First Friday Fraud Facts+

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The Idaho State Controller's Office distributes this newsletter as a cost-effective method of increasing awareness about ways to detect and prevent fraud, waste, and abuse in government.

Welcome to First Friday Fraud Facts+ (F4+). This edition will discuss predictive analytics used to catch fraud.

Predictive Analytics

Predictive analytics uses variables that have been used in previous fraud attempts and places them into a process to determine the likelihood of fraud being committed. Predictive analytics can be a very useful tool to detect fraud, but the results are dependent on the information used. It is important to fine-tune the process and determine which information will give you the results you are searching for.

Seven Steps to Tackle Fraud [1]

1. Build a profile of potential risks.
2. Test data for possible indicators. Once you have decided on the main problem areas, it is important to test 100 percent of data to develop trends and see where internal controls are not sufficient.
3. Improve the process by implementing continuous analysis.
4. Review results.
5. Expand the scope and repeat.
6. Report, make a list of recommendations to improve controls or change processes, then actually implement these recommendations.
7. Communicate, discuss what your investigation found—what your challenges and successes have been during this process.

Questions or Comments:

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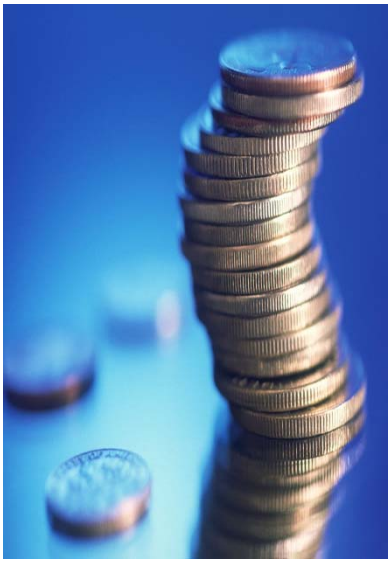

Benford's Law

Benford's law is an analysis method that can be used to help find errors and possibly instances fraud. This theory states there is a 60.2 percent likelihood the first integer of a number would be a 1, 2, or 3. Frank Benford noticed that most sets of "natural" values followed this pattern. Some examples of the types of data used to support this theory include: census data, income tax, stock exchange, sales figures, and demographics. Assigned numbers such as social security numbers don't follow this pattern. By running an analysis, an investigator can take a set of values, for instance, allowance for doubtful accounts, and compare it to Benford's law and know right away if the set of data contains the expected distribution Benford's law suggests. This test will also help with error correction by helping locate duplicate payments.[2]

FRAUD Case

HealthSouth is a large owner and operator of inpatient rehabilitative hospitals. A 2003 discovery showed the company had been involved with fraudulent activity totaling $2.7 billion over a 17 year period. HealthSouth had gone public in 1986 and from this time was able to falsify its financial reports. A year before the fraud was discovered, several members of management had been selling off their shares as quickly and quietly as possible. The company announced that cuts to Medicare reimbursements were going to reduce the pretax profits by $175 million, which in turn caused the stock to drop (per share) from $11.97 to $6.71. This significant drop raised flags at the SEC and they started to investigate.

During the investigation insiders informed the SEC that the Medicare reduction could be $20 million at most, and the other $155 million was being used to cover up reported earnings that hadn't actually occurred. The SEC worked with the FBI, which led a raid on the headquarters. The FBI left with a terabyte of digital data and three van loads of documents detailing how the financial statements were falsified. The purpose of this raid wasn't to obtain documents on financial statement fraud, but documents that would support insider trading charges. However, during the raid, many employees came forward and said the company was also committing financial statement fraud. In this case, 21 people pled guilty which included every CFO of HealthSouth since it went public in 1986.

The duration of the HealthSouth fraud may have been shorter and less costly if the auditors had used ratios to analyze the business practices of HealthSouth compared to other similar corporations. For example, looking at the provision for doubtful accounts, HealthSouth only reported 10 percent while Tenet HealthCare reported 34 percent as doubtful accounts. Another ratio that was too large to explain away was the intangible assets. HealthSouth reported 42 percent as intangible and Tenet only had 27 percent as intangibles. Big discrepancies like this should bring up questions as to how similar companies can have such different ratios.[3]

[1] 7 Steps to Tackle Fraud Using Data Analytics http://www.acl.com/pdfs/eBook_7steps_to_tackle_fraud.pdf Accessed on February 19, 2015

[2] I've Got Your Number http://www.journalofaccountancy.com/issues/1999/may/nigrini Accessed on February 11, 2015

[3] Sniffing for Cooked Books http://www.fraud-magazine.com/article.aspx?id=4294968446 Accessed on February 18, 2015