Government Analytics Can Shape Public Service for the Future

Fight fraud and fuel government productivity by moving from reactive to insight-driven services
The challenges associated with the “new normal” in government aren’t so new anymore, yet public sector leaders are still striving to adapt to the profound political, societal and economic changes that have radically changed the operating context. Simple survival techniques aren’t enough to satisfy rising citizen demands and dwindling budgets. Achieving high performance in the public sector requires reinventing public service delivery with government analytics to reduce costs, improve the quality of services and unleash technology to drive new insights.
As government administration endeavors to tackle public debt, contribute to social justice and build credibility with citizens, addressing public sector fraud and compliance—including tax evasion, procurement fraud and social services fraud—is increasingly being recognized as a key challenge that needs to be robustly addressed. For example, tax evasion affects the provision of healthcare, education, pensions and other services to people in need, leading to significant social and economic impact on performance and justice.

The sting of fraud is felt not only from broad-scale abuse. Small violations and injustices have far-reaching effects. Every tax receipt gathered by government and benefit payment made can make a difference in today’s strained fiscal environment.

For government leaders to take back control from fraudsters, they need to utilize government analytics to manage services in a way that is insight-driven rather than reactive. New technologies and new models of collaboration can enable proactive problem-solving and drive results. Governments all over the globe are beginning to take those strategic steps.

The many faces of fraud

Before identifying solutions, it is first important to take a closer look at the problem—especially given the fact that not all fraud is the same. Common types of fraud that infiltrate government are:

**Tax fraud.** Tax fraud occurs when an individual or business entity willfully and intentionally falsifies information on a tax return to limit the amount of tax liability. According to a report prepared by Tax Research LLP, tax evasion in the European Union (EU) is estimated at approximately €860 billion a year.¹

**Benefit fraud.** Benefit fraud is when someone obtains a government benefit they are not entitled to, or deliberately fails to report a change in his or her personal circumstances. The Irish Department of Social Protection has estimated that the level of fraud and error in the social welfare system is in the range of 2.4 percent to 4.4 percent (an average of 3.4 percent) of its total annual expenditure. Overpayments in Ireland increased by 65 percent in just three years. In the US, improper payments by government agencies reached $108 billion in FY 2012, according to paymentaccuracy.gov.²

**Procurement fraud.** Procurement fraud involves dishonestly obtaining an advantage, avoiding an obligation, or causing a loss to public property or various means during a procurement process by public servants, contractors or any other person involved in the procurement. In March 2012, the UK National Fraud Authority (NFA) published an indicative estimate of £2.3 billion in losses because of procurement fraud in the public sector. This estimate is made up of losses of £1.4 billion to the central government and £890 million to local government.³

Estimating the impact of fraud

Citizens worry about fraud. In fact, more than 30 percent of citizens surveyed by Accenture in 10 countries identified corruption and financial scandals as one of the most worrisome issues in their country.⁴ Interestingly, this figure rises to 40 percent for “highly” educated respondents and to 43 percent for those identifying themselves as a senior executive/decision maker/leader.⁵ Why are they so worried?

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¹ Source: Closing the European Tax Gap, A report for Group of the Progressive Alliance of Socialists & Democrats in the European Parliament by Richard Murphy FCA, Director, Tax Research UK.

² Source: Paymentaccuracy.gov; http://www.paymentaccuracy.gov/about-improper-payments

³ Source: HM Treasury, UK National Fraud Authority

⁴ Source: Accenture “Delivering Public Service for the Future: Navigating the Shifts” Study

⁵ Source: March 2012 Ipsos MORI Survey

Throughout this report the word “fraud” is used to encompass the many related issues, including waste, abuse, overpayment and error.
Global impact of fraud and non-compliance

134%
Italy’s shadow economy as % of healthcare spending

$3.1 trillion
US federal revenue lost due to tax evasion over the last 10 years

5% of world GDP ($3.1 trillion) is the size of tax evasion across the world

50%
of Greece’s deficit in 2008 ($37 billion) that could have been eliminated if some of the wealthiest had not evaded taxes

5.8 times
UK public sector fraud (£20.3 billion) compared to fraud in financial services (£3.5 bn)

$462 billion
amount India has lost due to tax evasion, crime and corruption post-independence

6 Sources for graphic:


India: Global Financial Integrity - Center for International Policy, http://india.gfintegrity.org/
Water-cooler anecdotes and media stories paint a bleak picture that enables citizens and governments to qualify the impact of fraud. Accenture set out to quantify the problem. We modeled a hypothetical global impact of fraud and non-compliance on human services, which represents a microcosm of the government services universe.

The findings are twofold. First, they illustrate the financial impact of fraud and non-compliance—the overall cost and the cost of misdirected benefits and lost efficiency from dealing with non-complaint cases. Second, they reveal the social impact of what the lost revenue could have been used for to support citizens.

For example, it is estimated that if not for tax evasion, India could have been an $8 trillion economy (in USD), the second largest in the world. Per capita income could have been seven times larger; India would then have been a middle-income country and not one of the poorest.

- India loses USD 314 billion from tax evasion annually, depriving it of funds for investment in roads, ports and power.7 With so little revenue, the government must borrow more to fund a planned $1 trillion five-year infrastructure program.

- According to the Tax Justice Network, total tax evasion in excess of USD 3.1 trillion (or 5 percent of world GDP) occurs as a result of the operation of the shadow economies found in every state in the world.8

We also took a macro view of the impact of fraud on the public sector, looking at the overall impact of fraud on countries in Europe.

The financial services industry is fighting the battle through a number of strategies that include moving identification activities into core processing areas, shifting focus to real-time prevention in certain non-compliance activities, and applying emerging non-compliance patterns and insights from each stage in the process. According to the 2010-2011 Kroll Global Fraud Survey, management controls, IT security and risk management systems represent the top three areas in which financial services companies are investing to tackle fraud. Using government analytics, the public sector can learn from the ways in which the financial industry is fighting the problem.

### Drawing insights from the private sector

The public sector is not the only industry plagued by fraud and non-compliance; banking and financial services are also dealing with the issue of risk management and fraud (see Figure 2). Not only is the prevalence of fraud high in this industry, but so is the level of response, as leaders know that addressing it is fundamental to their long-term business success. Government organizations can draw insights from the experiences of their financial services peers and use those principles to combat fraud using government analytics.

### Figure 1. Estimate of Total Public Sector Fraud in Europe

Using total public sector fraud figures from the UK National Fraud Authority, Accenture arrived at an estimate of total public sector fraud in the European Union countries.9

<table>
<thead>
<tr>
<th></th>
<th>In GBP (£)</th>
<th>In USD ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK public sector fraud (2012)</td>
<td>£20.3 billion</td>
<td>$30.5 billion</td>
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<tr>
<td>UK public sector fraud (2012)—excluding tax fraud</td>
<td>£6.3 billion</td>
<td>$9.5 billion</td>
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<tr>
<td>UK population (2011)</td>
<td>62.4 million</td>
<td>62.4 million</td>
</tr>
<tr>
<td>Fraud per citizen</td>
<td>£100.90</td>
<td>$151.36</td>
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<tr>
<td>EU population (27 countries, 2011)</td>
<td>502.5 million</td>
<td>502.5 million</td>
</tr>
<tr>
<td>Estimated total fraud</td>
<td>£50.7 billion</td>
<td>$76.1 billion</td>
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Countries in the European Union – Belgium, Greece, Luxembourg, Denmark, Spain, Netherlands, Germany, France, Portugal, Ireland, Italy, United Kingdom, Austria, Finland, Sweden, Poland, Czech Republic, Cyprus, Latvia, Lithuania, Slovenia, Estonia, Slovak, Hungary, Malta, Bulgaria and Romania (population as of January 1, 2011).

### Figure 2. The Prevalence of Fraud and Response in Other Sectors

The financial services industry is fighting the battle through a number of strategies that include moving identification activities into core processing areas, shifting focus to real-time prevention in certain non-compliance activities, and applying emerging non-compliance patterns and insights from each stage in the process. According to the 2010-2011 Kroll Global Fraud Survey, management controls, IT security and risk management systems represent the top three areas in which financial services companies are investing to tackle fraud. Using government analytics, the public sector can learn from the ways in which the financial industry is fighting the problem.

### Source

7 Source: Kumar, Arun; *The Black Economy in India*; Penguin Books; November 1, 2002
8 Source: Tax Justice Network; “The Cost of Tax Abuse”; November 2012
Management controls. Banks face increasingly intense scrutiny and have to comply with numerous regulations relating to improved internal controls, as well as addressing areas such as anti-money laundering. They are seeing a need for internal control frameworks and systems to evolve so as to meet new challenges. Some of the issues that can be addressed with government analytics, effective internal controls and supervision include:

- Lack of segregation of duties, such as an individual making bank deposits, posting them to the accounts receivable system and performing monthly bank reconciliations
- Poor physical controls over inventory, marketable securities or blank check stock
- Inadequate documentation and support for cash disbursements and financial transactions
- Inadequate or obsolete financial software
- Failing to perform independent verification to confirm the facts

IT security. According to a report by the UK Payments Council in March 2012, levels of credit card fraud, debit card fraud and online banking fraud all fell in the last 12 months. The drop in fraud is due to a number of measures taken by the industry to deter, detect and prosecute fraudsters. For example, current anti-fraud initiatives include online protection schemes such as MasterCard SecureCode and Verified by Visa. Such measures have led to card fraud losses being at their lowest levels since 2000.

The Royal Bank of Canada avoided $15 million in credit fraud losses using a fraud rules application that leveraged government analytics to target suspect applications. In a competitive market, the financial services industry understands that its response to security and the risks of fraud have a wider impact on their success in the market.

Risk management. The last year has seen continued market volatility, challenges related to profitability, growing complexity of regulations, and pressure on organizations and operating models for businesses and governments. To meet these challenges head on, organizations are seeking a more dynamic risk management framework. Over the last year we have seen the risk function taking action, becoming more integrated and making strides forward.

Risk is a key element of the search for answers and is increasingly integrated in more aspects of corporate decision-making such as budgeting, forecasting, and investment and divestment decisions. And it’s gaining momentum—more than 50 percent of companies interviewed in the Accenture 2013 Global Risk Management study are planning to increase their risk investments over the next few years.

It is not technology, data or analytical tools that limit risk management at most organizations but, rather, an overabundance of data. Risk leaders are still struggling to effectively manipulate data into useable and insightful information for decision making. In addition, a scarcity of talent and skills hampers the effective use of risk analytics and development of analytical models.

Which governments are gaining traction in fighting fraud?

Government organizations are following the lead of financial services best practices that move beyond detecting and correcting non-compliance. For example, the organizations below have taken proactive steps.

Centers for Medicare and Medicaid Services

In the US, the Centers for Medicare and Medicaid Services (CMS) developed the nationwide Fraud Prevention System (FPS) to implement predictive analytics technologies to identify and prevent the payment of improper claims in the Medicare fee-for-service program. Through FPS, the organization is better coordinating fraud-fighting efforts across programs and has achieved a positive return on investment, saving an estimated $3 for every $1 spent in the first year and preventing or identifying an estimated $115.4 million in payments. The organization has also generated leads for 536 new investigations by CMS’s program integrity contractors and augmented information for 511 pre-existing investigations.

10 Source: UK Payments Council
11 Source: UK Payments Council
12 Source: SAS
13 Source: Accenture 2013 Global Risk Management study
14 Source: US Department of Health and Human Services
Making the shift to insight-driven services in the public sector

Just as the financial sector has learned, there is no single solution governments can rely on to address the issue of fraud. Accenture recommends taking an end-to-end approach to proactively address the compliance issue. Historically, government agencies have sought to identify and correct non-compliance after a transaction has been completed, such as by reviewing a tax return or checking on a benefit payment. Accenture Intelligent Processing Services help agencies move beyond detecting and correcting non-compliance after benefits have been paid, to preventing it from happening.

Accenture recommends that predictive analytics be applied along with other data-driven techniques to identify and solve problems and to better equip an organization to make fact-based, cross-agency decisions that improve delivering public service for the future. Benefits of this approach include:

- **Speed** – Through real-time auditing and prevention of fraud and error, agencies can collect the right amount of taxes to help ensure the right people receive the benefits they deserve.

- **Specificity** – Accenture's Intelligent Processing compliance framework provides insight-driven services that address the main types of non-compliance, but also issues specific to public service sectors, such as human services. Main types of fraud include under-declarations, ineligible tax credits, high-risk refunds, non-filing and tax collection inefficiency. For human services agencies, fraud may stem from welfare or pension abuses.

- **Sustainability** – Solutions can wrap around existing systems and be implemented with a low initial investment through flexible pricing approaches. And by leveraging organizational effectiveness, talent and change management, agencies can sustain and improve business outcomes.

Focusing on integrity

Although the "new normal" isn't so new, the challenges it presents are still very real. However, technology advances are enabling governments to start to address challenges—such as those associated with fraud and error—with the help of an insight-driven approach. An example of this is embedding government analytics across core operations.

According to Accenture’s 2012 survey of government decision makers across six countries to assess the international government analytics environment within revenue, human services and social services organizations, those that are using analytics are more likely to have detected a decrease (versus no change) in errors and non-compliance during the past 12 months. For example, 67 percent of those surveyed in Australia, 50 percent in the US, and 47 percent in Canada are using analytics to address errors and non-compliance.

Every day that agencies wait to embed government analytics and change their business processes and governance arrangements to focus on integrity in their core processes is another day of financial loss. Governments can follow the lead of private sector industries faced with high levels of fraud, such as the financial services sector, and make focusing on integrity a priority. By doing so, agencies can ensure that during these difficult fiscal times, every last penny is managed to help shape the public services of the future.

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HM Revenue and Customs

Together with an IT supplier, the United Kingdom’s HM Revenue and Customs (HMRC) agency has piloted an innovative screening technique for tax credit applications and renewals to prevent losses due to fraud and error. HMRC invested £1 million from contract renegotiations with the IT supplier, and this yielded £10.63 million in savings.15 The technique has been able to identify high-risk applicants and prevent payments from being made to these applicants while also fast-tracking payments to low-risk applicants.

Australia Welfare

The establishment of Centrelink (now part of the Australian Department of Human Services) in 1997 as the main service delivery agency for welfare benefits allowed for the centralization and standardization of anti-fraud methods. In Australia, welfare fraud is made an offense under s 212 of the Social Security (Administration) Act 1999 in relation to any "false statement in connection with claim or hardship request.”

Compliance reviews are a mainstay in Centrelink’s efforts to identify fraud and error. The bulk of non-compliance issues identified by audits involve error rather than fraud, but follow-up investigations from cases identified as non-compliant sometimes lead to charges of fraud. On average, only 14.4 percent of reviews led to cancellations or reductions in payments. Of these cancellations or reductions, as few as 0.8 percent were referred to the prosecutor. For matters referred to the Commonwealth Director of Public Prosecutions (CDPP) over the full 13 years, 70 percent of cases were prosecuted. Prosecutions resulted in a 98.4 percent conviction rate, on average.16

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About the research

This study is based on secondary research in public sources to provide fact-based evidence to estimate the level of fraud in the public sector. The key elements in the research included data on the scale of fraud in the government sector, including tax evasion and procurement fraud worldwide, case studies of agencies successful in combating fraud and lessons from the financial services sector. Findings were vetted with subject matter experts in each of the target geographies. The research covered a total of 10 countries, including the US, Canada, UK, Ireland, South Africa, Australia, France, Spain, Italy and India.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 266,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world’s most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$27.9 billion for the fiscal year ended Aug. 31, 2012. Its home page is www.accenture.com.