

Planning Investigations & Evidence Gathering Techniques



Agenda

- a) Forensic science
- b) Evidence handling



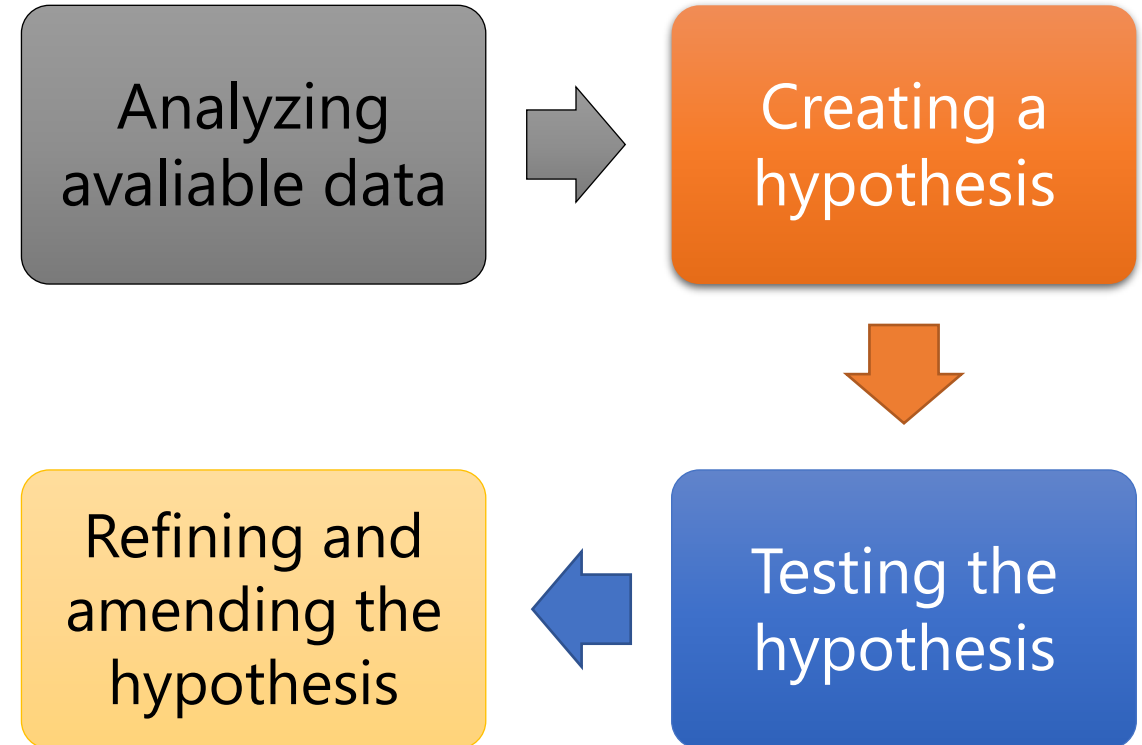
Fraud Investigations

Refers to the process of resolving allegations of fraud from inception to disposition.

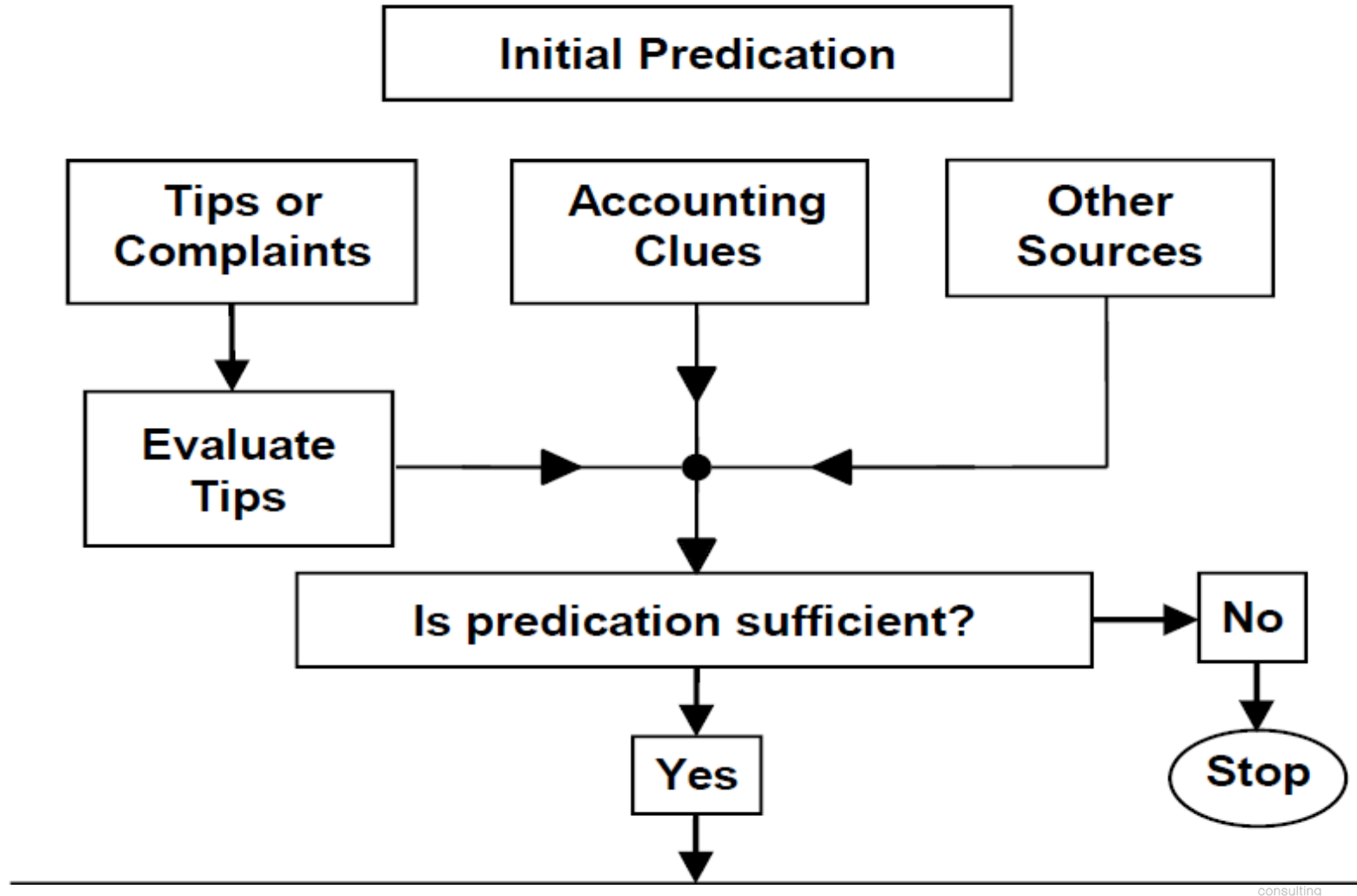


Fraud Examination theory

- It provides that when conducting investigations into allegations or signs of fraud the examiner needs to make a hypothesis (or theory) of what might have occurred based on the known facts as follows;



Fraud examination theory



Fraud examination theory

Yes

(Stop)

Develop fraud theory:

- Who might be involved?
- What might have happened?
- Why might the allegation be true?
- Where are the possible concealment places or methods?
- When did this take place (past or present)?
- How is the fraud being perpetrated?

Determine where the evidence is likely to be:

- On-book versus off-book
- Internal or external
- Potential witnesses

What evidence is necessary to prove intent?

- Number of occurrences
- Other areas of impropriety
- Witnesses

Fraud examination theory

Revise fraud theory.

Prepare chart linking people and evidence.

Determine possible defenses to allegations.

Is evidence sufficient to proceed?

No

Yes

Discontinue

Complete the investigation through:

- Interviews
- Document examination
- Observations

Principles of Forensic Science

There are seven (7) basic principles of forensics sciences

- i. Law of Individuality
- ii. Principle of Exchange
- iii. Law of progressive change
- iv. Law of comparison
- v. Law of Analysis
- vi. Law of Probability
- vii. Law of circumstantial facts



Categories of Forensic Science

- A. Criminal Identification
 - i. Scenes of Crime
 - ii. Photography
 - iii. Finger Prints
- B. Questioned Documents
- C. Ballistics
- D. Computer crimes (Digital forensics)
- E. Chemical, Biology, Radiology & Nuclear e- Analysis
 - i. Toxicology
 - ii. Explosives and Residues
 - iii. Foods Water, Drugs & Environment
 - iv. DNA & Serology



Types of digital forensic tools

A. Computer forensic tools

- i. Encase
- ii. SANS Toolkit
- iii. FTK (forensic tool kit)
- iv. IEF (Internet Evidence Finder)
- v. Wire shark/Caine and Able



Types of digital forensic tools

- Mobile device forensic tools
- Mobile phones come with a diverse range of connectors, the hardware devices support a number of different cables and perform the same role as a write blocker in computer devices



Methodology of digital forensics

- i. Seizure
- ii. Documentation of seized items
- iii. Delivery to the laboratory
- iv. Assigning of case to Investigating officer
- v. Forensic process flow
- vi. Generation of forensic report



Methodology of digital forensics

A. Forensic process flow

- i. Documentation and photographing of device (Inside and outside)
- ii. Imaging
- iii. Processing of information
- iv. Analysis
- v. Extraction of relevant information

Role of SOCO (Scenes of Crime Officer)

- i. Identifying and Gathering Evidence
- ii. Documenting Evidence
- iii. Preserving Evidence
- iv. Testing Evidence for authenticity and validity
- v. Reporting findings in courts of law (Testifying)

Handling of Exhibits

The main concept behind correct evidence handling is that the item recovered is the same as that produced in the courtroom. The usual term applied to such handlings is "chain of custody". The term denotes the links in the handling of the exhibit in question.

In any fraud investigation, it is the responsibility of the law enforcement and prosecuting agencies to compile the case against the suspect.

The standard of proof required to convict is beyond reasonable doubt

Handling of Exhibits

Chain of custody.

Refers to the chronological documentation or paper trail that records the sequence of custody, control, transfer, analysis, and disposition of physical or electronic evidence

Evidence management is the administration and control of evidence related to an event so that it can be used to prove the circumstances of the event.

Handling of exhibits

- i. Package computer hardware & other storage devices.
- ii. Check to see if the original packaging is available.
- iii. Use non-static packing & Cushion material
- iv. Preserve other forms of evidence, too
- v. Latent prints
- vi. DNA
- vii. Trace evidence



Handling of exhibits

- Document the scene you are leaving
 - Photograph
 - Videotape
- You should have “before” and “after” documentation
 - This Counters accusations of “trashing the place”



Our *values* for your success!

Thank you!



We take pride in doing the **right thing**, rather than what is right for **the profitability** of SCL.