



HOW CIOs CAN WORK MORE EFFECTIVELY WITH SOFTWARE VENDORS

BY CHRISTIAN BURGER

Take four leading chief information officers and information technology managers from the top U.S. construction companies, add four chief technology officers from some of the most successful software developers working in the construction sector, bring them all together with an industry-savvy moderator and you have the makings of a stimulating session.

At the Technology for Construction show in Las Vegas, Associated Builders and Contractors (ABC) and *Construction Executive* sponsored a CIO panel that allowed these top IT managers to respond to a series of questions on the role of CIOs in construction and the challenges they face managing technology and the user community in their organizations. Software developers were on hand to respond to questions crafted specifically for them, including what they need from CIOs and what CIOs can do to better prepare for today's technology and tools. The answers are often surprising—such as how some organizations inadvertently undermine the effectiveness of their own IT managers.

What challenges do IT managers and CIOs face in today's construction environment?

The role of today's IT manager has changed considerably from 10 and 15 years ago, at least in this industry. The job changed from one that was highly technical and very specialized to one that is now more strategic and managerial. Today's CIO cannot know everything about all aspects of automation, technology, communications, hardware and the like. Instead, the CIO should understand these components to a degree without getting bogged down in every detail of every system.

The challenges these managers face comes both from inside their organiza-

The four CIOs and IT managers were:

- Mark Federle, The Weitz Company, Des Moines, Iowa
- Tom Garrett, IT director, Brasfield & Gorrie, Birmingham, Ala.
- Linda Johnson, IT manager, TIC, Steamboat Springs, Colo.
- Mike Dow, Burger Consulting Group, Chicago (former IT director, Cianbro, Pittsfield, Maine)

The four CTOs and software developers were:

- Dave Bennett, chief marketing officer and market strategist, Cheetah Advanced Technologies, Fort Collins, Colo.
- Dennis Stejskul, senior vice president, Sage Software (formerly Timberline), Beaverton, Ore.
- Mike Ragan, director of marketing and sales, Viewpoint Construction Software, Portland, Ore.
- Richard Faris, CTO, Primavera Systems, Bala Cynwyd, Pa.

tions and from outside. The CIOs were quick to point out that the software developer community needs to be better about announcing new releases, explaining their content and then meeting that deadline. This helps CIOs plan within their companies.

IT managers also face a lack of understanding and support from the top management team. Some participate with management at the strategic level, but most only interact with upper-level managers when struggling to get modest budget increases approved.

Richard Faris of Primavera said construction is still a very project-centric industry. This suggests that leaders of construction businesses tends to focus more on supporting projects and their associated

are available, Dow explained.

Johnson also said as technology increases in scope and footprint within the organization, it is becoming difficult to keep multiple technologies running and integrated, especially when they are on different platforms and operating system releases.

Finally, construction panelists agreed that many companies, intentionally or not, are entrenched in a culture of “no change.” This makes adopting new systems and technology difficult, as change is almost always a fundamental requirement. When a system does not live up to expectations, the IT manager and his department are often the first ones blamed, although the problem may lie with the company’s culture.

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personnel than “overhead” initiatives.

Linda Johnson, the IT manager for the large and diversified TIC, suggested that today’s IT manager has to be very flexible. As companies grow and diversify, sometimes through acquisition, the IT environment must remain flexible. One packaged solution that fits today’s requirements may have to be adapted for another type of business next week. And sometimes, there is scant warning of this new business.

Mike Dow of Burger Consulting Group said that top management sometimes gets the wrong impression from the business media. Managers hear about outsourcing IT jobs overseas for \$15 an hour and think that will translate into overhead reduction within their own shops. The next time the IT manager has to justify a new hire or contract with an outside consultant, costs are compared. Expectations can be set unfairly when not all the facts

As CIOs and IT managers, what do you need from the software developers that would help you be more effective?

Many of the IT manager panelists want more outreach from the vendor community. Whether it is through customer-focused workshops or user conferences, the CIOs feel the vendor/construction company relationship is worthwhile.

Of equal importance was the idea of the vendor community better understanding the construction industry and its requirements. Many leading software developers have construction-savvy people involved in the sales process, but IT managers want that level of depth and understanding on the support lines and available for training and consulting.

Mark Federle of the Weitz Company said all construction companies get held to a strict degree of accountability for scope and budget. He feels that the vendor community should be held to the same stan-

dard. More succinctly, they should “play by same rules as contractors do,” he said.

And lastly, all IT manager panelists agreed that the vendors should more broadly embrace open standards. This notion would make business much easier as all systems and technologies could reside on one platform and work with a broadly available set of tools.

What can the top IT managers do to more effectively prepare their organizations for increased use of technology?

Mike Ragan of Viewpoint Construction Software said that the business model for many software developers has changed from working on one stand-alone solution for one specific platform, to working on a software product that could have multiple points of interface and multiple platforms. This situation creates complexity. While all of the vendors would like nothing more than to work on products and features for the user community, the reality, as Dave Bennett of Cheetah Advanced Technologies pointed out, is that software companies have to respond to competitive pressures and shift priorities.

The vendors also hoped for a deeper relationship with today’s CIOs. Vendors said they could plan better for their products and technology direction if they had the ear of the CIO or IT manager rather than the typical user who is only focused on day-to-day use of the system.

Interestingly, Primavera’s Faris shared the desire for contractors to be more regimented in the way they install releases. Some large jobsites in a typical construction company run their own IT shops and choose upgrades at their convenience, making the issue of support and training that much more difficult, he said.

And echoing one of the ideas expressed by the IT managers, one vendor expressed the need for a construction CIO to understand construction, even more so than they understand technology. Dow suggested that a really good project manager could handle the role of IT manager with a little training on the technology side. Opinions varied on this—from outright support to complete opposition. Many felt that a balance of construction and technology understanding and experience were essential to the job.

Is there a role for the super-user in today's organization?

A super-user is a person in the organization that is heavily involved with the support and use of a given system or application, for example, scheduling or project management. He understands the application better than most, is aware of new enhancements to the product, becomes involved with the user community in training, and acts as the go-to person for troubleshooting problems. This relatively new position for companies has turned out to be rather effective.

All panelists agreed that the super-user's role is more prevalent than it used to be. However, as Johnson noted, a super-user must be more than a product guru. He needs to be an internal champion for the product.

Further, the challenge, according to Johnson, is that some of the employees who are skilled with software products are not necessarily the best trainers (and vice versa). Faris was cautionary, indicating that, if not managed properly, the super-user can give the vendor a false sense of the broader user-community, recommending enhance-

ments to the product that are appropriate for the high-end user rather than the average user. Federle agreed, seeing the risks of relying too heavily on the power users who ask for capabilities that only they can appreciate. He said he turned off several features and functions for the broader user community that he originally turned on for the power users only a year or two before.

Dow said for the IT manager, another challenge with the super-user concept may not be readily apparent: It can create a gap between the IT workers and the rest of the user community. This will ultimately allow the IT people to retreat back into the "server room" and focus on the deeply technical issues. Also, if not managed properly, super users can drift toward their personal interests more so than toward company's overall good.

But all panelists agreed that the super-user can extend the IT organization and make the company more efficient, if the process is structured and formalized.

As CIO, how far ahead do you try and forecast (plan) for technology?

IT managers suggested that the technology planning horizon varies for each construction company. Ten years out was the longest strategic vision, while more tactical level planning was anywhere from one to three years out. Some expressed concerns about trying to look too far out, suggesting that plans become blurry beyond five years.

The vendor community also tries to plan three to five years ahead and communicate that direction to their customer community. Cheetah's Bennett presented one qualification, however, relating to communicating direction too far out. He indicated that market pressures and platform providers can cause a change in direction midstream, and that vendors do not want to be forced to develop something that is no longer strategically important or viable.

Dow added that today's CIOs should spend more time in front of customers and on jobsites to enhance their understanding of market demands and project realities. The CIO's role certainly has changed, as has its importance and complexity in today's construction company.

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