Critical Thinking: IA’s Value Proposition

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RISK ADVISORY SERVICES
About Whitley Penn

Established in 1983, Whitley Penn has become a highly distinguished accounting firm by providing exceptional service that reaches far beyond traditional audit, tax, and consulting services.

- 425+ Employees
- 54 Partners
- Offices in Dallas, Fort Worth, Austin, and Houston
- Currently ranked 47th largest firm in the U.S. from Accounting Today
- 5th largest public accounting firm in the Dallas-Fort Worth market
- Named “Best of the Best” accounting firms for the past fifteen years
Agenda

A synopsis of critical thinking
- Conceptual definitions
- The evolution of critical thinking through history
- Six steps for effective application

Professional skepticism
- The skepticism continuum and necessary attributes
- “Why Good Accountants Do Bad Audits”

Critical thinking as a value driver for internal audit
- Strategic alignment & scope
- Designing tests
- Presenting value creation

Open discussion
2017 Internal Audit skills analysis

538 CAEs and Directors surveyed

“For each of the skills listed, please indicate to what degree it is essential to your audit function’s ability to perform its responsibilities.”

*Percentage of those who chose very essential or extremely essential

<table>
<thead>
<tr>
<th>Internal Audit Skills</th>
<th>Importance of Skill*</th>
<th>Need More Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analytical/critical thinking</td>
<td>96%</td>
<td>49%</td>
</tr>
<tr>
<td>Communication skills</td>
<td>95%</td>
<td>45%</td>
</tr>
<tr>
<td>Understanding of professional ethics</td>
<td>79%</td>
<td>4%</td>
</tr>
<tr>
<td>Understanding the audit process</td>
<td>76%</td>
<td>9%</td>
</tr>
<tr>
<td>Persuasion and collaboration</td>
<td>79%</td>
<td>33%</td>
</tr>
<tr>
<td>Business acumen</td>
<td>76%</td>
<td>34%</td>
</tr>
<tr>
<td>Understanding of governance, risk and control</td>
<td>62%</td>
<td>23%</td>
</tr>
<tr>
<td>Understanding of the International Professional Practices Framework (IPPF)</td>
<td>51%</td>
<td>14%</td>
</tr>
<tr>
<td>Industry-specific knowledge</td>
<td>46%</td>
<td>36%</td>
</tr>
<tr>
<td>Process improvement and innovation</td>
<td>48%</td>
<td>33%</td>
</tr>
<tr>
<td>Accounting and finance</td>
<td>45%</td>
<td>11%</td>
</tr>
<tr>
<td>Risk management assurance</td>
<td>46%</td>
<td>18%</td>
</tr>
<tr>
<td>Basic IT knowledge</td>
<td>43%</td>
<td>24%</td>
</tr>
<tr>
<td>Cybersecurity and privacy</td>
<td>33%</td>
<td>52%</td>
</tr>
<tr>
<td>Data mining and analytics</td>
<td>35%</td>
<td>67%</td>
</tr>
<tr>
<td>Fraud auditing</td>
<td>20%</td>
<td>23%</td>
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Critical thinking definition

“Critical thinking is thinking about your thinking while you’re thinking in order to make your thinking better. Critical thinking is not just thinking, but thinking which demands self-improvement.”

Critical thinking is the ability to apply reason and logic to new or unfamiliar ideas, opinions, and situations. Thinking critically involves seeing things in an open-minded way and examining an idea or concept from as many angles as possible. It involves purposeful and reflective judgment about whether there is adequate justification to accept a conclusion as true. In determining the suitability of a conclusion, it gives due consideration to evidence, context of judgment, relevant criteria and standards for good judgment, and applicable theoretical constructs for understanding the nature of the problem at hand.
A history of critical thinking

Socrates (469-399 BCE)

“I know that I know nothing.” - From Plato’s Apology

The Socratic method is a form of cooperative argumentative dialogue designed to stimulate critical thinking and challenge ideas and underlying presumptions. It is a method of hypothesis elimination by scrutinizing contradictions in belief through tests of logic and fact.

Thomas Aquinas (1225-1274)

“Most men seem to live according to sense rather than reason.”

A proponent of systematic critical thinking, to ensure that his thinking met the test of critical thought, Aquinas systematically stated, considered, and answered all criticisms of his ideas as a necessary stage in developing them. Critical thinking is a disciplined art.
A history of critical thinking

Francis Bacon (1561-1626)

“If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties.” - From Bacon’s The Advancement of Learning

Bacon argued for the importance of studying the world empirically, through which he placed an emphasis on the information gathering process. He contended that most people, if left to their own devices, develop bad habits of thought.

Rene Descartes (1596-1650)

“If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things.”

Descartes developed a method of critical thought based on the principle of systematic doubt. Every part of thinking, he argued, should be questioned, doubted, and tested.
A history of critical thinking

William Graham Sumner (1840-1910)

“Criticism is the examination and test of propositions of any kind which are offered for acceptance, in order to find out whether they correspond to reality or not. The critical faculty is a product of education and training. It is a mental habit and power. It is our only guarantee against delusion, deception, superstition, and misapprehension of ourselves and our earthly circumstances.” – From Sumner’s Folkways
Six steps for effective critical thinking

1. Knowledge
2. Comprehension
3. Application
4. Analyze
5. Synthesis
6. Take Action
Professional skepticism definition

Professional skepticism is an **attitude** that includes a **questioning mind and a critical assessment** of the audit evidence. The auditor should conduct the engagement with a mindset that recognizes the possibility that fraud or exceptions could be present, **regardless of any past experience** with the entity and regardless of the auditor’s belief about management’s honesty and integrity. In exercising professional skepticism in gathering and evaluating evidence, the auditor **should not be satisfied with less-than-persuasive evidence**.

Comprised of three elements: **Auditor attributes, mindset, and actions**

Most problems auditors face from litigation do not result from a failure to apply necessary audit procedures – or to apply them properly. **The problems usually stem from the way auditors react – or don’t react – to information at hand** when they accept or retain clients, or **when auditors evaluate evidence developed during their examinations**.
Attributes of skepticism

Knowledge and reasoning
- Technical and auditing skills
- Industry knowledge and experience
- Objective and rational thinking

Interpersonal understanding
- Considers human biases and multiple points of view when evaluating evidence
- Effectively communicating with others, regardless of their position or power
- Probing, questioning others, and dealing with conflict

Autonomy and self-esteem
- The courage to stand up to pressures of others and draw one’s own conclusions

Accepting
Optimistic
Disinterested

Open-Minded
Realistic
Curious

Critical of Others
Pessimistic
Suspicious
In this ground-breaking article, the author states that it is a basic theory that we all have self-interest, a desire for achievement and success.

We see ourselves as knowledgeable in our own areas of interest, and we tend to interpret and apply our prior experiences to new ones.

We risk discounting facts that contradict our conclusions and embracing facts that support our viewpoints.

### Aspects that “amplify unconscious bias”

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<thead>
<tr>
<th>Aspect</th>
<th>Description</th>
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<tr>
<td>Familiarity</td>
<td>That auditors are less willing to find discrediting information on individuals or organizations that they know well.</td>
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<tr>
<td>Ambiguity</td>
<td>People tend to reach self-serving conclusions whenever ambiguity surrounds a piece of evidence, particularly when estimation or subjectivity is involved.</td>
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<tr>
<td>Escalation</td>
<td>Minor indiscretions and errors created by unconscious bias may evolve into conscious corruption.</td>
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Another view of critical thinking
When audit has become a “partner” to the business and is requested to take an active role in transformational change.

Analyze a process or risk that may have been considered “fundamental” in the past and provide a new perspective.

Bring in-depth knowledge of the industry and current market trends or leading practices to opportunities for improvement.

An understanding of how business processes, risk, controls, and underlying applications are related.

The foundational points that drive the audit methodology from planning, process documentation, testing, and reporting.
Critical thinking audit phases

Alignment of the audit area with the strategic initiatives or long-term vision for the audit area.

Planning step to examine the audit on multiple levels for value creation:
- Technology
- Efficiency
- Up/downstream processes

Audit results must match the strategic alignment and drive value:
- Cost recovery/Hours efficiency
- New growth opportunity
- Risk reduction
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<tbody>
<tr>
<td><strong>Section 1 - Planning &amp; Administration</strong></td>
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<tr>
<td><strong>A</strong></td>
<td><strong>Document Project Team:</strong></td>
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<tr>
<td></td>
<td><strong>Lead Auditor:</strong></td>
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<tr>
<td></td>
<td><strong>Staff Auditors:</strong></td>
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<tr>
<td><strong>B</strong></td>
<td><strong>Prepare the Work Program and create workpaper templates</strong></td>
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<td></td>
<td>1. Conduct a brainstorming session with the IA team in order to facilitate ideas and determine appropriate procedures for the work program. Consider the following:</td>
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<td></td>
<td>(a) What are the significant risks present in the audit area? Consider operational, financial, compliance, and fraud risk.</td>
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<td></td>
<td>(b) Possible uses of technology based audit techniques, specifically the opportunity for implementing continuous monitoring tools.</td>
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<td></td>
<td>(c) How does this audit support the Company's strategic objectives? Can any test steps be added or altered to more directly support the Company's strategy?</td>
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<td></td>
<td>2. Review internal documentation of past audits in the area including audit work programs, work papers, and reports to determine appropriate procedures for the work program.</td>
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<tr>
<td></td>
<td>(a) Do the audit steps in prior engagements support the Company's current strategy? If not, what needs to be changed?</td>
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<tr>
<td></td>
<td>(b) Are any threats present that may introduce bias in our procedures? Are current safeguards in place adequate?</td>
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<td></td>
<td>(c) Identify the assumptions used in the work program and challenge the appropriateness of the assumptions.</td>
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<td>(d) Are the sources of audit evidence the best available? Is there a better method for collecting the audit evidence?</td>
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<td>(e) Based on the risks identified for the audit area, are we using the correct level of professional skepticism? Determine our approach and document reasoning (i.e. neutral, presumptive doubt, significant doubt)</td>
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<td>(f) Review prior year test steps and consider if new areas should be scoped in or alternative approaches taken.</td>
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<tr>
<td><strong>C</strong></td>
<td><strong>Prepare an estimated time budget</strong></td>
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<tr>
<td><strong>D</strong></td>
<td><strong>Create &amp; Distribute Audit Notification to appropriate individuals</strong></td>
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</tbody>
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Test design consideration

- Re-perform
- Confirmation
- Vouch/Trace
- Analytic Review
- Observe
- Corroborate/Review
- Documents
- Interview

Axes:
- Relative Reliability Required
- Relative Time Required

Quadrants:
- Low Low
- High Low
- Low High
- High High
Conducting interviews

**Open-ended questions/high-gain questions**

*Avoid leading questions*

Take notes – but use caution

◦ Consider a second auditor to observe and take notes

Focus and eye contact

Avoid reading questions; try to engage in a conversation

Engaged posture/active listening

Be willing/able to change direction; flip questions

Provide a [hypothetical situation](#) for auditee to take you through

Paraphrase to confirm understanding

Don’t forget perceptive listening

...and follow-up questions
Evaluating audit evidence

The auditor’s thought process when encountering an unexpected result...

What have we seen like this?
Should we accept the result?
What will be the result of accepting?
How does this compare with previous experience?
What is your opinion based on the above?
Is there something to report?...To whom?

Potential Options

- Report the situation
- Expand the examination
- Inquire for further explanation
- Accept and close
# Quantify value drivers

## Value Category

<table>
<thead>
<tr>
<th>Engagement</th>
<th>Strategic Objective</th>
<th>Risk</th>
<th>Value / Significance of Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Management</td>
<td>Operational Efficiency w/ Best-in-class Quality</td>
<td>Financial &amp; Operational</td>
<td>Identified 12,000 hours of process efficiency by recommending a redesign of procedures and automation of inventory cost methods. Converted 8 key controls from manual to automated controls.</td>
</tr>
<tr>
<td>Procure to Pay</td>
<td>Drive Profitability</td>
<td>Financial &amp; Operational</td>
<td>Identified approximately $624,000 in confirmed duplicate payments and seven root cause process issues related to these direct findings.</td>
</tr>
<tr>
<td>Talent Management</td>
<td>Develop Our People</td>
<td>Human Capital Regulatory &amp; Legal Compliance</td>
<td>Identified gaps in training for key employees that increases compliance risk. Non-compliance cost estimates are approximately $28,000 per employee.</td>
</tr>
</tbody>
</table>
The value proposition

“They by applying critical thinking in everything it does, internal audit drives value for the business by delivering quantifiable results that help the business succeed. Characterized by a culture of challenge, inquisition, and continuous improvement, internal audit is a trusted business adviser that furthers strategic initiatives and protects stakeholders.”

Measures of success:

The business immediately adjusts to internal audit results
The business begins to implement continuous monitoring based on internal audit techniques
Business leaders and stakeholders request internal audit involvement
Company management has requested a business process improvement engagement regarding its accounts payable function. The Company has experienced complaints from vendors due to late payments. Meanwhile, the AP Supervisor insists that the department is overworked and needs to hire more people. During the engagement, internal audit has discovered that Company personnel continually override the invoice approval workflow, the number of three-way match exceptions are well above industry standards, and key performance indicators are not defined, tracked, or reviewed. What is the best course of action?

A. Create process maps documenting the current-state flow, bottlenecks, and control gaps.
B. Perform inquiry with process owners to determine pain points. Validate through discussion with management.
C. Perform data analytics on invoice processing to determine the root cause of deviations. Apply IT application control testing and user access testing to identify how workflow approval controls are circumvented. Benchmark 3-way match rules against industry standards to determine the correlation of exceptions to upstream requirements defined by Purchasing/Materials Management.
D. Perform tests of controls to determine whether controls are operating effectively. Evaluate the rate of deviation based on test results and determine if a correlation to problems identified by management exists.
Open discussion

You are wrapping up testing for a large payroll internal audit that is being conducted out of town. Your last test is to vouch a sample of individual payroll disbursements back to the underlying approved pay rates in the HR system to confirm the amounts paid to employees are accurate and valid. In your sample, you find a few examples where individuals with the same pay grade are paid significantly different amounts. However, all of the pay amounts you vouch agree to the underlying approved pay rate in the HR system. What is the best course of action?

A. You complete your test with ‘no findings’ as the payments agreed to the approved pay rates.
B. You expand your testing to see how large the cost disparity is. Based on the results, you evaluate whether there is a violation of Company policy through inquiry of management, inspection of policy documents, and consultation with the CAE.
C. You talk to the payroll manager who explains that the pay amounts vary based on the length of employee tenure, and this is common. You document your interview and conclusions and submit to the IA lead for w/p review.
D. You complete your initial test with ‘no findings’ as the payments agreed to the pay rates. But even though it wasn’t ‘in scope’, you add a new finding to the report on the different amounts paid to employees for the same or similar work.

Any other actions you would suggest?
Any concerns with the test design?
Questions?