



February 15, 2017

Matthew Waldron
Technical Director
International Auditing and Assurance Standards Board
International Federation of Accountants
585 Fifth Avenue – 14th Floor
New York, NY 10017
U.S.A.

Dear Mr. Waldron:

Re: Request for Input – “Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics”

The Canadian Auditing and Assurance Standards Board (AASB) is pleased to provide its comments on the Request for Input of the International Auditing and Assurance Standards Board’s (IAASB) Data Analytics Working Group, “Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics”. In developing our response, we collected feedback from stakeholders, representative of diverse groups, from across Canada. **Appendix A** outlines the stakeholder groups consulted.

Overall Comments

The AASB strongly supports the work of the IAASB’s Data Analytics Working Group (DAWG) to understand issues and learn about initiatives underway in this field. The AASB also supports the setting up of a project advisory panel to further explore key questions. The need for guidance related to the use of data analytics in the audit is most urgent, however, guidance for reviews would also be helpful since the nature of review procedures is also conducive to data analytics. The AASB believes this initiative is critical to the future of the profession. We are monitoring it closely and stand ready to assist in any manner required as the IAASB moves forward.

The AASB believes the Request for Input is a very useful summary of insights into the opportunities and challenges with the use of data analytics. The paper was an excellent source for engaging in insightful discussions with Canadian stakeholders. Based on feedback collected, the AASB has identified the following next steps for the DAWG to consider:

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The need for implementation guidance for use of audit data analytics under extant standards

Many of the stakeholders we spoke to struggle with how to implement audit data analytics (ADAs) within the conceptual principles of existing auditing standards. They need practical guidance for how ADAs can be utilized and areas of the audit where they may be most beneficial. Since extant standards were not written with ADAs in mind, auditors face challenges in operationalizing ADAs in the audit. A repository of illustrative ADAs and guidance on how they can be deployed in the current audit environment will assist auditors to implement them effectively. Auditors also recognize that the audit framework and concepts may need some adjustment to better fit ADAs, however this can evolve as research and experimentation leads to further innovation in this field.

Auditors are reluctant to deploy ADAs due to outstanding questions about how ADAs fit under the extant standards and whether these procedures will be acceptable to regulators. If there was guidance for auditors, some of these concerns could be addressed. Stakeholders stressed that the need for guidance is urgent. It may be most efficient to task a working group with building this guidance rather than the DAWG undertaking it. This will allow the DAWG to focus on providing input on the various standard-setting initiatives underway (ISA 315, 220, 540, 600). This may be a question for the newly formed DAWG Advisory Panel to consider as they outline the objectives for their group.

The need for education and training to build the skills of auditors

Many stakeholders identified the lack of auditor knowledge and skills in this field as a key hurdle to the use of ADAs. While some auditors and firms are investing heavily in gaining this knowledge and skills, others are not. Some auditors lack training in using analytical tools and designing ADAs to address audit requirements. In addition, auditors often do not know what procedures are possible and how to utilize them in the audit. Small and mid-sized firms struggle the most since they lack resources to invest in technology and are constrained for time to build the required skillset to perform effective ADAs. This is also true for public sector auditors from smaller offices that face similar time and resource constraints. They are requesting more education and training in this field.

Large accounting firms also expressed the need for greater focus on educating clients, audit committees and regulators. For ADAs to be implemented in audits, all of these stakeholder groups play a role in facilitating auditors' use of ADAs. While some clients are asking for greater use of ADAs, they do not always understand what is involved (data requirements and reliability needs) to enable this use. With more education, these groups can facilitate auditors in having the appropriate information and deploying ADAs effectively.

Obtaining support from audit regulators for the use of ADAs in the audit

Several stakeholders identified uncertainty as to whether audit regulators will accept the use of ADAs by auditors as a key deterrent to their use. As auditors are unclear how ADAs fit under extant standards, they are concerned that their professional judgment may be questioned by audit regulators, especially if the auditor has a different interpretation of how ADAs can be used to meet the standards. They are also concerned that regulators may question whether ADAs provide an acceptable level of precision to provide sufficient appropriate substantive evidence. These concerns are preventing auditors from experimenting with ADAs and utilizing them to a greater extent. We encourage the IAASB to work closely with audit regulators as guidance is developed and amendments to standards are made. It is vital that the IAASB and audit regulators have a common understanding of where ADAs can be deployed.

Responses to questions in the Request for Input

Question a) Have we considered all circumstances and factors that exist in the current business environment that impact the use of data analytics in a financial statement audit?

AASB Response:

The AASB agrees with the list of factors presented in this paper that impact the use of data analytics in audits of financial statements. However, the following key factors were referenced most often by stakeholders:

- **conceptual challenges** – This challenge is more than just from the perspective of the client. There is also the challenge that many auditors are not aware of what ADAs are possible and how to utilize them in the audit.
- **legal and regulatory challenges** - Auditors may be reluctant to implement ADAs until they are assured that audit regulators are satisfied that their use complies with auditing standards. Further, auditors who are experimenting with the use of ADAs on some audits may be reluctant to take benefit from that work because they are uncertain whether ADAs meet the requirements in the extant standards and may be questioned by an audit regulator. There needs to be a clear articulation of how ADAs fit within extant standards and how auditors can assess their impact on the audit as a whole.
- **re-training and auditor skillset** - Many auditors believe that a key challenge is finding the time or resources for re-training or learning about new technologies and ADA techniques. While large accounting firms may have more resources for education and tools, they still struggle with re-training auditors on use of these tools. Auditors from small and medium-sized firms face challenges due to limited time for training and cost constraints of some

tools. Furthermore, even when training is available, some auditors may not be willing to move away from traditional auditing practices because of concerns about costs and the required time investment. Unless auditors are willing to develop the requisite skills, ADAs will continue to be under-utilized.

Question b) Is our list of standard-setting challenges accurate and complete?

AASB Response:

The AASB agrees with the standard-setting challenges identified however, based on input from Canadian stakeholders, the key challenges noted are:

- **Clearly defining audit analytics.** There is no common understanding of this and other key terms. Without clear definitions, auditors and audit regulators may have different interpretations as to how ADAs are perceived to fit within the auditing standards.
- What is the **appropriate level of work on exceptions** and non-exceptions? What type of audit evidence is needed to support the auditor's investigation of these exceptions and the conclusion(s) reached? How can this be documented under extant standards? These types of questions arise because extant standards are silent on these issues. Auditors are faced with a significantly larger test base (usually 100% of the population) when they deploy ADAs. Extant standards are based on sampling and do not contemplate this approach to testing. The level of evidence and documentation expected by extant standards when outliers are noted may be reasonable when sampling is used; however, they may be difficult to apply for ADAs.
- **How do ADAs impact audit risk and the aggregation of audit evidence to support the audit opinion?** The audit risk model does not address ADAs and therefore trying to determine how ADAs fit under the current audit evidence model is difficult. Auditors need guidance to assess how ADAs impact their audit approach and evidence methodology. Clear articulation of this from the IAASB will help to promote implementation and use of ADAs.

Question c) To assist the DAWG in its ongoing work, what are your views on possible solutions to the standard-setting challenges?

AASB Response:

The AASB would encourage the DAWG to undertake the **following 2 activities** (simultaneously), to progress this project further:

1. **Engage with the following stakeholder groups** to understand how ADAs can be utilized in the audit:

- **Innovative companies utilizing data analytics** – Stakeholders believe that the DAWG could learn from other companies that are currently using data analytics in innovative ways. For example, many large companies have business streams dedicated to helping clients perform analytics using available data to better understand their customers and markets. Engaging with companies of this nature may assist the DAWG to ‘think outside the box’ and develop an innovative approach, better understand the possibilities with ADAs and identify how to successfully implement them in the audit.
- **Individuals already utilizing data analytics.** We understand that tax and fraud specialists utilize analytics to assist their clients. They are in a position to experiment with analytics in these fields because clients see a clear economic benefit (lower taxes, fraud identification) and analytics can be used to specifically address business issues. Another group that has made significant strides in the use of audit analytics is internal audit departments. Internal auditors have been utilizing analytics for many years already, and have faced similar challenges and hurdles as external auditors. This group may be able to share practical solutions to overcome some of the audit challenges.

2. **Strike a working group to develop implementation guidance for how to utilize ADAs today.** As mentioned in the overall comments, we believe the IAASB should commission a working group to develop implementation guidance that contains practical examples of ADAs, how to use them in the audit and how to document them under extant standards. This guidance would encourage greater use of ADAs and lead to further experimentation. Research may need to be conducted to address some of the audit challenges posed by ADAs which could be undertaken by academics. Over time, the audit framework may need to be amended or enhanced as research and experimentation provide further answers to some of the overarching challenges and issues identified.

Question d) Is the DAWG’s planned involvement in the IAASB projects currently underway appropriate?

AASB Response:

The AASB supports the DAWG’s plans to participate on IAASB projects currently underway, and add the following comments:

1. This involvement will primarily serve to ensure that any revisions proposed to extant standards do not preclude the use of ADAs. As noted elsewhere in our response, it is important for auditors to also have

comprehensive guidance on the types of ADAs and how they can be applied as a key component of the audit in complying with the standards.

2. While having DAWG members involved in the various projects underway, it is still important that the DAWG have the time and resources for its own project activities. Priority needs to be given to projects identified by stakeholders that will advance ADAs. We believe the IAASB may need to invest significant additional resources to these activities.

The IAASB may want to reconsider the most appropriate use of the DAWG's current members and how to support this group further.

Question e) Beyond those initiatives noted in the *Additional Resources* section of this publication, are there other initiatives of which we are not currently aware of that could further inform the DAWG's work?

AASB Response:

Canadian stakeholders identified the need for the DAWG to engage with innovative companies utilizing data analytics and internal auditors as mentioned in c) above.

The AASB has not identified any other initiatives or additional resources for the DAWG to consider.

Question f) In your view, what should the IAASB's and DAWG's next steps be? For example, actions the IAASB and DAWG are currently considering include:

- (i) Focusing attention on revisions, where appropriate, to ISAs affected by the IAASB's current projects.
- (ii) Exploring revisions to ISA 520, *Analytical Procedures*.
- (iii) Hosting one or more conferences with interested stakeholders to collectively explore issues and possible solutions to the identified challenges.
- (iv) Continuing with outreach and exploration of issues associated with the use of data analytics in a financial statement audit, with a view towards a formal Discussion Paper consultation in advance of any formal standard-setting activities.

AASB Response:

In addition to the next steps mentioned in c) above, the AASB also supports:

1. the DAWG **promoting conferences** to bring together the following stakeholder groups:
 - Practitioners;
 - Regulators;
 - Academics;

- Internal Auditors;
- Audit Committees; and
- Management.

Many Canadian stakeholders we spoke to support the IAASB holding conferences on data analytics. These conferences can educate and explore key issues. By engaging all stakeholders involved in the audit process, realistic solutions to some of the challenges faced in implementing ADAs can be explored. All parties need to be part of the solution to solicit buy-in and promote greater use of ADAs in the audit.

2. **A project on ISA 520, Analytical Procedures.** This project is needed immediately to align with how ADAs are used in the audit today.
3. **IAASB to encourage and work with the IAESB to develop training on this topic** to build auditors' skillsets. This was a key theme echoed by all stakeholder groups engaged by the AASB. This activity will need to be a combined effort of the two boards in order to move the profession forward.

The AASB believes responses to this Request for Input will provide valuable insights for how the DAWG can move forward and that further input on the issues (through a discussion paper) may not be needed. We believe there is a need to move forward quickly with activities identified by stakeholders.

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We hope that these comments will be useful to the IAASB in determining the appropriate next steps relating to the data analytics projects. If you have any questions or require additional information, please contact Eric Turner at (416) 204-3240.

Yours very truly,



Darrell Jensen FCPA, FCA
Chair, Auditing and Assurance Standards Board (Canada)

c.c. Canadian Auditing and Assurance Standards Board members
Ron Salole

APPENDIX A: List of stakeholder groups from whom feedback on this Request for Input was collected

Academics

- 1 Professor¹ from a leading Canadian University, Chair in Accounting

CPA Canada Audit Data Analytics Committee

- Chartered Professional Accountants of Canada's (CPA Canada) Audit Data Analytics Committee – This group is comprised of 12 members (of which 8 are practitioners) from across Canada involved in the field of audit analytics.
- Author that is writing all publications for this committee and providing thought leadership.

Members from large accounting firms

- 3 partners² who are subject-matter experts in their respective forms and specialize in audit innovation and data analytics.

Public sector practitioners

- 2 provincial auditors general – 4 staff were consulted, 3 of which specialized in audit data analytics on external audits and performance audits.

Small and medium-sized practitioners

- Chartered Professional Accountants of Canada's (CPA Canada) SMP Advisory Committee – This group is comprised of 14 practitioners from across Canada that are sole proprietors or work with small to mid-sized accounting firms.

¹ This individual is also a member of CPA Canada's Audit Innovation Committee.

² 2 of these partners also sit on CPA Canada's Audit Innovation Committee.