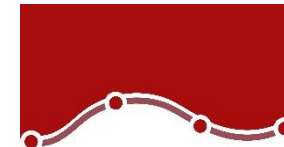




**SPSS**



**Statistics for  
Data Analysis**

## WHO WE ARE

SPS is an Italian center of statistical data analysis with more than 20 years of experience.

SPS was born in 1994 as SPSS Italia and it was the only reseller in Italy for SPSS software suite, authorised by SPSS inc.

Today SPS is an IBM Gold Business Partner, Software Support Provider and Expert Level in Data Science & Business Analytics.

## CONTACTS

Registered office:  
Via Antonio Zanolini, 36 A/B  
40126 Bologna (BO)

Operational headquarters:  
Via Isonzo, 55/2  
40033 Casalecchio di Reno (BO)  
P.I. 04222630370  
Tel. 051-252573  
[www.spss.it](http://www.spss.it)

## DATASHEET

---

**Statistics  
Direct Marketing**



# Statistics for Data Analysis

Organizations can solve a wide array of business and research problems with the solution Statistics for Data Analysis.

Compared to other statistical software, the solution is easier to use, has a lower total cost of ownership and more comprehensively addresses the entire analytical process, from planning to data collection to analysis, reporting and deployment.

Organizations of all types rely on Statistics for Data Analysis to help increase revenue, outmaneuver competitors, conduct research and make better decisions. With decades of built-in expertise and innovation, it's a leading choice for reliable statistical analysis.

Statistics Base is part of the solution Statistics for Data Analysis, which consists of:

- Software license
- Add-On
- SPS Service Program

This comprehensive, easy-to-use solution includes many different procedures and tests to help users solve complex business and research challenges.

## Highlights Statistics for Data Analysis

- Get support through every step of the analytical process.
- Carry out essential analyses from an intuitive graphical interface.
- Select from more than a dozen integrated products to make specialized analyses faster and easier.



# Statistics for Data Analysis

The solution analytical capabilities to meet the analysis requirements of any type of organization, from basic tools for solving common problems to advanced analytical techniques that enable all type of organization to address complex challenges.

Statistics for Data Analysis can help you:

- Analyze your data with new and advanced statistics, including a variety of new features within UNIANOVA methods
- Integrate better with third-party applications, including stronger integration with Microsoft Office
- Save time and effort with productivity enhancements:
  - More attractive and modern-looking charts in Chartbuilder
  - New groundbreaking features in Statistics Amos 25
  - Data and syntax editor enhancements
  - Accessibility improvements for the visually impaired
  - Updated merge user interface
  - Simplified toolbars

Statistics for Data Analysis can access quickly, manage and analyze any kind of dataset, including survey data, corporate databases or data downloaded from the web.

In addition, the software can process Unicode data. This eliminates variability in data due to language-specific encoding and enables your organization to view, analyze and share data written in multiple languages.

## Business Benefit Statistics for Data Analysis

- Support business decisions with data-based analytics for improved outcomes.
- Be more confident in your results by incorporating data from many different sources, including geospatial information, in your analysis and using proven, tested techniques to perform your analysis.
- Save time and effort with capabilities that enable experienced analysts to develop procedures or dialogs that others can use to speed through repetitive tasks.
- Give results greater impact by using visualization capabilities that clearly show others the significance of your findings.



# Statistics Direct Marketing

## Datasheet

### *Understand your customers and improve marketing campaigns*

You want your marketing programs to be as profitable as possible and gaining insight into the information contained in your customer data can help you reach this goal. To understand your contacts in greater depth, you can perform various kinds of analyses, including recency, frequency, and monetary value (RFM) analysis, cluster analysis and prospect profiling. You can also take the necessary steps to improve your campaigns through postal code analysis, propensity scoring and control package testing.

These types of analyses have typically required a lot of time and special expertise. Statistics Direct Marketing provides you with all the tools you need to conduct these analyses easily - and with confidence in your results. Although this module in the Statistics family of products relies on powerful analytics, you don't need to be a statistician or programmer to use it. Rather, the intuitive interface guides you, enabling you to classify customers in just a few easy steps.

### Highlights:

- Understand your customers in greater depth
- Improve your marketing campaigns
- Maximize the ROI of your budget



# Statistics Direct Marketing

## Datasheet

For example, you can classify your customers according to:

- Transactional data: how recently, how frequently, and how much they have purchased from your firm
- Identifying characteristics, such as age, marital status, job function and where they live

In addition, you can analyze the response rates to your campaigns, according to customer characteristics or by zip code, and test the effectiveness of various offers and creative treatments.

As a result of using Statistics Direct Marketing, your organization can:

- Identify which customers are likely to respond to specific promotional offers.
- Develop a marketing strategy for each different customer group.
- Compare the effectiveness of direct mail campaigns.
- Boost profits and reduce costs by mailing only to those customers most likely to respond.
- Prevent spam complaints by monitoring the frequency of emails sent to each customer group.
- Plan for locations to set up offices or stores.
- Connect to Salesforce.com to extract customer information, collect details on opportunities and perform analyses.



# Statistics Direct Marketing

## Datasheet

### Powerful but easy to use

Statistics Direct Marketing includes a combination of specifically chosen procedures that enable database and direct marketers to conduct data preparation and analysis activities. They can do this using only the Statistics Direct Marketing module, or they can use it in conjunction with Statistics Base and other modules in the Statistics product family.

Statistics Direct Marketing is easy to use. From the module's opening dialog, you'll be presented with six techniques. To better understand your contacts, choose from RFM analysis, clustering or prospect profiling. If you are ready to improve your existing campaigns, select from postal code response rate, propensity to purchase or control package test.

Enter the relevant information and variables for each technique, and analyses that used to require multiple steps can be completed in minutes with a single selection. The intuitive interface guides you every step of the way, and the new Scoring Wizard makes it easy to apply models created by a trained statistician or data miner to score your data. The significance of the output is clearly explained, and it appears in easy-to-read color-coded charts - or in tables - and can be exported seamlessly to Microsoft Excel or Microsoft Word.



# Statistics Direct Marketing

## Datasheet

### Identify your best customers with RFM analysis

If your company collects transactional and customer data, the RFM analysis tool in Statistics Direct Marketing can help you rank customers by value. The reasoning behind RFM analysis is simple: people who purchased once are more likely to purchase again. And the more frequently someone makes a purchase, or the more they spend, the more likely they are to purchase again.

With the increased use of email marketing campaigns and customer relationship management (CRM) software, RFM groupings have become an even more important marketing tool. With Statistics Direct Marketing, you can conduct an RFM analysis in less than ten minutes and classify your customers according to those who have:

- Purchased most recently
- Purchased most frequently
- Spent the most

Using RFM analysis, customers are assigned a bin number, such as 1, 2, 3, 4 or 5 for each RFM parameter. The total of these provides a figure referred to as an RFM rank or score. Lower scores identify customers who have spent the least, or rarely, or who have not purchased for a long time.



# Statistics Direct Marketing

## Datasheet

### Send the right messages with clustering

Perhaps your organization or company has an umbrella marketing campaign that you'd like to customize for different groups, or "clusters" of contacts, who vary by industry, age, gender, or ethnicity. If you need to discover which groups of prospects or customers share similar characteristics and differ from other groups, segment your contacts into clusters. Statistics Direct Marketing has a cluster analysis tool that enables you to immediately produce clusters of contacts, assign certain "personas" to each cluster, and develop targeted messages and marketing campaigns for every group.

### See which campaigns perform best

To test an existing campaign against new campaigns, collect your data and run a control package test in Statistics Direct Marketing. Color coding enables you to see easily which of the new (test) packages is most likely to produce a response rate that out-performs your existing (control) package. As a result, your team can identify the winning campaign and make smarter decisions about which package or packages to eliminate.





# Statistics Direct Marketing

## Datasheet

### Generate profiles of contacts who responded to an offer

In addition to identifying which package produced the best response, you can also use Statistics Direct Marketing to produce profiles of those people who responded to the test campaigns. Select the prospect profiling tool, which relies on classification trees, to pinpoint specific characteristics in the data, such as age, marital status and job functions.

With this information, you can contact a list broker and provide the profiles of the responsive customers. In turn, the list broker can compile a mailing list of prospects with similar characteristics - increasing the likelihood that they will respond to your organization's campaign.

### Select which contacts are most likely to purchase

Like many organizations, you may be facing a shrinking marketing budget - and trying to decide which of your many marketing campaigns will provide the most ROI. With Statistics Direct Marketing, you can maximize the value of your remaining budget quickly by selecting the customers who are most likely to respond to your campaigns and creating models to score other data. The propensity to purchase tool relies on previous response information and customer characteristics to build a model that predicts which customers are likely to respond to an offer - so you can eliminate those customers least likely to respond from your mailing lists, and stay within your budget.



# Statistics Direct Marketing

## Datasheet

### Identify top responders by postal codes

Would your organization like to determine the best location for adding an agency or a brick-and-mortar store? If your team works with a large volume of customer data and wants to uncover a geographic bias, use the Statistics Direct Marketing postal code response tool to identify a list of postal codes that have shown the highest rates of response to your marketing campaigns. Once you've identified the top performing postal codes, you can plan with confidence the best locations for a store or agency.

### Allocate marketing dollars more effectively

You can write RFM scores, prospect profiles and response rates back to existing data, or write them to a new data file created with select variables from existing data. With appended scores and data, you can quickly build lists of certain customers and adapt your marketing strategies for each customer group.

Use Statistics Direct Marketing to better understand your customer groups and identify the most valuable customers for your organization, whether those are the customers who purchase most frequently, spend the most or share certain characteristics. Likewise, you can also discover which customers are likely to respond to certain offers or which customers haven't purchased anything for a long time, and then develop marketing plans tailored to cultivate those customer groups.



# Statistics Direct Marketing

## Datasheet

Statistics Direct Marketing enables you to maximize the ROI of your marketing budget. Whether you're launching new campaigns, testing campaigns, looking to increase cross-sell and up-sell revenue, or even planning to open an office or store, you can use Statistics Direct Marketing to classify your customers - and make better business decisions.

### Using clustering and control package testing in insurance

Consider, for example, how a direct marketing campaign manager at an auto and homeowner's insurance company uses Statistics Direct Marketing to gain the most value from her marketing budget. She has hired an external advertising agency to produce a new marketing campaign. That agency has asked the campaign manager to identify groups of customers, or "clusters", that share similar characteristics, and are as different from other groups as possible. The agency would like to use this information to develop customized messages and personas for each group. The campaign manager uses the cluster analysis tool in Statistics Direct Marketing to create a dataset of customer groups.



# Statistics Direct Marketing

## Datasheet

Using the creative packages developed by the agency, the campaign manager assembles a test campaign that includes a control package that her company used successfully for 18 months, and two versions of test packages, Test A and Test B. She executes the campaign, and after 60 days of responses she uses the control package testing feature in Statistics Direct Marketing to compare the results of the three tests. She discovers that Test A outperforms both the control package and Test B.

As a result, the campaign manager can target the right customers with the right creative packages. This enables her company to maximize its marketing dollars, improve response rates and efficiently plan campaigns.



# Statistics Direct Marketing Features

## RFM analysis

Rows contain either customers or transactions

- Compute RFM scores from a dataset in which each row contains the aggregated data for one customer or the data for one transaction
  - You won't need to conduct extensive data preparation of your transactional data, so you'll get results more quickly

Define recency data by date or by interval

- Accept recency data in the form of a transaction date or in the form of the time interval since the transaction
  - There's less need for data preparation, so you'll get results more quickly and reduce the likelihood of possible errors

Append the RFM results directly to your data or a new data file so you can quickly identify and build lists of high-value customers

## Output

- Output histograms for all three variables using the entire dataset
  - See how the variables are distributed: graphically display frequency distributions for the date of the last transaction, the number of transactions, and their amounts
  - Use the bin count chart to view the results of the binning process and decide whether certain settings should be changed
- Output an average monetary value chart using the entire dataset to pinpoint how recency, frequency and spending are related in the sample
- Leverage improved, descriptive text to help explain - in everyday language - the output from executed procedures

## Custom variable names

- Allow users to specify their own names for variables
  - Choose variable names that are meaningful to you

## Cluster Analysis and Contact Profiling

### Display options

- Display tables and charts that describe each cluster and the characteristics that define the cluster

### Segment options

- Save a new field (variable) that identifies the segment corresponding to each case
  - Specify how many segments to include in the cluster
  - Automatically determine the best number of segments

## Output profile descriptions

- Contact Profiles output includes a table that provides descriptions of each profile group and displays response rates, cumulative response rates and a chart of cumulative response rates

## Control Package Test

### Output

- Display counts and percentages of positive and negative responses for the control and test packages
- Determine whether the control package and test package and test package are statistically different



# Statistics Direct Marketing Features

## Propensity to Purchase analysis

### Propensity to Purchase diagnostic output

- Display charts and tables to show overall model quality, goodness of fit and a classification table that compares responses

## Zip Code Response

### Create output for postal code response rates

- Create a new dataset that contains response rates by postal code
  - Create tables and charts that summarize the results by decile rank
  - Color-code tables to highlight the users you are targeting

### Group postal codes

- Users can choose general response rates based on N characters, three digits, five digits or the complete value of a postal code

### All procedures

- Export results to Excel



### **Statistics for Data Analysis solution**

Add more analytical power, as you need it, with optional modules and stand-alone software from the Statistics for Data Analysis family.

#### **Statistics Base**

Statistics Base includes the core capabilities to take the analytical process from start to finish. It is easy to use and includes a broad range of procedures and techniques to increase revenue, outperform competitors, conduct research and make better decisions.

#### **Statistics Advanced**

Statistics Advanced includes these powerful multivariate techniques: generalized linear models (GENLIN), generalized estimating equations (GEE), mixed level models, general linear mixed models (GLMM), variance component estimation, MANOVA, Kaplan-Meier estimation, Cox regression, hiloglinear, loglinear and survival analysis.

#### **Statistics Bootstrapping**

Statistics Bootstrapping enables researchers and analysts to use bootstrapping techniques on a number of tests contained in Statistics for Data Analysis modules. This provides an efficient way to ensure that your models are stable and reliable. With Statistics Bootstrapping, you can reliably estimate the standard errors and confidence intervals of a population parameter like a mean, median, proportion, odds ratio, correlation coefficient, regression coefficient and numerous.

#### **Statistics Categories**

Unleash the full potential of your categorical data through perceptual maps with optimal scaling and dimension reduction techniques. This add-on module provides you with everything you need to analyze and interpret multivariate data and their relationships more completely.

#### **Statistics Complex Samples**

Incorporate complex sample designs into data analysis for more accurate analysis of complex sample data. Statistics Complex Samples, with specialized planning tools and statistics, reduces the risk of reaching incorrect or misleading inferences for stratified, clustered or multistage sampling.

#### **Statistics Conjoint**

Statistics Conjoint helps market researchers develop successful products. By performing conjoint analysis, you learn what product attributes are important in the consumer's mind and what the most preferred attribute levels are, and can perform pricing studies and brand equity studies.

#### **Statistics Tables**

Use Statistics Tables to present survey, customer satisfaction, polling and compliance reporting results. Features such as a table builder preview, included inferential statistics and data management capabilities make it easy to clearly communicate your results.



### **Statistics Preparation**

With Statistics Preparation, you gain several procedures that facilitate the data preparation process. This add-on module enables you to easily identify suspicious and invalid cases, variables and data values; view patterns of missing data; summarize variable distributions to get your data ready for analysis; and more accurately work with algorithms designed for nominal attributes.

### **Statistics Decision Trees**

Create highly visual classification and decision trees directly within Statistics for Data Analysis for segmentation, stratification, prediction, data reduction and variable screening, interaction identification, category merging and discretizing continuous variables. Highly visual trees enable you to present results in an intuitive manner.

### **Statistics Direct Marketing**

Statistics Direct Marketing helps marketers perform various kinds of analyses easily and confidently, without requiring a detailed understanding of statistics. They can conduct recency, frequency and monetary value (RFM) analysis, cluster analysis, and prospect profiling. They can also improve marketing campaigns through postal code analysis, propensity scoring, and control package testing. And they can easily score new customer data and access pre-built models.

### **Statistics Exact Tests**

Statistics Exact Tests always provides you with correct p values, regardless of your data structure, even if you have a

small number of cases, have subset your data into fine breakdowns or have variables where 80 percent or more of the responses are in one category.

### **Statistics Forecasting**

Improve forecasting with complete time-series analyses, including multiple curve-fitting, smoothing models, methods for estimating autoregressive functions and temporal causal modeling. Use the Expert Modeler to automatically determine

which ARIMA (autoregressive integrated moving average) process or exponential smoothing model best fits your time-series and independent variables, eliminating selection through trial and error.

### **Statistics Missing Values**

If values are missing from your data, this module may find some relationships between the missing values and other variables. In addition, the missing values module can estimate what the value would be if data weren't missing.

### **Statistics Neural Networks**

Use the Statistics Neural Networks module to model complex relationships between inputs and outputs or to discover patterns in your data. Choose from algorithms that can be used for classification (categorical outcomes) and prediction (numerical outcomes). The two available algorithms are Multilayer Perceptron and Radial Basis Function.





### **Statistics Regression**

Predict behavior or events when your data go beyond the assumptions of linear regression techniques. Perform multinomial or binary logistic regression and nonlinear regression, weighted least squares, two-stage least squares and probit analysis.

### **Complementary product**

Use these products with Statistics for Data Analysis to enhance your analytical results.

### **Statistics Amos**

Support your research and theories by extending standard multivariate analysis methods when using this stand-alone software package for structural equation modeling (SEM). Build attitudinal and behavioral models that more realistically reflect complex relationships, because any numeric variable, whether observed or latent, can be used to predict any other numeric variable. The latest release includes a new nongraphical method of model specification that improves accessibility for users who need scripting capabilities and enables large, complicated models to be run more quickly.