



## Business Impact

“Public engagement enhances the Government’s effectiveness and improves the quality of its decisions.”

**President Barack Obama**  
Transparency and Open Government Memorandum  
for the Heads of Executive Departments and Agencies  
Jan. 21, 2009

## Challenges

- **Data volume.** Government agencies are mired in an overwhelming amount of data and struggle to understand how to deal with the huge volumes of new information and feedback coming in.
- **Scattered data.** Data is scattered throughout data siloes across agencies in a wide variety of formats, and much of it is text or unstructured data.
- **Limited analytic capabilities.** While government agencies have applied data mining and statistical methods on structured data to identify trends and patterns, they have not had an easy way of incorporating text and other unstructured data for more complete analysis.
- **Manual processes.** If analysis of unstructured data is done, it is usually done manually. Manual analysis of unstructured data is not only costly and error-prone, but requires enormous amounts of time.
- **Legacy content.** So much of government content lacks metadata. Content with limited or no metadata is difficult, if not impossible, to discover or re-use.

## How can government be more responsive to constituent needs?

### YOUR GOAL: Understand public sentiment to improve government policy and operations

Governments are under more pressure than ever to become more transparent, collaborative and participatory – traits seen as best practices for good governance. The public is also calling for increased visibility into government decision making, participating in online forums and using inquiry channels to seek answers to questions or to raise issues. Public sentiment and perception are central to successful government policy and operations.

The business of government includes collecting and archiving volumes of information, but it has been difficult for governments to operationalize the vast quantities of information that they store, receive and monitor. Limited resources have made it difficult for agencies to recognize patterns before they become issues. Reaching out and asking for citizen input and collaboration to solving problems is not new to government; what is different is the scale and reach.

Governments maintain many types of data repositories – structured and unstructured. While agencies have digitized much of the data and have created electronic card catalogues, it is still difficult to locate the right information based on keyword searches. Addressing this manually not only wastes valuable resources, but cripples the assessments of the content stores. Identification of emerging issues and trends in public concerns from logistical notes and reports is simply impossible when materials are examined in isolation.

### OUR APPROACH

While agencies are beginning to recognize the crucial role that data plays in their success, discovering the value hidden in data continues to be a struggle. Without a clear view of data and its significance, agencies are finding it difficult to produce insights and make informed decisions. We approach the problem by providing software and services to help you:

- **Eliminate content chaos.** Accurately categorize content to enable efficient information organization, access, distribution and retrievability.
- **Discover hidden patterns.** Identify explicit relationships and trends in unstructured and structured data for more informed decision making.
- **Respond to citizen feedback.** Analyze information from the Web, social networking sites, and internal electronic document collections to understand expressed sentiments and their effect on your agency.

For government officials who would like to more actively solicit feedback from their constituents but have been afraid of being overwhelmed with data, powerful text analytics solutions can help ease your concerns. SAS helps make unstructured data useful, offering faster access to insights and improving operational information and efficiencies.



## THE SAS® DIFFERENCE: Unlock unstructured data for greater insight.

SAS offers a more comprehensive and thorough perspective to discover trends and emerging issues, leading to in-depth analysis and better decision making. With SAS, you can predict, forecast and visually explore the commentaries, Web-crawled downloads and archival data in more than 30 languages – in one environment.

- **SAS provides a rich suite of tools for discovering and extracting knowledge** from text documents, including a comprehensive text mining solution that integrates text-based information with structured data and predictive analytics for better answers to complex questions.
- **SAS uses a combination** of advanced statistical modeling, natural language processing and advanced linguistic technologies to quickly and automatically categorize large volumes of multilingual content to discover trends, patterns and sentiments.
- **SAS enables you to take full advantage of content assets** and ensure reuse, spanning disparate departmental repositories regardless of who owns the content or where it was generated.

Because of the agile SAS framework, organizations can use the robust text analytics capabilities they need right now, and add new functionality incrementally as utilization matures – ensuring that investments are protected and maximized as part of ongoing intelligence advances.

### CASE STUDY: A US Federal Agency

#### ■ Situation

A large federal government agency needed to improve its ability to find information using search and browsing tools, implement controlled vocabularies, and unify numerous data sources and supporting applications across the enterprise. The agency was also manually indexing and providing content extraction and analysis of high-profile documents and needed to reduce the time spent on this task.

#### ■ Solution

Using a SAS Text Analytics solution, the agency was able to:

- Streamline the process for categorizing unstructured content.
- Centralize vocabulary services for application integration and development.
- Centralize its metadata repository.

#### ■ Result

- Increased the volume of documents that can be effectively indexed.
- Reduced operational staffing related to manually indexing documents.
- Increased productivity through standardized processes to accomplish work effectively and efficiently.

#### ■ What if you could ...

##### Eliminate content chaos

What if you could automatically extract, identify and associate archives and new sources of documents so that they are retrievable and relevant to information searches and customizable to constituent needs?

##### Discover hidden patterns

What if you could identify patterns in your data to improve efficiencies and enhance accountability to the public?

##### Respond to citizen feedback

What if you could improve the response times to public concerns and provide better service to constituents?

#### ■ You can. SAS gives you THE POWER TO KNOW®

### SAS FACTS

- SAS Text Analytics named “Trend-Setting Product for 2010” by *KMWorld* magazine.
- SAS has been in business since 1976 and today has customers at more than 50,000 sites worldwide.
- More than 80 countries’ public sector organizations are SAS customers.
- All 15 US federal departments are SAS customers.
- Approximately 85 percent of independent US government agencies and commissions use SAS.

Learn more about SAS software and services for government at <http://www.sas.com/industry/government>.



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