



Agenda Items 10 & 11

Technology-Related Discussions:

1. ASB Technology Working Group and Blockchain Education
2. ASB and ASEC Virtual Meeting

Presentation at the July ASB 2022 Meeting

ASB Technology Working Group

ASB's Technology Working Group (TWG)

- Chaired by ASB member Samantha Bowling
- Includes other ASB members Kathy Healy, Chris Rogers, and Bob Harris
- Other members: Dan Balla, Margaret Christ, Sara Watson, Erin Mackler, and former ASB member Brad Ames
- Staffed by Brian Wilson
- Note: TWG represents firms of various sizes, preparers, academics, and internal audit



What do we mean by Technology and the Audit?

From the ASB's Strategic 2021-2025 Strategic Plan

- Advancements in, and use of, technology in the audit
- Rapid developments in technologies are having a profound effect on audit and assurance engagements, including the use of automated tools and techniques and changes in how engagement teams are structured and interact
- The increasing use of new and innovative technologies by companies, and by practitioners in performing engagements, has increased the need for the ASB to monitor the development and use of such technologies, including the shift to remote work, and consider whether our standards remain fit for purpose in supporting their use.
- In addition, new and emerging service offerings by firms create the need for the ASB to evaluate whether appropriate standards and guidance are in place for the acceptance and performance of these services

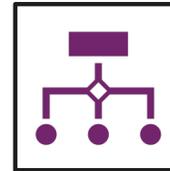
Technology Working Group Objectives



Continuously evaluate technology's effect on the audit and attestation process and timely respond with appropriate standards or guidance



Innovate through technology and enhance audit quality through awareness and education (JOA, Blogs, Seminars, etc.)



Work with Assurance Services Executive Committee (ASEC), the International Auditing and Assurance Standards Board (IAASB) and others to identify and monitor relevant technology trends

The objectives of the TWG, are based on the technology-related initiatives and actions in the ASB's 2021-2025 Strategic plan

The TWG believes that it should be the primary means to educate the ASB and support the ASB's efforts to innovate audit and assurance services through technology

Blockchain Education

Blockchain Education

- Delivered by Di Krupica
- Refer to separate slide deck
- Background resources (for reference only)

ASB Technology Working Group (resume)

Recent Activities

- Developing a technology-enabled risk assessment resource to illustrate how technology and audit data analytics can be leveraged in performing risk assessment procedures in accordance with SAS 145
- Promoting technology adoption for small to medium size firms:
 - JoA articles
 - Embracing Technology in the Audit (February 2022)
 - Artificial Intelligence is a Game Change for Audits (~Sept 2022)
 - Podcasts (Audit Evolution: Jen Burns and Sue Coffey)
 - June 2022 Engage conference (Samantha Bowling and Sara Lord)
- Developing a technology relationship matrix to capture important organizations impacting technology and the audit



Proposed Near-Term Resources*

Focus: Develop resources to resolve issues in-practice and to promote technology

< 12 months

> 12 months

1. Technology-related risk assessment nonauthoritative resource (in-progress)
2. Nonauthoritative guidance clarifying
 - that an audit procedure can be classified into more than one of the categories simultaneously, and/or have more than one purpose, and that a properly designed ADA may simultaneously identify and address a risk of material misstatements. This could be included in an update to the AICPA Non-authoritative Guide to Audit Data Analytics.
 - that an audit procedure performed at the individual item level could meet the classification of a test of details based on its level of precision, and/or the audit procedure classifications are not an all-inclusive list
3. Nonauthoritative guidance that there is a spectrum of risk to be considered when assessing data reliability and for applying auditor judgment
4. Nonauthoritative guidance to publicize the ADA guide and explain some of the key principles set out in SAS 142 (and SAS 145 on risk assessment, SAS 146 and SQMS 1 on technological resources)
5. Issue a resource to clarify the issues around inconsistency use and definitions of certain foundational technology/ADA terms

1. If auditor is using AI to support the audit, how to explain the appropriateness of the audit evidence
2. If the client is using AI, how to audit the “blackbox” of AI
3. Guidance regarding the auditor’s responsibilities with respect to the resolution of items with attributes that differ from those expected (i.e., notable items or possible misstatements) when using ADAs
4. Create more nonauthoritative examples on using Audit Data Analytics (format and/or location – TBD)

Key Questions for the ASB w/ TWG Recommendations

1. Does the ASB believe that U.S. GAAS is generally compatible with using technology (and ADA) but it needs clarity of how technology (and ADA) can be applied to existing standards? If the answer is no, why?

- The TWG believes that U.S. GAAS sufficiently permits or does not prohibit the use of technology and audit data analytics. Some newer standards (e.g., SAS 145, 142) contemplate them. More technology updates to standards have a diminishing return given technological and digital obsolescence
- As a result, the TWG believes that it should use all forms of nonauthoritative guidance and education resources to promote and clarify the use of technology in the audit. See prior slide on short-term priorities

2. Does the ASB believe that CPEA, Peer Review, Audit and Software/Methodology providers should be surveyed to identify what are the impediments to SMP firms using technology? Who are we missing?

- The TWG proposes surveying various groups to determine what is impeding the use of technology among SMP firms by leveraging our current and evolving understanding of the technology provider/disrupter ecosystem impacting the audit

3. Does the ASB believe that the proposed near-term resource projects are where the TWG should spend time and effort?

- The TWG believes it's near-term project focus should be to carve out a lane of work that doesn't duplicate the efforts of others. The TWG's focus should be on getting primarily SMP firms to use technology in Audits, educate them on the risk of using and not using technology and help them determine what audit evidence is with respect to the technology being used
- If the ASB agrees, the TWG will develop a more refined road map on planned actions

ASB and ASEC Virtual Meeting

Agenda

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1. ASB Technology Working Group Overview (slides 3-5)

 2. Review Near-Term ASB Resource Projects (slides 9-10)

 3. Key Questions for the ASB and ASEC

 4. Background resources (reference only)
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Key Questions for Joint Discussion

1. Based on a review of the ASB's TWG project list, are there any projects that should be added?
2. Which projects can the ASB and the ASEC collaborate on?

Appendix

ASB Technology-Related Risk Assessment Resource

What is it?

- Intended to be a series of online releases (e.g., through the JoA) that illustrates how technology and audit data analytics can be leveraged in performing risk assessment procedures in accordance with SAS 145 throughout the audit life cycle

The need for a resource

- Primarily for auditors but also management and TCWG
- It is intended to illustrate the nature and impact of the relationship between ICFR (including the maturity and sophistication of management's information systems, data management and technology), and the rate of technology and audit data analytics used in the performance of the auditor's risk assessment under SAS 145

The expected use of the resource

- The resource is nonauthoritative and intended to supplement and not supplant authoritative guidance issued by standard-setters or regulators
- An auditor can determine which elements of the resource might be relevant and scale such elements to address specific facts and circumstances in the audit

Expected Audit Quality Benefits

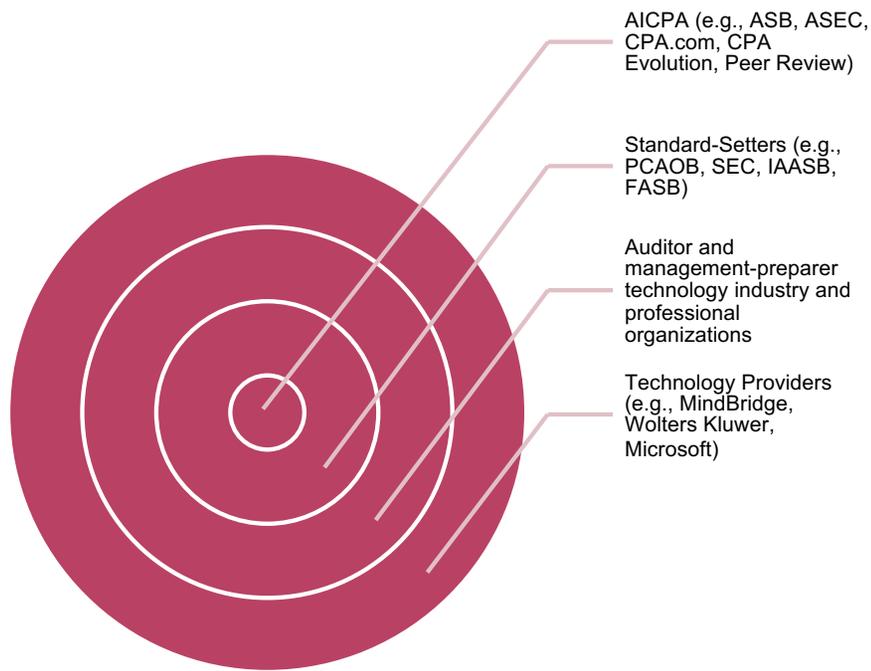
- For auditors:
 - Accelerating investments in automated tools and technology and accelerating the rate of integrating data analytics in their risk assessments and responses to risk enhances AQ
 - Technology-enabled audit data analytics can also enhance interactions with management and those charged with governance who expect high quality, compliant and insight-driven audit work
- For management and TCWG:
 - The greater management's involvement and the more an entity invests to progressively advance its use of technology and increase its sophistication of systems and data, the greater the dimensions of audit quality benefits

Planned deployment

- Three-part release
 - Part 1: Management technology and related controls maturity/capabilities spectrum
 - Part 2: The Auditor's use of technology to scale Risk Assessment procedures
 - Part 3: Illustrative fact patterns or case study
- Part 1 planned for 2nd half of 2022
- Parts 2 and 3 by the 1st half of 2023

DRAFT: pending ASB discussion

Technology-Related Relationship Matrix v1.0



- Purpose: Relationship matrix to capture important organizations impacting technology and the audit (enablers and disrupters). Understand the work being done but also where no work or education is occurring
- Intended Use: Monitor the financial statement audit ecosystem of technology advancement and disruption and plan longer-term TWG projects
- Status: 1st draft in-process

ASB Questions:

1. How does the ASB see it's role among technology-related stakeholders impacting the audit?
2. Who are stakeholders to the ASB when it comes to technology?
3. How could a relationship matrix inform the ASB's annual agenda?

ASEC Projects Summary By Topic – 2nd Quarter 2022 (1)

Topics	Short Term Project	Long Term Project
Blockchain	<ul style="list-style-type: none"> • Implications of blockchain on SOC 1 and 2 • Mapping of ISACA blockchain controls to TSC 	<ul style="list-style-type: none"> • Thought leadership series on blockchain
Digital Assets	<ul style="list-style-type: none"> • Digital assets nonauthoritative guidance topics: <ul style="list-style-type: none"> ○ SAB No. 121 Q&As ○ SOC Considerations (user auditor perspective) ○ ERO assertion Q&As (first wave, other waves to follow) ○ Valuation assertion Q&As ○ Crypto lending/borrowing Q&As • Proof of Reserves (PoR) Engagements: <ul style="list-style-type: none"> ○ Development of suitable criteria for fiat backed stablecoins ○ Development of an overall framework ○ Identifying risks and procedures to be performed 	<ul style="list-style-type: none"> • Potential digital assets nonauthoritative guidance topics: <ul style="list-style-type: none"> ○ Double accounting; Completeness; IT Risks; Hard forks; Presentation and Disclosure

ASEC Projects Summary By Topic – 2nd Quarter 2022 (2)

Topics	Short Term Project	Long Term Project
SOC	<ul style="list-style-type: none"> • Standing up in January 2022 a new cyber squad to promote new Association strategy initiative to promote CPAs in performing attestation and advisory cybersecurity services and SOC reports globally. in connection with the new strategy, staff is developing a couple of thought leadership papers for investors, analysts, regulators and other third parties to help them better understand how a CPA’s SOC 2 report can provide decision-useful information about the effectiveness of an organization’s security efforts. (Expected 2022; however, the project is in process) • How to Start a SOC Practice toolkit (in process; Expected to be ready for courtesy ASEC review in July 2022 with completion later in Q3.) • Revising SOC 2 guide for revised attestation standards and to continue to evolve SOC 2 examinations to make them more efficient and effective. (Expected completion Q3 2022) • Updating SOC for SC and SOC for Cyber guide for revised Attest Standards • Mapping of revised Cloud Security Alliance (CSA) criteria to TSC (in process) and developing a new SOC 2+ CSA illustrative report • Mapping of TSC to ISACA controls (in process) • Mapping of TSC to revised NIST 800-53 (in process) • Mapping of TSC to NIST 800-171 (in process) 	

ASEC Projects Summary By Topic – 2nd Quarter 2022 (3)

Topics	Short Term Project	Long Term Project
Software Functionality	<ul style="list-style-type: none"> Continuing to discuss market needs for services around the functionality of software, with a focus on smart contracts Developing AUP guidance for providing services and reporting on the functionality of software. In addition, the guidance will highlight specific considerations for engagements involving smart contracts running on a blockchain. (In process; timing TBD – 2022). 	
Sustainability	<ul style="list-style-type: none"> Transformed the ESG Assurance Brochure from an awareness piece to an interactive call to action for member firms to provide to clients and potential customers Facilitated suitable criteria education for the SASB Research Team and Board Members on February 14, 2022 Cohosted a joint webcast with the Value Reporting Foundation and the CAQ on May 19, 2022 on the development of international sustainability reporting standards and reporting requirements for SEC registrants Observing the CFA Institute’s Examination Procedures for the CFA Institute ESG Disclosure Standards for Investment Products Working Group Updating Sustainability Attestation Guide to add chapter on climate-related disclosures 	<ul style="list-style-type: none"> Updating the Sustainability Attestation Guide for practice issues and SEC requirements Monitoring need for guidance (non-authoritative or authoritative) for performing Examination Procedures for the CFA Institute ESG Disclosure Standards for Investment Products Monitoring need for guidance (non-authoritative or authoritative) in connection with attestation engagements on sustainable debt
Artificial Intelligence/Algorithms		<ul style="list-style-type: none"> Monitoring need to controls framework for how to audit AI/SOC for AI Exploring academic research on explainable AI
Data Integrity		Monitor market use of criteria for evaluating the integrity of a set of data and decide if additional guidance is needed
Data Privacy	<ul style="list-style-type: none"> Developing nonauthoritative guidance for practitioners engaged to perform services around data privacy (In process) 	
Reporting on maturity models	<ul style="list-style-type: none"> See third-party assessments below 	Exploring potential for reporting on maturity models through development of a robust example
QCM Criteria	<ul style="list-style-type: none"> Working with the Quality Control Material (QCM) Task Force to exposure QCM attribute and description criteria to accompany QCM examination. 	
Third-Party Assessment Engagements		Monitor TPA Q&A and assess need for additional guidance/ standard