Make better, more confident decisions about tomorrow – today

Enable everyone to create sophisticated forecasts automatically and explore interactive scenarios easily using DecisionTime and WhatIf?

DecisionTime™

WhatIf?™

Use forecasting to make better d

If you want your organization to succeed, you need to do more than create forecasts. You've got to use the results of the forecasts to improve your future. Are you confident that you have the accurate forecasts you need to make crucial decisions?

"Removing both the error and the need to rely on specialists, DecisionTime helps business users automatically find the most reliable forecast for their data and identify and explore different forecast predictors that should underpin an insight or fact-based decision."

— Bob Moran
Vice President,
Decision Support Research
Aberdeen Group, Inc.

Stay profitable by acting and reacting quickly

In today's highly competitive marketplace, you've got to make effective decisions, fast. Now you can. DecisionTime and WhatIf? give everyone the power to create sophisticated forecasts and easily explore scenarios.

Bad forecasts lead to lost opportunities and wasted dollars. If you forecast too high, you're faced with missed sales objectives and overstocked warehouses. Forecast too low and your customers go to the competition seeking the products and services you should be supplying. As the decision-maker, you're the one held accountable.

You don't have time to ask your staff to spend hours creating models and fine tuning forecasts — especially if they're using inadequate tools such as spreadsheets. Hired specialists help, but lack an insiders' vital perspective. And, when a forecast is finally made, you need to make sure everyone has that information. This way, you and your colleagues can quickly act and react, to that information. Then you can determine the impact of your decisions on profitability down the line.

Find answers to tough questions

DecisionTime and WhatIf? can help you answer:

- If I increase my advertising budget, how will it affect sales by product or region?
- How will increasing assembly line capacity affect production?
- Will a change in fees affect the number of new customers we obtain?
- How will increasing the number of law enforcement personnel affect crime?
- How will a change in the number of influenza shots affect patient length of stay?
- How will tuition increases affect enrollment?

SPSS' powerful end-to-end collaborative forecasting solutions give you the power to deliver the results your business demands.

Rely on the unparalleled combination of forecasting and collaboration

DecisionTime is the best way to quickly create powerful forecasts using SPSS' proven, heavy-duty analytics — the kind spreadsheets don't offer. You don't need to hire statisticians — the interactive wizard does all the work. And, don't worry about large data sets because DecisionTime's distributed architecture scales to the size of the problem to deliver reliable results. Once a forecast is created, WhatIf? lets the analyst share it with everyone in the decision-making process to spread knowledge, build consensus and gain buy-in.

DecisionTime and WhatIf?'s breadth and depth of analytics deliver forecasts that give you a clear picture of the future — so you can make the best, most profitable decisions. Nothing matches their ease of use, analytical power, performance and collaboration capabilities.

ecisions today – and in the future

Build accurate forecasts quickly with DecisionTime's wizard

To begin the forecast creation, DecisionTime quickly loads data from your databases or spreadsheets. Then DecisionTime's interactive wizard asks the forecast creator three simple questions. Your answers tell DecisionTime how to set up your analysis. This patent-pending technology chooses the best model for your data from seven exponential smoothing models and a wealth of ARIMA techniques. Because DecisionTime automatically selects the best model, you get reliable results every time. This saves your organization the cost of inaccurate forecasts along with the frustration of building models by hand.

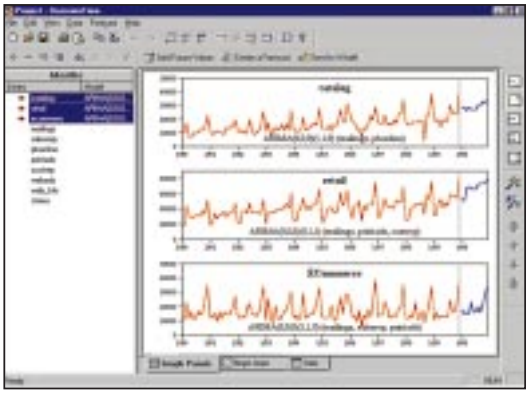
"DecisionTime and WhatIf? address making the capacity to build models and share models accessible to more users in more organizations."

– *Henry Morris*
VP for Data Warehousing and Information Access
International Data Corp.

To ensure the model is accurate, DecisionTime identifies influences affecting the forecast, including:

- Seasonality and trending
- Predictor variables, such as advertising or sales staffing
- Exceptions and one-time interventions such as sales promotions or price increases
- Automatically handling missing data

DecisionTime tells the forecaster which influences are important and which are irrelevant, building the most complete picture of the future. It also provides easy-to-understand measures that test the fitness of the model, so you are confident of on-target results.



The most advanced forecasting techniques work automatically behind the scenes to create your forecast in seconds.

Create scenarios to understand how your decisions impact your organization's results.

Enable more confident, well-informed decisions by sharing results instantly

Now everyone in the decision-making process — employees, partners, suppliers — can see how their decisions affect the big picture. With WhatIf?, you'll have better collaboration over a secure Web environment and more effective, efficient decision making throughout your entire organization.

Once a forecast is created in DecisionTime, WhatIf? deploys the results on the Web. Publishing the interactive forecast is a easy as saving a file. And, interacting with the forecast is as easy as using a Web browser. After exploring potential scenarios, you can use that information to make the best, most informed decisions.

Powerful enough to solve your toughest challenges

DecisionTime's distributed architecture is designed to let your forecasters make the most of your organization's infrastructure. Unlike most forecasting tools, DecisionTime enables multiple people to quickly and easily access huge, centralized databases. And since the calculations can be performed on more powerful server machines, you and your staff are not limited to the hardware restrictions of your personal computers.

"A tremendous solution that's extremely versatile and easy to use, DecisionTime and WhatIf? will be appreciated by everyone – from novice end users to statistical experts."

– *Doug Berry*
Chief Information Officer
Jefferson Memorial Hospital

See DecisionTime and WhatIf? in action

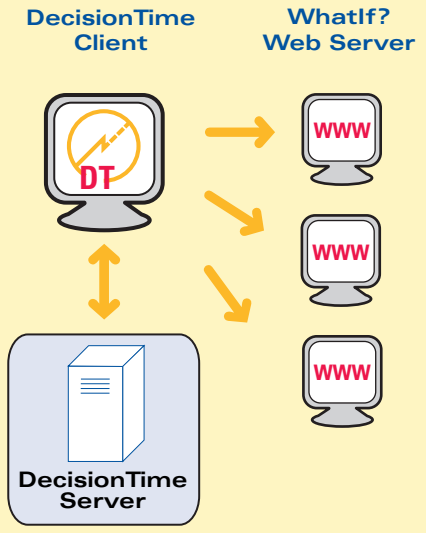
Let's say you are
A product manager for a retailer.

Your business-critical mission
Attain year-end goal — a 20 percent increase in sales.

Your solution
Create a 12-month sales forecast for your three product lines to see if you will meet your sales goal — if not, you want to adjust your plans to ensure that you do. See the step-by-step example to the right.

Results
Your DecisionTime forecast showed an increase in sales of 11 percent against a target of 20 percent. By collaborating with your colleagues in the field and discovering the best allocation of resources, you were able to create a scenario that not only met your sales target, but beat it substantially.

Forecasting solution



Using the DecisionTime client, your analyst accesses the data and creates a forecast. Large forecast jobs can be sent to the Server to improve forecast time. When the forecast is complete, it can be used by decision makers, suppliers, partners and colleagues via their Web browser. With WhatIf?, you and other decision makers can explore scenarios and discover the best plan of action.

Step 1

Getting started is easy — just bring in your data

DecisionTime's intuitive wizards guide you step-by-step from bringing in your time-series data to creating your forecast.

Step 2

Select the product lines you'd like to forecast

The Forecast Wizard asks you to identify the items you'd like to forecast and the length of the forecast.

Step 3

Select other data that might be relevant

You know that other data — such as advertising expenditures and the number of direct mail pieces — affect sales. The wizard enables you to add these items as forecast predictors and analyzes which are relevant.

Step 4

Click FINISH — get results

DecisionTime automatically creates your forecast in seconds — showing just an 11 percent increase. WhatIf? enables you to refine your business model by interacting with this forecast until your goal of 20 percent is met.

Step 5

Deploy your forecast into the hands of decision makers

Fully leverage those forecast results and put them to immediate use by deploying them across your enterprise on the Web.

Step 6

Realize your goal with planning that can see the future

WhatIf? empowers you to discover the optimal allocation of resources to produce a forecast and action plan that meets your goal.

Step 7

Produce the best action plan by exploring scenarios in WhatIf?

Using WhatIf?, you can instantly explore scenarios such as: "What if I send more (or fewer) direct mail pieces?" As you evaluate a decision, WhatIf? automatically calculates and displays the new forecast results on a graph and in a table. Create and explore as many different scenarios as you wish. Then share them with the rest of your team over the Web.

Step 8

Get the big picture

Get the big picture by combining your product line forecasts into an aggregate forecast.

The decision-enabled enterprise

Better decision making through collaborative forecasting and planning

Imagine having a way to objectively test decisions and refine plans by interacting directly with accurate forecasts. Image trying different scenarios and instantly seeing the most profitable one.

The combination of DecisionTime and WhatIf? provides an end-to-end solution that helps everyone in the forecasting process — from the forecast creator to decision-makers across your enterprise. DecisionTime enables you to create an accurate forecast in a matter of minutes. Then, WhatIf? puts that forecast to work — enabling decision makers to explore their options and take action with confidence.

Make the best decisions in your industry

DecisionTime and WhatIf?'s flexible, sophisticated forecasting tools are designed to help decision makers in a wide variety of industries. Use this collaborative forecasting power in:

- **Retail and e-commerce** – sales, revenue, expenses, inventory levels and demand for product lines, customer segments and geographic regions
- **Telecommunications and utilities** – customer acquisition, customer loyalty, revenue, usage, call volumes and wattage by price plan, product line and geographic region
- **Finance** – account balances, new customers and churn by product line
- **Health care** – number of patients, procedures, rate of infection and average length of stay
- **Transportation, hospitality and entertainment** – customer satisfaction, number of viewers, subscribers, filled seats, filled beds, revenue, expenses and demand
- **Education** – revenues, endowments and enrollment
- **Government** – revenues, expenses and economic trends

DecisionTime and WhatIf? features

DecisionTime

Results that you can use

- Easy-to-read forecast charts and tables
- Forecast graphs panels include the option of viewing a single graph, multiple graphs at once or multiple forecasts on the same chart
- Forecast table
- Customizable output
  - Change colors, line styles, labels, fonts and more
- Selectively view historical confidence intervals, forecast confidence intervals and fit values
- Zoom and scroll
- Forecast data can be exported to a text file
- Multiple forecast sorting options
- View by goodness-of-fit statistics, alphabetical listing or data-viewer order
- Export to WhatIf? for scenario building and evaluation

Easy to learn and use

- Smart Help interprets your forecast in plain English
- Online forecasting tutorial
- Online help
- Intuitive Windows desktop interface, e.g., tooltips, keyboard selection, etc

Flexible data management

- Accepts data input from Excel® (XLS), SPSS® (SAV), delimited ASCII text (TXT) or any ODBC compliant source
- Works with generic, non-cyclic periods, cyclic periods, hours, days, months, quarters, manufacturing quarters and years
- Data roll-ups – create forecasts on periodicity different than original data
- Data hold-outs – used to analyze the model fit
- Begin forecast prior to the end of historical data – a common test of forecast reliability
- Easy data updates reloads data from original source into forecast model
- Exports to spreadsheets or word-processing applications via cut and paste

Advanced features

- Seven exponential smoothing algorithms: Winter's Additive, Brown's, Damped Trend, Simple, Simple Seasonal, Holt's and Winter's Multiplicative
- Comprehensive ARIMA modeling
- Interactive forecast building
  - Adjust parameters, model specifications and refine forecasts manually
- Specify subset ARIMA models
- Series viewer – used to analyze the seasonality, stationarity of the series itself
  - Graphical representation of advanced statistical results including natural log transformations, square root transformations, differencing, seasonal differencing, ACF and PACF
- Model viewer
  - Rich goodness-of-fit statistics including residual sum of squares, MSE, root MSE, AIC, BIC, AICC, mean absolution percent error (MAPE), mean absolute error (MAE), maximum absolute error (MaxAE), and maximum absolute percent error (MaxAPE)
- Production job – uses existing model to automate the process of forecasting large datasets multiple times

WhatIf?

Deployment functions

- Scenario window
  - Create multiple scenarios by changing the values of predictors and immediately observing their impact on forecast
- Preserve and reuse previously established scenarios
- Display various scenarios in one chart for visual analysis and comparison
- Forecast scenario graphs, charts and tables of forecast results
- Display and correlate predictors with target forecasts graphically
- Function calculator
  - Aggregate multiple forecasts, e.g., regional sales, net profits, product lines, etc.
  - Perform other mathematical calculations such as currency conversions and profitability
- XML deployment for greater flexibility
- Exports to spreadsheets or word-processing applications via cut and paste
- Confidence Limits and Fit Values displayed graphically and numerically

DecisionTime and WhatIf?

System requirements:

- Windows 95/98/2000 or Windows NT 4.0
- 486DX processor or higher
- 32MB RAM
- 34MB hard disk space
- SVGA monitor
- Microsoft Internet Explorer 4.0 or higher (for SmartHelp feature only)
- CD-ROM drive

DecisionTime Server

System requirements:

- Windows 2000 or Windows NT 4.0 with service pack 3 or above; Service pack 5 is recommended
- 64MB RAM; 128MB of RAM is recommended
- 12MB hard disk space
- Pentium or Pentium-class processor running at 300MHz or faster
- Network adapter running the TCP/IP network protocol
- CD-ROM drive

WhatIf? Web Server

System requirements:

- 300MHz processor
- 512MB RAM
- 5-10GB free disk space
- Windows NT server

Data mining makes the difference™

SPSS Inc. enables organizations to develop more profitable customer relationships by providing analytical solutions that discover what customers want and predict what they will do. The company delivers analytical solutions at the intersection of customer relationship management and business intelligence. SPSS analytical solutions integrate and analyze market, customer and operational data and deliver results in key vertical markets worldwide including: telecommunications, health care, banking, finance, insurance, manufacturing, retail, consumer packaged goods, market research and the public sector.

SPSS®