



KPMG FORENSIC<sup>SM</sup>

# K-Trace: Leveraging Technology to Combat Fraud, Waste, and Abuse

ADVISORY



## K-Trace: Leveraging Technology to Combat Fraud, Waste, and Abuse

Leading organizations are applying proactive data analytics to combat the risks and costs of fraud and misconduct. Proactive data analytics involves taking routinely collected, unrelated data sets and then conducting comparisons, summaries, and aggregations to detect anomalies known to be indicative of potential fraud and misconduct. Leveraging such technology can help strengthen corporate governance, facilitate the implementation of more effective and focused internal controls, reduce potential future losses, and help identify recoverable actual losses.

K-Trace is an integral piece of the proactive forensic data analysis methodology used by KPMG Forensic<sup>SM</sup> professionals. This approach combines the latest sophisticated data analytics with our professionals' in-depth knowledge and practical experience gained through fraud investigations and fraud risk management assignments. In addition, K-Trace incorporates

publicly and commercially available information databases to help understand the veracity of critical organizational data. By tailoring K-Trace to address the distinct risks and issues inherent in your business and your organizational data, we customize our approach and analysis to help address your particular risks, needs, and method of conducting business.



## K-Trace can assist in the following areas

### **Identify areas of fraud risk**

Through our engagement experience, we have identified fraud schemes and the red flags that can reveal them. By conducting analytics that search for those red flags in your day-to-day business transactions, we can help you determine whether your organization may be at risk of fraud and pinpoint where that risk exists. K-Trace can also highlight potential operational inefficiencies, human error, wasteful spending behaviors, and company policy violations. It can also help identify control enhancements needed to prevent fraud, waste, or abuse.

### **Identify potential high-risk records and transactions**

Some red flags are more significant than others and certain clusters of red flags are more significant than the individual red flags. Analytics that fail to take into account these subtleties often produce voluminous data that is neither

meaningful, manageable, nor actionable. To address this challenge, our professionals work with you to define and apply risk scoring that assigns a numerical score each time a transaction or record has a match to a red flag. K-Trace provides the highest scored transactions and records along with an explanation of the risks. This is focused information that can be used for taking action.

### **Report suspicious data and provide recommendations on next steps**

We can work with you to provide customized reports based on specified data, relationships, transactions, or fraud indicators to give you a starting point for taking action. Using our knowledge of your organization, we can help you interpret the results and discern whether the findings represent indicators of potential fraudulent or unauthorized activity. KPMG Forensic can also provide recommendations for next steps, which might include further investigations or antifraud control enhancements.

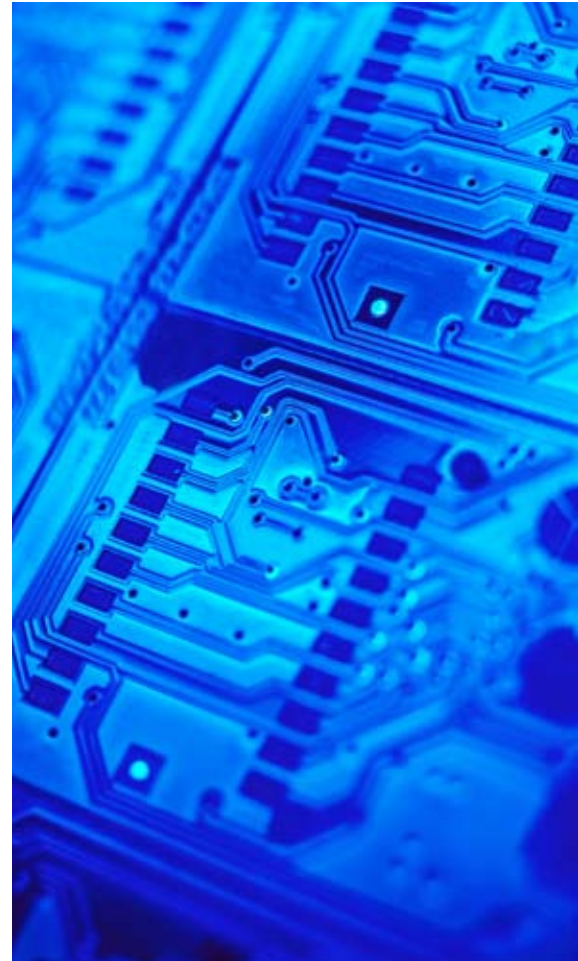
## K-Trace Experience

Working with hundreds of clients worldwide through our network of member firms, the K-Trace application has been applied across numerous industries and business processes. We work with a full range of data systems, including SAP, Oracle, JDEdwards, PeopleSoft, SSA Global Technologies, Microsoft Dynamics, the SAGE group and legacy systems.

## K-Trace Teams

K-Trace teams combine broad forensic experience with a highly developed data analytic capability—this constitutes K-Trace’s value-added forensic lens. Our teams are comprised of professionals with years of experience in fraud risk management and forensic accounting investigations across many industries and include professionals with deep technology and data analysis experience, encompassing database management systems, ERP systems, and data privacy.

The dual data analytic and forensic capability enables our teams to help clients make interpretations that less experienced professionals might miss—for example, we may understand when glaring anomalies highlight merely benign events or when minor irregularities signal the potential for major fraud or control weaknesses.



## -Trace Analysis Modules

KPMG Forensic has developed six analysis modules for K-Trace.

- Travel & Entertainment Expenses
- Purchase Cards
- Procure-to-Pay
- Payroll
- Manual Journal Entries
- Foreign Corrupt Practices Act (FCPA)/ Antibribery and Corruption (ABC)

### Travel and Entertainment Module

Recent studies indicate that 20 percent of all travel and entertainment (T&E) spend is “out of policy”<sup>1</sup> and 25 percent of business travelers admit to out-of-policy bookings.<sup>2</sup> Since T&E expenditures account for typically 8–10 percent of operating expenses,<sup>3</sup> better controlling such discretionary spending can directly impact operational costs.

The K-Trace T&E Module identifies T&E related red flags to help organizations prevent losses due to unauthorized spending and to reduce monitoring costs.

#### T&E Fraud and Misconduct Risks

- Bribery
- Duplicate expenses
- Employees splitting expenses to circumvent approval levels
- Expenses for personal use
- Inflated expenses/mileage
- Mischaracterized expenses
- Number “invention” or manufactured expenses

### Purchase Card Module

Purchase card misuse, both fraudulent and nonfraudulent, arises from transaction splitting, unauthorized purchases, and purchases that are not in accordance with company policy.

Based on a recent survey by the National Association of Purchasing Card Professionals (NAPCP), purchase card spending is growing by 11 percent per year,<sup>4</sup> potentially multiplying losses, particularly for companies having little experience with purchase card usage.

The K-Trace Purchase Card Module serves as an additional control for purchase card misuse.

#### Purchase Card Fraud and Misconduct Risks

- Expense splitting/combining
- False reimbursement submissions
- Inflated reimbursement submissions
- Purchases for personal use
- Returns of purchases for cash
- Rolling corporate card balance

### Procure-to-Pay Module

The K-Trace Procure-to-Pay Module helps organizations address these important issues:

- Spending control – helps manage costs by examining unusual spend categories, over-spend, bad payment terms, etc.
- Regulatory issues – helps reduce the cost of Sarbanes-Oxley (SOX) compliance and testing; helps identify the payment and receipt of bribes

covered under Foreign Corrupt Practices Act (paying/receiving bribes); helps reduce the cost of monitoring Office of Foreign Assets Control (OFAC) issues

- Potential fraud – helps identify a range of schemes, from ghost vendors to kickbacks
- Internal control issues – helps identify misuse not necessarily caused by fraud, such as duplicate payments, overpayment, and early payments

#### Procure-to-Pay Fraud and Misconduct Risks

- Check tampering
- Collusion – e.g. invoices below approval limits, discounts earned but “refused”
- Concealed check
- Concealment of transactions through splitting of amounts to bypass approval limits
- Duplicate invoice/purchase order
- Falsified volume or pricing
- Fictitious invoice/purchase order
- Ghost vendor
- Inflated invoice/purchase order
- Kickbacks
- Purchases of supplies for personal use
- Under-delivery of goods or services

1 Aberdeen Research, 2006, Travel and Entertainment Expense Management

2 T&E Magazine, February 2006, “How corporations are cracking down on expense report abuse”

3 ibid

4 The 2005 Purchasing Card Benchmark Survey Report, NAPCP

## Payroll Module

Payroll is one of the largest expense categories for many organizations, so it bears particular scrutiny, and due to complexities and high volume of transactions, it is critical to analyze payroll data for potential fraud, waste, and abuse. Like the Procure-to-Pay Module, the Payroll Module helps organizations address regulatory, fraud, and control issues with an array of analytic tools.

### Payroll Fraud and Misconduct Risks

- Employees acting as vendors
- Employees who are illegal immigrants or employed under false personal information
- Falsified time or overtime
- Ghost employees
- Improper bonuses or incentive compensation
- Improper supplemental payments
- Inflated salaries and hours
- Payments after termination
- Vendors acting as employees

## Manual Journal Entry Module

Manual journal entries can be used by management to override controls and manipulate revenue. Most companies do not have monitoring tools or reports in place to identify potentially unusual manual journal entries.

The K-Trace Manual Journal Entry module can assist organizations with identifying large and unusual manual journal entries that may require more scrutiny or review. It may also assist an organization with its efforts to improve its oversight and review of manual journal entries to its external auditor.

### Manual Journal Entry Fraud and Misconduct Risks

- Back-posting journal entries
- Hiding/obscuring entries
- Manipulating earnings, reserves, and revenue
- Quarter-to-quarter timing issues
- Subverting approvals

## FCPA/ABC Module

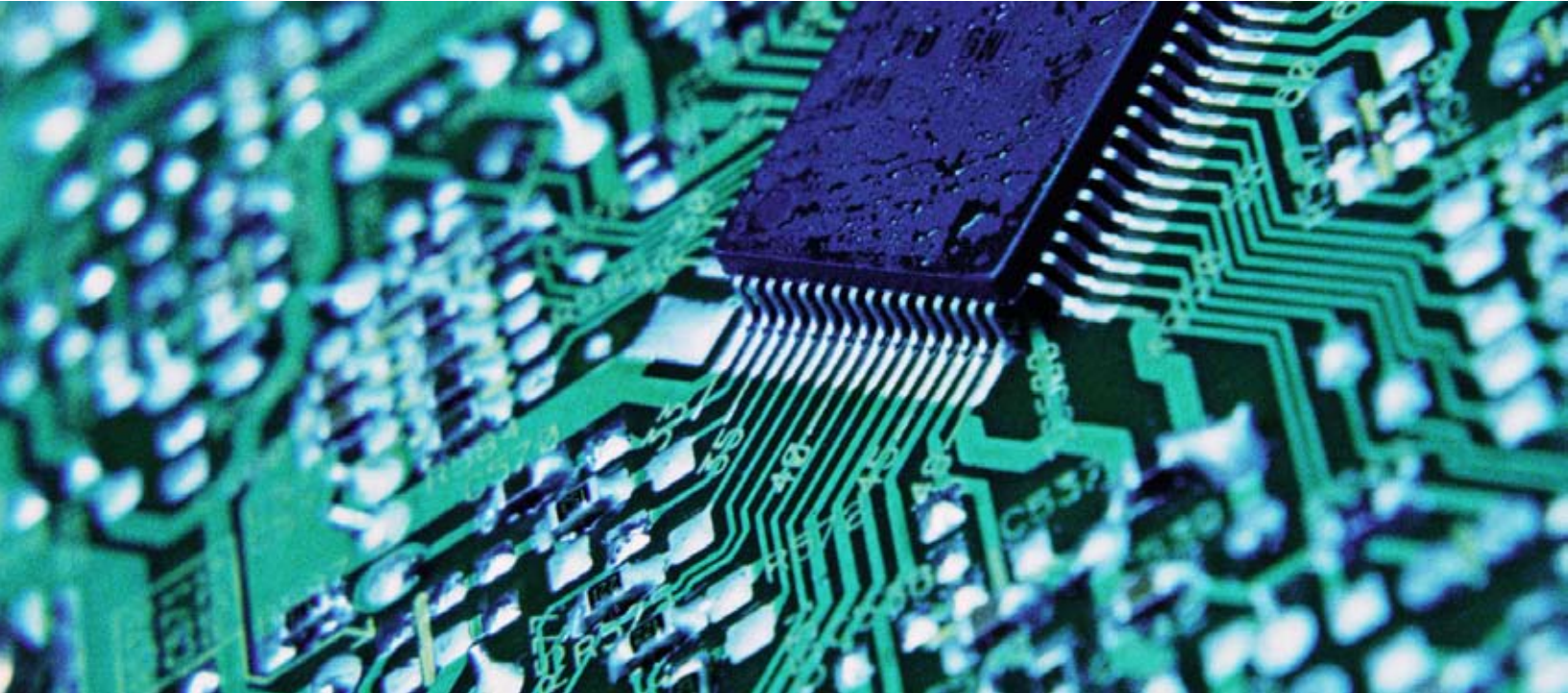
Enacted in the United States in 1977, the FCPA's antibribery provisions make it illegal to offer, promise, or provide money or anything of value to a foreign official for the purpose of obtaining or retaining business. FCPA (and other ABC legislation enacted around the world) enforcement activity has been increasing in recent years, with record-setting penalties, continued expansion of internal investigations into other jurisdictions, cascading investigations, targeting of individuals (almost half of the U.S.

Department of Justice/U.S. Securities and Exchange Commission actions), increased international enforcement and cooperation, and civil litigation following FCPA settlements.

The K-Trace FCPA/ABC module is a combination of data analytics from the Procure-to-Pay, Payroll, T&E, Purchase Card, and Manual Journal Entry modules, as well as the ability to perform a specific/refined keyword search and to check against third-party databases.

### FCPA/ABC-related Risks

- Cash advances
- Commission payments in excess of normal percentage
- False invoices
- Payments made directly to officials
- Payments made to unusual or offshore account
- Payments to customs clearance agents
- Payments to vendors with duplicate vendor IDs
- Payments without reference to invoice or purchase order
- Suspicious journal entries
- Unusual cash disbursements



## ther KPMG Forensic Services

Our assistance doesn't stop at the data analytics level. We offer a broad range of services to help companies in their efforts to achieve the highest levels of business integrity, not only through the prevention and detection of fraud and misconduct, but through investigation, as well. Once suspicious activity is identified through data analytics, KPMG Forensic can also assist with subsequent investigations or litigation, as needed.

## How K-Trace Helps Clients

**A FORTUNE 500 software and information technology company** suspected noncompliance with company policy on personal spending and purchases. KPMG Forensic was engaged to conduct data analysis of T&E transactions. KPMG identified multiple areas for process and control improvements, as well as \$3 million in potential cost recovery.

**A global professional services company**, concerned about possible noncompliance with company policy on spending and purchases for personal use, retained KPMG Forensic to perform data analysis of purchase card transactions. KPMG identified thousands of dollars in adult entertainment expenditures that were incurred by specific employees; identified personal use of the corporate card by multiple employees—in some cases by as much as \$300,000; and identified an accounting error of more than \$720,000 on a single corporate card account.

**A FORTUNE 500 consumer products company** suspected improper contract creation and billing by certain vendors. KPMG Forensic was engaged to conduct data analysis of its procure-to-pay transactions. Several areas of inadequate data management and controls were identified, including poor vendor master maintenance, insufficient user and data change logging, and more than 3,600 probable duplicate payments worth over \$30 million.

**A school district** with 15,000 employees was experiencing a range of unidentified payroll issues. It engaged KPMG Forensic to perform data analytics on its payroll transactions over a multiyear period. KPMG identified numerous ghost employees, employees paid out of more than one location, and over 30,000 hours of unauthorized overtime payments.

**A FORTUNE 500 global manufacturing company** was concerned about fraudulent payments. The company's chief audit executive retained KPMG to evaluate risks in the procurement process. KPMG professionals conducted a series of data analytic routines to obtain and evaluate all purchase orders, goods receipts, invoices, and payment transactions, along with the vendor master. Among the findings, KPMG identified over \$280,000 in duplicate payments and over \$7.1 million in documented payments to four unauthorized vendors. As a result of KPMG's findings, the company also instated a series of risk-mitigation projects to help reduce its exposure to fraudulent payments.

As part of a larger FCPA/ABC investigation for **a global integrated oil company**, KPMG Forensic conducted a data analysis of transactions to uncover red flags of FCPA/ABC-related activity. Additional activities by KPMG Forensic, including an assessment of the company's FCPA policy and the process for vetting the agent and interviews of key individuals associated with this matter, facilitated the interpretation of the data analytic results.

## About KPMG Forensic

KPMG Forensic is a global practice of multidisciplinary professionals from the member firms of KPMG International. We assist clients in achieving the highest levels of business integrity through the prevention, detection, and investigation of fraud and misconduct, and by avoiding or resolving disputes. Our professionals help clients discover the facts underlying concerns about fraud and misconduct, as well as assess and mitigate their vulnerabilities to such activities. We also deliver a broad range of services to help prevent and resolve commercial disputes including the assessment of damages; resolution of accounting, audit, and finance-related issues; and expert witness services.

Using a wide range of sophisticated technology tools, KPMG Forensic helps organizations address the risks and costs involved with evidence and discovery management, as well as the acquisition, management, and analysis of large data sets. Our professionals work alongside clients to handle information—from its creation to its preservation, collection, analysis, and presentation in discovery. We also apply computer forensic and data analysis techniques to assist with detecting fraud and misconduct. To support these services, member firms of KPMG International operate secure data centers in the United States, Canada, and the United Kingdom.

Professionals in KPMG's Forensic practice draw upon extensive experience in forensic accounting, law enforcement, fraud and misconduct control assessments, legal damage quantification and analysis, expert witness testimony, international arbitration, asset tracing, computer forensics, and forensic data analysis.

KPMG Forensic professionals are well positioned to provide consistent service to global clients. By sharing common global methodologies, KPMG International member firms can readily assemble multinational teams that possess the breadth and depth of technical skills and industry knowledge needed to address fraud, misconduct, and dispute concerns.



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