The ACFE/COSO Fraud Risk Management Guide: Second Edition
Dave Cotton is founder and Chairman Emeritus of Cotton & Company, Certified Public Accountants, headquartered in Alexandria, Virginia. Cotton & Company was founded in 1981 and has a practice concentration in assisting Federal and State agencies, inspectors general, and government grantees and contractors with a variety of government program-related assurance and advisory services. Cotton & Company has performed grant and contract, indirect cost rate, financial statement, financial related, and performance audits for more than two dozen Federal inspectors general as well as numerous other Federal and State organizations, programs, activities, and functions. In April 2022, Cotton & Company became a wholly-owned subsidiary of Sikich LLP.


Dave received a BS in mechanical engineering and an MBA in management science and labor relations from Lehigh University in Bethlehem, PA. He also pursued graduate studies in accounting and auditing at the University of Chicago Graduate School of Business. He is a Certified Public Accountant (CPA), Certified Fraud Examiner (CFE), and Certified Government Financial Manager (CGFM).


Dave served on the board of the Virginia Society of Certified Public Accountants (VSCPA) and on the VSCPA Litigation Services, Professional Ethics, Quality Review, and Governmental Accounting and Auditing Committees. He is a member of the Association of Government Accountants (AGA) and past-advisory board chairman and past-president of the AGA Northern Virginia Chapter and past Vice Chair of the AGA Professional Ethics Board. He is also a member of the IIA and the Association of Certified Fraud Examiners.

Dave has testified as an expert in governmental accounting, auditing, and fraud issues before the United States Court of Federal Claims, the Armed Services Board of Contract Appeals, and other administrative and judicial bodies.

Dave has spoken and written frequently on cost accounting, professional ethics, and auditor fraud detection responsibilities. He has been an instructor for the George Washington University masters of accountancy program (Fraud Examination and Forensic Accounting), and has instructed for the George Mason University Small Business Development Center (Fundamentals of Accounting for Government Contracts).

Dave was the recipient of the ACFE 2018 Certified Fraud Examiner of the Year Award (“presented to a CFE who has demonstrated outstanding achievement in the field of fraud examination … based on their contributions to the ACFE, to the profession, and to the community”); AGA’s 2012 Educator Award (“to recognize individuals who have made significant contributions to the education and training of government financial managers”); and AGA’s 2006 Barr Award (“to recognize the cumulative achievements of private sector individuals who throughout their careers have served as a role model for others and who have consistently exhibited the highest personal and professional standards”).
Disclaimer

The views expressed in this presentation are my views and do not necessarily align with the views of the Virginia Board of Accountancy.

The ACFE/COSO Fraud Risk Management Guide: 2022 Edition

- A short history: COSO, internal control, enterprise risk management, and fraud risk management
- The big picture: principles, standards, and leading practices
- FRMG overview
- The 2022 Update Task Force
- What has not changed
- Major changes
- Fraud risk management tools
- Be part of the antifraud effort
A short history: COSO, internal control, enterprise risk management, and fraud risk management

• 1985: Committee of Sponsoring Organizations of the Treadway Commission
• 1987: Treadway Commission Report
• 1992: Internal Control—Integrated Framework

Very little emphasis on fraud

Focus was on:
• Economy and efficiency of operations, including safeguarding of assets and achievement of desired outcomes;
• Reliability of financial and management reports; and
• Compliance with laws and regulations.
A short history: COSO, internal control, enterprise risk management, and fraud risk management

• 1985: Committee of Sponsoring Organizations of the Treadway Commission
• 1987: Treadway Commission Report
• 1992: Internal Control—Integrated Framework
• 1992-2001: COSO IC Framework gained broad recognition
• 2002: SOX section 404 mandated establishing/reporting on IC
• 2002-2012: COSO IC Framework gained global recognition

• 2004: COSO Enterprise Risk Management Framework
• 2013: COSO Internal Control—Integrated Framework
  • Principle 8: Consider fraud when assessing risks
A short history: COSO, internal control, enterprise risk management, and fraud risk management

- 2004: COSO Enterprise Risk Management Framework
- 2013: COSO Internal Control—Integrated Framework
  - Principle 8: Consider fraud when assessing risks
- 2014: ACFE/COSO Fraud Risk Management task force
- 2015: GAO Fraud Risk Management Framework
A short history: COSO, internal control, enterprise risk management, and fraud risk management

- 2004: COSO Enterprise Risk Management Framework
- 2013: COSO Internal Control—Integrated Framework
  - Principle 8: Consider fraud when assessing risks
- 2014: ACFE/COSO Fraud Risk Management task force
- 2015: GAO Fraud Risk Management Framework
- 2016: ACFE/COSO Fraud Risk Management Guide
A short history: COSO, internal control, enterprise risk management, and fraud risk management

- 2004: COSO Enterprise Risk Management Framework
- 2013: COSO Internal Control—Integrated Framework
  - Principle 8: Consider fraud when assessing risks
- 2014: ACFE/COSO Fraud Risk Management task force
- 2015: GAO Fraud Risk Management Framework
- 2016: ACFE/COSO Fraud Risk Management Guide
The big picture: principles, standards, and leading practices

Private Sector
- Accounting Principles
- Auditing Standards
- Internal Control
- Fraud Risk Management
- Enterprise Risk Management

Government
- Accounting Principles
- Auditing Standards
- Internal Control
- Fraud Risk Management
- Enterprise Risk Management

Leading practices

In-person May 2023 PDT

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The big picture: principles, standards, and leading practices

- Private Sector
  - Accounting Principles
  - Auditing Standards
  - Internal Control
  - Fraud Risk Management
  - Enterprise Risk Management

- Government
  - Required by law

2016 FRMG overview

- Five fraud risk management principles
- Maps to COSO IC Framework
- Detailed information on performing a fraud risk assessment
- 19 Appendices
Joint ACFE-COSO Task Force

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- Pamela Verick
  Protiviti
- Vincent Walden
  Kona AI

What has not changed

- Mapping to COSO IC Framework
Mapping of COSO Components and Principles to the Fraud Risk Management Guide

What has not changed

- Mapping to COSO IC Framework
- Five fraud risk management principles and the basic process
Basic fraud risk management process has not changed

What has not changed

- Mapping to COSO IC Framework
- Five fraud risk management principles and the basic process
- The fraud risk assessment process
Risk assessment process has not changed

1. Establish the fraud risk assessment team, considering:
   - Appropriate management levels
   - All organizational components

2. Identify all fraud schemes and fraud risks, considering:
   - Internal and external factors
   - Various types of fraud
   - Risk of management override

3. Estimate likelihood and significance of each fraud scheme and risk

4. Determine all personnel and departments potentially involved considering the fraud triangle

5. Identify existing controls and assess their effectiveness

6. Assess and respond to residual risks that need to be mitigated:
   - Strengthen existing control activities
   - Add control activities
   - Consider data analytics

7. Document the risk assessment

8. Reassess risk periodically, considering changes:
   - External to the organization
   - Operational
   - Leadership

Let’s Look at the FRMG, Second Edition

- Hot off the presses
- Rolled out 2 May 2023
- Purchase at ACFE or COSO
- Executive Summary available at no charge
Major changes

- Fraud risk management and deterrence linkage
- COSO’s two frameworks and fraud risk management linkage
- Expanded information on data analytics
- Internal control and fraud risk management: how they differ
- Assessing the effectiveness of existing control procedures
- Changes in the legal and regulatory environment
- Internal control and fraud risk management: how they differ
- Fraud reporting systems (hotlines)
- Changes in the external environment and fraud landscape
- Appendices changes
- Fraud risk management tools

Fraud risk management and deterrence

- COSO’s mission is to help organizations improve performance by developing thought leadership that enhances internal control, risk management, governance and fraud deterrence.
- According to the National Institute of Justice:
  - The certainty of being caught is a vastly more powerful deterrent than the punishment.
  - Police deter crime by increasing the perception that criminals will be caught and punished.
Fraud deterrence is the combined result of prevention and detection:

\[ \text{Prevention} + \text{Detection} = \text{Deterrence} \]

Deterrence is also supported and enhanced by the knowledge throughout the organization that:

- Those charged with governance have made a commitment to comprehensive fraud risk management.
- Periodic fraud risk assessments are being conducted.
- Overt and covert fraud control activities are in place.
- Suspected frauds are investigated quickly.
- Fraud reporting mechanisms are in place.
- Discovered frauds are remediated thoroughly.
- The entire Fraud Risk Management Program is being monitored on an ongoing basis.
COSO’s two frameworks and fraud risk management

• COSO Enterprise Risk Management Framework: 2004
• Enterprise Risk Management — Integrating with Strategy and Performance: 2017
• Fraud Risk management Guide: 2016, 2023
Expanded information on data analytics

- Added a data analytics Point of Focus under each of the five fraud risk management Principles:
  1. Uses Data Analytics to Support Fraud Risk Governance
  2. Uses Data Analytics Techniques for Fraud Risk Assessment and Fraud Risk Responses
  3. Uses Proactive Data Analytics Procedures
  4. Performs Data Analytics
  5. Uses Data Analytics to Continuously Monitor and Improve

Expanded Data Analytics Appendices

- **Appendix D-1** explains how to build a sustainable data analytics capability, develop a data analytics plan, attract, and develop a team of skilled professionals, acquire the right technological solutions, and implement processes and procedures.
- **Appendix D-2** provides both guidance and practical examples of the application of data analytics techniques and approaches as part of a fraud risk assessment.
- **Appendix D-3** explains how data analytics techniques can enhance fraud control activities to mitigate residual risks that were identified during the fraud risk assessment.
Internal control and fraud risk management

• Internal control and fraud risk management are related and support each other, but are different in some important respects.
• Controls that may assure accuracy in accounting and financial reporting may not be sufficient to protect against fraud.

Establish the fraud risk assessment team, considering:
- Appropriate management levels
- All organizational components

Identify all fraud schemes and fraud risks, considering:
- Internal and external factors
- Various types of fraud
- Risk of management override

Estimate likelihood and significance of each fraud scheme and risk

Determine all personnel and departments potentially involved considering the fraud triangle

Identify existing controls and assess their effectiveness

Assess and respond to residual risks that need to be mitigated:
- Strengthen existing control activities
- Add control activities
- Consider data analytics

Document the risk assessment

Reassess risk periodically, considering changes:
- External to the organization
- Operational
- Leadership

very important step
Internal control and fraud risk management

- Internal control and fraud risk management are related and support each other, but are different in some important respects.
- Controls that may assure accuracy in accounting and financial reporting may not be sufficient to protect against fraud.
  - *Let’s look at some examples ...*

Internal control and fraud risk management

- Segregation of Duties.
- Approved Vendor Lists.
- Higher Transaction Approval Authorities.
- Asset Verification Physical Counts.
Segregation of Duties

- **Do not let one person control all transaction phases**
- Good for accuracy in accounting and financial reporting
- BUT, in assessing fraud risk, we need to consider how that control can be circumvented or rendered ineffective
  - Collusion among the people across whom duties are segregated
  - Password-sharing
  - i.e., residual fraud risk
- Let’s apply additional controls to mitigate the residual risk
  - Frequently rotate the duties
  - Monitor password use and attendance

Approved Vendor List

- **We only do business with reputable companies that have been thoroughly vetted**
- Good for accuracy in accounting and financial reporting
- BUT, in assessing fraud risk, we need to consider how that control can be circumvented or rendered ineffective
  - Employee gains access to vendor database and adds bogus company
  - Corrupt vendor offers bribes or kickbacks
  - i.e., residual fraud risk
- Let’s apply additional controls to mitigate the residual risk
  - Match fields in employee and vendor databases
  - Apply data analytics to track unusual buying and pricing patterns
Approved Vendor List

- **Wait:** what if your organization includes employees in the vendor database in order to process travel expense reimbursement transactions?

Higher Level Approvals Required for Large Transactions

- **Any purchase of more than $50,000 requires regional manager approval**
- Good for accuracy in accounting and financial reporting
- BUT, in assessing fraud risk, we need to consider how that control can be circumvented or rendered ineffective
  - Purchase-splitting
  - Regional manager becomes corrupt
  - I.e., residual fraud risk
- Let’s apply additional controls to mitigate the residual risk
  - Apply Benford’s Law to the purchasing database
  - Apply data analytics to track unusual buying and pricing patterns
Physical Counts of Assets/Inventory

- We periodically take physical counts of assets and inventory
  - Good for accuracy in accounting and financial reporting
  - BUT, in assessing fraud risk, we need to consider how that control can be circumvented or rendered ineffective
    - Actual inventory is moved from location to location
    - Empty boxes are disguised to appear to have contents
    - I.e., residual fraud risk
  - Let’s apply additional controls to mitigate the residual risk
    - Vary the inventory counting process to conduct surprise counts or simultaneous location counts
    - Vary the counting process (weigh boxes; open boxes; etc.)

Library of Internal Controls

- If your organization is following the COSO framework, you probably have a list (“library”) of all controls
- Apply this “how could fraud happen despite this control” analysis to every control
Assessing the effectiveness of existing control procedures

Clarification that assessing the effectiveness of existing controls is a two step process.

- First, a determination will be made as to whether the control is in place and functioning as designed.
- Once that determination is made, the control will be re-assessed in terms of its effectiveness for preventing and detecting fraud.

Changes in the legal and regulatory environment

- Includes updated information with respect to recent legal and regulatory developments pertaining to fraud and fraud risk management, including:
  - The Department of Justice’s *Evaluation of Corporate Compliance Programs*.
  - U.S. Securities and Exchange Commission Climate and ESG Task Force
Fraud reporting systems (hotlines)

- ACFE research consistently reveals the importance of having fraud hotlines or whistleblower reporting systems in place.
42% of frauds were detected by tips, which is nearly 3x as many cases as the next most common method. More than HALF of all tips came from employees.

**2022 Report to the Nations**

**FIG. 6: HOW IS OCCUPATIONAL FRAUD INITIALLY DETECTED?**

- Internal audit: 41%
- Management review: 19%
- Document examination: 11%
- Analysis: 8%
- Re-audit: 5%
- Account reconciliation: 5%
- Automated transaction/data monitoring: 5%
- External audit: 4%
- Surveillance monitoring: 3%
- Notification by law enforcement: 2%
- Congressional inquiry: 1%
- Other: 1%

**FIG. 7: WHO REPORTS OCCUPATIONAL FRAUD?**

- Employee: 50%
- Customer: 16%
- Government: 16%
- Vendor: 16%
- Others: 10%
2022 Report to the Nations

Email and web-based reporting both surpassed telephone hotlines

2022 Report to the Nations

Organizations with hotlines detect fraud more quickly and have lower losses than organizations without hotlines

With fraud hotlines

$100,000

12 MONTHS

Without fraud hotlines

$200,000

18 MONTHS

Median loss

Duration
Fraud reporting systems (hotlines)

- ACFE research consistently reveals the importance of having fraud hotlines or whistleblower reporting systems in place.
- Expanded information on the importance of hotlines as part of Principle 1 (Control Environment) and Principle 4 (Information and Communication)

Changes in the external environment and fraud landscape

The fraud landscape is changing rapidly. The 2022 FRMG edition includes information on this changing environment, including:

- Environmental, social and governance (ESG) initiatives and reporting
- Cyberfraud
- Blockchain, cryptocurrency, and digital assets
- Ransomware
- COVID-19 response efforts, the CARES Act, and related programs
- Remote working and hybrid working environments
- Innovative and virtual management tools and accounting procedures
Appendices changes

- 2016 edition had 19 appendices
- 2022 edition has 7 appendices

<table>
<thead>
<tr>
<th>2016 Appendices</th>
<th>2022 Edition Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Glossary</td>
<td>Updated and retained.</td>
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<tr>
<td>B. FRM Roles/Responsibilities</td>
<td>Updated and retained.</td>
</tr>
<tr>
<td>C. FRM Considerations for Smaller Entities</td>
<td>Updated and retained.</td>
</tr>
<tr>
<td>D. Reference Materials</td>
<td>Eliminated.</td>
</tr>
<tr>
<td>E. Data Analytics and FRM</td>
<td>Revised and expanded. New Appendices D-1, D-2, D-3.</td>
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<tr>
<td>F-1. Sample Fraud Control Policy</td>
<td>Updated but moved to the ACPE Tools site.</td>
</tr>
<tr>
<td>F-2. Fraud Risk Management High-Level Assessment</td>
<td>Updated but moved to the ACPE Tools site.</td>
</tr>
<tr>
<td>F-3. Sample Fraud Policy Responsibility Matrix</td>
<td>Updated but moved to the ACPE Tools site.</td>
</tr>
<tr>
<td>F-4. Sample Fraud Risk Management Policy</td>
<td>Updated but moved to the ACPE Tools site.</td>
</tr>
<tr>
<td>F-5. Sample Fraud Risk Management Survey</td>
<td>Updated but moved to the ACPE Tools site.</td>
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<tr>
<td>G. Fraud Risk Exposures</td>
<td>Eliminated but replaced with an expanded list on the ACPE Tools site.</td>
</tr>
<tr>
<td>H. Fraud Risk Assessment Example</td>
<td>Updated and retained. New Appendix E.</td>
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<tr>
<td>I-1 thru I-5 Scorecards</td>
<td>Updated but moved to the ACPE Tools site.</td>
</tr>
<tr>
<td>J. Hyperlinks to Additional Tools</td>
<td>Updated and retained. New Appendix G.</td>
</tr>
<tr>
<td>K. Managing the Risk of Fraud, Waste, and Abuse in the Governmental Environment</td>
<td>Updated and retained. New Appendix G.</td>
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</tbody>
</table>
Fraud risk management tools at ACFE


- Antifraud Playbook
- Library of Antifraud Data Analytic Tests
- Fraud Risk Management Interactive Scorecards
- Risk Assessment and Follow-Up Action Templates
- Points of Focus Documentation Templates

Fraud risk management tools at ACFE

- Sample Fraud Control Policy
- Fraud Risk Management High-Level Assessment
- Sample Fraud Policy Responsibility Matrix
- Sample Fraud Risk Management Policy
- Sample Fraud Risk Management Survey
- Expanded list of fraud exposures, hyperlinked to underlying descriptions
  - Generic schemes
  - Industry-specific schemes
Fraud risk management tools at ACFE

Coming soon:

- PowerPoint Deck to use to explain Fraud Risk Management and its importance to senior management and those charged with governance.
Fraud Risk Management Monitoring Scorecard

Summary by Points of Focus

- Considering a Risk ofCHIEF and Separate Evaluations
- Considering Factors for Setting the Score and Frequency of Evaluations
- Establishing Appropriate Measurement Criteria
- Considering Known Fraud Schemes and New Public Cases
- Evaluating Common Crime and Redeploying Defenses

Breakdown by Score

Risk Assessment and Follow-up Actions Template

<table>
<thead>
<tr>
<th>ID Number</th>
<th>Identified Fraud Risks and Schemes</th>
<th>Likelihood (1-10)</th>
<th>Significance (1-10)</th>
<th>People and/or Department</th>
<th>Existing Anti-Fraud Controls</th>
<th>Preventive (P) or Detective (D) Controls</th>
<th>Efficiencies Assessment (1-10)</th>
<th>Residual Risks</th>
<th>Fraud Risk Response</th>
</tr>
</thead>
</table>

- This column is populated based on results of the fraud brainstorming process.
- These columns automatically generate the "heat map" that graphs likelihood versus significance.
- These columns automatically generate the Control Activities Tab columns.
Fraud Risk Heat Map

Fraud Risk Ranking Matrix

[Diagram of Fraud Risk Heat Map and Fraud Risk Ranking Matrix]

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Points of Focus Documentation

<table>
<thead>
<tr>
<th>Points of Focus</th>
<th>Our Organization’s Response including Cross-References to Other Material and Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Premature Fraud Detection through Prevention and Detection Control Activities</strong> — The organization addresses its fraud detection as a process of eliminating factors that may cause fraud to occur and understand that detection results from having effective preventive and detective fraud control activities in place.</td>
<td></td>
</tr>
<tr>
<td><strong>Integrates with the Fraud Risk Assessment</strong> — The organization ensures that the design and implementation of fraud control activities link directly to the fraud risk assessment.</td>
<td></td>
</tr>
<tr>
<td><strong>Considers Organization-Specific Factors and Relevant Business Processes</strong> — The organization ensures that the design and implementation of fraud control activities consider a range of factors, including those unique to the organization, its industry, and its operating environment.</td>
<td></td>
</tr>
<tr>
<td><strong>Considers the Application of Control Activities at Different Levels of the Organizational</strong> — The organization ensures that fraud control activities exist throughout the organization at all appropriate organizational levels.</td>
<td></td>
</tr>
<tr>
<td><strong>Utilizes a Combination of Fraud Control Activities</strong> — The organization ensures that fraud control activities include a range, variety, and mix of preventive and detective controls.</td>
<td></td>
</tr>
<tr>
<td><strong>Considers Management Oversight of Controls</strong> — The organization includes fraud control activities that consider and address the ability of senior management personnel to circumvent or override internal control activities, including fraud control activities.</td>
<td></td>
</tr>
<tr>
<td><strong>Uses Proactive Data Analytics Procedures</strong> — The organization implements a well-designed, rigorous system of data analytic processes and procedures that can identify anomalous transactions or events for further investigation.</td>
<td></td>
</tr>
<tr>
<td><strong>Displays Control Activities through Policies and Procedures</strong> — The organization ensures that fraud control activities are thoroughly documented and implemented through organizational policies.</td>
<td></td>
</tr>
</tbody>
</table>

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**Skimming**

**Data Analytics Library**

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Library of Data Analytics Tests

**Cash - Skimming**

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical Analysis</td>
<td>Vertical analysis of sales accounts, i.e., cash as a percentage of total assets over time, etc., can be used to detect skimming at a high level.</td>
</tr>
<tr>
<td>Sequential Analysis</td>
<td>Sequential analysis of sales accounts, i.e., cash percent change over time, can be used to detect skimming at a high level.</td>
</tr>
<tr>
<td>Current Ratio Analysis</td>
<td>Track current assets to current liabilities over time.</td>
</tr>
<tr>
<td>Quick Ratio Analysis</td>
<td>Quick Ratio Analysis, i.e., Current Assets divided by Current Liabilities percent change over time.</td>
</tr>
</tbody>
</table>

**Inventory Analysis**

Track inventory shrinkage due to unrecorded sales. Inventory detection may include statistical sampling, trend analysis, review of receiving reports and inventory records and verification for material requisition and shipping documentation as well as actual physical inventory counts.

<table>
<thead>
<tr>
<th>Red Flags</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Bank employee questions the validity of a check</td>
<td></td>
</tr>
<tr>
<td>Inspect for a forged endorsement on a check</td>
<td></td>
</tr>
<tr>
<td>Inspect for a bank account with a name similar to the company name</td>
<td></td>
</tr>
<tr>
<td>Inspect for alteration of the check across a department</td>
<td></td>
</tr>
</tbody>
</table>

**Journal Entry Review**

Analysis of journal entries made to the cash and inventory accounts to identify:
1. False credits to inventory to conceal unrecorded or understated sales,
2. Write-offs related to lost, stolen, or obsolete product,
3. Write-offs to accounts receivable,
4. Irregular entries to cash accounts,
5. Analysis of journal entries to ensure compliance with accounting policies.
6. Journal entries to ensure compliance with cash controls.

**Data Analytics Library**

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Library of Data Analytics Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Compare inventory levels and turnover rates on a by project or by region.</td>
</tr>
<tr>
<td></td>
<td>Inventory written off and then new purchase made (total write-offs and quantities purchased by product).</td>
</tr>
<tr>
<td></td>
<td>Compare contract awards by vendor (number of contracts won compared to bids submitted).</td>
</tr>
<tr>
<td></td>
<td>Sole sourced contracts - number of bids per contract.</td>
</tr>
<tr>
<td></td>
<td>Check for vague contract specifications: (i) amendments, extensions, increases in contract value, (ii) total number of amendments, (iii) original delivery date and final delivery date, (iv) original contract value and final contract value.</td>
</tr>
<tr>
<td></td>
<td>Check for split contracts (same vendor, same day).</td>
</tr>
<tr>
<td></td>
<td>Check for bids submitted after bid closing date.</td>
</tr>
<tr>
<td></td>
<td>Check for last bid wins.</td>
</tr>
<tr>
<td></td>
<td>Low bidder drops out, and subcontracts to higher bidder (compare contractor with invoice payee).</td>
</tr>
<tr>
<td></td>
<td>Fictitious bids - verify bidders and prices.</td>
</tr>
</tbody>
</table>

Fictitious Revenue

Data Analytics Library
Library of Data Analytics Tests

**Revenue Recognition**

- **Bill & Hold**
  - Analysis of inventory that has been "segregated" or shipped to a third party intermediary where the customer has not taken title and assumed the risks, yet the company has booked this isolated inventory as revenue.

- **Bill & Hold**
  - Identify revenue and receivables recorded prior to shipment.

- **Channel Stuffing**
  - Compare discounts or incentives on a monthly basis to identify unusual spikes at the end of the quarter or year.

- **Channel Stuffing**
  - Compare sales and corresponding returns on a per customer basis.

- **Debt Swap**
  - Identification of Journal Entries with Net Debit to Liability and Credit to Revenue.

- **Debt Swap**
  - Identification of Journal Entries with Net Debit to Liability and Credit to Expenses.

- **Fake Invoices**
  - Analysis of sequential invoice numbers.

- **Fake Invoices**
  - Analysis of the first two digits to identify anomalies such as a disproportionate number of invoices starting with 7, 8 or 9.

- **Fake Invoices**
  - Analysis of company names that "sound like" known vendors.

- **Revenue Recognition**
  - Analysis and anomaly detection of the sequence of transactions to identify missing checks, invoices.

- **Revenue Recognition**
  - Compare A/R credit memos to A/P invoices.

- **Revenue Recognition**
  - Compare revenue reported by month and by product line during the current period with comparable prior periods.

- **Revenue Recognition**
  - Confirm with selected, high risk customers relevant contract terms or question company staff regarding shipments near the end of the period.

- **Revenue Recognition**
  - Identification of revenue recognized at period end and subsequently reversed or partially reversed.

**Fraud Triangle Analytics**

- **E-mail analysis** of selected employees (accounting or sales) for "Rev Rec" related key words around incentive/pressure, opportunity and rationalization.

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**Be part of the antifraud effort**

- The tools at ACFE are intended to be crowd-sourced.
- If you have:
  - Suggestions for modifications to existing tools
  - Ideas for additional tools
  - Additional fraud exposures to add to the list
  - Other comments or recommendations.... Contact us.

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Yes, Yes, Yes...It’s Hard Work

Just remember
• The perps hope you are lazy
• If the perps discover that you are not lazy and have thoroughly implemented fraud risk management processes, they will move on to find easier targets

So, would you rather be:
• The easy target, or
• The organization that the perps are afraid to steal from?