

# DIGITAL DESIGN & CONSTRUCTION

Interoperability in Action

**F**rom pipelines to powerplants, educational institutions to health facilities, performing arts theaters to sports stadiums, owners and building professionals have looked to technology for change. More than just a way to autonomously analyze data, today's advanced solutions must share information, facilitate business processes and enable communications. They must, in essence, interoperate.

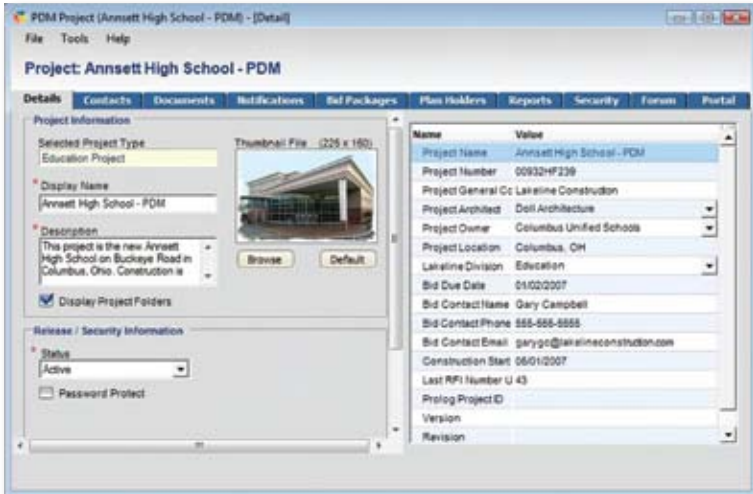
In 2004, the U.S. National Institute of Standards and Technology estimated that the cost of non-interoperable technology solutions was almost \$16 billion annually. The companies and projects highlighted in the following special section represent a few of the pioneers who have sought to reduce the staggering cost of disconnection by finding systems that work together.

These companies and many others have found ways to leverage interoperable tools that seamlessly push and pull data to ultimately create the framework for more creative, innovative and efficiently-built solutions that will define the next era of building and infrastructure.

By Vicki Speed

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## Texas-Based Contractor Reaps Rewards of Interoperable Expectations



of the project life cycle—project and document management.”

To this end, Austin Commercial implemented the Prolog® project management control solution from Meridian Systems to drive collaboration, purchasing management, cost control, document management and field administration. Next, Cardenas and his team implemented the Project Document Manager (PDM) document control solution from McGraw-Hill Construction (MHC), an interoperable document management tool designed to store, post, print and manage documents from pre-design through close-out directly from the MHC Network.

“Beyond functionality, the value of PDM is its integration with tools such as Prolog which allow us to synchronize all project data from design documents to project schedules and costs,” explains Cardenas.

“The possibilities are endless but the main integration points are document control, project management, schedule, accounting and, most recently, building model objects.”

PDM offers full integration with Prolog, as well as with AutoCAD® for design review, an E-plan room for construction and a comprehensive cradle to grave archive process for closeout and facilities management. It also provides access to Thomas Reprographics and the MHC/ReproMAX national network of plan room and reprographic centers and integrates with MHC’s Network, Dodge and Sweets. Additionally, PDM users can search the MHC Network - Global Directory for subs and vendors and then synchronize that information with Prolog or other tools.

Perhaps, the most satisfied user of the PDM/Prolog tools is Warren Ames, corporate project controls manager. He says, “Close-out documentation, typically one of the most painstaking and tedious aspects of any project, is light years better than just a few years ago. I have all design, schedule and cost information at my fingertips along with the ability to process the necessary documents into one cohesive unit. Preparing close-outs has become, dare I say, almost enjoyable.”

Cardenas concludes, “The industry has talked about interoperability for years and many don’t realize that it’s actually possible, particularly in the area of project management. While we’ve still got some work to do to bring design, estimating and scheduling systems together in a similar interoperable environment, we believe building information modeling is the spark necessary to take this next step.” ▲

When a firm grows from a predominantly Texas-based regional company to operations in six additional states and over \$1 billion in annual revenue in just 10 years, some might expect to see signs of growing pains.

Yet, for Austin Commercial, an industry-leading commercial building general contractor, this steady growth has sparked powerful and positive change. In this time, the firm has reshaped its conventional business processes and incorporated today’s most advanced technology solutions to meet the needs of its increasingly complex, geographically diverse organization.

Fred Cardenas, project management systems and technical support at Austin Commercial, says, “Along with the challenges of geographic diversity, technology advancements in general have changed expectations. Gone are the days where a cell phone and fax machine are sufficient. Our typical jobsites have multiple T1 lines, voice over IP telephones, high-definition video conferencing and large format printers. Owners, architects and our own employee owners have come to expect the availability of these tools in order to facilitate communication.”

While continuing its business growth to new regions, Austin Commercial has focused on creating a technology-driven business process that reduces redundant data entry and consolidates data and reports into one centralized data store.

Cardenas says, “The idea is to link silos of data and exchange it with various organizations, users, systems and platforms, in essence to deliver interoperability. Although interoperability sounds easy, it’s not. In order to be successful you need to establish the fundamentals and develop a set of clearly defined goals. We started with two key components