \$26-billion program, information overload can make it difficult to spot problems. The ability within Proliance to review and manage by exception is unsurpassed."

Kim McAvoy Associate Vice President PMIS Solutions Team AECOM



an important factor from a global accessibility perspective, allowing for ease of deployment.

In 2005, AECOM selected Proliance as its next generation technology solution and added the software to its PMIS toolset. Five years later, the company has hundreds of Proliance users all over the world.

An 80/20 Blend of Best Practices

Within Proliance, AECOM has established its own version of the 80/20 rule. For every program or project that utilizes the software, 80 percent of their own standardized processes are combined with 20 percent of client-specific customizations. And AECOM has multiple 80 percent standards that are geared toward specific markets, such as health care, education and transportation. "With our program management engagements, we are an extension of the client we are representing," McAvoy says. "We need to meld our best practices with the client's best practices. Proliance is very adaptable to this and allows us to deliver personalized management services that also incorporate the standardized processes we have developed over time."

With major AECOM programs, a discovery session with the client reveals the standards and customizations needed to meet specific expectations. Then, the PMIS Solutions Team configures the Proliance database and workflows to capture, track and deliver the type of information desired. "With transportation, for instance, there might need to be an intensive correlation between schedule and cost," McAvoy explains. "So we will configure standardizations and workflows that support that need."

Each Proliance deployment improves AECOM's standards. For example, a custom template designed for one project might be added to the standards for the corresponding market. "This has definitely been a growth process for our team," McAvoy says. "We have created a number of very unusual add-ons and Proliance data views to support our unique client requirements."

Leveraging On-Site Super Users

To manage the training demands for each Proliance deployment, AECOM uses a combination of intensive, multi-faceted group training and a train-the-trainer approach. "On our major programs, we designate internal Proliance champions," McAvoy explains.
"These Super Users serve as our on-site administrators and train the collaborative partners on the program, such as the design teams, construction teams and the client." Document control is a significant component of collaborative partner training, which ensures that documents like requests-for-information (RFIs) get recorded – and answered.

Depending on the size and scope of the program, AECOM may have more than one on-site Proliance administrator. "We may have one champion who is very good at the financial and cost control portions of Proliance," McAvoys explains, "and another one who excels at

the document control, coordination and teaching aspects."

Remarkably, AECOM's Los Angeles-based PMIS Solutions Team is a lean and efficient operation. With the exception of Australia, which has its own implementation team, this core group supports the company's entire global program management technology operations. "The champion philosophy has exploded in Australia, and we have quite a few Super Users working on program and project implementations there," McAvoy says. "Our small group handles the rest of the globe."

Automating Electronic Workflow

One of the most important Proliance functions for AECOM and its clients is built-in electronic workflow. "When you have a project that lasts 10 years, different people and groups come and go. At one stage, you might have an active design team. At another stage you might have active subcontractors. The electronic workflow within Proliance makes this process much simpler because the workflow is pre-programmed."

An AECOM specialist, for instance, may review drawings on one project for three weeks before moving on to the next project. Proliance provides



Saadiyat Island Cultural District in Abu Dhabi



Knowledge Economic City in Saudi Arabia

a consistent methodology that allows that specialist to be productive as soon as he/she arrives on a project. And, once the drawings are reviewed, the system will automatically move the project forward. "Proliance delivers consistency to our people and to the project itself," McAvoy says. "The electronic workflow designates the next task that must be done and the next person in line to take action."

Managing information electronically using a predetermined workflow gives AECOM and its client "a single source of truth," which is especially vital on very large programs. "We have a project that had 8,000 documents in six months. When you're managing that much information, it is really beneficial to have it all in one place. Proliance tracks the history and delivers concise, auditable information. And that's just the document controls portion of the system," McAvoy explains.

Unsurpassed Financial Insight

"The financial side of Proliance also delivers untold benefits," McAvoy continues. "Most accounting systems are reflective; they only tell you where you have been. With Proliance, we have a projective financial view of the project that tells us where it is and where it is going. This eliminates surprises because we can forecast what is coming."

Comparative financial analyses and exception reporting provide insight into all projects within a program to identify potential issues early. "When you're dealing with a \$26-billion program, information overload can make it difficult to spot problems. The ability within Proliance to review and manage by exception is unsurpassed."

The flexible reporting functions within Proliance allow AECOM to generate different data views depending on the client's unique concerns. For each program, three or four different reporting

dashboards will be created to address the needs of various recipients, such as a project manager or the client's financial personnel. Addressing the stringent reporting requirements of public works projects is simplified, too.

In addition, AECOM can use Proliance to record how its expertise benefits the owner, thereby reinforcing the value of the services they deliver. Documenting negotiations that lower the cost for change orders is one example. "We actually did a study on one of our projects where we used Proliance to track all of the cost-saving services we performed. We were able to demonstrate to the client that our efforts had more than paid for our services," McAvoy states. "The Proliance reporting is very impressive."



New Doha Port in Qatar



Capital District Infrastructure Project in Abu Dhahi

A Key Differentiator in a Global Market

According to McAvoy, without Proliance, AECOM would find it challenging to deliver its current level of service to clients. "Instead of having a single funnel of information that creates bottlenecks on large programs, Proliance disperses our workload," she says. "Proliance increases our productivity all over the world."

In fact, Proliance has proven to be so valuable that the PMIS Solutions Team often demonstrates the system's capabilities at sales presentations while touting the program management services that AECOM provides. "We deliver some of the finest services in the world on some of the most unique projects around the globe," McAvoys states. "Proliance gives our business another key differentiator in the competitive market."

