

## SPECIAL REPORT: PROJECT MANAGEMENT

# Technology tools help bring projects in on time

By ADAM STONE

Without technology, project management can be an exercise in redundancy.

"I remember doing a project, and the guy in the next cubicle was doing a project, and we didn't always know what those projects were. So I would go out and ask everybody for a piece of information, when they have already given that same info to the guy beside me," said John Eisaman.

As manager of strategic alignment, supply management, at the U.S. Postal Service, Eisaman has seen a lot of improvement in project management in recent years. With 26 major projects in play right now, new collaboration tools have him better positioned to keep his finger on the pulse of project activity.

Eisaman is in good company. Across government, project managers are employing new technology tools and concepts to help bring their efforts in on time and on budget.

Some of these tools might fall under the heading "improved basics." These are technologies that fulfill the basic project management functions of communication, budgeting and tracking, yet do so in ever more sophisticated ways.

The FBI's Office of IT Program Management, for example, uses Microsoft Project, a popular piece of software that assists managers in developing plans, assigning resources, tracking progress and managing budgets. This off-the-shelf product "has really become the de facto standard in the project management industry," said John Hope, the office's project management executive.

Lately, though, Hope's office has gone a step further, implementing Microsoft's Project Server. It does everything Microsoft Project does while also delivering a bigger picture, allowing managers to observe and consolidate their efforts in a shared working environment.

This big-picture approach describes a key element in the latest technology fixes that are helping project managers do their jobs suc-



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The U.S. Postal Service's John Eisaman has seen improvements in project management in recent years. He uses collaboration tools to keep track of 26 major projects.

cessfully. From the oversight of isolated initiatives, project managers increasingly are looking to IT solutions to give them broader control through higher-level oversight. It's called portfolio management.

One such solution comes from Austin, Texas-based software maker Planview, where Mark Homrich describes a federal landscape in which IT executives are typically too overworked to manage multiple projects successfully.

"If they are having to scramble to support 10 projects, there is a lot of time spent just moving resources back and forth," said Homrich, Planview's vice president of business development for federal solutions.

This effort to juggle resources often snags timelines and budgets. By using portfolio management software to view the full range of ongoing projects, "there is a better sense of what the true priorities are, so the scope of work may go down, or at least there will be better communication about what are the true priorities," he said.

Clarity Portfolio Manager from CA of Islandia, N.Y., and Rational Portfolio Manager from IBM Corp.

of Armonk, N.Y., similarly allow a user to schedule work across multiple projects, provide visibility into resources to staff these projects, and track the status of multiple projects.

Other products deliver the big picture not just by tracking the usual metrics — on time? on budget? — but also by asking global questions about the project's success in meeting overarching business goals.

The Postal Service uses eProject to this end.

"You manage a project to meet some sort of business objective. The project is not an end in and of itself," said Tim Low, director of marketing at Seattle-based eProject. To ensure success, he suggested, it is necessary to analyze up front the relative worth of any given endeavor. That's where software comes in.

"Technology can help you analyze at the very beginning and make an informed decision about which individual projects will help you to best serve that greater goal," he said. Through the rigors of analysis, IT "takes away some of the more subjective measures, so

you reduce the risk of just doing someone's pet project. It becomes more of a data-driven discussion."

### Simulation modeling

Returning to the smaller-picture world of day-to-day project management, it is fair to say that most tools are designed to tell you where you are relative to certain milestones. Is spending on track? Are we in synch with the anticipated timeline? This creates a reactive situation. You don't know there is a problem until there is a problem. Then it's time to scramble.

More recent technologies offer an alternative, in the form of simulation modeling. Instead of scanning the present from moment to moment, these technologies envision the future in order to construct a realistic landscape by which a project may guide and measure itself.

For project managers, simulation modeling can bring to the table advanced algorithms to help deliver much-needed information. "How is my productivity going to be changing over time? How much rework will there be over time? When will that rework be discovered? And

how will that play out over time?" said Tom Mullen, a member of London-based PA Consulting Group's management team and head of the firm's Federal and Defense Services practice.

Simulation tools look at project requirements, resources and funding, while also factoring in the performance of past projects, similar efforts and potential setbacks including a significant design change, a key technology failure or a funding crunch. Drawing together all this data, "we can start calibrating the model to those activities to date, and then allow the model to begin to return a more independent estimate of what is likely to happen," Mullen said.

You might not like the answers, but at least you can start preparing a fallback plan. "We're not telling them they are going to fail. We are helping them to understand what the incremental impact is going to be if this happens," Mullen said.

### Training needs

It's clear that project managers have a range of tools and trends working in their favor. But they also have one major factor working against them: lack of training.

In late 2006, Price Systems LLC of Mount Laurel, N.J., surveyed 104 federal IT executives about the state of IT projects they manage. Some results were predictable: 34 percent said schedule management is most challenging, while 31 percent said cost management is most challenging.

The big shortfalls came in the area of training: 78 percent said their teams and program managers have inadequate cost-estimating training; 77 percent have inadequate risk-identification-and-management training; 73 percent have inadequate initial-baseline-development training; 67 percent have inadequate technical-project-management training.

The technology tools are great, but statistics like this make it clear that without additional training at all levels, technology will only take project management so far.