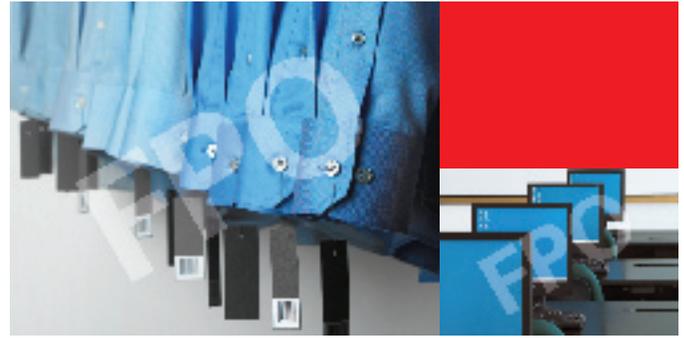# INFORMATION
THAT PREDICTS

Crystal Ball's Solutions for Public Sector Organizations

The success of any public sector programs depends on your ability to accurately predict the impact of uncertainty and risk, precisely estimate project costs, and strategically plan and allocate your resources. Oracle's Crystal Ball can help you accomplish all these and more.

"Within five minutes of opening the box, I was successfully running Monte Carlo Simulations...Great user interface."

Alan Barta
Geomorphologist
U.S. Dept. of Agriculture

"CB Pro opened the doors for a number of new contracts and has given us credibility throughout the Department of Justice."

Tom Rubino
Economist/Statistician
Fentress Incorporated

With increased responsibilities, staff cutbacks, and drastically reduced budgets, this is a challenging time for public sector institutions. Whether you're focused on cost estimation, human health risk assessment, strategic resource allocation, or production forecasts, you can't afford to ignore how uncertainty affects your forecasts and exposes your organization to unnecessary risk. Your knowledge and toolset will make the difference between the success and failure of your project.

Oracle's Crystal Ball is the leading Microsoft Excel spreadsheet-based application suite for predictive modeling, forecasting, simulation, and optimization. Used by public sector organizations as diverse as the US Army Corps of Engineers, the New York Power Authority, Los Alamos National Labs, and Health Canada, Crystal Ball helps you better assess your alternatives, increase your confidence in planning details, make more informed decisions, and minimize project costs and risks.

Mitigate Project Costs and Risks

Whether you are analyzing the feasibility of private finance initiatives, forecasting economic impact of proposed development project, or planning the operations of the electricity network, you will need to accurately analyze the costs and risks associated with your project. Crystal Ball provides the necessary capabilities to conduct a Monte Carlo or Latin Hypercube statistical simulation as well as sensitivity and tornado analysis, correlation, and historical data fitting. Using the advanced analytics techniques in Crystal Ball, you can understand which of the inputs drive the uncertainty in your models, account for positive or negative dependencies of uncertain inputs, compare the data to the distribution algorithms, and calculate the best possible fit and parameters for your data.

In addition, Crystal Ball enables you to transparently communicate risk to engineers, accountants, and managers who may not be

comfortable with results expressed only in terms of probability. With Crystal Ball, you can quickly run spreadsheet simulations as well as view and change the input assumptions, allowing your managers and peers to visualize your methods and understand your results. And by quantifying and explaining your operational risks, you can more precisely anticipate the costs and risks, make better strategic decisions, and ultimately improve the return on investment of your projects.

Improve Process Efficiency by Leveraging Six Sigma

Current budget constraints in the public sector require that programs and services using public funds be accountable and effective. Aiming to improve process and resource efficiency, many government organizations have implemented process measurement tools such as Six Sigma. But if you're only basing your analysis on hard data—not on the variation inherent in any manufacturing, engineering, or service process—you're only getting halfway there.

Oracle's Crystal Ball takes you the rest of the way to success by allowing you to use predictive and analytical techniques to anticipate and reduce the effects of variation. Because testing on physical models can be prohibitively expensive, Crystal Ball is particularly valuable in Design for Six Sigma (DFSS) practices. By providing designers with easy access to simulation, modeling, optimization, and forecasting, it helps them assess capability, pinpoint critical-to-quality

factors, and explore design alternatives.

Using sensitivity analysis, capability metrics, correlation, and scatter charts provided by Crystal Ball, you will be able to understand which of the uncertain input variables are most critical, assess the quality of your virtual design or process prior to implementation, and better visualize the correlations between variable inputs and outputs. The end results: better product and service quality, enhanced business process efficiency, improved customer service, and faster time to market.

Optimize Resource Allocation

Whether you're planning a U.S. army operative, managing your annual multimillion dollar IT project, or supervising your call center operation, resource optimization is the key to your success. Crystal Ball can help you better conduct strategic evaluation of projects, forecast market demand, determine scheduling and cost of projects, and plan and allocate resources.

By leveraging leading-edge analytical techniques such as Monte Carlo simulation, sensitivity analysis, and the Tornado Chart tool, you will be able to understand which model variables have the greatest effect on the success of your project. And the forecast, overlay, trend charts, and generated reports help you to clearly present your results to colleagues and managers.

In addition, OptQuest, the Crystal Ball add-in designed to enhance simulation

models by automatically searching for and finding optimal solutions, is ideal for managers who wish to select the best possible combination of new projects, reduce overall project costs, and determine the optimal levels of staffing. With Crystal Ball, you can more effectively model projects and calculate related risks, thus avoiding cost and schedule overrun, more accurately anticipating the effect of variables and resources on your project development, and ensuring on-time and successful project completion.

Win with Crystal Ball

Leveraging advanced simulation, optimization, and forecasting tools provided by Crystal Ball, you will be able to reduce the time required to produce estimate, mitigate your cost and schedule risks, and improve the efficiency and effectiveness of all your programs. In addition, Oracle provides a wide array of resources, including example models featured on the Web site, online and onsite training programs, as well as customized consulting engagement to help you get the most out of Crystal Ball.

Why wait? Start making smart decisions today by capitalizing on the power of Oracle's Crystal Ball.

CONTACT US

To learn more, call **+1.800.ORACLE1** to speak to an Oracle representative or visit **oracle.com/crystalball**

Outside North America, visit oracle.com/corporate/contact to find the phone number for your local Oracle office.

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