THE PROFESSIONAL MAGAZINE OF THE PROJECT MANAGEMENT INSTITUTE

December 2002 www.pmi.org

TAKE THE LEAD

Executive-Level
Sponsors
Ensure Project
Results



ROBERT JOHNSTON SENIOR MANAGER. BELL TECH LOGIX. INDIANAPOLIS, IND., USA

Risk Assessment Tactics

Gauging Team Performance

Jaried Project Manager Roles

THE PROFESSIONAL MAGAZINE OF THE PROJECT MANAGEMENT INSTITUTE

www.pmi.org



DECEMBER 2002 • Volume 16

22 Louder Than Words

What do your actions say about your business priorities? Enable enterprisewide project processes to realize true return on investment. by Ross Foti

28 In No Uncertain Terms

Project managers can draw upon an array of methods to identify risks and spot opportunities. by Mark Ingebretsen

34 Real-Time Reviews

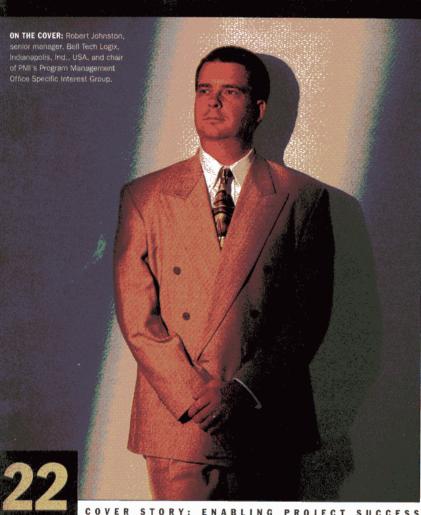
New knowledge management practices turn tactical project reviews into strategic earlywarning systems. by Dawne Shand

38 Peak Performance

Learn from your project successes and manage the knowledge effectively to achieve your company's performance goals—instead of reinventing the rules. by Tracy Mayor

42 They Wear Many Hats

Six Canadian companies discuss how they expect project managers to perform many tasks above and beyond actually managing the project. by Claire S.J. Wood, PMP



COVER STORY: ENABLING PROJECT SUCCESS

14 THE BIG PICTURE Creating Enterprise Excellence in a Project-Centered Organization by Dave Ellison

16 THE DIFFERENCE Duties of the Effective Project Sponsor by Neal Whitten, PMP, Contributing Editor

18 CAREER PORTFOLIO It's Always Time to Network by John Sullivan, PMP, Contributing Editor

20 ASK PM NETWORK Leadership and the Project Manager by Bud Baker, Contributing Editor

48 WORLD VIEW Ready for Kick-Off by Sarah Parkes

50 TECHNOLOGY TRENDS Project Tool Divergence by Chris Vandersluis, Contributing Editor

72 VARIANCE THRESHOLD Enemies List by Michael Hatfield, PMP, Contributing Editor

58 2002 PM Network Editorial Index

62 Call for Nominations: 2003 PMI Professional Awards

66 Call for Nominations: 2003 Project of the Year Award

Recognized in 2002 for Best Redesign

Δ.

by the American Society of Business Publication Editors and APEX Awards for Publication Excellence.





2 @Random 4 Feedback 8 Stakeholders 52 in The Field 54 PM Products 57 Featured Book 68 Services Directory





oday's project management pioneers use performance management to make better decisions when planning new projects. Data from earned value management (EVM) systems—the most popular methodology for monitoring performance—can be used to fine-tune management systems before taking them out for another spin, says Alexandre Rodrigues, a consultant and professor at Universidade do Minho, Guimarães, Portugal.

Rodrigues is working to improve EVM methodologies with António Laranjo, who worked on two of his country's largest and most public projects in the last decade: Expo98, also known as the Lisbon World's Fair, and Euro 2004TM, the next European Cup.

Expo98, a 40-month, \$780 million (€800 million) undertaking, included some 12 programs and 75 individual projects, everything from a train station to a new state-of-the-art aquarium.

Using earned value experience from Expo98, Rodrigues monitors the rebuilding of 10 stadiums and public infrastructure for Euro 2004, expected to be the third-largest sporting event ever held. "Euro 2004 has inherited the planning and control system of Expo98," Rodrigues says. "For Expo98, we had to [both] collect the right data at the right time and develop a system for doing that. Now, with Euro 2004, the system is in place, and we can start using it more proactively."

While individual metrics rarely translate between two projects, a good scheduling system would be necessary for good performance measurements, says Marilyn McCauley, president of the McManagement Group,

PEAK PERFORMANCE

Learn from your project successes

and manage the knowledge effectively
to achieve your company's performance
goals—instead of reinventing the rules.

BY TRACY MAYOR

a Springfield, Va., USA-based consultancy, and a member of the governing board of PMI's College of Performance Management. "It's important as you develop your baseline to ensure the cost, schedule and technical challenges all are fully integrated," says McCauley. "You need a good cost-estimating process [and] a way to effectively identify technical requirements. These should all be easily transferable from program to program."

In building a new baseline, managers can turn a former project's red flags into assets, McCauley says. If you consistently underestimated costs last time, tried to force-feed the schedule or ran into weather concerns that caused schedule slips, you should pay particular attention to those factors when starting a new project, she says.

"Earned value management puts discipline into the discipline of project management," says Wayne Abba, president of PMI's College of Performance Management. "If you have an unstable baseline, that's a strong indication right at the outset that you haven't created a good schedule or defined your project well enough," observes Abba, vice president of integrated management services at Dekker Ltd., a San Bernadino, Calif., USA-based maker of performance management software.

In the Moment

Beyond building a better baseline, Rodrigues and Laranjo found time trends that emerged during Expo98 could be applied to their new project: resource allocation, schedule analysis and labor productivity.

For example, the team's analysis methodology to determine corrective actions during Expo98 also applies to Euro 2004. During Expo98, they discovered that simply adding more resources to a flagging project was inefficient and

We first used EVM six years ago for a large project.
Since then, we've used it for a small number of projects, and 12 months ago, we decided all projects would be run using EVM.





frequently ineffectual. To retake the project schedule, managers must measure physical vs. scheduled progress and monitor the productivity of different resources with various work, Rodriques says.

As for time trends, by plotting the cost performance index (CPI) and schedule performance index (SPI) over time and tracking their variation, managers can identify patterns, such as learning curves or rework cycles, that will hold true for similar projects.

Outsourcing and Labor Issues

Past performance indicators related to labor productivity can be put to use when negotiating with—or sometimes trying to push—construction contractors, says Rodrigues. Armed with good earned value performance indicators for stadium projects in Lisbon and Porto, for example, Rodrigues and Laranjo find it much easier to request or demand higher productivity from a project that is underperforming.

Looking at labor productivity, Taylor Woodrow, a housing and development group, notes significant dissimilarities between trades. You can't compare the output of a bricklayer to that of a steel worker, says Paul Kidston, project control manager for Taylor Woodrow plc, Middlesex, U.K.

However, the firm has found labor data can help estimate likely performance of any one particular trade. That is, you can apply bricklaying in the past to future expectations, even after taking geographical variances into consideration. Output in London, for example, tends to be higher than that of outlying cities, says Kidston. "It's a number we can use to verify what [contractors] are saying, and it's a good comparison to use to make sure we haven't driven any problems into the [new] project."

Kidston isn't content to limit his horizons to just sharing data between projects. Taylor Woodrow is in the midst of assembling a *de facto* knowledge database of earned-value analysis that the firm can tap time and again for projects of many types and scopes. "We first used EVM six years ago for a large project," Kidston says. "Since then, we've used it for a small number of projects, and 12 months ago, we decided all projects would be run using EVM."

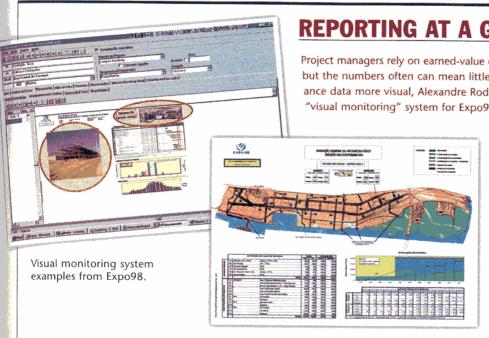
As a result, the company will have a store of EVM knowledge that relates to forthcoming contracts. "As regards timing, for example, after collecting data we hadn't yet put to any use, we now have a sufficient number of projects to know how different types of projects should be paced," Kidston says. "And the same goes for costing."

EVM: GLOBAL, COMMERCIAL AND STREAMLINED

Earned value gained acceptance in government circles for its costcontainment functions, but the discipline is winning adherents among profit- and loss-driven corporations. The for-profit world is discovering a good way to link budgets and performance with the business case.

"By measuring performance and identifying it with the business case, companies can make sure projects are funded properly and supported," says Wayne Abba, president of the PMI College of Performance Management. That conversion isn't just happening stateside—it's a global phenomenon, he says.

In the United Kingdom, Portugal and Brazil, among other countries, project managers report that performance management is becoming *de rigueur* even when government contracts are not involved. "It was most prevalent in the [Ministry of Defense], but now it's catching on in construction and infrastructure [such as] railways and the underground," says Paul Kidston, project control manager for Taylor Woodrow plc, a U.K.-based housing firm. "I would say it's becoming an almost mandatory tool."



REPORTING AT A GLANCE

Project managers rely on earned-value data to help them monitor performance, but the numbers often can mean little to senior executives. To make performance data more visual, Alexandre Rodriques and Antonio Laranjo developed a "visual monitoring" system for Expo98 that fleshes out EVM data with actual

> site photographs and other relevant graphs and maps.

The system selects and graphs data such as percentage of planned and actual work accomplished, percentage of work accomplished within a given time period, and monthly and cumulative economic evolution. Alongside those graphs, the system includes

information about weather conditions and before-and-after photographs of a site, which gives managers a more visceral way of visualizing progress,

Rodrigues says.

When selecting companies for new contract awards, the United States Air Force uses historical earned-value data as one element in evaluating a company's past performance, according to Blaise Durante, deputy assistant secretary of management policy and program integration, U.S. Air Force acquisitions. Technical performance, schedule, cost control and management are examined.

"A 'very good' or 'exceptional' rating is not based on a single cost performance or schedule performance index reading," he says. Rather, evaluators are interested in how companies put their earned-value data to use. The rating looks at things like the contractor's ability to make completion estimates based on earned-value data, develop and implement corrective action plans and successfully track against those plans. "Did they understand and use what the earned-value data was telling them in their execution decisions?" Durante says.

More the Merrier

If one performance management analysis serves as an early warning system, and two give you a better baseline, then several can serve as an enterprise-level knowledge base, says the College of Performance Management's Abba.

"Companies often come to EVM because of a government requirement or a contract, but as time passes and people become imbued with the discipline, they realize they've begun to build

a knowledge base," says Abba. That bank of historical data in turn allows companies to refine their cost-estimation and risk-management capabilities with each new project, he says.

To reach that type of earned-value nirvana, Taylor Woodrow gathers its data with an eye toward the future. For example, the company recently launched a project that included unfamiliar technology: building a water treatment plant. To pursue other such contracts in the future—and reap EVM benefits along the way-the firm is collecting a greater level of cost performance data than normally would be gathered, according to Kidston.

Ricardo Viana Vargas, PMP, a Brazilian project consultant, heartily endorses that strategy. "In the beginning, you must be simple, direct and objective, and with time, you can increase your analysis," says Vargas, author of a new earned-value volume Análise de Valor Agregado em Projetos [2002: Editora Brasport]. "There are many kinds of [cost-performance indices], some complex, some more applicable on a daily basis. If you apply numerous different CPIs, then the next time you can apply the ones that worked best."

In the end, most managers seek a way to flag problems now but also to avoid them in the future. "It's simple, really," says Vargas. "You track the indices to see what's going well and what's not, and then use them to make better decisions for the future." PM

Tracy Mayor is a Massachusetts-based freelance writer who has appeared in CIO, Electronic Business and Salon.com.

There are many kinds of cost-performance indices. some complex, some more applicable on a daily basis. If you apply numerous different CPIs, then the next time you can apply the ones that worked best.

> RICARDO VIANA VARGAS. PROJECT CONSULTANT, A&C GROUP

