Making Auditing Standards Fit-for-Purpose in a High-Tech World

By Gregory Shields, CPA

Gregory is a member of the board of directors of the University of Waterloo Centre for Information Integrity and Information Systems Assurance (UWCISA). He is also a member of CPA Canada's Audit Data Analytics Committee. Before his retirement, he was CPA Canada Director, Auditing and Assurance Standards. His recent projects include developing non-authoritative auditing guidance on data analytics, cryptocurrencies, and accounting estimates.

CPA Canada's recently completed phase I of its *Foresight: Reimagining the Profession* initiative makes an urgent case for changing – and quickly – how auditing standards are currently developed and implemented.[1] Making the point even more emphatically, the retiring chair of the International Auditing and Assurance Standards Board (IAASB), Prof. Arnold Schilder, has said "...the world continues to change at an ever-increasing rate, with complexity becoming more prominent, in particular in relation to technology. Thus, there is some urgency to deal with changes that are needed to keep the standards relevant and fit-for-purpose."[2]

Auditing standards urgently need to change in two respects. First, they should reflect that the vast majority of entities being audited already make significant use of technology in their operations and in preparing financial statements. Such use will continue to grow rapidly and become more complex. Second, the standards need to be revised to strongly promote – and perhaps require – the use of automated audit procedures, including data analytics. Despite leaders of the accounting profession calling for action now, however, auditors in general do not appear to share this sense of urgency. They may express agreement with the concept of a need for change in the near term, but resist any significant revisions of standards that would make such changes a reality. For example, in 2016, the IAASB Issued a Request for Input (RFI) on the growing use of technology in audits, especially data analytics.[3] IAASB's Feedback Statement on this RFI states that "most respondents believe that the principles in the extant ISAs are still appropriate and accommodate the use of data analytics, and caution against prematurely rushing to change requirements in the standards."

Auditing standards urgently need to change. They should reflect that the vast majority of entities being audited already makes significant use of technology in their operations and in preparing financial statements. Such use will continue to grow rapidly and become more complex.

Even if there was widespread desire for rapid change, the current standard-setting process would not permit it. The Monitoring Group's 2017 consultation included a question on the timeliness of standard setting and how it might be improved.[4] Responses to this consultation paper show that many auditors do not appear to see a need, let alone an urgent need, to speed up the standard-setting process. The strong preference seems to be to develop non-authoritative guidance that is useful but, unlike requirements in standards, can be ignored.

Set out below is a brief overview of the recent history of recognizing technology matters in international auditing standards and where the IAASB seems to be headed. There are also suggestions as to why the process to reflect technology in standards has been so slow and why auditors should be required to use automated procedures in assessing risks of material misstatement.

Discuss, debate, procrastinate

Exhibit 1 shows some key dates and IAASB activities relevant to clearly recognizing in standards that most audited entities use IT and that auditors use, or should use, data analytics. Various other technological advances are increasingly affecting audits including, for example, blockchain and artificial intelligence (AI). These are not discussed here, although some data analytics may be based on use of AI.

Starting on a positive note, Series 2 of the June 2019 IAASB agenda papers set out some proposed revisions to ISA 315, *Identifying and Assessing the Risks of Material Misstatement*, to incorporate matters related to information technology.[5] These include, for example, a new requirement to assess risks related to IT, and a number of application and explanatory material paragraphs addressing the auditor's understanding of the audited entity's use of IT.[6] These proposed changes are a useful step in the right direction.

Revised ISA 315 is expected to be approved in September 2019. The problem is the time it took to make these changes. The effective date has not yet been discussed but, based on precedent, the revised standard would apply to year-end work performed in early 2022. Information gathering for this project started in March 2016.[7] Although the six years from project start to application is relatively short compared to some projects, some might quite rightly view this as far too long a timeframe.

> Communication among firms may be stifled because firms who have made technological advances understandably do not want to jeopardize their competitive advantage in the auditing marketplace.

The IAASB also plans to modernize other standards to reflect the effects of ever-changing technology. Agenda item 7 for the IAASB's June 2019 meeting discussed possible revisions to ISA 500, *Audit Evidence.* If everything were to go according to plan, an exposure draft of the revised ISA 500 would be approved in March 2021.[8] The exposure draft period would likely be the usual 90 days, and addressing comments could take another 18 months (based, for example, on the time taken to finalize revised ISA 540). Final approval could take place in late 2022 and be effective for years beginning on or after December 15, 2023. The revised standards would be applied in year-end audit work starting in early 2025. It seems quite shocking that this would be more than 10 years after the initial formation of the Technology Working Group to specifically focus IAASB's attention on important technology issues.

Exhibit 1 – Slow Pace of Change

September 2014	Decision to form the IAASB Technology Working Group (formerly the Data Analytics Working Group).[9]
September 2016	Publication of the Request for Input (RFI) titled *Exploring the Growing Use of Technology in the Audit, With a Focus on Data Analytics.*[10] Response deadline: February 15, 2017.
January 2018	*Feedback Statement* on the September 2016 Request for Input.[11]
October 2018	Revised ISA 540, *Auditing Accounting Estimates and Related Disclosures*, approved.[12] • No reference to auditor use of data analytics or other automated audit procedures. • Effective date: Audits of financial statements for years beginning on or after **December 15, 2019.**
June 2019	IAASB agenda papers Series 2 presented on the possible revisions to ISA 315, *Identifying and Assessing the Risks of Material Misstatement.*[13] • Planned approval date: **September 2019.** • Planned effective date – not yet discussed. • One proposed requirement to assess risks related to IT. • No requirement to use data analytics or other automated procedures in identifying and assessing risks. • Several application and explanatory material paragraphs on the use of automated tools and techniques. • Appendix 5 – Considerations for understanding IT. • Appendix 6 – Considerations for understanding general IT controls.

	IAASB agenda paper 7 presented on a possible project to address technology issues such as: • Revising ISA 500, *Audit Evidence.* • Planned project proposal approval date: **September 2019.** • Planned exposure draft approval date: **March 2021.** • Developing non-authoritative guidance. • Revising aspects of other standards. Likely time for completion – 5 years.[14]

Agenda item 7 also discussed what is described as a possible targeted project to address relevant aspects of technology across all the ISAs. Paragraph 30 of the Agenda item notes that, since not all ISAs are likely to be revised in the near future, a project to update the ISAs to reflect the effect of technology would ensure that technology is addressed across the ISAs more promptly. But, then, Paragraph 31 suggests that no project to make these changes should be initiated at this time, since the most pressing need is for non-authoritative guidance. Further, Paragraph 30 states that, when the project is eventually started, it would be undertaken much like the IAASB project on disclosures. The initial information gathering for the disclosures project started in September 2010. The related revisions to standards became effective for audits of financial statements for periods ending on or after December 15, 2016.[15] Therefore, it appears that many years will pass before changes are made across the ISAs to address technology issues. It seems highly unlikely that many of us would consider this to be an urgent response.

Is slow progress due to lack of meaningful communication?

IAASB agenda item 7 for June 2019 sets out 51 issues (and related actions) to be addressed. Most of these have already been identified, discussed and debated for at least five years. For example, most were identified, and partially addressed, when developing the AICPA non-authoritative *Guide to Audit Data Analytics*, issued in 2017 and adopted by CPA Canada in 2018.[16] Representatives from the major public accounting firms in the USA, and some from Canada, participated in developing that guide. Therefore, there was awareness of the major issues, at least among the big firms. Agenda item 7 gives the impression, however, that there has been little communication about the work done to date on these matters.

Communication among firms may be stifled because firms who have made technological advances do not want to understandably jeopardize their competitive advantage

> Long delays in reaching consensus on revisions to standards are the result of the lack of specific stakeholder input.

in the auditing marketplace. For example, a KPMG web page titled "Audit Data Analytics – Unlocking the Value of Audit," dated February 25, 2015, states: "At KPMG we have been using data and analytics (D&A) for many years to effectively utilize the data our clients hold. Over time we have developed a series of software and tools that integrate into our audit, giving us the ability to study entire data populations and that help us to better identify risks and investigate anomalies."[17]

As another example, on its webpage titled "How Audit Can Benefit from a Dive Into Deep Data," dated March 9, 2017, Ernst & Young states: "Audit is undergoing a data revolution. There has been rapid expansion in the types and volumes of data that companies produce, providing richer sources of information to be used when conducting an audit. ... Now, with the majority of transactions conducted electronically, powerful data analytics tools and techniques enable auditors to analyze more data points than ever before, which can enhance audit quality and confidence in the capital markets."

Of course, these types of assertions may be drafted by those in firms responsible for service development and marketing. On the other hand, standard setting may be more influenced by compliance-oriented partners whose job is to minimize risks of litigation and who, in some cases, may be more comfortable in leaving requirements in standards as they are.

There have been efforts at communication and collaboration. For example, several years ago, the AICPA, major accounting firms and academics started the Rutgers AICPA Data Analytics Research (RADAR). One key issue that RADAR was meant to have addressed by now is what action an auditor should take when a data analytic results in hundreds (or thousands) of notable items (some might incorrectly call them "anomalies" or "outliers") that need further consideration. Although the *Guide to Audit Data Analytics* suggested a filtering process, the RADAR initiative has not as yet produced any significant paper that discusses this matter in more depth.

Does the quality of both requests for input and responses need to significantly improve?

Long delays in reaching consensus on revisions to standards are the result of the lack of specific stakeholder input. For example, Paragraph 38 of the IAASB's 2014 RFI on technology and data analytics states: "Due to the large volumes of data that feed into information systems that are used in models to develop some accounting estimates, use of new data analytics tools may be valuable in addressing audit risks associated with these data sources." Of the 51 respondents to the RFI, 43 were silent on amending ISA 540, *Auditing Accounting Estimates and Related Disclosures*, to address auditor use of data analytics. One respondent suggested that change is needed but it should be given a low priority because ISA 540 "is closely linked to the need for the auditor to exercise appropriate professional judgment" – as if data analytics did not involve using judgment. Seven respondents referred to a need to look at ISA 540, but only a few provided clear rationales for doing so. For example, the EY response states: "Improvements to

guidance in ISA 540 should be specifically considered, in our view, to address the appropriateness of the use of data analytics to obtain evidence over accounting estimates, including as it relates to the entity's use of data sources (both internal and external, financial and non-financial), facilitating the performance of independent sensitivity analyses, and the application of predictive techniques (through application of algorithms)."[18]

Lack of clear and detailed input on which IAASB could base meaningful debate was again evidenced in responses to the ISA 540 exposure draft. Of the 69 responses received, 63 were silent on the issue of including guidance on use of data analytics in auditing accounting estimates. Only 6 stated that this matter should be considered. This may be a case of where a key question was not asked. The ED for ISA 540 had no question specifically directed at obtaining input on auditor use of data analytics. There may have been an assumption that amendments to ISA 540 on the use of technology would be made later as part of a separate project, but the ISAs listed for possible revision in agenda item 7 for the June 2019 IAASB meeting unfortunately does not include ISA 540. The ball seems to have been dropped.

Can resistance to adding or revising requirements be overcome?

There is no proposed revision to ISA 315 to require use of automated audit procedures, in particular data analytics. A strong case can be made for amending requirement Paragraph 18 as follows (additions indicated by <u>underlining</u>):

> 18. The risk assessment procedures shall include the following:
>
> (a) Inquiries of management and of other appropriate individuals within the entity.
> (b) Analytical procedures, <u>including use of automated audit procedures when the volume of relevant data is large.</u>
> (c) Observation and inspection.

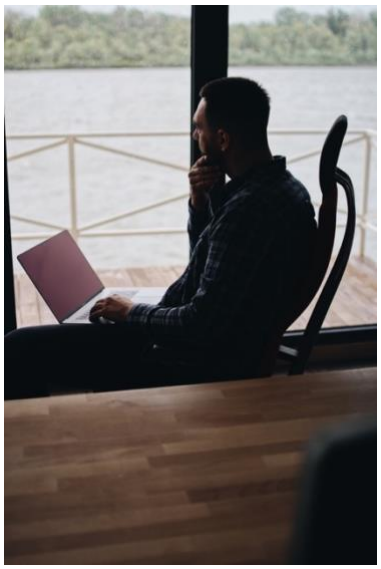
Reasons why this amendment should be made include the following:

> Perhaps even more worrying is that many responses to the consultation paper seem to equate increased speed of standard setting with a reduced ability to provide input on standards and a consequent reduction in the quality of standards.

- The IAASB decided long ago that risk assessment should go beyond inquiry to include analytical procedures to improve audit quality. There is clear evidence that use of data analytics can improve the quality of the auditor's risk assessment even further.
  - This is acknowledged in Paragraph 38 of the IAASB RFI and discussions on the webpages of major firms.
  - Many auditors are already using data analytics for risk assessment. CPA Canada's publication *An Inside Look at How Auditors in Canada Are Using Data Analytics* notes that virtually all engagement teams participating in the study used data analytics to help identify and assess risks of material misstatement.[19] These data analytics

included, for example, churn analyses of customers, providing valuable information on customer characteristics relevant to assessing the appropriateness of the allowance for doubtful accounts. Similarly, a churn analysis of inventory is very useful in assessing inventory obsolescence. The big success story is journal entry analysis.
    - This *Inside Look* study notes that the most commonly performing data analytic (as a risk assessment and substantive procedure) is journal entry analysis. Such analysis has now become so imbedded in audit methodologies that some auditors no longer think of it as a data analytic (although it is). This represents where auditing is, or should be, heading. That is, use of automated procedures would no longer be considered unusual. Anecdotal evidence suggests that the use of journal entry analysis was driven by a requirement added to ISA 240, *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements.* Paragraph 33(a) (iii) requires the auditor to consider the need to test journal entries throughout the year. This requirement, combined with the high volume of automated entries often encountered and the many attributes of entries to be taken into account, made use of data analytics the most effective and efficient approach. Many aspects of an entity's process to prepare its financial statements have those attributes.
- It seems very hard to justify not using data analytics for large data populations when the learning curve for many of these analytics would not be high or costly. For example, use of two- three-way matches is common. For many auditors, this is a useful jumping-off point to start embracing technology and slowly but surely moving on to more sophisticated and powerful analytics that will contribute to audit quality.
- The proposed requirement would not be linked to any particular technology and will not lose its relevance.
- Some auditors will not use data analytics unless they are required to so. They want to be able to point to a requirement when, for example, discussing their audits with regulators. It is important to break the barrier against requirements to use technology so that no auditors are left behind.

Does the standard-setting process need to change?



The November 17 Monitoring Group consultation paper *Strengthening the Governance and Oversight of the International Audit-Related Standard-Setting Boards in The Public Interest* asked for input on how to improve the timeliness of standard setting. The Group suggested, for example, expanding standard-setting staff, having IAASB members focus their discussion on strategic rather than technical matters and reducing the size of the IAASB. Respondents were also asked to provide other ideas to speed up the standard-setting process.

The responses from some auditing firms, national standards setters and accounting bodies indicate some support for

expanding IAASB staff but seem quite resistant to the other proposals. A fairly common suggestion was to add a Technical Advisory Group. But adding staff and yet another committee would not likely speed up the standard-setting process. This would just result in more input for the IAASB to deal with when members have long ago reached the limit of what they accomplish under the current volunteer board structure. With the support of their respective organizations, many IAASB members spend hundreds of hours per year in standard-setting activities, over and above what is required for their day jobs. Nothing more can reasonably be asked of them.

Perhaps even more worrying is that many responses to the consultation paper seem to equate increased speed of standard setting with a reduced ability to provide input on standards and a consequent reduction in the quality of standards. For example, one response states: "The standard-setting process is necessarily a deliberative, multi-stakeholder, consultative procedure; a desire to accelerate slightly the pace of standard setting does not support substantially restructuring the standard-setting process."[20] It is not clear, however, why measures to increase speed should be viewed so negatively. The IAASB's process is highly transparent and information is readily accessible. All agenda papers are publicly available before meetings and accessible for indefinite periods of time after meetings. All meetings are recorded and anyone who wants to can observe them in person. Automation, such as a web-based template, could build on the existing transparency of the process to enable stakeholders to provide immediate specific feedback on matters discussed at each IAASB meeting. If means were made available to provide continuous input, and standards are deemed important enough to make that effort, then presumably exposure draft time could be reduced considerably. Also, it is not clear why, in a world of rapid change, auditing firms cannot become rapid-response organizations, or at least be more agile. For example, why should firms still be given at least a year to implement changes to standards in this day and age, when they are, or should be, already long aware of what changes are coming and what is needed to implement them?

Remaining relevant and valued

These are clearly fundamental issues that need to be addressed soon as part of the efforts to reimagine the auditing profession if it is to remain relevant and valued. Fear of, and resistance to, change in using technology are understandable. The French philosopher Paul Virilio said that "every technology carries its own negativity, which is invented at the same time as technical progress."[21] One of his examples is that, when you invent electricity, you invent electrocution. But that should not stop progress. A high-speed electric car (perhaps eventually largely self-driven) can break down, but so can a horse and buggy. The auditing profession has to move towards the rapidity of the former, not stay with the slow pace of the latter.

Endnotes

1 CPA Canada Foresight Initiative (Foresight Initiative).

2 *Technology and the Future Ready Auditor*, Tech Talk (IAASB, May 2019).

[3] Request for Input, *Exploring the Growing Use of Technology in the Audit, With a Focus on Data Analytics* (IAASB, September 2016) (RFI Data Analytics).

[4] *Strengthening the Governance and Oversight of the International Audit-Related Standard-Setting Boards In The Public Interest* (Monitoring Group, 2017) (Monitoring Group Consultation).

[5] Draft Revised ISA 315, *Identifying and Assessing Risks of Material Misstatement* (IAASB agenda item 2-F, June 2019).

[6] Paragraph 40 of proposed ISA 315 is the new proposed requirement to assess risks related to IT. Examples of and supporting application and explanatory material that address matters related to IT include paragraphs A144 to A147 and A179 to A193. Appendices 5 and 6 that respectively set out fairly detailed matters for auditors to consider in obtaining an understanding of the auditee's use of IT and its general IT controls.

[7] Revised ISA 315 project history.

[8] IAASB Issues Paper re revising ISA 500, *Audit Evidence*, para. 28. (IAASB agenda item 7, June 2019).

[9] IAASB Data Analytics Working Group activities update, footnote 1 (IAASB agenda item 3, June 2015).

[10] Request for Input, *Exploring the Growing Use of Technology in the Audit, With a Focus on Data Analytics* (IAASB, September 2016) (RFI Data Analytics).

[11] Feedback Statement on RFI (IAASB, January, 2018).

[12] Revised ISA 540, *Auditing Accounting Estimates and Related Disclosures* (IAASB ISA 540 Project Page).

[13] Draft Revised ISA 315, *Identifying and Assessing Risks of Material Misstatement* (IAASB agenda item 2-F, June 2019).

[14] IAASB Issues Paper re revising ISA 500, *Audit Evidence* (IAASB agenda item 7, June 2019).

[15] IAASB Disclosure Project page (Disclosures Project Page).

[16] Overview of *AICPA Guide to Audit Data Analytics* (Guide Overview).

[17] KPMG web page Audit Data Analytics, last accessed June 9, 2019.

[18] EY response to IAASB RFI (see endnote 3) (EY response).

[19] *Inside Look at How Auditors in Canada are Using ADAs* (CPA Canada, April 2019) (Inside Look - Use of ADAs).

[20] AICPA response to the Monitoring Group consultation paper, pg. 11 (AICPA Response).

[21] Paul Virilio, Philippe Petit, Sylvère Lotringer, *"Politics of the Very Worst," Semiotext, 1999.*

OIO