

Solution Spotlight:

Government Performance Management

USING BUSINESS INTELLIGENCE TO MEET THE CHALLENGES OF THE PRESIDENT'S MANAGEMENT AGENDA

U.S. Social Security Administration

FOCUS ON SOCIAL SECURITY

The U.S. Social Security Administration (SSA) is the agency of the U.S. federal government responsible for administering income support programs for the elderly, the disabled, and their dependents. For FY2006, SSA had 64,000 employees, an administrative budget of \$9.2 billion, and made program payments of \$596 billion.

SSA faces strategic, financial and operational challenges in the coming years, including:

- Increasing demand for its services due to of the aging of the Baby Boom generation;
- An employee retirement wave, also due to Baby Boomer demographics;
- New tasks imposed by Congress such as managing Medicare Part D (Prescription Drug) benefits;
- Increasing accountability for results driven by the President's Management Agenda (PMA), the Government Performance & Results Act of 1993 (GPRA), and other mandates;
- Requirements to provide service via new channels such as the Internet

THE PROBLEM

SSA uses "workpower" as an operational performance metric. (Workpower is a measure of which service activities SSA employees spend their time on.) Historically, workpower has been determined through a process of "work sampling" which includes manually interviewing SSA employees at local field offices about

which tasks they're performing during given time intervals. While these methods are adequate for cost accounting at the agency level, they are not timely or detailed enough to be useful for operational management at a local or regional level. In addition, the work sampling methods are manual and costly. As a result, SSA has lacked a sufficiently precise tool for optimizing productivity and cost effectiveness at the local office level.

THE SOLUTION

As a leader in Federal financial management, SSA had the experience to develop a very compelling vision for delivering more robust management accounting information, including productivity performance management information, to local managers. In May 2003, SSA engaged DecisionPath Consulting to assist with the following:

- Develop a better system and process for measuring workpower;
- Identify the business intelligence (BI) requirements that would enable SSA to manage its workpower more effectively;
- Demonstrate the proposed method in a full scale prototype and show how the resulting workpower information could be used to satisfy SSA's BI requirements and strategic objectives.

In the course of the engagement, DecisionPath consultants facilitated more than 40 requirements-gathering sessions with SSA decision-makers at all levels. The goal of the sessions was to clearly

understand how SSA envisioned using workpower information for labor productivity, staffing and resource management, managerial cost accounting, budget formulation, and other areas. All of the information requirements were clearly presented in terms of business questions so that they could be grouped and documented into specific analytical areas.

The New Work Measurement Method

Most of SSA’s work is performed by SSA employees using one or more computer systems. Leveraging this situation and considering the sources of management information at hand, DecisionPath worked in partnership with SSA to:

- Develop a time measurement method that uses system log files and other source files in a new and valuable way;

- Define 11,000 business rules to measure time (workpower) from these sources;
- Create a model that applies the business rules to the source data to calculate workpower by service activity (“workload”) by employee by day.

The definition of the business rules and the creation of this “workpower interpretation model” required DecisionPath to gain deep business and process knowledge of how SSA operational components perform their work serving the public, as well as a deep technical understanding of the programmatic and BI systems SSA uses to perform that work. Figure 1 shows a conceptual diagram of the workpower interpretation model.

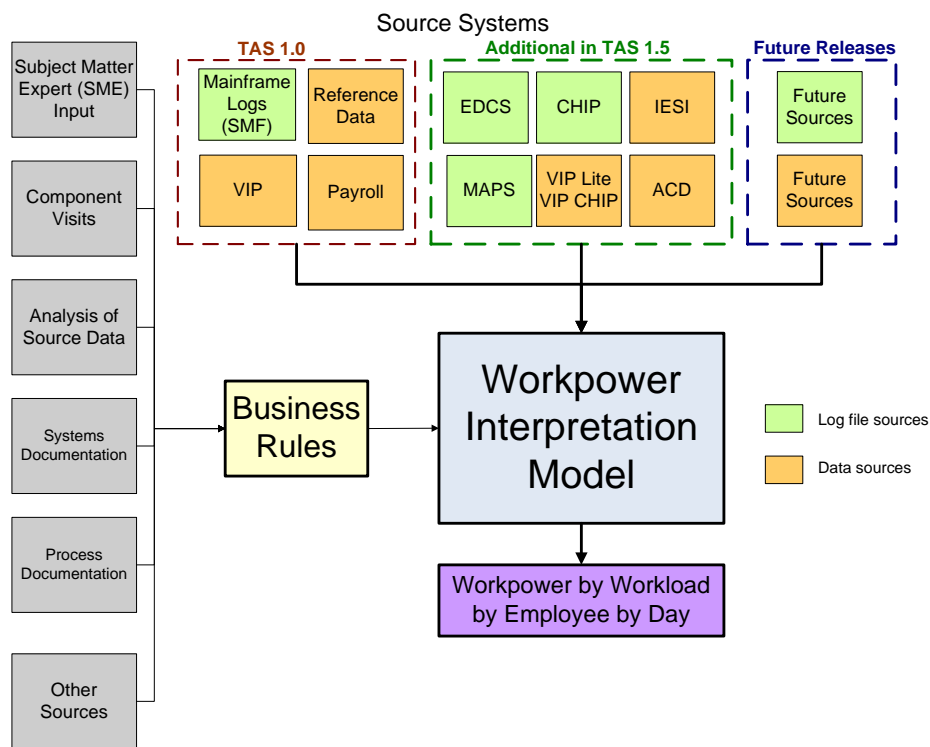


Figure 1: DecisionPath’s SSA workpower interpretation

Designing and Building the DW/BI Solution

Together with activity counts, payroll data, and other relevant data to provide context, the workpower calculated by the workpower interpretation model is stored in a data warehouse. Data marts make this data available to users via canned reports or *ad hoc* queries. The first release of this data warehousing/business intelligence (DW/BI) application, which SSA calls the Time Allocation System, went live in February 2006. Future releases will extend the workpower interpretation model to cover additional operational components and will provide BI for additional analytical areas.

TECHNICAL ENVIRONMENT

The initial release of this business intelligence system uses SAS, DB2, and COBOL on SSA's IBM OS/390 mainframe environment, an Oracle 10g data warehouse running on an HP UNIX server, and Hyperion Intelligence 8.3 for reporting. The next system release will incorporate extract, transform, and load (ETL) technology from Ab Initio.

BUSINESS VALUE

Most of SSA's legacy work measurement systems use manual sampling to determine workpower. In addition to being untimely, disruptive to the workers, and valid only at the agency level over long periods of time, this method and therefore these systems are costly to operate. This new business intelligence system eliminates the manual sampling and therefore its cost.

Workpower (how employees spend their time) is fundamental to many decision-making processes at SSA, such as resource allocation within and among components, labor productivity, process improvement, managerial cost accounting, and budget formulation. The more timely, granular, and accurate workpower information provided by this new BI system will help SSA fulfill the requirements of the Government Performance & Results Act of 1993 (GPRA), SFFAS No. 4 – Managerial Cost Accounting, and the President's Management Agenda initiatives on Budget and Performance Integration and Improved Financial Performance.

ABOUT DECISIONPATH CONSULTING

DecisionPath Consulting provides strategy, business process, technology, and program management services in the specialized field of Business Intelligence (BI). When properly implemented, BI processes provide the accurate, highly relevant, and timely information that's required to optimize financial and operational performance in any organization. DecisionPath Consulting is an independent, objective source of the business and technology expertise required to ensure that your BI initiative is successfully deployed in a timely, cost-effective manner.



Data Warehousing
Business Intelligence
Performance Management Solutions

Six Montgomery Village Ave., Suite 622
Gaithersburg, MD 20879
P: 301-926-8323, F: 301-417-0508

www.decisionpath.com