



NEW BUSINESS MODELS; THE NEED FOR MORE INFORMATION SPEED; NAVIGATING A SUCCESSFUL CMAR PROJECT

Moving Beyond Commoditization

Engineering firms, caught in the all-too-common “vicious cycle of commoditization and low prestige,” must re-examine their fundamental business models to re-establish themselves as pre-eminent value creators in the 21st century, according to a new book by Kyle V. Davy and Susan L. Harris, who are both instructors in ACEC’s Senior Executives Institute program.

The book, *Value Redesigned: New Models for Professional Practice*, shows how design firms can leverage internal talent and cutting-edge technologies to create bold value propositions that are tied to new pricing strategies.

The book also offers guidance on re-creating a firm’s business model by:

- Adopting innovative strategies for working with clients and building new capacities for both creative leadership and technical work;
- Implementing new pricing strategies that will produce a fair return for their efforts; and
- Moving back into significant leadership positions with clients and society.

The book is available through ACEC’s Bookstore at www.acec.org.

For IT: Speed Succeeds

One of the biggest issues facing engineering and design firms is computer-related application performance over wide-area networks (WANs). If not functioning efficiently, this performance can negatively affect collaboration, revision control and the required investment in information technology (IT) to support remote development/design teams.

In a recent ACEC online seminar on improved server management for design firms, Chris Pinckney, chief information officer at Psomas, explains how the multi-office firm has used Riverbed Steelhead appliances to solve multiple application challenges and, at the same time, realize a positive return on investment after the first year of implementation. Riverbed’s concept of the “serverless office” provided Psomas an alternative to monthly expenses needed to increase T1 and T3 lines and investing hundreds of thousands of dollars on an enterprise document management system.

In his presentation, Pinckney says the beauty of the Riverbed Steelhead appliances really comes into play when opening a new office. When the firm recently opened an office in Denver, Psomas installed a T1 line but not the usual file server, exchange server and backup server. Using the Steelhead technology, the firm was able to place just local printing and a backup domain controller on a low-tier, cost-efficient server.

“As we move forward, this option has become a part of our long-term strategic plan to remove file and e-mail serving from many of our existing offices as well,” he says.

Pinckney’s presentation also includes a variety of tips for firms

considering streamlining their IT strategies, such as:

- Train and educate: There is a “leap of faith” for many users accustomed to local files;
- Test, test and test again. And share your results with everybody at the firm; and
- Have a plan in place in case the WAN goes down.

Making the Most of the CMAR Process

As project owners around the country continue to look for new innovations in the delivery of engineering services, one method—Construction Manager at Risk—seems to be growing in popularity.

With CMAR, a public owner pre-qualifies and selects a construction manager (CM) during the design phase. The CM provides planning, estimating, scheduling and other consulting services. When the design is near completion, the CM and client negotiate a guaranteed maximum price (GMP) and schedule.

Elliott Gappinger, president of Oridian, a consulting firm that provides project and construction management services, says: “CMAR has valuable potential advantages to project owners: Contractor expertise can be matched to the needs of specific projects, most risks can be identified and mitigated during design with contractor involvement, fast-track projects can be accommodated, and claims and construction disputes can be virtually eliminated.”

ACEC is publishing a book by Gappinger, titled *CM at Risk*, which will be available in April as part of the Council’s Project Delivery Series. The book dissects the sometimes challenging dynamic between owner, engineer and contractor during CMAR projects and examines the impact of contractor design input on the responsibility of the engineer-of-record, the value of the engineer’s estimate and the use of “value engineering.” Gappinger also highlights potential pitfalls for engineers on CMAR projects, such as:

- Failure to understand owner expectations;
- Failure of the contractor to perform as required during design; and
- Lack of adequate project management.

Gappinger’s book also supplies methods for identifying these problems and working around them, as well as information to help engineers prepare scopes of work and fee proposals that are appropriate to the special demands of the CMAR process. ■

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