At Adolfson & Peterson Construction (A&P), profit margins weren't keeping pace with the company's fast-growing revenues. Inefficiencies, poor collaboration and delayed communication were just some of the factors eroding profit.

That's why, in late 2000, A&P put together an in-house committee – which it called Team Digital – to evaluate its current technology systems and devise a strategy for change. Team Digital determined that the optimal long-term solution would be the implementation of separate, construction-specific applications for accounting, project management, estimating and customer relationship management (CRM) that could run on a standardized SQL platform.

When Team Digital's research was complete, best-of-breed software solutions were chosen based on their ability to increase A&P's efficiency and profitability. For project management, A&P chose Prolog Manager and Prolog WebSite from Meridian Systems. According to Team Digital, Meridian's commitment to the construction vertical and "personable approach" during the evaluation process helped it stand out from the competition.

A Grass-Roots Implementation

While many companies take a top-down approach to new technology initiatives, the semi-autonomous structure of A&P's various locations prompted a different kind of Prolog rollout. According to Frank Carlson, A&P's Director of Business Applications, "Our implementation was more of a bottom-up, grass-roots adoption of the software." He compares the experience to viral marketing; use of Prolog expanded as its merits and problem-solving abilities were espoused by early adopters.

"As the main person responsible for our Prolog implementation," Carlson says, "it would have been much easier if executive management had stated, "You will use this software." But there is something to be said for an application that is introduced to an organization and adopted companywide because of its value, not because it is mandated."

"In 2004 our work volume was about $420M and 2008 is projected to be closer to $800M. With help from Prolog, we're on track to nearly double our volume in just four years – and we're operating with roughly the same number of project management support staff!"

Frank Carlson
Director of Business Applications
Adolfson & Peterson Construction
Today, Prolog is used by 450 of A&P’s 572 employees. Use of the software has become a requirement and every project (some 300+ active jobs) is set up and managed in Prolog. Capabilities utilized include Cost Control (budgeting and change management), Document Management (RFIs, submittals and meeting minutes), Field Administration (punch lists and daily reports) and reporting functions.

**Real-Time Reporting Drives Cost Control, Profitability**

When choosing best-of-breed applications, A&P knew that managing budget, costs and projections – the three primary factors that determine project profitability – could be a challenge. “How do you bring information together when you have your budget in Prolog and your actuals in the accounting software?” Carlson asks, before supplying the answer. “We use Microsoft Reporting Services to seamlessly display information from both SQL databases on an Intranet site, which makes the data appear integrated even though it isn’t.”

Although integrating project management with accounting is seen as the ideal, A&P’s limited IT resources required them to think differently. They configured both applications to mirror setups like cost codes to create compatibility without moving data from one program to another. Through the Intranet, a custom metrics dashboard displays a series of job overview reports with real-time aggregate numbers (pulled from both programs) and the ability to drill down to detail.

These Intranet reports have proven to be very beneficial during project review meetings. Instead of displaying a spreadsheet and using valuable meeting time explaining formula calculations, project managers now log on to the Intranet to display a job’s budget, costs, projections and transaction detail in real time.

“The visibility this provides into project performance has tremendous value to our executive team’s ability to make decisions,” states Carlson, who cites statistical analysis to determine associated bottom line benefits. “Over the last three years, our profit margin percentage has grown by over one percent. One of the key drivers of this improvement is our core business applications and the fact that we have Prolog controlling budgets and change orders.”

**Making Best Practices Better**

Since purchasing Prolog more than five years ago, A&P has achieved real-time sharing of project information, enterprise-level project overviews, collaboration across all locations – and much more. “We know that Prolog has made many of our business processes faster and more efficient through standardization,” explains Carlson, “but there’s more to it than that. Prolog allows us to streamline our processes to become best practices and then work together to continually improve them.”

Carlson explains that when spreadsheets and word processing documents were the A&P “standard” for managing projects, it was impossible to maximize any one process because each person had a proprietary way of doing things. Prolog has changed that and he uses subcontract change orders to illustrate how.

“With Prolog, we gained an instant process for generating a change order, which we mailed out to the subcontractor. Soon, we turned that process into a best practice by switching from standard mail to e-mail. Over time, collective input took that best practice to the next level and today we have a paperless process: The change order is generated in Prolog, printed to PDF, digitally signed and e-mailed to the subcontractor. Many software systems claim to help companies establish best practices, but Prolog gives you the ability to make best practices better.”

Prolog WebSite has contributed to the creation of additional best practices on projects that use this collaboration tool. “We know that jobs using Prolog WebSite to manage the RFI process have faster turn-around times,” Carlson says. “The collaboration functionality can save a couple of days in response time for every RFI, which is a big deal across the duration of a project.”

**Doubling Work Volume without Adding Staff**

Greater efficiencies, detailed tracking of project documents and real-time monitoring of budgets and costs has allowed A&P to synchronize profitability with revenue growth – and Prolog has played a big part in this achievement.

“In 2004 our work volume was about $420M,” states Carlson, “and 2008 is projected to be closer to $800M. With help from Prolog, we’re on track to nearly double our volume in just four years – and we’re operating with roughly the same number of project management support staff!”

When summarizing why Prolog is such an effective project management tool, Carlson says this: “Prolog is built for the project management team. It is scalable and customizable and gives you the ability to track every detail that you need to track. Prolog helps mitigate the inherent risk associated with construction.”