

By Louis Pilla | Photography Danny Turner

• Bell Helicopter flying high with Primavera

With a common language
and tool for gathering critical information
and performance metrics,
Bell Helicopter/Textron's project managers
fly in clear skies.

With their first flight in December 1903, the Wright brothers forever changed the way the world travels. Filled with stunning successes (think Lindbergh) and abject disasters (think the Hindenburg), our 100-year climb into the sky stands as an unparalleled human accomplishment.

Bell Helicopter, a subsidiary of Textron, joins that adventure by building military and civilian aircraft.

Developing and managing leading aircraft technology takes the most sophisticated tools available. One of those tools, Primavera project portfolio management software, helps Fort Worth, Texas-based Bell Helicopter manage its information technology (IT)



John Daniel, director, IT Plans and Controls

projects. Bringing Primavera software online presented not only a technology advance for the company, but cultural change as well. But before delving into those details, let's look at the various kinds of IT projects at Bell.

THREE TYPES OF PROJECTS

Bell's IT department manages three types of projects, according to John Daniel, director of IT Plans and Controls:

- *Small, short-duration projects.* Typically taking less than 100 hours, these projects generally involve a change within a legacy system.
- *Middle-level projects.* These typically deal with implementing a new capability, such as a new Web application. Usually requiring less

than 500 hours, they are more complex than the short-duration projects, but don't have the corporate governance associated with a large enterprise project.

- *Large enterprise projects.* These projects consist of hundreds of tasks with multiple resources and involve various functional areas. They tend to be focused on the implementation of commercial, off-the-shelf software. For example, Bell recently completed implementing i2 Technologies' Factory Planner, an advanced planning and scheduling tool for the manufacturing floor.

EARLY CHALLENGES

Although today Primavera allows robust oversight of IT projects at

Bell, implementing the software and its capabilities wasn't without challenge. Bell Helicopter first decided to implement Primavera software about three years ago, when the company began to enhance its program management toolset.

But, problems arose when the company tried to introduce the software without first formalizing its process and culture around project management. "We tried to infuse a tool without revamping our project management processes," says Daniel. "As a result, the first use of the software was a bit sparse, and we didn't achieve the toolset's full value."

A NEW CULTURE

The difficulties, however, had to do

Primavera for Product

Until now, Bell Helicopter's Earned Value Management (EVM) Department has relied on mainframe-based, 1970s technology for project management in building military and civilian helicopters. This labor-intensive system uses batch processing that can delay results.

But all of that is about to change as the department implements Primavera's new cost management technology. Doing so will speed the development of the company's 28 government helicopter contracts – representing billions of dollars in business – as well as commercial aircraft development at Bell.

The technology is a comprehensive cost management and earned value system that works in conjunction with wInsight from C/S Solutions, Inc. After scheduling projects in Primavera, managers at Bell will push

data into the cost management solution, which, among other things, spreads cost and schedule values into their appropriate time periods and contains rates for specific resources.

This will allow schedulers to "dollarize" the hours of resources that have been loaded into Primavera. Managers can then use wInsight as their earned value analysis and performance measurement tool.

Massive changes

The use of cost management with wInsight represents a massive change in project management at Bell. The software will integrate technical requirements, schedule and cost objectives into one baseline plan, providing early detection of issues that may impact program scope, schedule or costs.

with the company culture, not the technology, the 21-year Bell veteran notes. It wasn't the tool itself, but the lack of a consistent, standard project management approach to

own approach and used tools they were familiar with."

Over the past year, IT has worked to implement a standard management approach and toolset. The

throughout the organization, as well as the use of earned value to manage projects.

As part of the process, the company re-introduced the use of Primavera, teaching IT project personnel and managers the ways that the tool could help them to better manage their projects. Today, the company's IT department is using it to manage and track projects of any significant size through the centralized capability that the software offers. The software is providing them with a common language and tool for gathering information and metrics about performance across the IT organization.

*"It's not that we didn't manage projects.
But everybody had their own
approach and used tools
they were familiar with."*

— John Daniel, director, IT Plans and Controls,
Bell Helicopter/Textron

managing IT projects. "It's not that we didn't manage projects," says Daniel. "But everybody had their

department focused on refining and implementing a common project management technique and culture

CENTRALIZED DATA

Bell is using Primavera's core module

Development

The toolset will offer more quantitative measurement of data. Instead of getting subjective estimates of project completion, managers can obtain quantified, objective data measurement.

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A pilot, then roll-out

By using this new earned value management system, Bell also expects to shrink response time; for example, allowing timely analysis instead of waiting for batch processing to complete. It will also allow easier detection of project performance trends.

In addition, it will permit Bell to integrate cost and schedule activities. Currently, schedules are kept in one system and cost baselines in another, entailing a lot of manual effort to keep the two in sync.

During June and July, the EVM department will pilot Primavera's cost management tool and wInsight, running it in parallel with Bell's legacy system. Plans call for a roll-out in August, with complete deployment scheduled for end of the year. — LP

to maintain project plans and update the status of projects. With this technology, the IT group can capture and maintain project information in a central database accessible by authorized personnel across

from a resource perspective, allowing them to identify any resources – a programmer that might be over-located, for example.

Now, Daniel says, project managers can “look out the windshield”

ADDING MODULES

In addition to features pertaining to project management, Bell’s IT department has implemented Primavera time recording technology. “Essentially, it’s a timesheet

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the enterprise, eliminating disparate spreadsheets and timelines. Project managers can also view projects

to see what could happen if corrective action isn’t put in place, rather than having to determine what happened after the fact.

IMPORT ABILITY

The IT team is also taking advantage of the Primavera solution’s ability to import project plans from other software packages. Software vendors, Daniel notes, typically provide canned project plans, often in Microsoft Project, for implementing their software.

Primavera can import that Microsoft Project file and quickly build a project plan, eliminating the need for staff to re-enter the information required to maintain the actual performance of their own activities.

Bell also finds Primavera’s activity network diagram helpful. Instead of listing activities by work breakdown structure with text information, the activity network diagram shows a flow chart of the plan. Those diagrams are printed and posted weekly in work areas, so that staff members can see what the project looks like from a graphical standpoint instead of just text.



deployed over the Web that acts as the collection mechanism for time spent on plan tasks,” says Daniel. “It allows individuals to provide updates on tasks they’re responsible for,” he explains, adding that some 100 individuals are using Primavera to input timesheets on various projects.

Bell is also in the process of implementing the web-based reporting module, and is currently analyzing the methodology management capability, which permits managers to work with project templates.

AN EXTREMELY HELPFUL TOOL

“At the end of the day, Primavera is an extremely helpful tool,” says Daniel. Still, he cautions, the success of even the best project management software is dependent upon the level of program management maturity within the organization. “The focus needs to be around that culture, the process around project management, and the maturity of that capability. Then the tools become really effective.” •

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Regular reporting

Since implementing Primavera, Daniel and his team of IT managers meet weekly to report on project performance, and to deal with any roadblocks that may be impeding the success of a project.

With the help of the software, each project manager can focus on his or her projects’ cost and schedule performances as well as any related issues or actions. Through the use of Primavera filters that can be set to view certain criteria, a project manager can identify which of hundreds of tasks might be impeding a project’s performance and take corrective action before the problem becomes a serious issue. — LP