Predictive Analytics: the New Tool to Combat Fraud, Waste and Abuse
By: Albert J. Lee, Ph.D.
Government entities tasked with both regulatory enforcement and data analysis have an increasing number of data sources at their disposal. Firms are implementing varied predictive analytics systems using those data sources, which is leading to an increase in efficiency and transparency in both the public and private sectors.

Using Data Analytics for Oversight and Efficiency
By: Sikiru A. Fadairo, Ph.D; Rosemary Williams, DBA, CPA; and Evelyn Maggio, J.D.
Data analytics is a powerful tool that can help government agencies reduce fraud, waste and abuse. Using these analytic tools, government agencies and auditors can better analyze financial performance and systemic patterns of fraud, waste and abuse; improve operational efficiency; and reduce costs.

State Financial Reporting Evolution: What If CAFRs Could Talk?
By: Theodore Arapis and David Grady, CPA
GASB’s major mission has been to establish a user-friendly subnational financial reporting model that fosters uniformity, transparency and accountability. An examination of CAFRs for all 50 state governments since 1999 confirms that state financial reporting is uniform, transparent and accountable. However, CAFRs lack simplicity, raising concerns about their purpose.
Data Analytics — a Tool for Building Trust in Government
By: Edward J. Mazur, MBA, CPA

The evolution of modern technologies and the growth of data stored in digital form provide government leaders with an opportunity to use data analytics as a powerful management tool for strengthening accountability, performance reporting and transparency — and, in the process, increase the public’s trust in government.

Calling All Government Financial Managers to a More Analytic Role as Highly-Valued Business Advisors!
By: David A. Fitz, CGFM, CPA, PMP; James P. Hauer III, CGFM, CPA; and Jeffrey C. Steinhoff, CGFM, CPA, CFE, CGMA

The 2012 World Economic Forum declared data an economic asset, like currency or gold. Powerful analytic capabilities exist today, with continual significant advances ahead. How do we connect the dots, turning massive untapped raw data into business intelligence assets and moving to a more analytic role as highly-valued business advisors?

Passion for Change and Good Data:
The Right Combination for the DATA Act
By: Richard Gregg, J.D.

When there’s a lack of understanding of the importance of good data, impediments occur. Organizations without the necessary data or without a culture that uses data effectively face huge challenges. This article focuses on how the combination of the DATA Act and strong leadership can transform federal financial management.
Passion for Change and Good Data: The Right Combination for the DATA Act
No More Checks

At the time the DCIA was enacted, 60 percent of federal benefit payments were made electronically. While the goal was clear — to have all these payments be made electronically — getting there was not so clear. In fact, in 1998 Treasury had to back away from the “all electronic mandate.”

For starters, we did not know the cost of issuing a check compared to an electronic payment. We knew, or thought we knew, that electronic payments were quite a bit less expensive, but we didn’t have the data to support any kind of precise comparison. As we worked to convince the many stakeholders of the disadvantages of checks and the advantages of electronic payments, we needed to show the cost savings that would occur through electronic payments. There was also a critical need for us to understand how much to spend on marketing the benefits of electronic payments while still having a good return on investment.

Initially we settled for an “in the ballpark” comparison of the two payment methods based primarily on direct costs. Within three years, we had high-quality, full-cost data. The data, together with the related data analytics, were essential to making decisions and helping us manage this program initiative. But obtaining and analyzing the data from our various systems was labor intensive and time consuming. For example, the FMS payment centers did not separately delineate costs for paper versus electronic payments, and there was no process to capture overhead, such as information technology costs, for each payment process.

The second missing data element was the lack of good information on individuals who were still receiving payments by check. We had a sense, at least anecdotally, that a large number of individuals were unbanked and therefore unable to receive an electronic direct deposit. But we didn’t know if there were certain areas of the country particularly partial to checks and if so, why? To fill this void, we selected a firm to conduct surveys, focus groups and analysis so we could better understand our customers. The conclusion of that analysis was that our initial approach to providing low-cost bank accounts to individuals who were unbanked was not working — and was not going to work. We learned most individuals without bank accounts didn’t want one and that commercial banks had little interest in offering a money-losing account with low balances and low maintenance fees.

Based on that analysis, FMS started a pilot program in 2008 offering a pre-paid debit card called “Direct Express” to individuals receiving checks. Again, based on market research, we found that pre-paid debit cards, if designed properly, would be well received by the unbanked. The pilot was very successful, and it was quickly expanded and made available to everyone receiving a check.

By September 2009, more than four million deposits with a cumulative total of almost $2.7 billion had been made to Direct Express card accounts, and most of the payments were to individuals without bank accounts. Based on that success and our improved knowledge about our customers, Treasury in 2010 reinstituted the “all

By: Richard Gregg, J.D.
Increase Debt Collection

The second part of the DCIA placed FMS in a central role for the collection of nearly $50 billion in non-tax federal debt more than 180 days delinquent. In 1998, FMS and most agencies with delinquent debt had no idea of the quality, aging or collectability of this large debt portfolio. While agencies made some attempt to collect this debt, it was not a high priority. The priority for agencies was to make program payments through loans, grants or contracts, and few resources were devoted to the “back end” of delinquent debt collection. Having quality data on the delinquent debt portfolio was not a high priority, and it was given little attention.

It took at least seven years of great effort by FMS and the agencies to begin to have a decent understanding of the size and attributes of the debt portfolio. One of the early surprises was quite a number of the debts sent to FMS did not have sufficient documentation to attempt collection. Those were returned to the agency, where either additional supporting documentation was found or the debt(s) written off as uncollectable. Although weeding out the debts with insufficient documentation was time-consuming and costly, it was also an important element in improving the quality of the data.

After some time, FMS was able to gain a better understanding of the delinquent debt’s makeup through analyzing the various debt portfolios. Some of the debt had been delinquent for many years — in some cases more than 10. As a general rule, the older the debt, the more difficult it is to collect; therefore, once FMS determined the length of time the debt has been delinquent, it put more emphasis on collecting newer debts — especially newer debts with larger dollar amounts. In the past few years, FMS has taken a more sophisticated data analytics approach for determining which debt to collect internally and which debt to forward to private collection agencies.

With Treasury, the Office of Management and Budget and agencies giving the collection of delinquent debt a much higher priority, there have been significant improvements in the collection of delinquent federal debt. BFS now collects more than $7 billion every year in delinquent non-tax debt, and there has been considerable improvement in the quality and understanding of the data. Therefore, it seems the DCIA was much needed and has been very beneficial in the collection of old debt. At the same time, looking back on almost 20 years since the Act was passed, it is also clear the quality of the data and our understanding of the data have been woefully inadequate. Furthermore, BFS did not start conducting sophisticated data analytics until recently.

Need for the DATA Act

These examples can be viewed from two different perspectives: one, Treasury has overcome huge obstacles to greatly improve financial management; and, two, if the quality and the use of data in these examples are representative of government data, then there is no more compelling case for the DATA Act. In fact, both perspectives are accurate. Even though Treasury did not fully appreciate the importance of having and using data until fairly recently, the department — through the use of consultants and trained staff — has used data to make important improvements. Much of these data were not readily available or in a format conducive to data analytics. Simply put, we made it up as we went.

The DATA Act and Program Management: What’s Required

Some might believe that once the DATA Act is implemented the use of data analytics by government managers and policy makers will automatically pave the way for improved management and policy decisions. Such an outcome is highly unlikely, and here’s why:

electronic” mandate with a two-year phase-in period. By 2014, Treasury’s monthly payment reports showed that 98 percent of federal benefits payments were being made electronically. This transformation will save more than $1 billion over 10 years. It also greatly improves service to the customer and reduces fraud.

As we reduced the volume of checks, we knew that we wouldn’t need as many payment centers. Between 1998 and 2013, FMS closed four of its six payment centers. Once again we did not have good data to readily assist us in deciding which payment centers to close. We did not have data to measure the relative efficiency and quality of the payment centers. There were two reasons for this void: management’s priority was to make all of the payments accurately and on time, not to measure the relative efficiency of each center, and managers at the payment centers resisted such comparisons because they were concerned their center would close if rated as less efficient. While I believe management made the right decisions when closing specific payment centers, it would have been far easier to explain these decisions to employees and other stakeholders if we had better data on efficiency and quality to assist us.

In the 17 years between the passage of the DCIA and 2013, the government’s payments processing business was transformed. This transformation would have been much easier and faster if high quality data had been readily available and effectively used.
1. You Have to Want It

Today there are great examples of organizations that are passionate about change and that are making significant improvements within their organizations and across government. At the Department of Agriculture (USDA), for example, the current chief financial officer (CFO) is innovative, and he and his team are dramatically improving USDA’s operations. The CFO is also pushing hard to make improvements across the federal government. A few years ago, USDA examined the cost and the level of service of its existing paper-based invoice system and, based on that data, decided to change that outdated process. Within a year of making that decision, the department had installed an electronic invoice system throughout its large organization. Moving to electronic invoicing saved millions of dollars and greatly improved accuracy and the quality of service to contractors.

This is an excellent example of using data to analyze the current process and compare it to the electronic process being offered by FMS and having the leadership to make a change.

The Department of Health and Human Services (HHS) has oversight over a huge portfolio of programs, including Medicare. With hundreds of billions of dollars in disbursements to doctors, hospitals and other health care providers there is an enticing opportunity for overbilling and fraud. In recent years HHS, with strong support from private contractors, has used data to shine the spotlight on some of the more blatant abuses. The Internal Revenue Service (IRS) has also used a team of data analysts, in this case to identify anomalies in tax returns. This has done a great deal to reduce the number of fraudulent tax refunds made possible by identify theft.

HHS and the IRS have made important progress, but much more could be done if better and more accessible data were made available. The federal government has a vast array of data, with which, if broader access was provided and the data were used more effectively, improper payments could be significantly reduced.

I expect that USDA will use the improved data required by the DATA Act to perform analytics that drive further innovation and performance improvements. Organizations lacking the USDA’s present leadership drive are unlikely to take full advantage of the improvements in data quality and accessibility. Put another way, if government executives today are not driven to transform their agencies, better data in the future won’t change these attitudes. I believe there needs to be an assessment by senior level government officials on whether their CFOs,
2. Commitment of Resources

There is no shortage of data within the federal government. However, it is critical to recognize all data are not equal, and our focus must be on data that help us make better decisions and manage programs more effectively. Much of that data, however, is the product of stove-piped operational systems not easily linked or used across the organization or with other government agencies. Such data may not be accurate or tied in with an agency’s financial reporting system. In many cases, such data may not adhere to broad-based government standards. The DATA Act, once fully implemented, will greatly improve many of these current shortcomings. At the agency level, since it’s the agencies’ data, there needs to be a commitment on how to take the data and effectively use it in managing agency programs.

There needs to be a plan on how to maximize the use of the data. One part of the plan entails knowing what data are more important and determining their relative value. This will help in the prioritization of resources for data that really matters.

Because so much data exists, it is important to determine how to most effectively use data to best support the overall goals and strategies of the organization. Secondly, there needs to be trained staff with the right set of software support for capturing, manipulating, and presenting the data to enable managers and executives to easily use the data for management purposes. There does not need to be large staff doing this work. A small cadre of high-quality people supported by the private sector can make a tremendous difference. Today there are numerous companies that can assist an agency in extracting important data from legacy systems, linking data with other legacy systems, and then enabling staff and managers to manipulate, analyze and present data easily and at a relatively low cost.

It’s Up to Us

If agency leadership has a passion for change and the willingness to commit necessary resources to effectively using data to drive change, government financial management can be transformed.

In these times of reduced budgets, many agencies are looking for ways to significantly reduce administrative and operational costs. Some executives and managers may feel they already have reduced staff and funding in these areas far too much. In a few cases that may be true. In other cases, reductions happened without a fundamental reexamination of how the work should be done. In the USDA, for example, instead of trying to streamline or improve an inherently flawed system — the paper invoice process — and obtain some modest cost reductions, the CFO and his team scrapped that approach and went to an electronic shared-service model that fundamentally changed this business, resulting in significant cost reductions and service improvements.

With good data, a manager can easily compare the quality, efficiency and responsiveness of different parts of an organization performing the same function, or compare program performance to other government agencies. As previously described, some parts of the federal government have adopted electronic invoicing while other agencies still use paper. If quality data were currently available to show the costs, error rate and customer service for those agencies still relying on paper invoicing, I am confident customers and senior managers would demand electronic invoicing. Today such information is not readily available, but with the implementation of the DATA Act and the effective use of data across the government, the capability will soon arrive.

The DATA Act, when implemented, will provide federal executives and managers with information they have never had before. However, unless that information is used to reexamine how financial management is conducted and to help drive fundamental change, the promise of the DATA Act will not be fully realized.

Endnote

1. Department of Treasury, Bureau of Fiscal Service monthly comparison of Treasury disbursed EFT payment volumes. Also see Fiscal Assistant Secretary David Lebryk’s September 12, 2014 blog “Treasury makes 98 percent of monthly benefit payments via safe, reliable electronic channels.”

Richard (Dick) Gregg, J.D., who retired from the U.S. Department of the Treasury (Treasury) in 2014, has more than 40 years as a Treasury executive and leader. In late 2014, he joined HJS PLLC as a managing director. The recipient of numerous Presidential Rank Awards, he has received the George Mitchell Payments System Excellence Award twice, most recently in 2013. He has also received the two highest awards at Treasury: the Treasury Medal in 2006 and the Alexander Hamilton Award in 2014.