



Discover secrets  
your spreadsheet  
can't tell you

The following table summarizes why SPSS is a better choice for in-depth analysis than your spreadsheet. With SPSS' range of functionality and ease of use, we are sure you'll agree that SPSS makes the perfect companion to your spreadsheet. Start making better more informed decisions today by including SPSS in your desktop toolkit.

<p><b>You need the big picture to make good decisions</b></p>	<p>SPSS goes beyond a spreadsheet's standard business graphs with a wide variety of charts that give you more insight into your data — and enable you to make important decisions with confidence. <b>(Pg. 3)</b></p>
<p><b>There's more than one way to look at your data</b></p>	<p>End the hassles of manually building, rerunning and reformatting tables when you make changes by using SPSS' multidimensional pivot tables; they make exploring your data free and easy. <b>(Pg. 5)</b></p>
<p><b>The trick to effective analysis is knowing what's significant</b></p>	<p>SPSS gives you a full set of statistical tests so you can tell if relationships are meaningful or differences are significant. Plus, "What's This?" help that gives you explanations, definitions and rules of thumb. <b>(Pg. 6)</b></p>
<p><b>It's important to separate the apples from the oranges</b></p>	<p>SPSS saves you time when you need to produce similar reports and graphics for subsets — in-depth analysis for all subsets in just a few mouse clicks. <b>(Pg. 6)</b></p>
<p><b>It's easier for you to work with words than numbers</b></p>	<p>SPSS gives you a more intuitive look at your data by showing you words (your labels) while working with numbers (your codes) — and labels are automatically applied to your graphs and reports. <b>(Pg. 8)</b></p>
<p><b>You need accurate results even when some data are missing</b></p>	<p>When you have missing data or want to quantify meaningful differences between non-response answers to survey questions, SPSS automatically gives you better, more accurate information than a spreadsheet. <b>(Pg. 9)</b></p>
<p><b>Knowing when there's a problem with your data matters</b></p>	<p>SPSS helps you spot data-entry errors or unusual data points that you may want to leave out of your analysis, or look at more closely before writing your final reports. <b>(Pg. 10)</b></p>
<p><b>Getting data into SPSS is easy</b></p>	<p>SPSS makes it easy to analyze data from spreadsheets, databases and complex file structures. And, SPSS practically eliminates the risk of accidentally changing your data while you do your analysis. <b>(Pg. 11)</b></p>
<p><b>All your data are valuable</b></p>	<p>You shouldn't be held back just because your spreadsheet can't work with large data sets — with SPSS you can analyze all of your data without risky compromises. <b>(Pg. 11)</b></p>
<p><b>Using the right tool for the job saves time and increases your productivity</b></p>	<p>Unlike a spreadsheet, which is designed for row-and-column math, SPSS simple interface and underlying database make it easy for you to slice and dice your data for the in-depth analysis your decisions require. <b>(Pg. 11)</b></p>
<p><b>Answers to your questions should be easy to find and easy to understand</b></p>	<p>A spreadsheet's help only tells you the commands to follow to perform a task — SPSS' gives you pop-up definitions of statistical terms, rules of thumb for interpreting results, "show me" buttons and more. <b>(Pg. 13)</b></p>
<p><b>Your statistical tools should grow as your analytical needs change</b></p>	<p>Spreadsheets limit you to the most basic statistical features — SPSS gives you all those in its Base, and you easily take your work to the next level by choosing from a set of closely integrated add-on modules. <b>(Pg. 13)</b></p>

Spreadsheets are essential business tools which you should never give up. Spreadsheets are excellent for tracking numbers, creating basic graphs, simple reports and calculating basic math. They are indispensable for “what if?” analysis and many financial tasks, such as budgeting.

When you need to go beyond simple summaries and basic row-and-column math; when you want more insight into your data, you're ready for SPSS 7.0 for Windows. Together, a spreadsheet and SPSS 7.0 for Windows give you the tools necessary to make better, more informed decisions.

## 12 Secrets you should know about data analysis

“ SPSS’  
graphing  
capability is  
impressive.”  
— *InfoWorld*

### 1. You need the big picture to make good decisions

Tables of numbers alone do not tell the full story in your data. Sometimes it is necessary to see a picture of your data to completely understand the results. Visual displays help you spot patterns and identify data that are unusual or possibly even incorrect. Unusual data may require special treatment and incorrect data can distort the results of an analysis. In either case, a visual representation of your data often helps identify problems or opportunities you may not have discovered in the numbers.



Figure 1. Customer hold time data.

A spreadsheet's standard business graphs, such as bar, line and pie graphs, are good at displaying basic information and summarizing data for presentations. SPSS goes beyond standard graphs by giving you a variety of additional charts that give you more insight into your data. Charts such as boxplots, control charts and Pareto charts. These charts are powerful analytical aids; they reveal underlying trends and variability in your data that typical business graphs don't reveal. Overall, using the analytical charts and graphs in SPSS helps you better understand your data and make more informed decisions.



Figure 2. This is a bar chart of average hold time by the day of the week. From this spreadsheet chart, you could mistakenly believe that the customer service team is performing well within the established standards.

Suppose you are the Customer Service Manager for a catalog company that maintains a staffed customer service line from 7:00 a.m. to 7:00 p.m. You have access to data that records the average time a customer spends on hold, in 15-minute increments, every day of the week (see Figures 1 and 2).

" SPSS provides a wealth of charting methods and styles." — *S.M.U.G. News*

You would like to analyze the performance of the customer service representatives to see how quickly they answer calls since this has a direct impact on customer satisfaction. You decide the best way to begin is to create a chart. You could create a bar chart for each day of the week. The individual bars could represent 15-minute increments of the average hold time. However, doing this would give you seven separate charts, each chart with 48 bars — far too much information to evaluate quickly.

You decide the best alternative is to create a single chart with one bar for each day of the week. To do this, you must manually calculate an average hold time for each weekday. With this method, however, you could lose important detail by summarizing the information. But, you don't know any other method. Looking at the bar chart, you notice that the average time a customer is on hold varies by the day of the week, between 74 seconds and 115 seconds. This range is well within your company's established acceptable range of 0-150 seconds. If your analysis stopped here, you could draw the conclusion that the customer service team is performing fairly well.

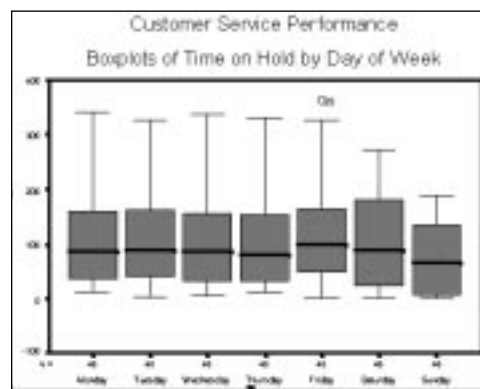
Taking your analysis a step further helps you gain an even better understanding of what is happening in customer service. A boxplot of the data shows more detail giving you the median, minimum, maximum and distribution on one chart. SPSS reveals that although the average time a customer spends on hold is adequate, the performance of the customer service area is dramatically different throughout the day (see Figure 3).

The "whiskers" of the box plot show that there are several occasions in which customer service representatives answer calls much faster than the average and sometimes when their performance is much slower than average.

This chart suggests further investigation. It appears that at times the representatives experience a slowdown and at other times there are far too many incoming calls for the representatives to handle. At peak times many customers may not wish to remain on hold and hang up, resulting in lower satisfaction levels. This is one example of how an SPSS statistical graph gives you more information to understand your data better.

To create graphs in a spreadsheet, you must take extra steps in addition to creating any tables. In a spreadsheet, you must manually specify the data to graph by highlighting rows and columns to include in the graph. Then, you must highlight the area in your worksheet into which you want to place the graph. Finally, you follow a multi-step procedure to set up the chart, label it, etc. until you have completed a simple chart.

In SPSS, creating graphs is easy because the data are already organized into a database ready for analysis. There is no need to highlight the individual data cells to include in your



**Figure 3. The whiskers of this SPSS boxplot, and the outlying point, clearly show instances in each day when customer service cannot answer calls within an acceptable range of 0-150 seconds. The spreadsheet bar chart misses this important finding.**

graph or to summarize the data to prepare it for graphing. And, you never have to specify where the graph should be placed. When you run a report, you often have the option to produce a fully-labeled graph, with just a single mouse click, at the same time. There is no need to leave your analysis and run a separate session to produce charts because you can create and edit charts as you go — with over 50 built-in chart types to choose from.

## 2. There's more than one way to look at your data

When you create a report in a spreadsheet, what you see often triggers additional questions, requiring the analysis to be re-run with a different view. SPSS' revolutionary pivot tables display your results in a multidimensional table. An SPSS pivot table enables you to look at your results from many different angles by simply dragging icons. Rearranging icons, representing rows, columns and layers, increases the amount of information you can glean from your table and makes it easy to present your results clearly and professionally.

"Very easy to change the layers. It's (Pivot Table) a very visual way to deal with your data."  
— Zvia Naphtali, beta tester

You have the freedom and flexibility to explore your data after you have run your initial analysis. There is no need to run it again. You can explore the results of your analysis, more easily compare results across subgroups and uncover interesting findings.

Some spreadsheet packages include pivot tables, but often it is up to the user to create and format them. Once formatted, these tables cannot be pivoted again without losing their formatting. Pivot tables in SPSS require no additional work to create because the results of your analysis are automatically put into a pivot table (see Figure 4). Just double-click on the table and it's ready to be pivoted or re-formatted for a different look. And, pivot tables are very easy to read because the column and row headings are clear.

Re-formatting reports and tables in SPSS is easy because predefined styles can be applied with a single click, so there is no need to manually apply borders, shading, bolding and other attributes. If you prefer, you can create a preferred format for your tables and save your style as a template to use for all your reports. And, unlike pivot tables in spreadsheets that lose their formatting if they are pivoted again, SPSS pivot tables keep all your formatting and remain presentation-ready regardless of how many times you pivot them.

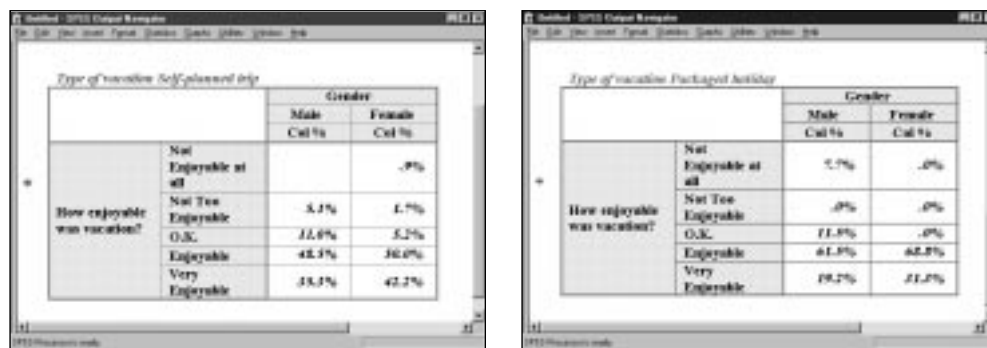


Figure 4. Pivot tables in SPSS 7.0 for Windows clearly present your results in an interactive format, so you can easily look at results by group and step through each group. In the graphs above, we are showing one layer of data at a time. In this example, the layers represent the type of vacation.

The above pivot table was created from survey data about people's travel and vacation preferences. The pivot table contains three dimensions: one in the row, rating how enjoyable a certain type of vacation is; one in the column, gender; and one in the layer, type of vacation.

Layers allow you to display one category of data at a time, so you can, for instance, step through each type of vacation to see if there are any differences in people's vacation preferences. This table could be used to help you get a further understanding of which vacations people prefer and whether there are any gender differences. SPSS pivot tables help you easily explore questions that require you to examine groups and group differences and ultimately assist you in making more informed decisions.

### 3. The trick to effective analysis is knowing what's significant

"For more statistical tools than you'll get from a spreadsheet such as Excel, without the learning curve, SPSS for Windows is a great buy."

— *Michael Burgard, PC/Computing*

It is not enough to look at simple reports and try to draw conclusions from them. Often, in glancing at a spreadsheet report, you notice differences that look interesting. Or, you see what appears to be a meaningful relationship. For example, Territory A's sales are higher than Territory B's. But are these findings really important? Are the differences big enough to be "statistically significant?"

Other factors, such as the size of your data file and the distribution of the data, must be evaluated before you can come to a conclusion with confidence. To know immediately if your results are significant or if differences are random, use the comprehensive significance statistics in SPSS.

SPSS has more significance tests than spreadsheets, so you can be confident in the interpretation of your results. These significance statistics are easy to use and can usually be run along with another analysis, such as a crosstabulation, with a simple click of your mouse button. Some significance tests include: Z-tests, t-tests, f-tests, p-values and confidence intervals.

If your statistics are rusty, click "What's This?" to get explanations, definitions and rules of thumb for statistics or results. If you aren't sure what an analytical term means, easily look through the glossary of statistical terms for its definition.

### 4. It's important to separate the apples from the oranges

SPSS lets you quickly and easily run lengthy series of reports and graphs for different groups by simply clicking on the names of the groups and then clicking "Run." There is no need to set up the data as a database, sort it for every group, manually redo totals, and format reports or use wizards to build graphs as required by spreadsheets.

It's easy for you to look at many groups separately or compare them, all with a few mouse clicks and all without any manual manipulation of the data. There may be patterns hidden in your data that tell you important information, but only if you look at your data when it is grouped in a certain way or when you compare certain groups.

For example, a product manager may wonder if people who read one magazine purchase more of their product than readers of another magazine, or whether younger people are

" SPSS for Windows distinguishes itself with smooth operation, great data manipulation and superb documentation."  
— *InfoWorld*

buying more of their product than older people. These types of questions require you to analyze data in three ways: as a group, as separate groups and as a group comparison. There is no need to create separate data files or run the analysis on each group separately. With SPSS, you can do this quickly and easily so you pinpoint relationships in the data that are important and make better decisions.

Suppose you need to run the same report on separate groups within your data. In a spreadsheet, you would have to filter out each group individually and walk through every step of the analysis for each group. However, if the groups are mutually exclusive, the split file option in SPSS automates this process and can run the entire analysis for each group at one time. You can go back to the whole group, or further subset the group you're working with easily.

Suppose you need to produce sales reports, with graphs, for each of the United States. SPSS does this for you easily. Simply double-click on the variable "state" and click OK to run all the reports. To do this in a spreadsheet, the analysis would have to be specified and run 50 different times and 50 separate graphs would have to be created, through a step-by-step, wizard-like process that is very repetitive. Or, you could write a lengthy macro to do most of this task in your spreadsheet. Either way, the job is more easily completed using SPSS.

SPSS has many data management features, like the split file option described above, that save you time and make in-depth analysis easy. As another example, suppose you sent out a survey to those sales managers and received your data back in 50 separate, tab-delimited files or 50 forms. What would you need to do to effectively analyze that data? Even the first step, getting the data into a form you can use, can be confusing, time-consuming and frustrating. With SPSS, it's easy for you to merge files together without worrying about matching up rows or columns of data.

Some of the data management capabilities SPSS contains are:

- **Merging**  
Merging combines files together from various sources. For example, information for customers in two different sales regions can be maintained in separate data files, but can be easily combined for monthly summary reports. There is no file aligning required and no loss of detail when the files are combined.
- **Splitting**  
Splitting files separates your data into groups for analysis, but does not change the underlying structure of the data. For example, you can try grouping your data in different ways to discover new segments of your customer base that warrant more of your marketing efforts.
- **Subsetting**  
Subsetting files restricts your analysis to a specific subgroup based on criteria you specify, including specific value, date and time ranges as well as many other arithmetic expressions. No new data file is created. You can select sales data from a certain range or region to run a set of analyses, such as sales greater than \$10,000 or Region Y and Z.

"The Data Editor looks like a spreadsheet but gives you flexibility to edit data values and labels cases"

— Manatee Root Directory

- **Recoding**  
Recoding files changes existing data values into different values. This is especially useful for collapsing or combining categories, such as grouping people into categories for analysis by age.
- **Data Dictionaries**  
Data dictionaries help you reapply information about a data file, such as display formats, descriptive value and variable labels, and graph labels to a new data file containing some of the same variables. Data dictionaries automatically label all your graphs and tables.
- **Aggregating**  
Aggregation allows you to sum cases based on the value of one or more grouping variables and to save the "rolled up" information to a new data file. This is extremely useful when you need to distribute summarized data to a group of people electronically, because there is no need to re-enter the summarized data in a new file.

5. It's easier for you to work with words than numbers

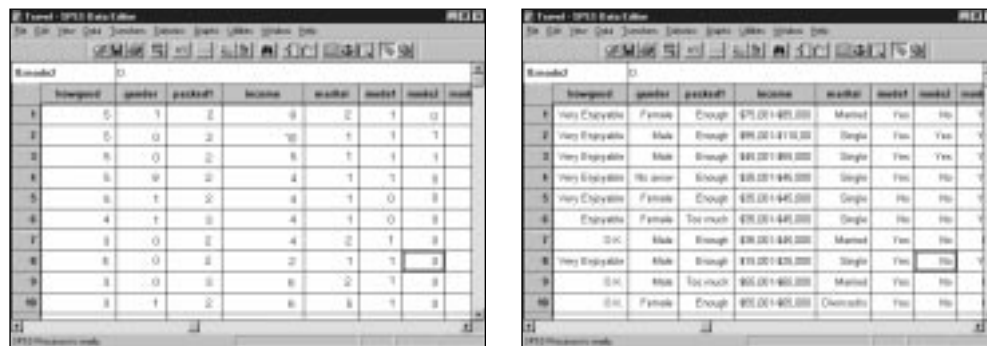


Figure 5. The SPSS Data Editor can show data in two formats: data values (left) and a more intuitive look at your data through value labels (right). In either case, all the calculations are done with the underlying numbers.

Within a familiar row-and-column setting, SPSS gives you a more intuitive look at your data. The spreadsheet-style Data Editor shows you words (labels) in place of numeric values (codes) while still running calculations using the underlying codes. Codes are defined as values of a variable which identify the level or type of grouping. For example, 1 = Female and 0 = Male (see Figure 5).

SPSS also enables you to store all your labels in a data dictionary and reapply them to new data whenever you need to (see Figure 6). This saves you valuable time when preparing

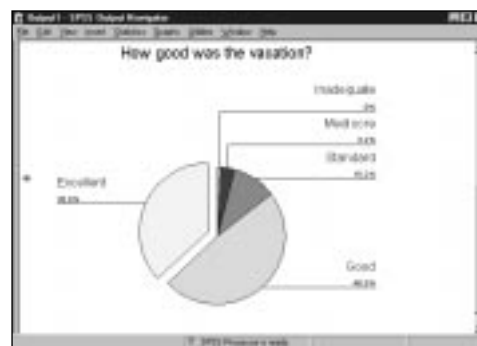


Figure 6. SPSS presents results in easy-to-understand formats. The labels in this pie chart were applied automatically.

“ Users who need to run statistical analyses of data, present findings and produce reports that will be read by others will appreciate the many features found in... SPSS for Windows.”  
— *Bits and PC's*

your data for analysis. Since your labels are automatically applied to your graphs, you get clearer and easier to understand presentations. In a spreadsheet, you can work with words or numbers, but not both at once.

When dealing with unfamiliar data, it can be difficult to remember what every variable represents. SPSS presents you with a list of variables to choose from, and by clicking the right mouse button, you can get more information on a specific variable (see Figure 7). The range of acceptable values for that variable are immediately displayed. There is no need to search for variable descriptions because SPSS gives you information at your fingertips.



**Figure 7. Pop-up information about your data is available whenever you are presented with a list of variables. Not only does this feature save you time, it can also increase your productivity.**

6. You need accurate results even when some data are missing

Data are missing from almost every dataset, and these gaps affect your analysis and results. When data are missing, SPSS can eliminate them from the analysis so you get accurate and meaningful results. For example, missing data in a frequency table can be separated out so you get valid percentages.

With SPSS, you can differentiate between various types of missing data, including: illegible responses; invalid responses that don't match acceptable range of responses; or no response, such as question was not applicable, respondent refused to answer or the respondent didn't know

By distinguishing between the various types of missing data, you can find and understand patterns in respondents who answer “don't know” versus “not applicable” because you have the choice of eliminating this data during analysis. SPSS looks at data on a question-by-question basis and can include a survey respondent's answers only for those questions with a valid response (see Figure 8).

Quality of travel to/from destination				
		Frequency	Percent	Valid Percent
Valid	Not important	4	1.2%	1.4%
	Somewhat important	29	8.0%	22.2%
	Very important	147	41.3%	86.4%
	Total	180	50.5%	100.0%
	Missing	20	5.7%	
	Total	200	56.2%	

**Figure 8. The table on the left was created in Excel, the one on the right in SPSS. In Excel, only blank fields are considered missing. Data such as “don't know” or “not applicable” (coded “8” and “9” above) are included in totals and percentages, even when you want them excluded. In SPSS, you can exclude any type of missing data from the analysis, so your percentages and totals always remain accurate.**

A typical spreadsheet package, on the other hand, counts only data that has a blank entry as missing data and doesn't allow you to separate other data you may wish to leave out of the analysis. This inflexibility may cause you to miss critical differences that exist. Some spreadsheets offer a work-around solution by suggesting a "hand-tailored" approach to the formulas in the individual cells. This work-around can be time-consuming and error-prone.

In SPSS, examining the non-respondents and eliminating them from an analysis is easy. You simply choose to exclude cases with missing values.

## 7. Knowing when there's a problem with your data matters

SPSS helps you spot data-entry errors or unusual data points that you may want to leave out of your analysis – or look at more closely.

"Easily the slickest Windows-based statistics package... new users will love how smoothly the Windows dressing works."

— *InfoWorld*

Data points that are unusual affect the results of your analysis and influence the decisions you make. It is important to know whether unusual data is the result of a data-entry error, and should be disregarded, or whether it reflects a true relationship that exists in the data, and should be considered in your decision.

For example, scatterplots can provide an overview of the data helping you draw preliminary conclusions about possible relationships. To get more information, add trend lines with a mouse click. Data that do not follow general patterns or groupings may need to be checked to make sure they were not the result of a data-entry error.

Suppose you believe that sales representatives who make more phone calls generate more sales in their territories than those who don't make as many calls. The scatterplot in Figure 9 (on the following page) shows this relationship, but also brings to your attention an outlying point that doesn't seem to follow the general trend. SPSS makes it easy to examine these unusual points. Once you click on the questionable point, it is labeled on the graph and highlighted in the data. Exploring this point further is now easy — you know the name (or label) of the point. In this case, a review of the document used to input the data showed that the outlying point is a data-entry error. Simply correct it and proceed.



	name	calls	territory	gender
1	Bob	25	\$13,207	male
2	Mary	21	\$9,264	female
3	Jane	38	\$13,876	female
4	Robert	17	\$6,728	male
5	Sharon	15	\$6,296	female
6	Steven	20	\$9,480	male
7	John	7	\$17,000	male
8	Larry	9	\$3,812	male
9	Jill	10	\$7,800	female
10	Mark	27	\$14,379	male

**Figure 9.** The scatterplot, to the left, shows an outlying point that does not follow the general trend of the data. Simply click on the point to identify and label it. When you return to the Data Editor to examine the point, it is already highlighted.

## 8. Getting data into SPSS is easy

You can easily import data from your spreadsheet into SPSS, so there is no need to modify or re-enter your data in a different format. Because SPSS creates its own data file from the spreadsheet file, your original spreadsheet file remains completely intact — making your work in spreadsheets and SPSS easy.

SPSS can handle data in a wide variety of formats, beyond just spreadsheet files. Using ODBC, SPSS easily reads data in databases such as Oracle or Microsoft Access. SPSS also has advanced capabilities for importing data in complex file types and record structures.

## 9. All your data are valuable

Don't compromise your analysis because of software limitations. Get the best value with SPSS, and analyze all your data easily.

Typical spreadsheets can only handle datasets around 256 variables and 16,000 rows. Once you have reached that limit, the program does not accept any more data. It simply stops reading data (see Figure 10).

SPSS works with extremely large data sets, so you never have to break your data file and analyze it piecemeal. Whether your dataset has 200 or 20,000 rows, SPSS handles it easily.



**Figure 10.** If you try to load more than 16,000 rows of data into a spreadsheet, you are likely to get this message. Since SPSS works with extremely large data sets, you never have to break up data files and you never get this message.

"...you don't need to be a computer whiz to use SPSS."

— *Windows Magazine*

## 10. Using the right tool for the job saves time and increases your productivity

Spreadsheets are a good tool for performing row-and-column math, tracking numbers and running some basic statistics. But, they weren't designed for in-depth data analysis. Before statistical analysis even begins in a spreadsheet, you must specify an input and output range. If you aren't careful, you can accidentally copy a formula over data you wanted to keep.

In a spreadsheet, you set up an analysis by specifying the cells it should use as an input range. However, this type of analysis never behaves like an analysis in a database would behave. For certain analyses in a spreadsheet, the data has to be manually sorted and resorted. For example, producing group data reports.

SPSS is already a database. So, unlike most spreadsheets, you no longer need to manually set up your data. SPSS completely separates your results from the data, so you are never in danger of corrupting your data as you make changes.

Spreadsheets lack crucial business statistics and charts. SPSS goes beyond what you get in your spreadsheet and gives you more tools, including:

" SPSS for Windows provides enhanced statistical procedures while enabling non-specialists to handle statistics on a PC."

— PC Magazine

- Time series analysis  
This forecasting tool provides much better predictions than the simple regression found in spreadsheets because time series considers seasonal fluctuations. For instance, forecasting future sales of a product with seasonal fluctuations, such as hot chocolate, is much more accurate when time series analyses are used.

- Quality control analysis  
Product or service fluctuations in performance and quality can be extremely costly. Quality control statistics and charts help identify when a product or process is not meeting standards. Action can then be taken to correct the situation.

- Nonparametric tests  
General significance tests, like the t-test, are appropriate when the data is normally distributed. But, when the distribution is not normal or the sample size is small, using a general test can result in erroneous significance levels.

Nonparametric tests give you an accurate significance level when your data don't follow typical patterns. For instance, data that tracks a direct-mail campaign contains information on every piece of mail sent, who responded and who purchased the product. Because response rates are typically very low for direct mail (i.e. 1%) this type of data is very skewed toward non-responders, or people that did not purchase the product. In this situation, it is more accurate to use nonparametric tests to calculate significance levels.

Spreadsheet statistics are often difficult to find and use effectively. To perform a sophisticated analysis, such as regression, you must specify the range of data for your dependent and independent variables. Then, you must specify labels. Plus, you need to tell the spreadsheet where to put the results. If these steps are not followed properly, your regression won't run.

In SPSS, there is no need to specify input and output areas. Statistics are easily found in a single drop-down menu that contains all the statistical choices plus selected graphics. You efficiently choose the correct statistic for your need (see Figure 11).

In addition, all your results including tables, charts and text are automatically organized in the Output Navigator — finding your results is fast and easy (see Figure 12). Should you need to redo the same analysis on another data file, SPSS documents your analytical steps in a separate file, so you can easily walk through your analysis again.

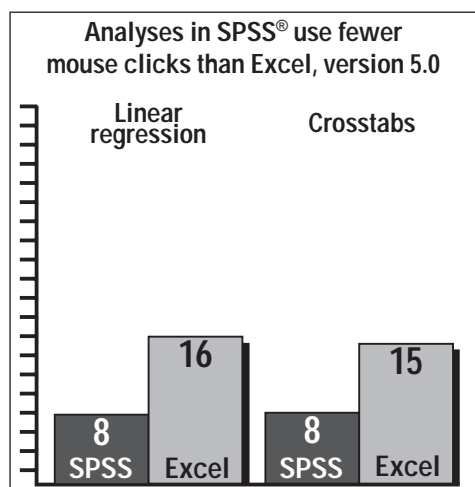


Figure 11. With SPSS 7.0 for Windows, you use fewer mouse clicks than typical spreadsheets, allowing you to concentrate on analysis and not the mechanics of the program.

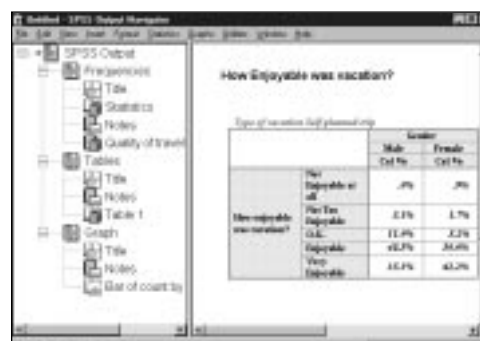


Figure 12. All your results, including tables, charts and text, are automatically organized in the Output Navigator.

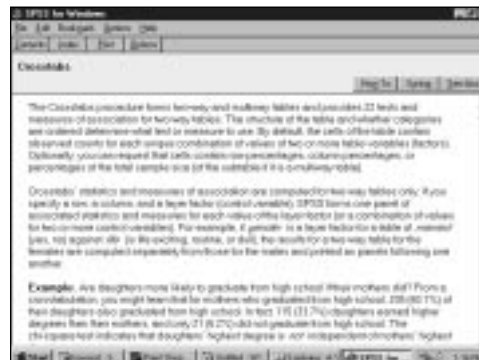
## 11. Answers to your questions should be easy to find and easy to understand

If you have a question in a spreadsheet, “help” tells you the commands to follow to perform a certain task. But, that is really only half the answer. You aren’t shown why a particular analysis could be useful or how to interpret the results once you’ve run the analysis.

In SPSS, if you have questions, generous online help is available (see Figure 13). Help includes:

- pop-up definitions of statistical terms
- a complete glossary of statistical terms
- “rules of thumb” for interpreting results
- “show me” buttons link directly to the tutorial for more in-depth looks at operations.
- comprehensive tutorial for an introduction to SPSS or when you need a refresher on specific tests

“ I would not trade this [SPSS] for anything.”  
— *Darien Fenn, beta tester*



**Figure 13. This is a screen from the extensive SPSS online help. Here, you can learn more about the SPSS Crosstab feature.**

Each dialog-box choice and every term used in a report is completely explained . Top-quality technical and statistical support is also available over the phone, fax, e-mail, CompuServe, the SPSS Bulletin Board and the SPSS World Wide Web page.

## 12. Your statistical tools should grow as your analytical needs change

SPSS offers a broad range of statistics that can grow to fit your needs. The SPSS Base system includes all the statistics, graphics and data management capabilities required by most business users. And, add-on modules are available which contain statistical procedures designed for specialized analytical needs. When added, these modules are seamlessly integrated into the SPSS interface. SPSS gives you all the statistics you need in one package, so there is no need to learn a separate program.

On occasion, you may need special functionality like advanced forecasting or market segmentation. These procedures go beyond what is offered in the SPSS Base system. A typical statistical or spreadsheet package does not offer such specialized techniques. The SPSS modules give you complete statistical functionality and allow you to apply the most appropriate technique to your unique analytical needs. The add-on statistical modules relevant for business users include:

### SPSS Categories®

SPSS Categories discovers consumer preferences that help you improve your products and price them effectively. You can measure the impact of individual product attributes on consumer preference.

**SPSS CHAID™**

SPSS CHAID finds statistically significant subgroups faster and easier.

**SPSS Trends™**

SPSS Trends improves your forecasts with powerful time-series analysis tools.

**SPSS Professional Statistics™**

SPSS Professional Statistics gives you a better understanding of the important relationships in your data, such as consumer buying habits.

**SPSS Advanced Statistics™**

SPSS Advanced Statistics analyzes complex relationships with sophisticated procedures.

**Neural Connection™**

Neural Connection gives you even more power and flexibility for prediction, classification, time series analysis and data segmentation.

Other modules are also available. Overall, SPSS products meet your changing and expanding needs effectively.

" It's the quality of the add-on modules, however, that place SPSS in a class of its own."  
— *PC Pro*

**Summary**

Statistical software is the perfect complement to your spreadsheet. Spreadsheets are great for everyday tasks, such as tracking budget numbers and creating simple summary reports and graphs. However, there are times when you need more information from your data and need to perform in-depth analysis. At these times, you need SPSS. Since SPSS was designed for in-depth data analysis, you get better information from your data.

SPSS is the right choice to take your analysis to the next level. SPSS connects to your data regardless of where or how it is stored. SPSS can uncover hidden patterns and trends that rarely emerge using spreadsheet row-and-column math. SPSS gives you great looking reports and graphs so you can effectively and easily communicate the results of your analysis. Together, SPSS and your spreadsheet can take your business data and translate it into meaningful information so you can make fully informed decisions.

**About SPSS**

SPSS Inc. is a multinational software products company that delivers statistical product and service solutions for survey research, marketing and sales analysis, quality improvement, scientific research, government reporting and education. Primary product lines include: SPSS for a variety of business solutions, SYSTAT and BMDP for scientific analysis, and QI Analyst for manufacturing and quality improvement applications. More than 2 million people worldwide use SPSS products.

Chicago-based SPSS has sales and support offices and distributors worldwide. In 1995, SPSS completed the best year in its 28-year history with total revenues of \$63 million.

SPSS software operates on most models of all major computers. It is widely used on personal computers running Microsoft® Windows® and Windows 95. Versions for the Power Macintosh® and many UNIX® platforms are also available. In addition, many products are offered in Catalan, French, German, Italian, Japanese, Spanish and traditional Chinese.

**Contacting SPSS**

To place an order or to get more information, call your nearest SPSS office or visit our World Wide Web site at <http://www.spss.com>

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