MIS 5208 – Lecture 08 – Investigating Concealment

Ed Ferrara, MSIA, CISSP
eferrara@temple.edu
Learning Objectives

1. Describe concealment investigation methods and how they relate to fraud.
2. Understand the value of documents and electronic records in a fraud investigation.
3. List the different methods of obtaining documentary evidence.
4. Understand how to perform discovery sampling to obtain documentary evidence.
5. Explain how to obtain hard-to-get documentary evidence.
Investigators must understand the following aspects of documentary evidence:

- Chain of custody of documents
- Marking of evidence
- Organization of the evidence
- Coordination of documentary evidence
- Rules concerning original versus copies of documents
Aspects of Documentary Evidence

Chain of Custody of Documents

A record must be kept of when a document is received and what has happened to it since its receipt.

Why is it important to maintain a chain of custody for documentary evidence?
Aspects of Documentary Evidence

- Marking the Evidence
- A transparent envelope should be used to store the evidence, with the date received and the initials of the examiner written on the outside
- A copy of the document should be made, and the original document should be stored in the envelope in a secure place
Aspects of Documentary Evidence

- Organization of the Evidence
- Evidence database should have the following:
  - Creation dates of documents
  - Sources of documents
  - Dates when the documents were obtained
  - Brief descriptions of document contents
  - Subjects of documents
  - Identifying or Bates number
Aspects of Documentary Evidence

- Original Documents versus Photocopies
- Originals are preferable to photocopies
- In certain jurisdictions, only four situations permit photocopies
  - Original document has been lost or destroyed
  - Original document is in the possession of an adverse party
  - Original document or record in the custody of a public office
  - Original documents are too voluminous
Aspects of Documentary Evidence

- Obtaining Documentary Evidence: Audits
- Auditors conduct seven types of tests
  - Tests of mechanical accuracy (recalculations)
  - Analytical tests (tests of reasonableness)
  - Documentation
  - Confirmations
  - Observations
  - Physical examinations
  - Inquiries
- Discovery sampling is the easiest of all statistical sampling variations to understand.
- Testing a random sample
- Using
  - Random Number Generator
  - Random Number Table
Discovery Sampling

- **GOAL:** Discover at least one error in a given sample size if the population error rate is a certain percentage.
  - Error: In our case this would be the presence of fraud (e.g. a check written to a fictitious doctor).
  - Population: All members of a group about which you want to draw a conclusion.
  - Sample Size: A subset of all available information – The part of the population selected for analysis.
  - Population Error Rate: The rate by which a potentially fraudulent occurrence in the Sample.
  - Confidence Level: Reliability or Degree of Belief in the Obtained Results.
  - Sampling Risk: It is possible the sample will not be representative of the population.

*Sampling information to assure that the proportion of the information with a particular attribute (i.e., error) is not in excess of a given percentage of the population.*

Discovery Sampling

- Step 1: Use a random number generator to select the checks to select for review
- Step 2: Use a Discovery Sampling Table to determine how confident you are that there is or is not fraud in the sample.
- Remember: The only way to know that there is no fraud in a sample

**Random Number Table - Excel**

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**Copyright © 2018 Edward S. Ferrara**
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95% confident – no fraud when sampling 300 checks
Discovery Sampling

Sampling data

You want to discover the rate of deviation from a prescribed control, or the total amount of monetary misstatement, in an account or class of transactions. However, you may not have the time or the budget to examine every record in the data set.

You can use ACL to draw a statistically valid subset of the data, called a sample, and analyze this much smaller set of data instead.

**Drawing a sample**

You can then project the results you get from analyzing the smaller set of data to the entire population of data. The projection creates an estimate of the overall deviation rate, or the overall amount of misstatement.

**Projecting results**

The sample selection and the projection use statistical formulas, which ensure a reasonable and measurable degree of confidence that the estimate is close to what you would have got if you had actually examined every record.
**Discovery Sampling**

### Note

The information about sampling in this guide is intended to help users already familiar with audit sampling perform sampling tasks in ACL. The information is not intended to explain audit sampling theory, which is a complex subject.

For in-depth coverage of audit sampling, consult a resource such as AICPA's Audit Guide: Audit Sampling.

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**Sampling types**

ACL has three types of sampling:

- record sampling (attributes sampling)
- monetary unit sampling
- classical variables sampling

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**Generate a random selection of records**

You can use ACL to generate a random selection of records. The method outlined below selects records at random, however the resulting output cannot be considered representative of the entire population of records.

If you intend to do analysis on the selected records and project the results back to the entire population, the selection needs to be statistically valid, or representative. For more information, see Sampling data.

**Steps**

1. Open the table from which you want to randomly select records.
2. From the main menu, select Sampling > Record/Monetary Unit Sampling > Sample.
3. Under Sample Type, select Record.
4. Under Sample Parameters, select Random.
5. Specify the following values:
   - **Size** – the number of records that you want to randomly select
   - **Seed** – (optional) a seed value to initialize the ACL random number generator
     - The seed value can be any number. You can recreate the same random selection of records by respecifying the same seed value.
     - Enter a seed value of '0', or leave the seed blank, if you want ACL to randomly select a seed value.
   - **Population** – the total number of records in the table
   - **To** – the name of the output table
6. Click OK.
Documentation and Evaluation

- Investigation should document the method used to determine sample size
- Document:
  - Population Error Rate
  - Confidence Level
- Evaluation:
  - Are the errors intentional or mistakes
Aspects of Documentary Evidence

- Obtaining Documentary Evidence: Hard-to-Get Documentary Evidence
- Three ways to obtain documentary evidence:
  - Subpoena
  - Search warrant
  - Voluntary consent

Remember this …

*Discovery sampling is a simple, statistically based method of analyzing a subset of transactions from a larger pool. It allows the investigator to decide on an acceptable risk level for sampling. As with all sampling, discovery sampling should only be used when full-population analysis using a computer is not possible.*
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subpoena

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versus
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vicente yagpes
respondent.

subpoena

cherrie mae dayudac,
00235-a
complainant

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Authorization for Bank to Release Information Form

Dear Sir or Madam:

You are hereby authorized and directed to release to ______________ at ______________ all banking information requested by him relating to my Account No. ______________, on this one time basis only.

We would consider it a great courtesy if you would respond promptly to their inquiries.

This shall be your good and sufficient authority for doing so.

With best regards,

_________________________________
Authorized Signer on Account

cc Inquirer listed above
## Table 8.3 Questions about Disputed Documents

**Handwriting:**
1. Is the signature genuine?
2. Is the continued writing genuine?
3. Was the writing disguised?
4. Who did any unknown writing?
5. Can any handwriting that exists be identified?

**Printing:**
1. What make and model of printer was used? During what years was the particular make and model used?
2. Can the individual printer that was used be identified?
3. Was the printing done before or after any handwriting and/or signatures?
4. Was the printing done on the date of the document or later?
5. Who did the actual printing?

**Alterations and additions:**
1. Was the document altered in any way or added to at a later time? Were pages added, parts torn or cut off, pages purposely wrinkled or stained, etc.?
2. What original date or matter was altered or added to?

**Age:**
1. Is the age of the document in accordance with its date?
2. How old are the paper, the printing, the ink, the seal, etc.?

**Copies:**
1. Are the photocopies or photostatic reproductions copies of other documents?
2. What type of copy machine was used? What brand?
3. Can the individual copier be identified?
4. In what year was the particular make and model used? Produced?

**Other:**
1. Can machine-printed matter be identified?
2. Can the check writer, the adding machine, the addressograph machine, or other machine be identified?
3. Was the envelope resealed?
4. Can the stapler, glue, pin, clip, or other fastener be identified?

**Characteristics of handwriting:**
1. The basic movement of the handwriting—clockwise, counterclockwise, and straight-line—indicating direction, curvature, shapes, and slopes of the writing motions.
2. Slant—forward, backward, or in between.

6. Can any handwritten numerals be identified?
7. Which was written first, the signature or the writing above it?
8. Can the forger be identified?
9. Is the handwriting or signature consistent with the date of the document?

6. Was the printing on the document all done at one time, or was some of it added at a later time? How much was added later?
7. Were copies made using the original document?
8. Are the copies genuine?
9. Can the printer or the document be identified from a carbon tape?

3. When was the alteration or addition made?
4. Who made the alteration or addition?
5. Has the photograph on an ID card or other ID document been removed and replaced with another?

3. Is there evidence of the manner or location in which the document was kept?

5. Was any portion of the copy not on the original document? Was it pasted up?
6. Is there any indication that pages are missing on the copies that were part of the original?
7. Can the copy be traced to and identified as the particular original document that was its source?

5. Is the printed document genuine or counterfeit? If counterfeit, can the original document used as a reproduction source be determined?
6. What processes were used to print the counterfeit document?
7. Could the printing source or counterfeiter be identified if located?

3. The manner in which letters with loops are curved, and the size, shape, and proportion of the loops.
4. Peculiarities in the approach strokes and the upward strokes in the first letter of a word and in capital letters.
Thank you