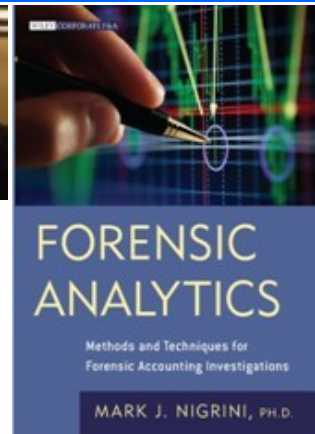


Forensic Analytics: Methods and Techniques for Forensic Accounting Investigations

Two-day workshop. Overview.

Do you want?

- ⇒ An energetic and enthusiastic instructor?
- ⇒ A lesson with insights into Benford's Law?
- ⇒ To see Access 2007 used in a forensic setting?
- ⇒ To see forensic tests and techniques run in Excel 2007?
- ⇒ Hands-on skills to make you the "go-to" person for forensic analytics and the continuous monitoring of transactional data?
- ⇒ An interpretation of real-world fraud cases with the implications for you?
- ⇒ To put the theory into practice as soon as you get back to work?



Do you need to buy software to do all of the above?

No! With Excel 2007/2010 and the Nigrini templates you are ready to go. Access, IDEA, and ACL can also be used for the *Forensic Analytics* tests.

Main topics

- ⇒ Benford's Law, the fun, the facts, and the future.
- ⇒ The Nigrini Cycle of forensic tests.
- ⇒ Continuous monitoring, methods, successes, and techniques.
- ⇒ Lessons learned from real-world fraud cases.
- ⇒ Why companies need effective and proactive anti-fraud measures.
- ⇒ Low-priced software and internet technology for effective and efficient forensics.

Deliverables: A dynamic, enthusiastic and mildly entertaining presentation by Mark Nigrini, Ph.D. 1 copy of *Forensic Analytics* <http://www.wiley.com/WileyCDA/WileyTitle/productCd-0470890460.html> The key to 75 files with data, templates, PP slides, and end-of-chapter questions for *Forensic Analytics*. A 30-page document with the cases, questions, screenshots, & solutions for the hands-on work.

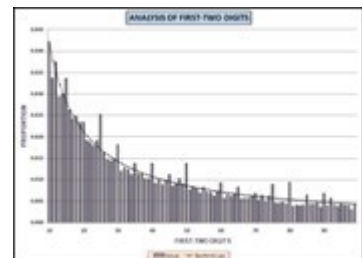
Audience:

Internal auditors in the private and public sector that would like to use organizational data to effectively and efficiently create value.

External auditors that would like novel and new effective tools to assist in the external audit and also to create consulting revenues.

Valuation accountants and security analysts that want to gain a competitive advantage with proprietary tools to evaluate data authenticity.

Corporate controllers that would like to introduce their staff responsible for internal controls to the power and efficiency of forensic analytics.

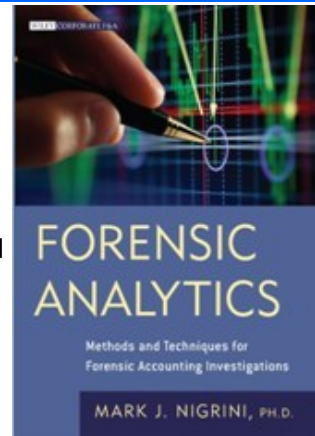


Forensic Analytics: Methods and Techniques for Forensic Accounting Investigations

Day #1 of the two-day workshop.

This workshop draws on the topics covered in *Forensic Analytics* by Mark Nigrini. Forensic analytics is the procurement and analysis of electronic data to reconstruct, detect, or otherwise support a claim of financial fraud. Other goals include the detection of errors, inefficiencies, and biases where people tends towards certain behaviors (perhaps favoring specific numbers or number ranges) to influence decision makers or to circumvent actual or perceived internal control thresholds. The main steps in forensic analytics are data collection, data preparation, data analysis, and reporting.

This workshop is a special opportunity to learn about Benford's Law and other forensic analytic tools and techniques. Most of the second day is devoted to hands-on time with real relevant case studies. The workshop lectures also cover value-added case-



studies and demonstrations of running the tests in Excel and Access. The workshop is aimed at accountants and analysts with a general day-to-day familiarity with obtaining and importing transactional data. No prior forensic or analytics experience is assumed.

The main first day topics are listed below:

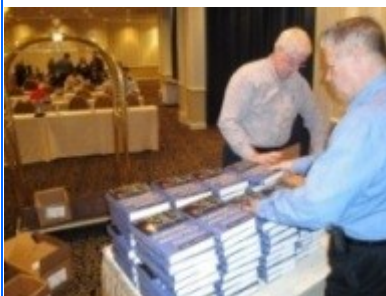
Benford's Law: The fun, the facts, & the future. An informative and engaging review of the primary, advanced, & associated Benford tests

Corporate payments case study: An interesting real-world case demonstrating the high-level forensic overview tests, the Nigrini Cycle tests, and then moving on to the highly focused forensic tests designed specifically to identify small groups of anomalous and suspect transactions.

Continuous Monitoring: A reflection on preventive and detective controls and the concept of risk-scoring forms the foundation for this session. The discussion walks through real-world innovative applications using correlation and leading-edge examples of monitoring using time-series analysis.

Fraud and tax evasion: These fascinating sessions discuss the Charlene Corley and Susan Thompson frauds, & the Richard Hatch tax evasion drama, and the lessons learned from these engaging cases.

Conclusion: The expertise-driven first day finale reviews software solutions that would raise your forensic efficiency and effectiveness and includes solutions to send large files securely by e-mail, convert



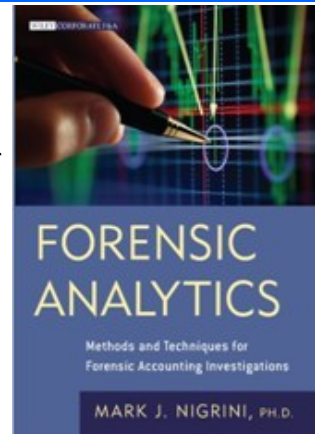
pdf data files to Excel, access court records electronically, copy and manipulate screen shots, edit and manipulate pdf files, recover deleted files, check the grammar in forensic reports, back-up your work in the cloud, and to convert long web addresses to short URLs.



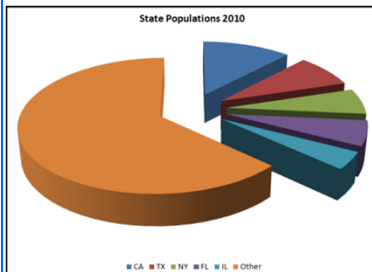
Forensic Analytics: Methods and Techniques for Forensic Accounting Investigations

Day #2 of the two-day workshop.

The second day also draws on the topics in *Forensic Analytics*. Most of the day is devoted to hands-on work, a review of discussion and multiple choice questions to reinforce the forensic material, and a review of the reasons for our duty to detect and deter fraud. The hands-on work can be done in either Excel, Access, IDEA, or ACL. The step-by-step solutions are only shown in Excel and Access. There are extra assignments (like AP classes in high school) for power-users that might breeze through the case studies. The handouts and case study descriptions are comprehensive and include data files, templates, solutions, and PowerPoint slides. The abbreviated case studies are:



1. Using accounts payable data calculate the total purchases per month and



prepare a periodic graph.

2. Prepare the data profile using the Nigrini Cycle template. What insights can you crawl from your results? Run the first order Benford's Law test using the Nigrini Cycle template. Identify the 5 largest spikes.

3. Run the number duplication test in Excel. Which dollar amounts caused the five largest spikes?

4. Run the largest subsets test using Excel's pivot table function. Identify

some interesting findings.

5. Using census 2000 and 2010 data, run the largest growth test by calculating the percentage change for each state from 2000 to 2010. Do the results for any of the states seem anomalous?

6. Using census data, Excel's pivot table capabilities, and the VLOOKUP function create an "Exploded pie in 3-D" pie chart from the data.

7. Using census data, run the forensic test to identify possible erroneous cases where a state has two or more counties with the same 2010 populations.

8. This case is an introduction to Access (or IDEA or ACL). Import the census data and run a basic forensic query.

AP1-AP3. Selected end-of-chapter questions and cases from Chapters 2, 5, and 8 of *Forensic Analytics*.

Fraud and tax evasion examples: This fascinating continuation discusses the O'Banion, Bajakajian, and Robbins cases, and the lessons that can be learned from these three interesting cases.

The energetic **conclusion** to the workshop is a summary of the main points and a look at aspects of the



legal environment that play a role in the prosecution of fraud cases. Nigrini makes a compelling case for effective internal controls and an efficient, capable, and competent proactive fraud detection regime.

