SAS® Office Analytics for Midsize Business

Access the power of SAS to gather, manage and analyze data in a familiar Microsoft Office environment

What does SAS® Office Analytics for Midsize Business do?

SAS Office Analytics for Midsize Business provides business users access to the power of SAS Analytics in a familiar Microsoft Office environment. With the solution, users can easily access and integrate data from different sources, apply SAS Analytics and present results. Executive managers and information consumers can track performance from email clients or SharePoint portals.

Why is SAS® Office Analytics for Midsize Business important?

The solution enables all business users to access SAS capabilities without requiring IT support or analytical expertise. The solution is easy to use, affordable and scalable. It gives small and midsize organizations access to the statistical power large enterprises have had for years – providing them with accurate, fact-based information for improved decision making.

For whom is SAS® Office Analytics for Midsize Business intended?

This solution is designed for small and midsize businesses with limited IT staff and analytical expertise.

Businesses gather data at an amazing speed. The challenge lies in making sense of it. Where did the data come from? Are strategies based on fact, or on erroneous information or instinct?

Just getting access to data is challenging, because it's scattered across different systems and databases that don't communicate. Does the finance department use the same information as operations? Does marketing have current data for campaigns?

Most business users constantly ask IT for help to get a complete, consistent and accurate view of data. But IT groups at most midsize businesses lack the time, money and staff to assist.

In the race for timely business intelligence, organizations need tools that allow everyone – not just IT – to explore data for new insights. Many rely on Microsoft Excel – but spreadsheets aren't integrated with other applications or set up for robust statistical analysis.

SAS Office Analytics for Midsize Business puts the power of SAS Analytics directly in users' hands via familiar Microsoft Office environments. It lets business users employ SAS capabilities for data access, management, sophisticated analytics and reporting – even results distribution.

With a multidimensional view of customers, you can explore data for emerging trends and insights into customers and markets. And decision makers can act quickly, with confidence that everyone is guided by the same information and goals.

Key Benefits

- **Access a single, consistent view of data.** Users can access and consolidate data from different operational systems to get a unified view of the most recent information. Users no longer need to build their own data extracts and develop different versions of the same report.
- **Make business users self-sufficient.** Without additional training, business users can take advantage of the proven capabilities of SAS Analytics directly from familiar Microsoft Office applications.
- **Get faster, better results with easy-to-use tools.** An intuitive query interface lets users access large amounts of data and view results directly in Excel. Guided analysis lets them analyze data, schedule projects, share results and embed them into Office applications.
- **Free IT for more strategic tasks.** Single, centralized data access and control ensure that users have appropriate access privileges and can react quickly to evolving business demands. Because users are self-sufficient, IT is freed from tedious maintenance and ad hoc query and reporting tasks.
- **Satisfy corporate and governmental compliance regulations.** With SAS, you can produce repeatable results using validated data and processes that are easily documented and verified for corporate and governmental compliance. Imagine how much time can be saved – no more tracking down which report is correct.

Solution Overview

Business users often gather, manipulate and report information using Microsoft Office applications. But they frequently need access to large, varied data sources that exceed the limitations of Microsoft Office tools. And standard reporting packages do not include sophisticated analytic techniques that businesses need to predict future trends.

As a result, the IT department spends valuable time doing custom analyses and generating ad hoc reports. This leads to IT backlogs, inconsistent results and delayed decisions.

SAS Office Analytics for Midsize Business makes it easy to incorporate the proven data management, analytics and reporting capabilities of SAS into your organization's widely used Microsoft Office toolset. Working directly from Microsoft Office via integrated menus and toolbars, business users and analysts can be self-sufficient and gain the control they need to do their work effectively.

The solution liberates IT by centralizing data access and control. The result is fewer backlogs, companywide access and faster, more informed decision making. From its point-and-click interfaces to its easy-to-comprehend metadata capabilities, SAS Office Analytics reduces the learning curve and gives users the time and tools they need to make good business decisions.

Data access and management

SAS Office Analytics for Midsize Business includes an intuitive query interface that returns results directly to Excel spreadsheets. As a result, users can preview and query data sources larger than the size permitted by Excel – they can browse several thousand rows of data at the same time.

This capability ensures that business users have the correct data detail needed for accurate analysis based on a complete set of records. It also removes the problems associated with intermediate summarized data formats, which are often subsets or aggregations of detail data. Data processing is performed on the SAS server, bypassing the data limitations of Microsoft Office.

Filter-and-sort dialog boxes make it easy for users to reduce and organize results to acceptable sizes for their needs, and to identify the data to be inserted into Microsoft Excel. Results from various data sources can be delivered as raw data into Excel for further manipulation with native Excel functionality.

In addition, SAS Office Analytics for Midsize Business allows users to refresh data automatically, and to rerun any queries and apply relevant filters to
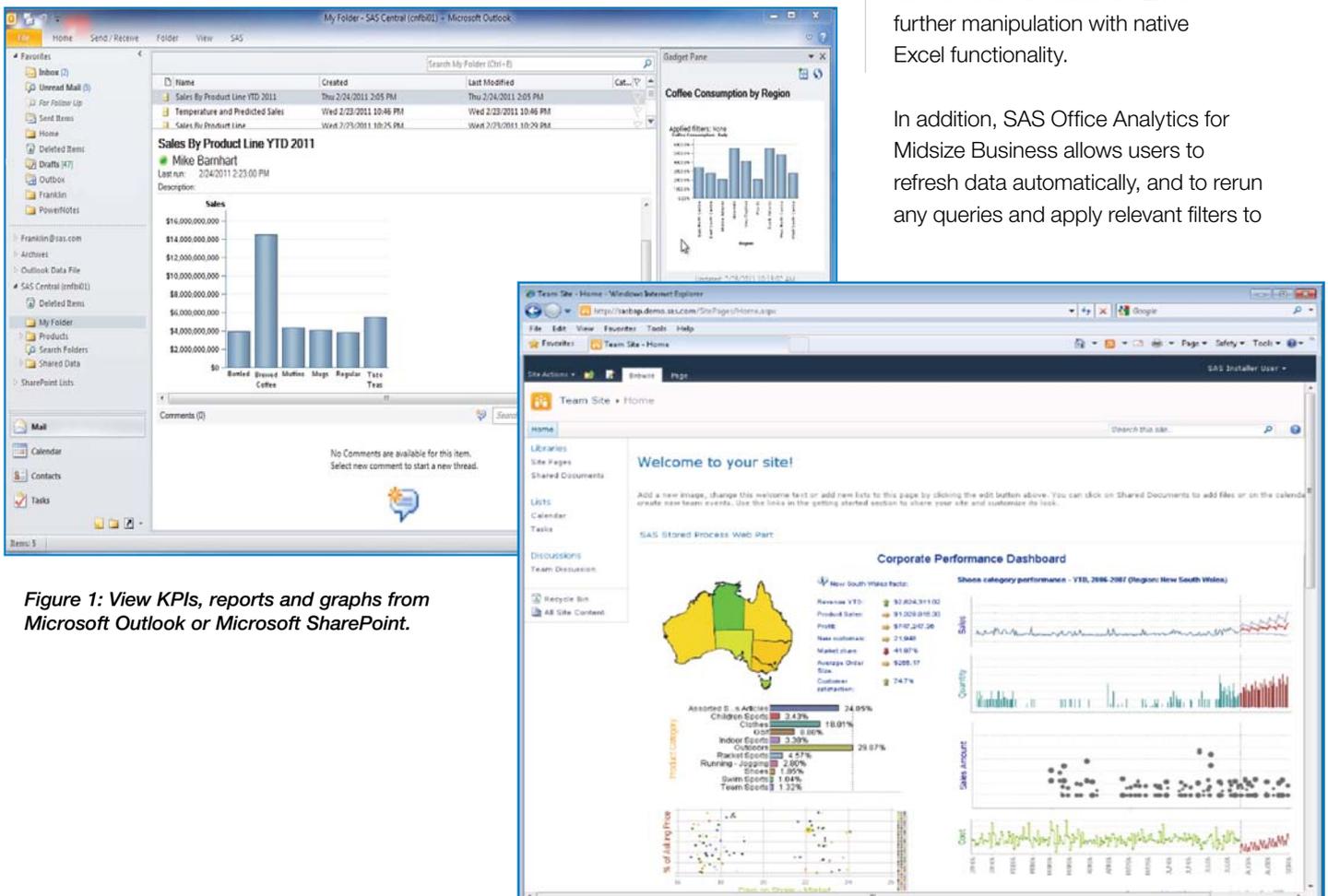

Figure 1: View KPIs, reports and graphs from Microsoft Outlook or Microsoft SharePoint.

ensure that the most up-to-date information is available. Users can switch dynamically between multiple data sources, so they can run multiple tasks with different data sources from within one worksheet or document. Warnings alert users whenever the result set to be returned is over the size limit.

Powerful SAS® Analytics

SAS offers the most extensive set of predictive analytics available, providing organizations with valuable insights. SAS Office Analytics for Midsize Business provides a wide range of statistical methods, ranging from traditional analysis of variance to exact methods and dynamic visualization techniques. Using statistical software can provide new information that improves processes, drives development and revenues, and helps organizations retain valued and satisfied customers.

Graphics and reporting

Almost everyone has some familiarity with Microsoft Office; and for small and midsize businesses, Office is often an especially important productivity tool. It is natural for businesses to use this as their standard for management reports. With SAS Office Analytics for Midsize Business, business users can easily create reports and distribute their findings. After getting the desired results, they can use native Microsoft functionality to publish Microsoft Office documents – with embedded SAS Analytics – to relevant decision makers. Recipients can update the embedded results from the Microsoft Office documents as needed.

Guided analysis and model building for power users

The solution includes SAS® Enterprise Guide® to empower advanced users by giving them an environment that's appropriate for various types of analyses, data manipulation and visualization.

Key Features

Microsoft Office integration

- Access SAS capabilities for data access, reporting and analytics directly from Microsoft Office tools, including Word, Excel, PowerPoint and Outlook.
- Use wizard-driven report creation within Microsoft Office tools.
- Provide offline viewing of previously created results.
- Access data from any centrally IT-defined enterprise data source and perform a "writeback" to source data using Microsoft Excel.
- Refresh data at the click of a button from any central enterprise data source defined by IT.
- Cycle through data that exceeds row limitations of Microsoft Excel. Server-side optimization ensures that large data sources are never transferred as one to the client.
- Use all the capabilities of Microsoft Excel on the data displayed, but retain the ability to always access the latest view of information.
- Embed intelligence and information derived from SAS into Microsoft Word and Excel.
- Deliver results as PDF, RTF or HTML with Microsoft Word, raw data (CSV) or HTML into Excel for further manipulation with native Microsoft Office functionality.
- Manipulate pivot tables to illustrate multidimensional data from various sources.
- Deliver graphics results directly into Microsoft Word, Excel, PowerPoint and Outlook in any of these formats: ActiveX, PDF, GIF, JPEG or PNG.
- Refresh tables and charts automatically to get the latest view of information, pulling from current data that is centrally maintained.
- Enable distribution of embedded results on demand using native Microsoft Office functionality.
- Render reports created with SAS Enterprise Guide inside Microsoft Office.

Data access engines

- Access data directly, easily and securely with native interfaces.
- Use the solution's data access capabilities, including:
  - SAS/ACCESS® Interface to PC Files for access to Microsoft Excel, Microsoft Access, dBase, Lotus, SPSS, JMP® and Stata.
  - SAS/ACCESS Interface to ODBC for access to any ODBC-compliant data source.

Powerful SAS® Analytics

- Includes a wide range of powerful statistical analysis capabilities. These include:
  - Analysis of variance for analyzing experimental data.
  - Regression to examine the relationship between a response variable and a set of explanatory variables.
  - Categorical data analysis for investigating the association of data categories and the strength of the relationships.
  - Multivariate analysis for modeling data with two or more response variables or for identifying relationships among variables.
  - Survival analysis for measuring lifetime or time until an event.
  - Cluster analysis, which places observations into groups based on similarity.
  - Multiple imputations, which let you fill in missing values to generate complete data sets.

Guided analysis and model development for power users

- Provides a .NET-based native Windows application to programmers, analysts and advanced users.
- Includes an enhanced user interface with context-sensitive menus, toolbars and role-based user definitions.
- Has a large number of prebuilt tasks and task templates that cover a wide variety of topics.
- Offers wizard-driven conditional flow logic capabilities for more rapid creation of complex, conditional processing.
- Provides enhanced complex query with computed columns creation, filtering options and results preview to make the query-building process more efficient.
- Lets users view OLAP cubes from SAS or other vendors that support OLE DB for OLAP and the MDX standard.

These custom analyses and results can be incorporated seamlessly in Web-based reports or Microsoft Office documents.

Microsoft SharePoint integration

By adding a SAS Stored Process Web part to a SharePoint site, business analysts can allow report consumers to view and refresh reports, apply filters and parameters to get custom views, maintain user authorizations, and reuse the underlying SAS asset.

Business metadata management for IT

SAS Office Analytics for Midsize Business gives IT users and data architects the opportunity to translate data structures into terms that business users can understand and use. It also enables them to define business rules consistently. With these data structures, IT can control which data and what volume of data can be retrieved. This capability ensures that IT maintains control without infringing on users' flexibility and productivity.

SAS® Office Analytics for Midsize Business System Requirements

To learn more about SAS Office Analytics for Midsize Business system requirements, download white papers, view screenshots and see other related material, please visit sas.com/smb-oa.

Key Features (continued)

- Provides additional analysis using slices of OLAP cubes.
- Easily incorporates geospatial data into analyses.
- Enables users to query and subset data graphically from any accessible source or write SQL/MDX.
- Lets you package results into SAS Stored Processes that can be used in all SAS Business Intelligence interfaces and in Microsoft Office. This provides secure access to anything SAS can do, and allows work to be distributed without IT involvement.

Business metadata management for IT

- Map physical data structures to business terms in an easy-to-use interface.
- Access data from virtually any data source, including multiple sources at once.
- Combine data from multiple sources.
- Define consistent business views of data for relational tables and OLAP cubes.
- Create one business view over disparate database management systems for a combined set of query attributes.
- Control the size of result sets that can be returned to avoid long-running queries.
- Centrally manage metadata, define access controls, and register and manage users and groups through a single interface.
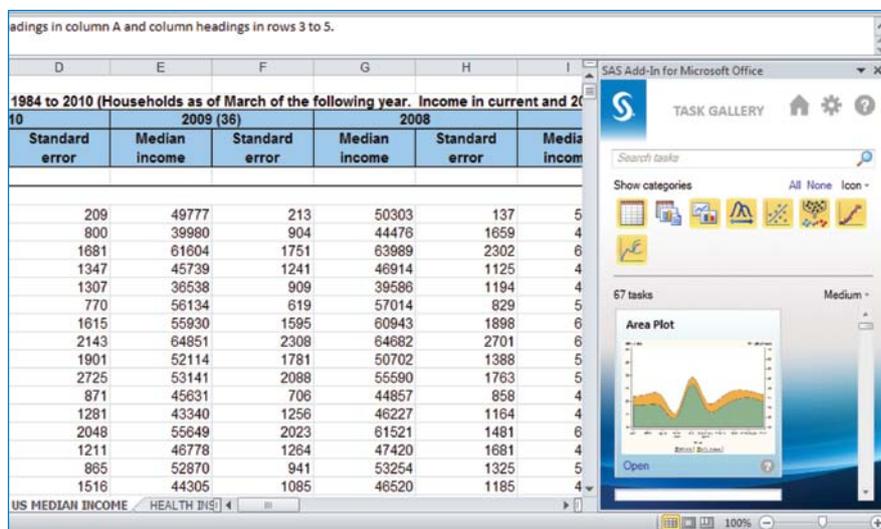

Figure 2: Seamless integration with Microsoft Office provides easy access to SAS tasks, charts and statistics.

SAS

THE POWER TO KNOW.