Products in Palisade's DecisionTools Suite

@RISK incorporates a technique called Monte Carlo simulation which enables you to represent uncertainty (risk or opportunity) in previously static Microsoft Excel or Project models. Using @RISK you can see all of the possible scenarios - and also how likely they are to occur. This means you can judge which risks or opportunities to take - and which ones to avoid. With @RISK you can answer questions like "what is the probability of profit exceeding $100 million" or "what are the chances of meeting this project deadline?" Sample applications include: production forecasting, cost estimation, contingency planning, reservoir estimation, budgetary projections, real options analysis, capital project estimation, DCF / NPV analysis, operational risk assessments, resource allocation, and production decline calculations.

PrecisionTree allows you to build decision trees in Excel, enabling you to visually map out complex, multi-layered decisions in a sequential, organised manner. The underlying idea behind a decision tree is decisions, chance events, and end results are represented by nodes and connected by branches. The result is a tree structure with the "root" on the left and various payoffs on the right. Probabilities of events occurring and payoffs for events and decisions are added to each node in the tree. With PrecisionTree, you'll see the payoff and probability of each possible path through a tree. Sample applications include: oil well drilling and development, capital project investment.

TopRank performs automated "what if" sensitivity analysis on Microsoft Excel spreadsheets – and is excellent for auditing models. Define any output or "bottom line" cell or cells, and TopRank will automatically find and vary all input cells which affect your output. The end result is a ranking in order of importance of all input factors which affect your bottom line. Results are presented in at-a-glance tornado diagrams and other reports. Sample applications of TopRank include identifying critical factors in: capital projects, oil and gas production, environmental analyses, cost estimations, DCF / NPV analysis.

NeuralTools allows you to create neural networks within Excel. The idea behind neural nets is that they imitate brain functions in looking for patterns in existing data sets – and once they're trained on historic data, they can take new data and make intelligent predictions about the outcome. Sample applications include: oil reservoir properties estimation, crude oil blending, oil field development, water injection and production predictions.

NeuralTools
sophisticated neural networks for Excel

Evolver
the innovative optimizer for Windows

RISKOptimizer and Evolver are both optimisation programs which are based on genetic algorithms. They are both designed to solve non-linear, complex problems and the way they work is by constantly trying to find new solutions to problems – and then building on those solutions to find even better solutions. The difference between the two products is that RISKOptimizer allows you to also build in uncertainty to your optimisation model by using Monte Carlo Simulation. Sample applications include: production optimization of water flood, production optimization of gas lift wells, distribution, scheduling, budgeting, portfolio and product mix optimisation, and resource allocation.

RISKOptimizer
optimization with simulation

StatTools replaces Excel's statistics functions with its own more robust and accurate functions, and enables you to perform time-series forecasting and statistical analysis. Containing the most common statistical analyses StatTools also allows you to build your own custom statistical procedures. Sample applications include: sales forecasting, real options analysis, Six Sigma and quality control, life cycle analysis.

StatTools
advanced statistical analysis for Excel