Review of Crystal Ball

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Crystal Ball is an easy-to-use yet powerful Monte Carlo simulation add-in to Microsoft Excel that allows analysis of the risks and uncertainties associated with Microsoft Excel spreadsheet models. Monte Carlo simulation is a well-established method for defining the uncertain components in a mathematical model. It involves generating numerous scenarios from a user-defined range of values, or a probability distribution for each uncertain parameter in a spreadsheet. It calculates the result for each scenario, generating a range of results, which is evaluated to assess risk. Crystal Ball is widely used in education, financial planning, and in the environmental, oil and gas, and telecommunications industries, among other fields. There are many statistical distributions to choose from, or the user can enter a custom distribution.

Crystal Ball's functionality includes sensitivity analysis, correlation, and historical data fitting. The sensitivity analysis indicates which of the uncertain variables are most critical, and thus dominate the uncertainty associated with the model. The correlation feature allows the user to link uncertain variables to account for their positive or negative dependencies. If historical data are available, the data-fitting feature can be used to compare the data to the range of results and calculate the parameter values that yield the best fit to the data.

Crystal Ball's clear graphics and reports facilitate inclusion of as little or as much detail as needed to present the results effectively, although there are no options for personalized chart formats. The user's manual is well written and includes straightforward directions to get users started, as well as in-depth discussions of the underlying theory. Crystal Ball is easy to use; experienced Excel users should have a simulation running in 30 minutes or less.

More information can be obtained at www.CrystalBall.com, where demo versions are available for download and various applications of Monte Carlo simulation are discussed. Commercial prices begin at $1,490, and significant educational discounts are available.

Visit www.crystalball.com and Calibra Consulting at www.inversemodeling.com .

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Reviewer: Evan R. Anderman, Ph.D.

Ease of Use:
GUI:
Application:
Output/Plotting:
Documentation:

Rating System for graphics:

Excellent
Very Good
Good
Satisfactory
Poor

Best Feature: Ease of use

Speed:

Worst Feature: Chart Formatting

OVERALL RATING

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