CHAPTER

1

Introduction to the SAS Add-In for Microsoft Office

What Is the SAS Add-In for Microsoft Office?

The SAS Add-In for Microsoft Office extends the functionality of Microsoft Excel, Microsoft Word, and Microsoft PowerPoint by enabling you to access SAS analytics and SAS reporting functionality without any SAS programming experience. The SAS add-in is designed for users who are familiar with these Microsoft Office programs but who might be new to SAS.

The SAS add-in includes approximately 80 SAS tasks that enable you to perform a variety of analyses. Examples of analyses that you can perform include linear and nonlinear regressions, multivariate analyses, time series analyses, one-way frequencies, and summary statistics. The SAS add-in enables you to refresh these analyses so that your results include the most up-to-date information. You can also easily share the results with others at your site.

When the SAS add-in is installed on your computer, a **SAS** tab is automatically integrated into the Ribbon in Excel, Word, and PowerPoint 2007. The **SAS** tab enables you to access the SAS analytics and reporting functionality directly from these Microsoft Office programs without having to open a separate SAS interface.

Note: If you are using Microsoft Office 2000-2003, then a **SAS** menu is automatically integrated into Excel, Word, and PowerPoint. You can perform the tasks in this book if you are using Microsoft Office 2000-2003. However, the SAS options are located in the **SAS** menu rather than the **SAS** tab. The instructions and screenshots in this book are specific to Microsoft Office 2007. △

Benefits to Using the SAS Add-In for Microsoft Office

Most of the SAS add-in functionality is identical in Excel, Word, and PowerPoint; for example, you can run analyses and reports in all three applications.

The SAS add-in extends the functionality in Excel, Word, and PowerPoint by enabling you to complete the following tasks:

▫ *Access SAS data sources as the input data for your analysis.* You can use any SAS data source or any data source available from your SAS server (including databases such as Oracle, Teradata, and DB2) as the input data for an analysis.

☐ *Perform more complex analyses and computations than what is available in Microsoft Excel.* For example, one of the complex analyses that SAS provides is the Canonical Correlation task. This task enables you to examine the relationship between a linear combination of a set of X variables and a linear combination of a set of Y variables. You might run a canonical correlation analysis to determine the degree of correspondence between a set of job characteristics and a set of measures of employee satisfaction. This extends the correlation analysis that is available in Excel. You can run these complex analyses and computations in Excel, Word, or PowerPoint.

☐ *Run custom analyses that were developed by others at your company.* Using the SAS add-in, you can also open reports that were developed by SAS Enterprise Guide or SAS Web Report Studio users at your site. Some of these reports might run programs called SAS Stored Processes. These programs are customized SAS code that is developed by business analysts or your IT department. Running these programs enables you to quickly generate a custom report without writing any SAS code.

☐ *Refresh the content in the Excel worksheet, Word document, or PowerPoint presentation on demand or automatically at a specified time.* Scheduling when the content is refreshed enables you to have the most up-to-date data and reports when you need it.

☐ *Publish the results to a central location.* By publishing a document, you can share it with others without having to e-mail it. If you publish the document to a metadata repository, then you can perform an impact analysis on the document. Impact analysis enables you to see where a data source came from and the items that are dependent on this source. This analysis enables you to know how changing a data source might affect other documents.

Additional functionality is available in Excel. In Microsoft Excel, you can also complete the following tasks:

☐ *Access and view data sources that exceed the 1,048,576 record limitation in Microsoft Excel 2007.* (In Microsoft Excel 2000-2003, this record limit is 65,536.) The SAS add-in does its processing on the server, which enables it to by-pass the record limitation in Excel.

☐ *Copy data to a SAS server.* You can copy an Excel data source or a SAS data source to the SAS server. After a data source is copied to a SAS server, it becomes a SAS data set. This enables you to share Excel data with Word and PowerPoint users at your site. This functionality also enables Excel users to update information in a SAS data source and upload it to the SAS server.

☐ *Send the results from an analysis that you ran in Excel to a Word document or PowerPoint presentation.* For example, you ran an analysis of your company's sales for this year, and now you need to give a presentation of the results. Using this functionality in Excel, you can select which results to include in a PowerPoint presentation. This saves you time because you need to run the analysis only once.

This book explores some of the basic tasks that you can perform in Excel.

How to Use the SAS Add-In for Microsoft Office

When you open Microsoft Excel 2007, you should see a **SAS** tab in the Ribbon. You access the SAS add-in from the menu options on this tab.

Note: If you do not see a **SAS** tab, then you might not have the SAS add-in installed. For help, contact the SAS support personnel at your site. △

Display 1.1 The SAS Tab in Microsoft Excel
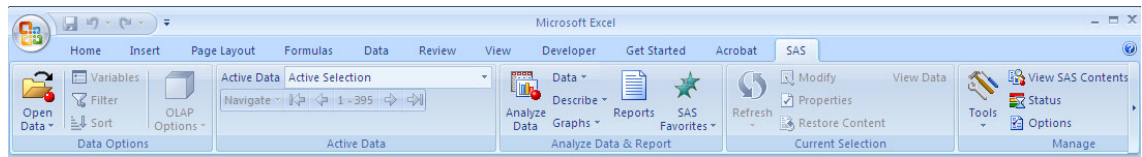
You can perform a variety of tasks using the SAS add-in. The following process briefly explains how you would run a SAS analysis:

1 Open Microsoft Excel.

2 Select the analysis that you want to perform.

Note: After you select the analysis, you might be prompted to log in to the SAS server if you have not previously logged in during the current session. You must be connected to a SAS server to run an analysis or to access a SAS data source. △

3 Select the data source that you want to use in the analysis. In Excel, you can use data in an existing Excel worksheet or in a SAS data source. If you select a SAS data source, you can choose to filter and sort the data before the analysis.

Note: If the SAS data source is open in an Excel worksheet, then the task uses the filter and sort criteria that you specified when opening the data source. △

4 Select the options in the analysis that you want to use and then run the analysis.

5 Specify the location of the output. For example, in Excel you can choose to include the results in the existing worksheet, in a new worksheet, or in a new workbook.

The results automatically open in Excel in the location that you chose.

Note: The SAS add-in is also available in Microsoft Word and PowerPoint. △

Accessibility Features of the SAS Add-In for Microsoft Office

The SAS Add-In for Microsoft Office includes accessibility and compatibility features that improve usability of the product for users with disabilities. These features are related to accessibility standards for electronic information technology adopted by the U.S. Government under Section 508 of the U.S. Rehabilitation Act of 1973, as amended. For more information about the accessibility of the SAS Add-In for Microsoft Office, see the online Help.

If you have questions or concerns about the accessibility of SAS products, send e-mail to **accessibility@sas.com**.