Conducting Integrated Cost and Schedule Risk Analysis

Using Polaris™, decision makers can perform trade-off analyses between cost, schedule, risk, and technical scope to achieve their objectives.



Due to the complex nature of today's projects, it is more important than ever that decision makers have accurate analysis to create realistic management plans to quickly and effectively achieve their objectives.

Today, a new family of next-generation analytic tools is helping analysts provide their leadership with unparalleled insights into the programs and portfolios they manage.

Booz Allen Can Help with Innovative Analytical Tools

Booz Allen Hamilton, a leading strategy and technology consulting firm, has developed the Polaris[™] tool to perform integrated cost and schedule risk analysis (sometimes known as Joint Confidence Level [JCL] analysis). Integrated cost and schedule risk analysis is the total integration of the three primary program management functions-budgeting, scheduling, and risk management-and their effect on the probability of a program's success. Currently in use on dozens of programs across a myriad of international corporations and government agencies, Polaris[™] allows an organization to quantify its cost and schedule risk, and identify the leading sources of that risk. Using Polaris[™], decision makers can perform trade-off analyses between cost, schedule, risk, and technical scope to achieve their objectives.

Booz Allen's Service Offering: Polaris™

Polaris™ is a groundbreaking tool for conducting integrated cost and schedule risk analysis. It achieves industry-leading runtimes for Monte Carlo simulations, facilitates analysis of complex programs or portfolios in seconds, and provides a host of other key features, including:

- 1. Gantt Chart and Cost/Schedule Uncertainty. Polaris™ organizes a network of programs, tasks, costs, constraints, and schedule interrelationships into a Gantt chart view. It incorporates cost and schedule uncertainty into the model, and maps risks to specific programmatic impacts. Program and portfolio managers can use the analysis to defend budgetary decisions and identify lead sources of cost, and schedule growth using statistical analysis.
- 2. Cost Loading. Polaris™ loads schedules with time-dependent (variable) and time-independent (fixed) costs, generating scatter plots of the project cost and end dates. This allows decision makers to develop compatible, risk-adjusted budgets and schedules, generating substantial insight and guidance for programs.
- **3. Trade-Off Analysis.** Polaris[™] allows analysts to take actions to mitigate cost and schedule growth. These

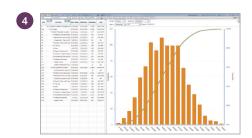




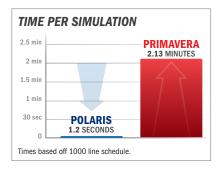












For more information contact:

Eric Druker

Senior Associate druker eric@bah.com 314-368-5850

Graham Gilmer

Senior Associate gilmer_graham@bah.com 202-898-3385

Michael Cole

Associate cole michael@bah.com 703-377-6308

- actions can include mitigating risks, accelerating or decelerating risks, or removing scope to help an organization fit its programs and portfolios into a constrained budget.
- 4. Discrete Risk Analysis. Polaris™ ranks risks based on their impact on project cost and schedule, allowing development of optimal mitigation plans. By integrating risk into the schedule, Polaris[™] produces a more accurate risk forecast than common risk registers.
- **5. Sensitivity Analysis.** Polaris[™] uses a complex statistical analysis to highlight the lead sources of cost and schedule risk, allowing decision makers to focus on and alleviate drivers of cost and schedule growth in a program or portfolio.

Polaris™ uses Booz Allen's RealTime Analytics simulation technology to perform analysis in a fraction of the time required by comparable tools. This allows analysts to perform trade-off and what-if analyses without ever leaving the room.

Polaris[™] supports data entry from numerous sources and consolidates information into a comprehensive model. It combines the schedule data from a Microsoft Project or Primavera P6 file with uncertainty and risk data loaded in various Microsoft Excel spreadsheets.

Latest Upgrades and Additional Features

Booz Allen continues to expand the strong Polaris™ foundation and advanced capabilities. Numerous enhancements to the core risk analysis engine of Polaris[™] give the user even more power and customization, all without sacrificing industry-leading runtimes, and an

easy-to-use, intuitive interface. Key improvements include:

- · Critical Path Tree Visualization. Displays all potential critical paths, as well as the relative probability of each scenario and which critical tasks align to each outcome.
- Resource Heat Map Visualization. Ouickly identifies over-utilized resources and what can be done to ensure that work gets completed within an organization's constraints.
- Inflation Tables. Calculates future year, inflation-adjusted costs.
- Schedule Health Check. Incorporates the Defense Contract Management Agency 14-point schedule health check to test the integrity of the project's schedule.
- Advanced Reporting. Expands reporting functionality to include chart exports as data to Excel.
- Cost/Schedule Trade-offs. Allows the program manager to dynamically increase the resources on a task to realize shorter task duration.

See our ideas in action at boozallen.com/polaris

About Booz Allen

Booz Allen Hamilton is a leading provider of management consulting, technology, and engineering services to the US government in defense, intelligence, and civil markets, and to major corporations, institutions, and not-for-profit organizations. Booz Allen is headquartered in McLean, Virginia, employs more than 23,000 people, and had revenue of \$5.76 billion for the 12 months ended March 31, 2013. To learn more visit www.boozallen.com. (NYSE: BAH)