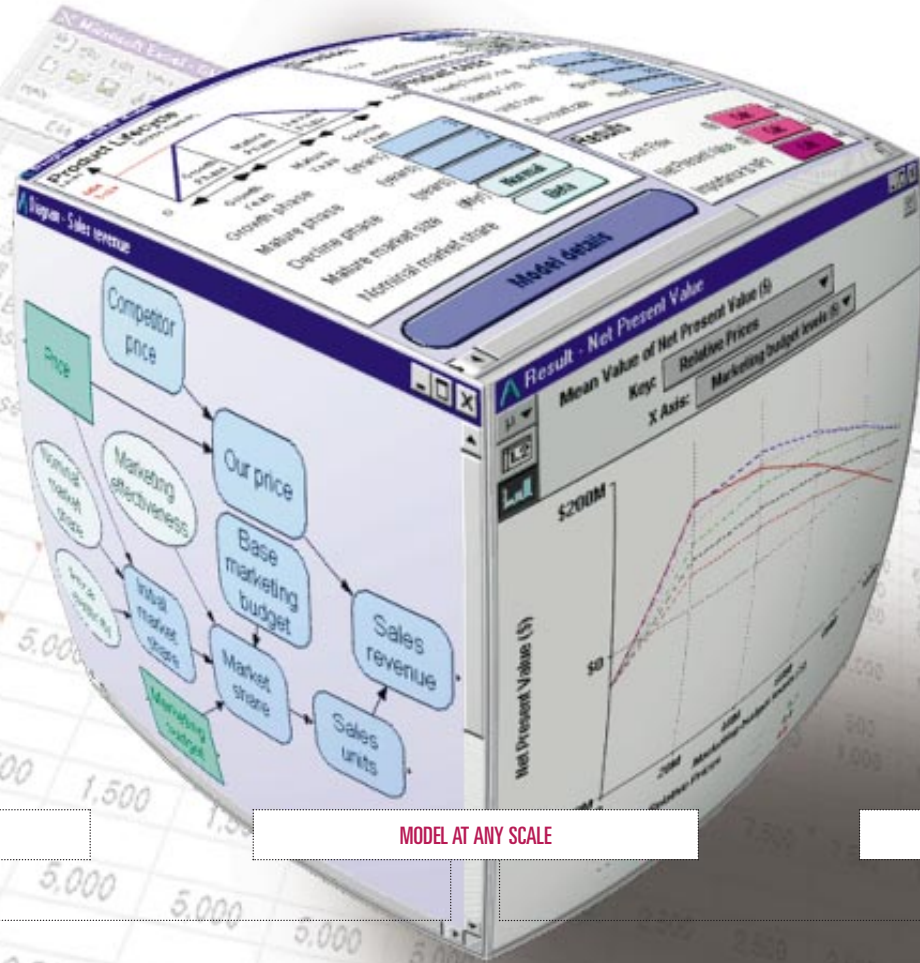




analytica

BEYOND THE SPREADSHEET



EVALUATE BUSINESS PROPOSITIONS

MODEL AT ANY SCALE

MANAGE RISK AND UNCERTAINTY

BRING CLARITY AND POWER TO BUSINESS MODELING

THE QUANTITATIVE MODELING TOOL WITH VISUAL EASE

"Everything that's wrong with the common PC spreadsheet is fixed in Analytica."

PC Week

"A powerful forecasting and business-modeling package that does what spreadsheets never could."

Inc. Technology

Used worldwide to build, revise and present business models – without the time consuming difficulty of spreadsheets.

- Use Analytica's Influence Diagrams to construct models as easily as connecting the dots.
- Visually organize and simplify models as a hierarchy of nested modules.
- Clearly communicate assumptions, design rationale, and notes of explanation through free-form user documentation.
- Build and easily modify multi-dimensional models with Analytica's Intelligent Array™ technology.
- Hot-link data tables between Analytica and spreadsheets via Microsoft OLE. Link with databases through ODBC (Open Database Connectivity)*.
- Present results, graphs and charts, with clarity and ease, directly from Analytica. Seamlessly use Microsoft Excel's charting engine.
- Manage uncertainty, conduct extensive "what-if" exercises, probabilistic simulations, risk analysis and more with Analytica's rich library of functions and powerful processing engine.

WHO'S DOING WHAT WITH ANALYTICA

- Business and Finance
- Aerospace
- Consulting
- Internet/e-Commerce
- Health Care
- Energy & Environment
- Product Development
- Defense
- R&D
- Manufacturing
- Telecommunications
- Universities

3M, ARCO, AT&T, ALCOA, Boeing, Cisco Systems, Daimler-Chrysler, Disney, Eastman Kodak, Eli Lilly, GE, General Motors, Hewlett Packard, Hughes, MCI, Motorola, Microsoft, Northwest Airlines, Seagate, TRW, US West, Warburg Pincus, Xerox,

UC Berkeley, Cambridge, Carnegie-Mellon, Harvard, Stanford

Anderson Consulting, Booz Allen Hamilton, Deloitte & Touche, Ernst & Young, McKinsey & Co., PriceWaterhouseCoopers, Strategic Decisions Group, SAIC

- Project evaluation
- Financial modeling
- Decision support and analysis
- Risk analysis, management and mitigation
- Forecasting
- Market analysis
- Probabilistic simulations
- What-if scenarios
- Cost/benefit assessments
- Policy analysis
- And more

BUILD ANALYTICA MODELS IN THREE EASY STEPS

"With a little practice, you can link elements to build a model almost as fast as you can think."

MacWorld

"An Analytica diagram is worth a thousand spreadsheet cells."

Rich Brenner

The Brenner Group LLC

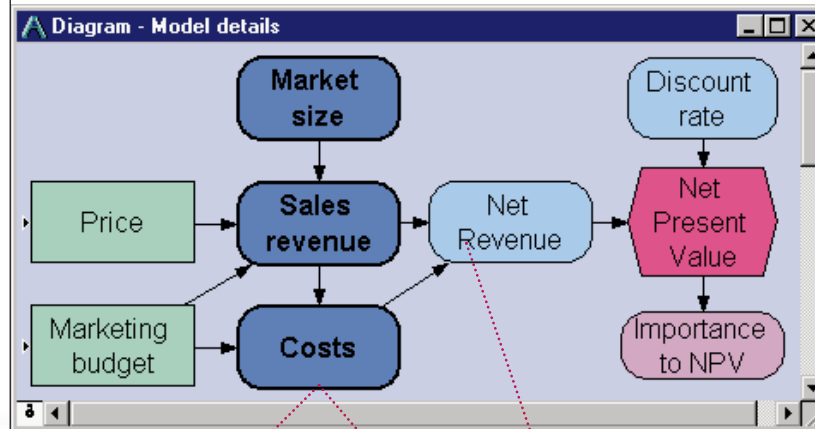
"The best single decision-analysis program yet produced."

MacWorld

1. Drag-and-drop individual nodes into the diagram window. These nodes are the building blocks of your model. Identify and track them by applying your choice of shapes, colors and titles.
2. Connect nodes with arrows to define the influences of one variable on another. The resulting Influence Diagram is visually logical, easy to understand and simple to change.
3. Define each node in its own object card by adding data, formulas and user-defined text descriptions:
 - Type in data directly, copy and paste, hot-link to spreadsheets, or import from your corporate database*.
 - Build formulas from a list of inputs which appear in a drop-down list. They are readily available, along with a rich set of functions, to paste into the formula for each variable. No more needle-in-a-haystack searches for spreadsheet cells.
 - Document assumptions, data sources and notes of explanation in your own words.

Simplify and Organize

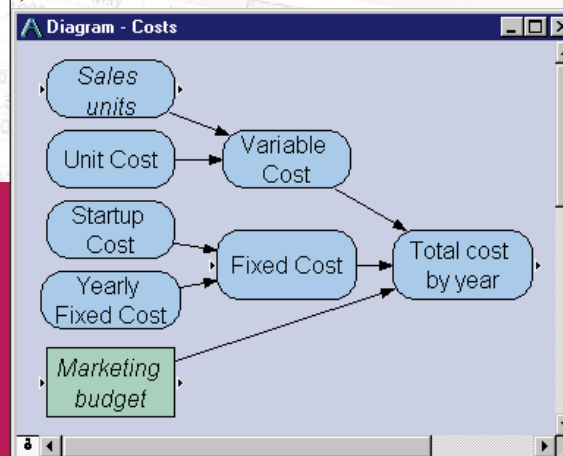
Collapse complex models into a hierarchy of nested modules with drag-and-drop ease. No need to build separate summary models-it's all on one screen.



Specify each node by type, shape, color and name.

- Decision variables are those you can control, e.g., price or marketing budget.
- Objective variables are quantities you are trying to optimize, e.g., net present value.
- Chance variables depict the uncertainty of something you can't control or predict with precision.
- Other variables are dependent upon decisions or chance variables, but not directly controllable or uncertain in themselves.

Analytica's influence diagrams draw clear distinctions between these basic types of variables – critical knowledge that is lost in spreadsheets.



Object - Net Revenue

Variable Net_revenue **Units:** \$/year

Title: Net Revenue

Description: Annual net revenue over the product's life cycle.

Definition: Sales_revenue - Total_cost_by_year

Inputs:

- Sales_re... Sales revenue
- Total_cos... Total cost by year

Outputs:

- Net_pres... Net Present Value

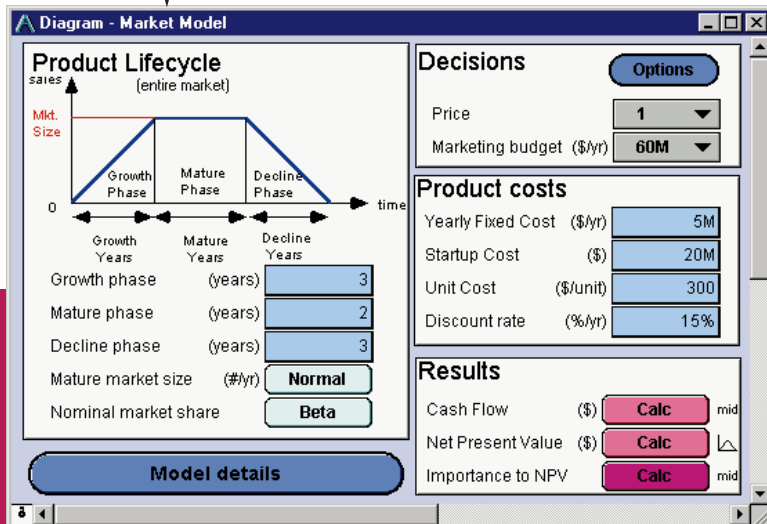
INSTANT ACCESS TO EVERY ELEMENT OF YOUR MODEL

Drill Down, Up or Sideways

Analytica's Influence Diagrams are your model's visual roadmap. With a hierarchy of nested modules, you always know where you are and can quickly move to any desired level or module.

Build, navigate, present and explain your model's structure with speed and confidence.

Never again hunt down and decipher arcane row-and-column coordinates or formulas. Dispense with building separate summary models and reports in order to present and support your results. Your Analytica model is all you need.



Organize key inputs, outputs and modules of importance, into one, easy to comprehend user interface panel.

EXPAND YOUR MODELS WITH INTELLIGENT ARRAYS™

Analytica's proprietary Intelligent Arrays™ provide the power to scale up your models to handle multidimensional problems with ease — for instance, sales over many time periods, products, and regions, as a function of alternative prices and marketing budgets. Each dimension becomes a simple index. With Analytica:

- Write and store each formula only once, not once for each cell in a table.
- Choose the most meaningful views in tables and graphs by interchanging rows, columns, and higher dimensions at will.
- Extend existing dimensions or add new ones—the model expands automatically without the manual work required with spreadsheets.
- Intelligent Arrays™ provide order-of-magnitude efficiencies for large models:
 - Reduce the time and effort to build, verify and audit
 - Reduce the run-times to execute
 - Reduce the file size of models

	0	20M	40M	60M	80M	100M
0.6	\$-42.44M	\$127.6M	\$119.1M	\$72.68M	\$7.473M	\$-68.75M
0.8	\$-42.44M	\$123.2M	\$137.3M	\$114M	\$69.7M	\$11.95M
1	\$-42.44M	\$102.7M	\$121.7M	\$108.5M	\$75.91M	\$30.07M
1.2	\$-42.44M	\$80.46M	\$96.42M	\$85.39M	\$57.58M	\$17.82M
1.4	\$-42.44M	\$60.3M	\$70.33M	\$57.56M	\$30.44M	\$-7.134M
1.6	\$-42.44M	\$42.91M	\$46.27M	\$30.05M	\$1.493M	\$-36.16M

"What had taken 39 spreadsheet workbooks and 9MB of disk space was now in one Analytica file, all of which takes up less than 100KB. This simulation intensive model took over 5 hours to run in spreadsheet form but only 1 1/2 hours with Analytica."

Brian Thomas
SENES Oak Ridge, Inc.

MANAGE RISK AND UNCERTAINTY

Risk and uncertainty are facts of life, which are more easily managed with Analytica. Understand and manage uncertainty explicitly, using probabilities, without requiring special statistical expertise:

- Express uncertainty by selecting the appropriate probability distribution in Analytica's graphical browser.
- Propagate uncertainties throughout your model - with ease and efficiency - using Latin Hypercube or Monte Carlo sampling.

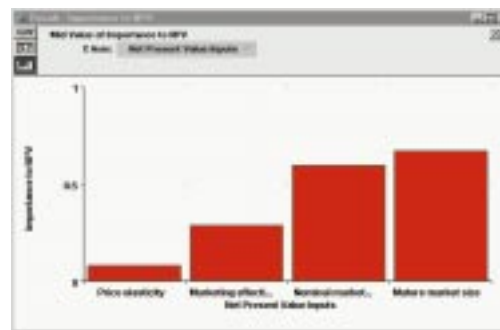
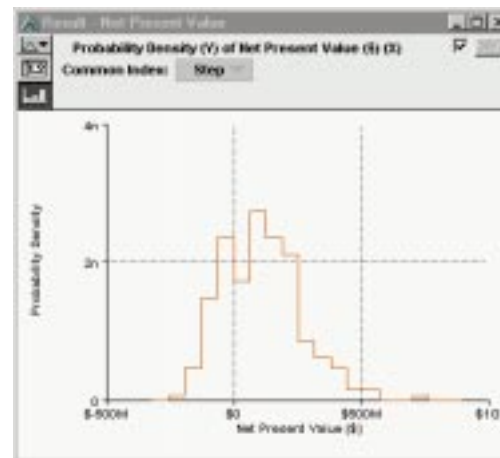
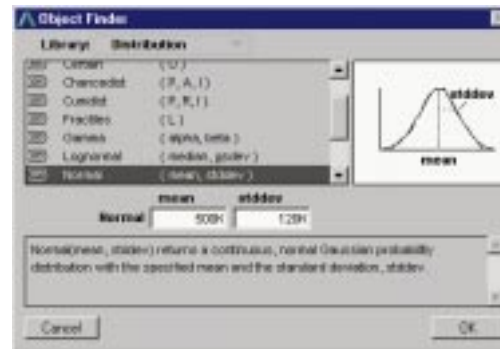
Display uncertain results in any form: as probability bands around the median, probability density functions, cumulative probability functions, or standard statistics.

Analytica handles uncertainty much more easily and efficiently than spreadsheets. It requires no extra plug-ins or add-in applications, because probabilistic simulation is integral to its design.

Focus on the Important Issues

Understanding which assumptions and uncertainties really make a difference is the key to successful modeling and analysis. Analytica was built with this in mind and provides powerful methods for conducting sensitivity and uncertainty analysis:

- Explore and graph the effects of varying one or more inputs over a range.
- Discover non-linearities and interactions.
- Conduct importance analysis to compare the contributions of each uncertain input on the objective variable using rank-order correlation.
- Visually explore relationships between uncertain variables with scatter plots.



DECISION MAKING WITHIN THE ENTERPRISE

Effective decision making requires a shared understanding of key issues and the collaborative development of objectives and strategies. Analytica was specifically designed to facilitate this process:

- Influence Diagrams provide the perfect visual format for creating and communicating a common vision of objectives, issues, uncertainties and decisions.
- Decompose complex models into separate modules which team members can work on collaboratively.
- Develop templates and function libraries to speed model building.
- Interoperate with Excel spreadsheets via OLE linking.
- Import and export data to databases using standard ODBC protocols*.
- The free browser version of Analytica lets you share your models with as many people as you wish for review.
- Make model elements private to shield sensitive information*.

"I also like the ability to integrate with Microsoft Office and cut and paste into Excel spreadsheets."

David Gill
The Boeing Company

