

Critical Investigation Issues for Compliance Professionals

13 July 2018

Gerry Zack, CCEP, CFE
Incoming CEO
SCCE & HCCA
Minneapolis, MN
gerry.zack@corporatecompliance.org

David Rule, CFE, CFC, EnCE, CISA
Director Xione Group Pte Ltd
davidr@xionegroup.com



Today's Agenda

1. Initial phase of an investigation
 - Scoping and risk assessment
 - Key steps in commencing an investigation
2. Collection and use of data and other digital evidence
 - Types of digital evidence
 - Methods and tools used for collection
 - Use of forensic analytics
3. Minimizing bias risks
 - How implicit bias affects investigations
 - Actions to take to minimize bias risk



PART 1

The Initial Stages of an Investigation



Scope Considerations

- How specific/vague is the allegation or concern/red flag?
- Could additional individuals be involved?
 - Internal
 - Third parties (individuals or organizations)
- What other acts could the subject(s) have perpetrated?
 - Very common that if someone is engaged in wrongdoing, there are multiple schemes/acts
 - Perform role-based risk assessment
- How far back might the activity have been occurring?
- Are violations/losses potentially still occurring?
- How likely is it that other individuals may have witnessed the alleged wrongdoing?



What Triggered the Investigation?

- Allegation/tip
 - Anonymous v. known
 - Internal v. third party
 - Level of specificity
- Internal audit
- Other auditing/monitoring activity
- External process (government auditors, etc)
- How serious is the alleged or possible act?
 - Escalation issues?



Allegations

- Perform preliminary assessment to determine whether an investigation is warranted
- Consider whether it is necessary to perform without subject's knowledge Covert v Overt
- Data analytics
 - Consider this – If the allegation is true, what impact would the act have on electronic data? How would the digital trail of the act differ from that of a valid transaction or act?
 - Data analytics is often the most practical method of establishing credibility of an allegation
- Document analysis
 - Look for red flags, characteristics that support or refute the allegation



What Next?

- What type of compliance issue?
 - Employee theft, fraud, bribery, privacy, data breach, environmental, etc
- What level within the organization is implicated?
- Possible next steps:
 - If there is an allegation, assess credibility
 - Notify/engage legal counsel
 - Assemble team; Determine who investigates
 - Is subject currently employed with us?
 - Consider whether it is necessary to investigate without subject's knowledge



Scope Considerations

- How specific/vague is the allegation or concern/red flag?
- Could additional individuals be involved?
 - Internal
 - Third parties (individuals or organizations)
- What other acts could the subject(s) have perpetrated?
 - Very common that if someone is engaged in wrongdoing, there are multiple schemes/acts
 - Perform role-based risk assessment
- How far back might the activity have been occurring?
- Are violations/losses potentially still occurring?
- How likely is it that other individuals may have witnessed the alleged wrongdoing?



Identifying Records and Data Needed

- Develop process map of the transaction/activity cycle(s) involved in the target of the investigation
 - MUST understand how the transaction cycle operates in order to identify relevant records/people needed
- Based on this process map, identify:
 - People involved in each step
 - Internal controls
 - Preventive
 - Detective
 - Documents and forms
 - Received
 - Created
 - Electronic records
 - Systems and databases affected



Identifying Records and Data Needed

- **Example** – For corruption in the purchasing cycle:
 - Identification and documentation of need
 - Development of specifications, if necessary
 - Solicitation of bids or negotiation with alternative vendors
 - Selection of vendor
 - Contract, statement(s) of work, etc
 - Purchase orders
 - Change orders, subcontracts, etc
 - Receipt of goods or services
 - Submission, review and approval of invoice
 - Payment
- In addition, what other internal records would we expect along the way? E-mails, electronic approvals, etc.



PART 2

Use of Digital Evidence And Data Analytics



Preserving/Collecting Electronic Evidence

- If internal investigation prompted by regulatory agency or whistleblower complaint, legal counsel should assist organization to issue a document hold notice
 - identify relevant records
 - identify relevant record custodians
- Negative implications of information being lost/altered
- ESI (electronically stored information):
 - What ESI is relevant?
 - What format is it in?
 - Where is relevant ESI stored?
 - How do we ensure we collect it all?
 - Proper collection (use forensically recognized technologies)



Uses of Data Analytics & Forensic Tools

- To assess credibility of an allegation or concern
- To determine which documents and records should be inspected
- To identify additional individuals who may have been involved
- To prioritize or identify suspect transactions
- To determine where internal controls broke down or were intentionally violated
- To assess whether noncompliance was intentional or accidental
- To estimate the full extent of the problem



Data Analytics to Assess the Allegation

- Data analytics can be used to assess the credibility of an allegation, helping to determine whether to launch an investigation
- If the allegation is true:
 - What data would be created or touched in the processes involved
 - How would characteristics of the data associated with noncompliant activities differ from data involved with compliant activities
 - Perform data analytics to see if these characteristics are present, consistent with noncompliant activity
 - Data analytics does not prove fraud, corruption, noncompliance, etc; But it can provide evidence of characteristics that are consistent with such improper activity



Framework for Using Data Analytics

- Which data is affected, and how, in each stage of a compliance issue:
 - Preventive control that should have prevented the act
 - Perpetration/violation - the act itself
 - Concealment – often separate step(s) from the act itself
 - Detective control that should have detected the act
 - Effects of the act (if any)



Forensic tools

- What forensic tools should I or my investigator use ?
- Can we recover deleted documents ?
- Now that we have all the data how do I search through all those IM/Chat/Webmail ?
- How do I take this to court ?



Forensic tools

- Forensic imaging:
 - EnCase – Guidance software
 - Forensic Tool Kit – Access Data
 - X Ways Forensics – X Ways
 - BlackBox Software – Mac applications
 - Harvester – Cloud based investigations

- Hand Held Device seizure:
 - XRY – Mobile Forensics Tools
 - Oxygen – Oxygen Forensics Inc
 - Paraben – Paraben Forensics



Recovered documents

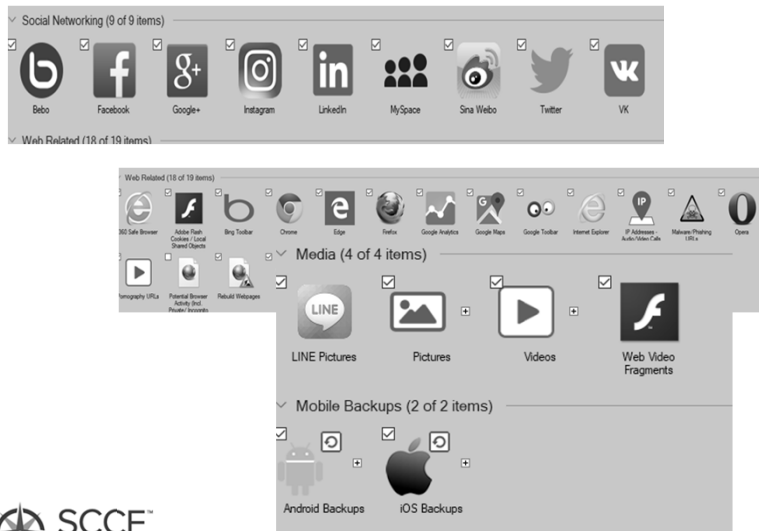
ID	Name	Is Deleted
1	Slitend	
2	System Volume Information	
3	SAFE	
4	Slipfile	
5	1 Prioritization	None 09/07/18 14:09:11
6	2 Search for Internet artifacts	09/07/18 14:09:11
7	3 Create thumbnail cache	09/07/18 14:09:11
8	4 Generate MDS hash	09/07/18 14:09:11
9	5 Generate SHA1 hash	09/07/18 14:09:11
10	6 Verify file signatures	09/07/18 14:09:11
11	7 Identify protected files	09/07/18 14:09:11
12	8 PST	09/07/18 14:09:11
13	9 NSF	09/07/18 14:09:11
14	10 DBX	09/07/18 14:09:11
15	11 EDB	09/07/18 14:09:11
16	12 AOL	09/07/18 14:09:11
17	13 MBOX	09/07/18 14:09:11
18	14 EMLX	09/07/18 14:09:11
19	15 Mount archive files	09/07/18 14:09:11
20	16 Keyword Search	09/07/18 14:09:11
21	17 System Info Parser	09/07/18 14:09:11
22	18 IM Parser	09/07/18 14:09:11
23	19 Windows Event Log Parser	09/07/18 14:09:11
24	20 Windows Artifact Parser	09/07/18 14:09:11



Internet Artifacts



Internet Artifacts




Internet Artifacts

Classifieds URLs 2025

<ul style="list-style-type: none"> Cloud Services URLs Facebook URLs Google Analytics First Google Analytics Refe Google Analytics Sest Google Analytics URL Google Maps Queries Google Searches Identifiers Malware/Phishing UR Parsed Search Querie Pornography URLs Rebuilt Webpages Shipping Site URLs Social Media URLs Tax Site URLs Torrent URLs 	<ul style="list-style-type: none"> Chat AIM Chat Message Second Life Skype Accounts Skype Calls Skype Chat Messa Skype Chatasync M Skype Contacts Skype IP Adresse Skype Media Cach Skype Voicemails Yahoo! Non-Encryp 	<ul style="list-style-type: none"> Documents Excel Documents 441 PDF Documents PowerPoint Documer RTF Documents Text Documents Word Documents Email EML(X) Files Gmail Fragments Gmail Webmail Outlook Appointment Outlook Contacts Outlook Emails Outlook Journals Outlook Notes
--	--	---

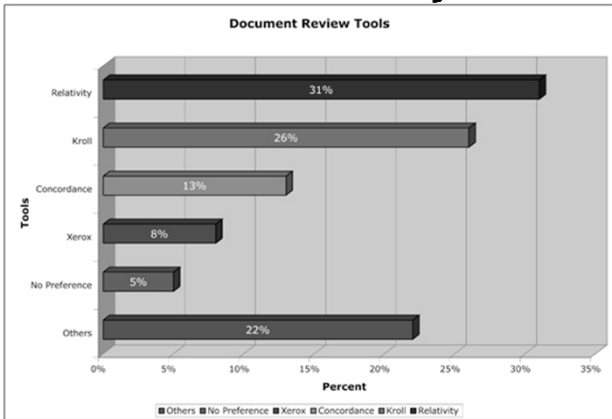
<ul style="list-style-type: none"> Media Carved Video 1024 Facebook Pictures 42 Pictures 192381 Videos 540 Web Video Fragments 2 	<ul style="list-style-type: none"> Peer to Peer Ares Search Keywords 12 	<ul style="list-style-type: none"> Social Networking Facebook Chat 93 Facebook Pages 3 Facebook Status Updates/Wall Po... 1
--	---	---



SCCE
Society of Corporate Compliance and Ethics


Document Review Platform eDiscovery

Document Review Tools



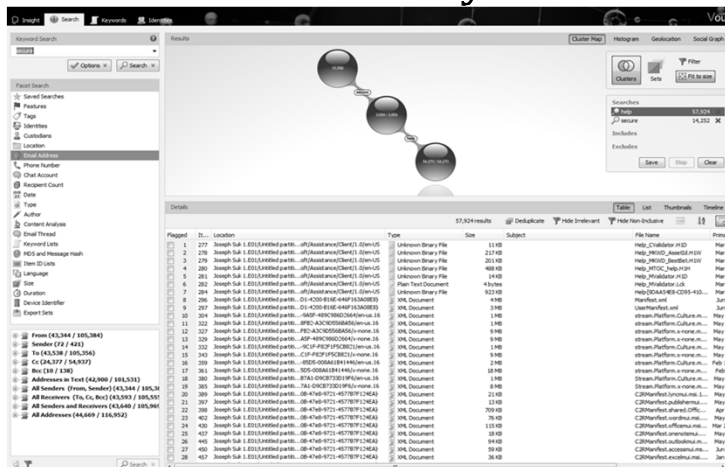
Tool	Percentage
Relativity	31%
Kroil	26%
Concordance	13%
Xerox	8%
No Preference	5%
Others	22%

Contract attorneys pick...

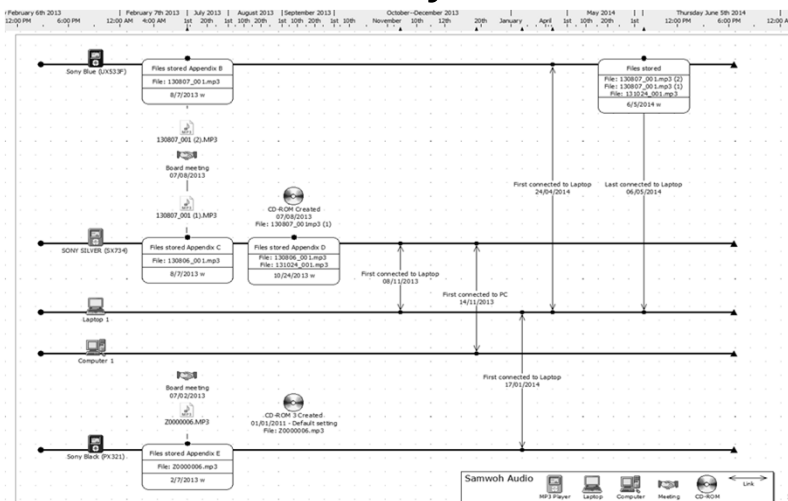


SCCE
Society of Corporate Compliance and Ethics

Document Review Platform eDiscovery



i2 Link Analysis Chart



PART 3

Issues of Implicit Bias



Bias

- The inclination or tendency to present or hold a partial perspective that is preconceived or unreasoned.
- Conscious or
- Unconscious

Can lead to unfair treatment of people and inaccurate interpretations of information in an investigation

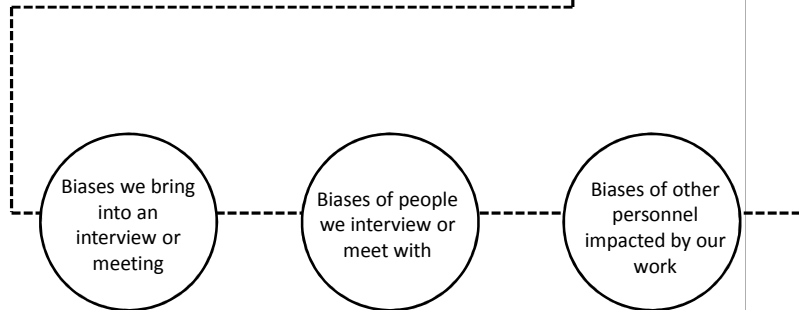


Unconscious (Implicit) Bias

- Unconscious (implicit) biases are those that we are not aware of at the time they are impacting us (we might become aware of them later)
- Science says we have more of these unconscious biases than we'd care to admit
- And numerous real-life cases provide further evidence of the existence and effects of implicit bias
- Unconscious bias is just one category of numerous unconscious behaviors we experience



Where Bias Impacts Investigations



How Bias Impacts Investigations

- Mistakes in planning or designing our procedures
- Improperly performing procedures
- Reaching incorrect conclusions
- Improper review of our own work by supervisors
- Failures in applying professional scepticism



Example Impact of Bias on an Investigation

- Biases regarding the guilt or innocence of someone alleged to have committed an offense
- Bias regarding acceptance of representations made by management or personnel
- Biases impacting our determination regarding scope of work
- Bias with respect to our initial hypothesis of what happened and how
- Biases in how we perform interviews and in how we interpret results of interviews
- Bias in how we interpret data



Categories of Bias

- Affinity bias
- Priming
- Confirmation bias
- Bounded awareness
- Anchoring
- Incrementalism
- Availability bias
- Groupthink



Affinity Bias

- There is a natural tendency to favor those people with whom we are most comfortable
- Often based on:
 - Age
 - Race
 - Religion
 - Education
 - Cultural background
 - Gender
 - Geographic location or origins
 - Common Interests or memberships



Priming

- An implicit memory effect in which exposure to one stimulus influences a response to another stimulus
- Differentiated from purely implicit forms of bias because implicit biases are formed entirely internally, while primed biases are the result of external influences



Confirmation Bias

- The natural tendency to seek out or interpret information in a manner that supports the existing hypothesis, belief, or expectation
- Satisficing is a related term that refers to selecting the first hypothesis that appears to be good enough, rather than exploring all alternatives to find the best one



Manifestations of Confirmation Bias

1. Only considering , or placing exclusive reliance on, evidence that supports an existing hypothesis
2. Interpreting evidence or information in a manner that supports an existing hypothesis
3. Only registering information during an interview that supports an existing hypothesis

The hypothesis could be the guilt or innocence of an individual in an investigation, the methods used to perpetrate a fraud, an assertion or explanation provided by management during an investigation, or assumptions used in preparing a valuation.



Bounded Awareness

- An unconscious bias in which a someone fails to seek, see, use, or share relevant information or records
- Relationship between confirmation bias and bounded awareness - as more information is gathered and interpreted as support for one hypothesis (due to confirmation bias), the more inclined the individual is to stop searching for information that could contradict that hypothesis, or to ignore available, contradictory information
- In other words, the professional stops investigating or auditing



Anchoring

- Anchoring bias occurs when someone *anchors*—or fixates—on a preliminary estimate related to a case, and becomes convinced that the figure is correct. For example:
- An auditor is presented with a set of financial statements from a client, and the auditor anchors on the figures in the statements.
- An investigator anchors onto a preliminary estimate of an amount embezzled from a company, or an amount that a fraudster admits to stealing.
- Anchoring is the thinking that if these preliminary figures are not correct, they can't be off by a substantial amount, can they?



Incrementalism

- Focusing on a narrow range of alternatives representing marginal change without considering the need for dramatic change from the existing position. Closely related to anchoring.
- The professional only allows himself to make incremental adjustments to the amount he anchored to, even if all the evidence gathered indicates that the preliminary amount is significantly incorrect.



Availability Bias

- The inclination to make decisions based on information that is most readily available.
- The more difficult information is to obtain, the less likely individuals are to bother with it.
- Another manifestation of availability bias, and one that is similar to bounded awareness, is the failure or inability to identify entirely new or different hypotheses



Groupthink

- A phenomenon in which the desire for harmony or conformity in a group results in an irrational or dysfunctional decision-making outcome
- There is a conscious and unconscious element to groupthink
- Also known as *consensus* - members of a group attempt to minimize conflict and reach a decision without proper consideration of alternative hypotheses or views
- Outside counsel may serve as counter-weight



Becoming Unbiased

- It is virtually impossible to start out unbiased, let alone maintain an unbiased mindset throughout an engagement
- Instead, professionals must take actions to *become unbiased*—to identify and counter the effects of their own biases:
 - Acknowledge that all individuals bring implicit biases with them every day and are susceptible to the effects of priming
 - Take specific actions to eliminate (or at least minimize the effects of) their inherent biases, including priming.
- Use of outside legal counsel as a component of monitoring bias



Avoid Jumping to Conclusions

- This is the most obvious step, but one of the most difficult
- Attempt not to focus on a single theory/conclusion – but how?
- Two methods for professionals to avoid becoming fixated on a single hypothesis are:
 1. Actively challenge the existing hypothesis.
 2. Develop alternative hypotheses.



Actively Challenging the Hypothesis

When actively challenging their own hypotheses, investigators should

1. Force themselves to:
 - a. Identify other explanations for the suspicious behavior
 - b. Consider different suspects
 - c. Develop alternate hypotheses
2. Consider writing down these alternatives and challenges.
3. Use a devil's advocate
4. Consult someone not previously involved in the investigation (much like the quality-review process for an audit)
5. Take a fresh look—essentially start over with some of the very first pieces of information
6. Consider what the absence of information could mean (e.g., if this really is fraud or noncompliance, what trail or clues should be present that are not?)



Overcoming Bias in Interviews

- Both participants in an interview bring their unconscious biases into an interview, creating potential for a severely compromised interview
- Interviews are designed to provide a flow of information. Nothing can cut off that flow more than unconscious biases that make either or both individuals uncomfortable—even if that discomfort is not consciously obvious



Overcoming Bias in Interviews

- Focus on gathering facts or on the other goals of the interview, and on establishing rapport with the person being interviewed.
- All people want to be treated with respect, and most people genuinely want to help other people.
- Make a conscious effort to identify things about the interviewee that he can relate to.
- Be aware of cultural differences.
- Half the battle is the interviewer reminding himself of the necessity of overcoming these differences to establish an effective interview process.



A3

Additional Steps to Minimizing Bias

1. Consider all relevant records and information, not just ones that support an assertion or would most quickly close out a case. Always think “what else should I look at?”
2. In an investigation, consider all possible non-violation-related explanations for suspicious evidence and data anomalies. Write them down—this really does help.
3. Extend the scope of interviews beyond those who can corroborate facts that support the hypothesis. Include others who might have useful information that fits a different hypothesis.
4. Include all relevant findings in the report, including information that counters the hypothesis



Slide 46

A3 Stairstep interaction
Author, 2/16/2015

A4

Additional Steps to Minimizing Bias

5. Use an independent quality-review process.
6. Beware of affinity and other implicit biases in conducting interviews (on the part of both parties) and actively attempt to counter it (e.g., the interviewer can force himself to spend sufficient time interviewing someone who has the potential for triggering a bias).
7. Avoid group interview of multiple employees (GroupThink)
8. Get sufficient sleep.



QUESTIONS ??

Gerry Zack, CCEP, CFE

Incoming CEO

SCCE & HCCA

Tel: +1 952.567.6215

gerry.zack@corporatecompliance.org

David Rule, CFE, CFC, EnCE, CISA

Director

Zione Group Pte Ltd

davidr@xionegroup.com



Slide 47

A4 **Stairstep interaction**
Author, 2/10/2015