

Modernize your procurement process to maintain its integrity and reduce costs



Business Impact

A [2022 report by the Association of Certified Fraud Examiners](#) estimates that organizations lose 5% of revenue to fraud each year - resulting in a median loss of \$117,000 before detection.

Challenges

- **Growing volumes of siloed data** and an increasingly digital procurement process can lead to weakness in controls, improper payments and corruption.
- **Manual oversight occurs infrequently** and fails to capture improper payments made between procurement cycles or those that represent long-term historical trends.
- **Inefficient operations and process controls** may lack third-party (e.g., supplier) data capture and analytics that dig deeper than simple rules-based analysis.
- **Complex, decentralized** procurement processes leave more room for errors and abusive loopholes in the system.

The Issue

Improper payments and lack of oversight can have a dire effect on purchases of goods and services or commissioning of projects from third parties. For example, not following the tender process creates gaps for irregularities. Problems also arise when payment claims aren't delivered or are inferior to what an order specified. Internal mistakes create another layer of issues. With losses estimated at 1% to 4% of total procurement spending, the ramifications, if left undetected, include an increase in unnecessary spending, operational disruption, reputational risk, legal action and, of course, financial loss.

Weak controls and improper payments lurk throughout the procurement life cycle and are difficult to find. On average, these vulnerabilities are detected more than a year after having been initiated - if they are identified at all. Clearly, it's important to detect irregularities as quickly as possible. Manual audits rely on auditor skill to detect fraudulent behavior from a vast array of information - but this only happens at one point in time, so it doesn't provide continuous monitoring for detection and prevention. How can you minimize risks earlier and prevent procurement abuse?

Our Approach

Our modular approach to procurement integrity uses automation to accelerate the process and free up valuable resources for more consistency. And by bringing together data from disparate external sources, you gain better situational awareness. We deliver software and services to help you:

- **Identify and combine information** from different systems, agencies and third-party data sources to resolve entities and augment knowledge about suppliers, people and products.
- **Employ a combination of analytical techniques**, such as clustering, segmentation, pattern recognition and associations, to determine or predict the overall risk posed by each payment, invoice, supplier or purchase order.
- **Improve audits and investigations by integrating data** with other types of intelligence to manage a workflow that reflects organizational objectives. Reporting provides information to key decision makers in the form of dashboards, portals, web analytics, mobile reporting, briefings and alerts.

In conjunction with your existing safeguard policies, SAS helps you make quick decisions about whether to stop invoices, payments or purchase orders. SAS detects even the most obscure instances of error or abuse – and reduces disruption and delays due to low-risk items – so there's minimal impact on customer service. Only SAS offers:

- **Domain expertise.** Our procurement models from multiple industries accelerate time to value. These models provide objective, data-driven risk screening to identify high- and low-risk purchase orders, suppliers, invoices and payments, so procurement officers can remediate high-risk processes and secure financial positions quickly.
- **Continuous, automated monitoring.** We target wasteful or high-risk billing and purchase orders by incorporating data from a variety of sources. So you can identify events that require closer review without delaying other event processing. Predictive analytics finds and minimizes false positives.
- **Automated data analytics/reporting.** SAS provides descriptive reasons why an event occurred or an alert was generated. This broadens the impact of analytical outcomes across your organization. Go beyond individual invoice or payment views to analyze all related activities and entity relationships at a network dimension. Once linkages are established, factor them into risk-scoring models.
- **Empowered users.** With automation in data management, triage and workflow, operations are streamlined so that analysts can make fast decisions via an easy investigative interface. Review all relevant data, perform advanced searches, and apply temporal or geospatial methodologies from a single solution.

Situation

As a supplier to many countries, a large public utility company was facing pressure to reduce revenue leakages. It positioned advanced analytics as one of its top five strategic priorities to prevent revenue loss. This initiative was intended to catch and halt procurement error, waste and abuse.

Solution

The company used advanced analytics from SAS to examine employee, supplier and transactional data for potentially fraudulent, wasteful or abusive procurement transactions. It implemented a continuous control monitoring system that generated alerts highlighting potential irregularities and possible weaknesses in ERP systems and controls. And the company developed an integrated case management function to link cases by specific common factors, capture incidents reported to the fraud hotline, attach electronic case evidence, and provide integrated management dashboards and reports.

Results

- Identified a significant number of suppliers sharing the same bank account number with different names, and found employees sharing bank accounts with suppliers.
- Uncovered excessive multiple invoicing, inflated payments and duplicate payments.
- Identified approximately US\$700 million in duplicate invoices (same vendor, same amount, and greater than \$5,000).
- Identified 600 employees with active interests in suppliers.

- Use automated processes to ingest data, apply data quality and generate risk scores for all available data sources?
- Interactively traverse and query complex relationships to uncover patterns, suspicious entities and link relationships?
- Identify connections inside networks and among entities where typologies indicate higher risk?
- Enable analysts to build, gather, explore, visualize and manipulate data pertinent to their investigation or research, then collaborate with other investigators and auditors to document their findings?
- Use a large set of scenarios and risk-scoring rules – as well as previous behavior – to predict certain outcomes?
- Allow auditors and procurement professionals to see when anomalies are triaged and subsequently dispositioned, and keep track of the outcome when improper payments or fraud are discovered?

You can with SAS.

SAS Facts

- SAS was named a Leader in *The Forrester Wave™: Enterprise Fraud Management, Q3 2021*.
- SAS is a Leader in the 2021 Gartner *Magic Quadrant for Data Science and Machine Learning Platforms*.
- SAS provides advanced analytics and AI technology solutions for public and private enterprise fraud and security initiatives across the globe.

Learn how SAS helps fight procurement fraud at sas.com/procurement-integrity.

