



Predictive Analytics Software and Services Solutions

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modeling • forecasting • simulation • optimization



The *complete risk and decision analysis toolkit* ***DecisionTools*** ***Suite***

YOUR FIRST STEP TO BETTER DECISIONS...

The DecisionTools Suite is an integrated set of programs for risk analysis and decision making under uncertainty that run in Microsoft Excel. The DecisionTools Suite includes @RISK for risk analysis using Monte Carlo simulation, PrecisionTree for decision analysis, and TopRank for automated “what if” sensitivity analysis. In addition, the Suite includes StatTools, NeuralTools, and Evolver for prediction, data analysis and optimization. All programs were designed and developed to work together easily.

The DecisionTools Suite is available in English, Spanish, Portuguese, French, German, Japanese, Chinese, and Russian.

LEARN MORE: PALISADE.COM/DECISIONTOOLS_SUITE

THE DECISIONTOOLS SUITE

BRINGS TOGETHER

Seven powerful analytical programs
that work together in Excel



@RISK

*risk analysis using
Monte Carlo simulation*



StatTools[®]

*advanced statistical analysis
for Excel*



PrecisionTree[®]

decision trees in Microsoft Excel



Evolver[™]

*sophisticated optimization
for spreadsheets*



TopRank[®]

*automated "what-if" analysis
for Excel*



RISKOptimizer[®]

*optimization with simulation
(available in Industrial edition only)*



NeuralTools[®]

*sophisticated neural networks
for Microsoft Excel*

FEATURES & BENEFITS

FEATURES

See all possible outcomes with
Monte Carlo simulation

Map out decisions with decision trees
and influence diagrams

Works in Excel

Genetic algorithms and OptQuest
optimization methods

Sensitivity or What-If Analysis

Distribution viewing and fitting

Presentation-quality graphs and reports

Full integration between programs

Parallel processing

Bundle pricing

BENEFITS

Avoid pitfalls and identify opportunities

Identify and illustrate the best alternatives

No need to learn new applications from scratch

Solve both linear and nonlinear problems quickly and accurately

Identify the most important variables

Accurate description of uncertainty

Easily explain results and recommendations to others

Easily install and migrate between component tools; apply
analyses from one tool to another tool's model for greater insight

Speed up large Monte Carlo simulations by using
available CPUs within a single machine

Save money compared to buying products separately



@RISK

risk analysis using Monte Carlo simulation

Would you like to know the chances of making money – or taking a loss – on your next venture? Or the likelihood that your project will finish on time and within budget? How about the probabilities of finding oil or gas, and in what amounts? Armed with that kind of information, you could take a lot of guesswork out of big decisions and plan strategies with confidence. With @RISK, you can answer these questions and more – right in your Excel spreadsheet.

@RISK performs **risk analysis** using **Monte Carlo simulation** to show you many possible outcomes in your spreadsheet model—and tells you how likely they are to occur. It mathematically and objectively computes and tracks many different possible future scenarios, then tells you the probabilities and risks associated with each different one. This means you can judge which risks to take and which ones to avoid, allowing for the best decision making under uncertainty.

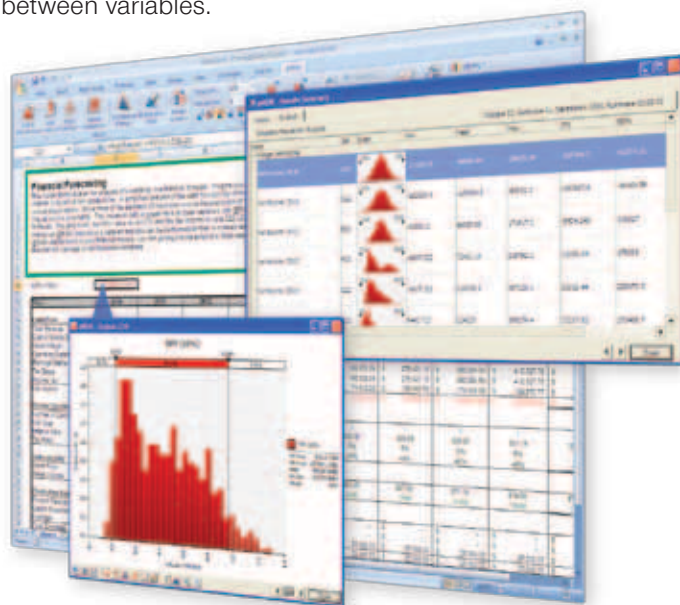
Set Up Your Model. Start by replacing uncertain values in your spreadsheet or project schedule with @RISK probability distribution functions (like Normal or Uniform) that represent a range of different possible values that a cell could take instead of limiting it to just one case. @RISK comes with over 50 distribution functions. These are true Excel functions, so you can enter, edit, and copy them just like any Excel formula. Then, select your outputs – the “bottom line” cells whose values interest you.

Run a Monte Carlo Simulation. Click the Simulate button and watch. @RISK recalculates your spreadsheet model thousands of times. Each time, @RISK samples random values from the @RISK functions you entered, places them in your model, and records the resulting outcome.

Understand Your Risks. The result of a simulation is a look at a whole range of possible outcomes, including the probabilities they will occur. A wide variety of graphs, reports, and analyses helps you understand the risks you face and communicate those risks to others.

Define Uncertainty with Ease. A graphical gallery lets you preview and compare various probability distributions. You can also use historical or industry data and @RISK's integrated distribution fitting to

select the best distribution function with the right parameters. Input distributions can also be correlated with one another, reflecting real-life dependencies between variables.



Understand with Graphs. @RISK graphs include histograms, cumulative curves, sensitivity tornado charts, scatter plots, box plots, overlays, trend graphs, and more.

Share Models with Others. You can remove and restore @RISK functions from your models, enabling colleagues without @RISK installed to use and edit the same files. In addition, you can store custom @RISK probability distributions and simulation results in the @RISK Library for sharing with other @RISK users in your group.

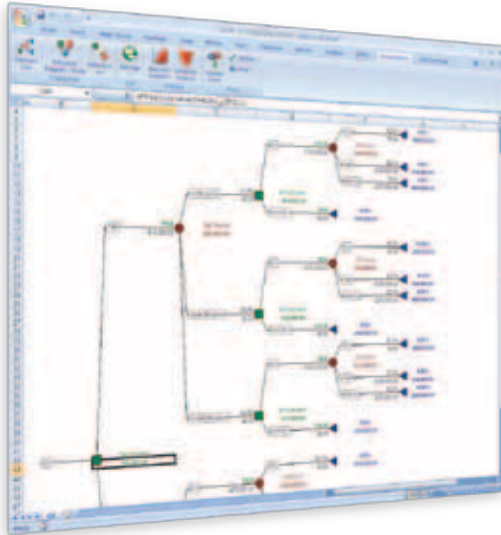
Integration with Microsoft Project. The new version of @RISK for Excel integrates with Microsoft Project, allowing you to perform all your risk modeling from the more flexible Excel environment. @RISK now imports your Project schedules into Excel so that you can use all of Excel's formulas, and @RISK's features, on your Project models. Excel becomes a front-end for your Microsoft Project schedule, linking directly to the underlying .MPP(X) file. Changes made in either Project or Excel are reflected in the other. When it's time to run your Monte Carlo simulation, Microsoft Project's scheduling engine is used for the calculations, ensuring accuracy.



PrecisionTree

decision trees in Microsoft Excel

Have you ever been faced with a complex, multi-stage decision like what is the best strategy for testing and drilling for oil, or should we build a new plant or buy an existing one?



What about bidding on a new project – what should you bid, and how should you react to your opponent's bid? Or perhaps you are faced with determining what the best litigation strategy is in a legal dispute, or the best series of medical tests and procedures to maximize a patient's chance of recovery?

PrecisionTree helps you tackle these types of complex, sequential decisions. With PrecisionTree, you can visually map out, organize, and analyze decisions using decision trees, right in Microsoft Excel. Decision trees are quantitative diagrams with nodes and branches representing different possible decision paths and chance events. This helps you identify and calculate the value of all possible alternatives, so you can choose the best option with confidence.



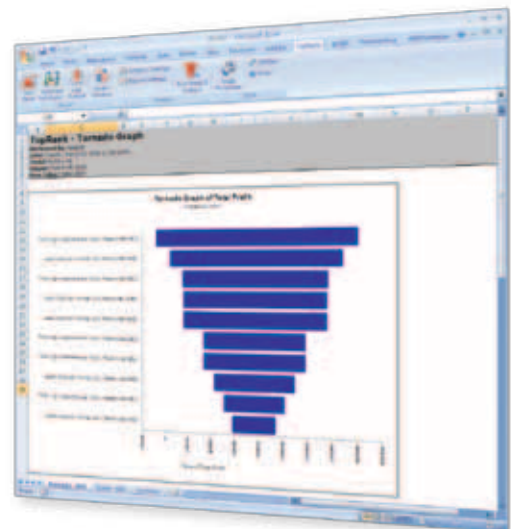
TopRank

automated “what-if” analysis for Excel

In a large, complex spreadsheet model, how do you determine the most important factors? What if you need to determine how sensitive your profits are to particular variables, such as material costs or market share? Or perhaps you want to run a risk analysis in @RISK, but don't know which variables are important enough to add distribution functions to.

Included with the DecisionTools Suite, TopRank performs automated “what if” sensitivity analysis on Microsoft Excel spreadsheets to answer these questions. Define any output or “bottom line” cell or cells, and TopRank will automatically find and vary all input cells which affect your output. You can also control exactly which cells you'd like to analyze. The end result is

easy-to-understand tornado charts, spider graphs, and other reports which clearly identify and rank which affect your bottom line the most.





StatTools

*advanced statistical analysis
for Excel*

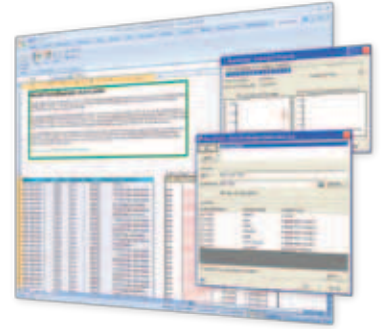
Have you needed forecasting, regression, quality control charts, or other statistical analyses beyond the basics that are provided with Excel? Have you ever doubted the accuracy of some of Excel's statistical results? StatTools addresses both of these issues, providing a new, powerful statistics toolset for Excel. StatTools covers the most commonly used statistical procedures, and offers unprecedented capabilities for adding new, custom analyses. StatTools is used for sales forecasting, real options analysis, Six Sigma, and much more.



NeuralTools

*sophisticated neural networks
for Excel*

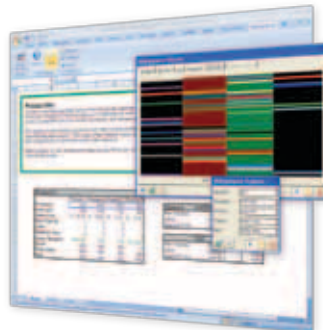
NeuralTools performs predictions in Microsoft Excel using sophisticated neural networks. NeuralTools imitates brain functions to “learn” patterns in your known data, and uses those patterns to make predictions from new, incomplete data. In addition, NeuralTools can automatically update predictions live when input data changes, saving time and enabling more robust analyses. NeuralTools is used for loan underwriting, credit scoring, call center planning, fraud detection, and much more.



RISKOptimizer

optimization with simulation

Wouldn't you like to know the best allocation of your limited resources to maximize your profits? Or the most efficient schedule to minimize costs? But what about the uncertainty inherent in sales projections, returns from individual investments, or production costs?



Traditional optimization methods ignore this uncertainty, a very risky approach. RISKOptimizer tells you not only the best combination of inputs to use, but the risk associated with each strategy. It does this by combining optimization algorithms with Monte Carlo simulation. You can seek out strategies that enable you to minimize your risks while achieving your goals.



Evolver

*sophisticated optimization
for spreadsheets*

Evolver uses innovative genetic algorithm (GA), OptQuest, and linear programming technology to quickly solve problems in finance, distribution, scheduling, resource allocation, manufacturing, budgeting, engineering, and more. Virtually any type of problem that can be modeled in Excel can be solved by Evolver, including otherwise unsolvable, complex nonlinear problems. Evolver has a unique ability to arrive at the best overall “global” solution to a problem—solutions traditional solvers typically miss.



TECHNOLOGY PARTNERZ - WE MAKE ANALYTICS HAPPEN

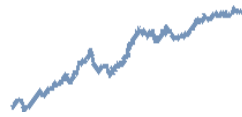
Technology Partnerz support it's clients in improving decisions and business outcomes by providing business modeling, simulation/risk analysis, optimization and time-series forecasting in the areas of capital investment decisions, enterprise performance management and enterprise project management. Our certified consultants provide expertise through-out the predictive analytics adoption cycle. From needs assessments and opportunity identification to post-implementation support, Technology Partnerz provides a wide range of flexible consulting solutions.

Build Planning and Make Decisions

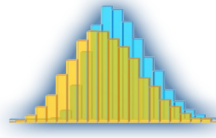
Model Building



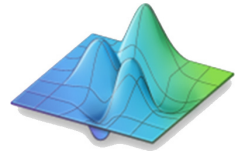
Time-Series Forecasting



Simulation



Optimization



Enterprise Project Management

Enterprise Performance Management

DEVELOP YOUR ANALYTICS CAPABILITY WITH A TRUSTED PARTNER

Analytics Strategy

- **Solution Selection:** Technology Partnerz provides objective and impartial support and methodologies to select the right analytics solution for your organization.
- **Business Analysis:** We identify and develop analytics and risk analysis solution specs, business processes and implementation plans.
- **Change Management:** We provide advanced change management services to ensure that predictive analytics thinking and best practices are firmly entrenched in the business culture.
- **Software Procurement Services:** Through our relationships with key analytics vendors we are able to sell directly or we can facilitate the software procurement process.

Solution Delivery

- **Model Building, Auditing & VBA Development:** Cradle to Grave model and VBA application development services.
- **Live Expert Support:** When a project gets complicated, sometimes all you need is a little help. Our consultants provide remote consulting and support for model building and results analysis to make sure that you get the results you need, when you need them.
- **Decision Analysis:** Our consultants work with you to identify and collect the necessary information, conduct in-depth analysis and modeling (including development of several alternative scenarios) as well as draft a clear and elegant report to present to stakeholders and management.

Knowledge Transfer

- **One-on-One Live Training over the internet:** Our remote one-on-one solutions are centered on both transferring skills and best practices while solving a pressing business need.
- **Customized Training:** Our certified trainers to support your training and competency development objectives. We can tailor our workshops to solve specific business issues and provide skills that will benefit participants and the organization for years to come.
- **Knowledge Transfer:** Technology Partnerz works alongside your project team to identify risks/opportunities, build tailored models, conduct workshops and provide the tools for you managers to make the most informed decisions possible.

SOLUTION DELIVERY

Sometimes you need just a little help to get back on track. Our consultants are certified in a host of solutions and can assist you to build or enhance your solution to your specifications. From giving advice on how to accomplish tasks to complete outsourcing of your project, we offer a wide array application and project support services including advanced experience with Excel, MS Project & MS Visio.

Designed to support each clients' individual needs, our full line of technical services will help your people get the most out of predictive analytics solutions. Technology Partnerz expert facilitators and analytics consultants can support your team in the following ways :

Modeling Expertise

- Developing and **customizing simulation & optimization** models
- Providing comprehensive **support during the model building** and simulation process
- Reviewing existing models to **ensure that simulation & optimization is used properly** and to its full extent
- **Effective use of data** through advanced statistical expertise and value of information analysis, support eliciting and modeling expert opinions
- **Auditing of risk assessments** to find errors, inaccuracies and missed opportunities

Custom VBA Application Development

We design custom applications for both advanced and novice users using Excel VBA and the Dev. Kits of your solution of choice (@RISK, Crystal Ball, RiskSolver Platform or ModelRisk). We also design innovative ribbons to make running and using the applications completely adapted to the users and the problems they are working on. We provide a host of flexible services to get the job done.

- Design, customize and build analytics and simulation models
- VBA programming for :
 - Streamlining data collection, processing and report building - Including Risk Based Digital Dashboards!
 - Custom Applications & Add-Ins using Excel for your specific process need or project.
- Advanced probability calculations and simulation routines in Excel using the tool of your choice, including Oracle Crystal Ball, Palisade @RISK, Frontline Solver, Vose ModelRisk
- Integration with external data sources such as MS Access, MS SQL, ODBC, OLAP...



Have you analyzed your risks?

Consulting Services Overview

Modeling

We work with you to translate your problem or decision into an analytical model. These models can then be simulated and optimized.

Simulation

We use simulation to better understand the dynamics affecting your business and impacting the accuracy of your decisions.

Optimization

Go from What-If to What's-Best by optimizing your business models.

Time-Series Analysis

Forecast sales, demand, growth or whatever makes your business tick with the help of our senior consultants

Project Risk Analysis

From Cost and Schedule Risk Analysis to valuations, we can assist you in making decisions that maximize the bottom line

Excel Development

Own ready-to-run models and templates that can be applied and expanded for future projects.

ABOUT TECHNOLOGY PARTNERZ

Technology Partnerz Company Overview

Established in 1999, Technology Partnerz got its start doing organizational change management and business analysis for the implementation of large-scale ERP systems. During this time, over 15 SAP/Oracle/MINCOM projects were delivered. Through this exposure, it was quickly understood that risk analysis (both quantitative and qualitative) were critical necessities in achieving success in these types of projects as well as in most other business situations.

With this in mind, in March 2006, Technology Partnerz incorporated predictive analytics into most of its tools and methodological approaches. This integration resulted in the launch of a dedicated analytics practice in March of 2008. Since 2009, Technology Partnerz has been Oracle Gold Level Partner and is recognized as the as one of the world's leading Oracle Crystal Ball Solutions Partners.



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