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The IAASB Data Analytics Working Group
529 Fifth Avenue
New York, NY 10017, USA



Global Office
New Bridge Street House
30-34 New Bridge Street
London, EC4V 6BJ
United Kingdom

T: +44 (0)20 3882 2000
F: +44 (0)20 3725 9890

info@bakertillyinternational.com
www.bakertillyinternational.com

Dear Sirs

Our comments on the IAASB's DAWG document: Exploring the growing use of technology in the audit, with a focus on Data Analytics

Baker Tilly International is pleased to provide you with its comments on the IAASB's Request for Input.

We would like to express our compliments for IAASB's DAWG document Exploring the growing use of technology in the audit, with a focus on Data Analytics which gives a clear overview of important topics for auditors in practice relating to the growing use of technology in the audit.

We support the IAASB's DAWG statement that stakeholder expectations regarding the use of technology in the financial statement audit are evolving. We foresee that stakeholders, in this technology driven era, expect that auditors are using the possibilities of the current state of technology whenever needed. Furthermore, the various range of techniques to analyse digital data might result in changing perceptions by stakeholders about audit quality and the level of assurance.

In the future, we expect a need for a complete revision of the way we conduct financial statement audits. We emphasize that adapting the current auditing standards, which are written in a non-digital era, is just a short-term solution. In the long run, we foresee a need for auditing standards that facilitate continuous auditing towards data level assurance instead of assurance at the level of documents (e.g. the financial statements).

We notice interesting developments with artificial intelligence, applying blockchain technologies and more specific algorithms, machine learning and deep learning. Users in the business environment and academia claim that this gives better insights and reveal information that could not be provided by humans without using technology. There will be a time, that stakeholders expect auditors to use these techniques to enhance audit quality.

We acknowledge that the process to be followed in evaluating and adapting standards needs to be done with care, however, technology is developing fast and society changing rapidly. This causes a certain mismatch in audit practice between what is expected and what has been set out in the current standards on auditing. The audit profession needs guidance on how to deal with this situation. Guidance which is supported, not only locally, but also from an international perspective, so that it is clear for the audit profession how to deal with this evolving environment and for stakeholders to know what to expect.

The challenge will be to develop standards that are generic enough to fit into the digital age with rapid developments and that are, on the other hand, specific enough for the auditors in practice.

We cannot expect auditors to be experienced data scientists with full knowledge of the current state of information technology. Although, we expect that our profession will be more and more technology enabled heading towards other types of assurance, like continuous and data level assurance, requested by stakeholders. It will take some time; however, things might come sooner than we expect.

We fully support that the auditors, standard setters, regulators and other stakeholders need to work together in exploring how the use of data analytics could support enhanced audit quality.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Paul Ginman'.

Paul Ginman
Chief Quality Officer

Worldwide Network of Independent Accounting Firms
Member of the Forum of Firms

Annex 1 – Responses to questions from IAASB's DAWG

(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?

The IAASB's DAWG document covers on a high-level circumstances and factors that we recognize in the current business. We would like to add the following considerations:

- For a better understanding of using data analytics there is a need to differentiate the various types of data analytics. Examples could be identified at the level of: data discovery and visualisation, data-mining, process mining, open source analytics, using algorithms, using artificial intelligence (machine learning, deep learning), etc.
- The statement 'testing 100% of the population' could be misinterpreted by stakeholders. What is meant in this context is that '100% of the transactions is subject to analysis'. We suggest that this is re-phrased.
- Following on from this, it is important to manage stakeholder's expectations and the way that they perceive the level of assurance that can be provided using the current state of technology for data analytics. This is relevant when the auditor uses a more 'data driven' audit approach (analytics beyond the level of 'spreadsheet analytics'). Furthermore, this is also relevant when the client uses data analytics as part of their system of internal control.
- To elaborate on this: What kind of audit techniques do audit clients expect when they are using various types of data analytics themselves and can be considered as technology driven? The question arises: do they expect another level of assurance compared to companies not being as technology driven and not having auditors using data analytics? If this last question is answered with a 'Yes'; is this a realistic expectation?
- Related to managing expectations in a competitive audit market, we would like to express our concerns about giving the suggestion that using data analytics would be a means of lowering audit budgets. We consider using data analytics in most of the cases as needed given the client's level of automated data processing. It might also be needed to understand the client's business processes better. In this case the use of data analytics could enhance audit quality but does not always mean a lower audit budget. Of course, the use of audit techniques should be based on a cost benefit consideration to determine an efficient and effective audit approach.
- Given the current state of technology we should ask ourselves the question whether we need to re-consider what we, and even more important stakeholders, perceive as 'audit quality'.
- The use of data analytics requires another area of skills and knowledge compared to the traditional auditing techniques. Educators need to facilitate this. Not only for auditors in the field, but this is also relevant for regulators.
- Even more important, to move forward we need to engage with regulators and get their point of view relating to the use of data analytics in the audit. So, that there is a clear understanding of when and how to use the various types of data analytics for financial statement audits.

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

We consider the list of standard-setting challenges accurate and we acknowledge the main challenges the auditor faces when using data analytics. We would like to add the following considerations:

- As mentioned before we identified the need to differentiate the various types of data analytics in all its aspects, also the most basic type of analytics with spreadsheet tools.
- We observe in our member firms' client situations where the auditor wants (based on client expectations also) or even needs to move towards a so-called 'data driven' audit approach. So, at this moment there is a strong need for guidance from standard setters and also regulators.

Guidance that explains their point of view regarding procedures to be followed and documentation criteria that have to be met.

- We argue that in a 'data driven' audit, a combination of data analytics (using tools) and traditional audit procedures will still be needed. For example: suppose a client has highly automated transaction processing, but input of data into the client's IT system is not fully automated. The auditor can decide to use various types of data analytics to understand business processing (e.g. with process mining) and test automated controls efficiently (e.g. with data mining). In this case, substantive audit procedures might be necessary related to underlying source documents.
- Furthermore, in a highly automated client environment we think that there is still a need to consider the evaluation of the control environment. As this is the foundation of the client's internal control system. Can data analytics be used in this area? We ask the IAASB to elaborate more on this and give the auditor practical guidance on the requirements.
- When using data analytics, we suggest that the auditor should be provided with additional guidance on how and what to document in the audit file.
- In our opinion, guidance should also include the specific procedures to be followed for the data analytics itself and to what extent the auditor should assess the client's IT environment. We can imagine that this guidance needs to be in line with the specific characteristics of the type of data analytics and the current state of the technology and it may evolve over time.
- The auditor needs guidance on how to act when they conclude that the level of IT controls is insufficient. Suppose, the auditor faces a client situation where they conclude that there is a need to use data analytics as transaction processing is highly automated. However, the IT general controls show deficiencies. How should the auditor deal with this? On the other hand, we also identify client situations where data analytics can be a useful audit technique when deficiencies in IT general controls are identified. We ask the IAASB to elaborate more on this and give the auditor practical guidance on the requirements.
- Based on the above, we suggest that the auditing standards should be kept at a more generic level and that the IAASB provide additional guidance which can be updated and extended faster compared to the ISAs themselves.
- Another observation we would like to add: audit clients are using more and more data analytics for managerial purposes. Suppose, the auditor wants to use these data analytics performed by the client. In that case, the auditor uses information produced by the entity. Can the auditor follow the same procedures as with 'system generated reports'? Is it clear how the auditor should deal with this? We think the auditor needs additional guidance. How and to what extent should and could the auditor assess the client's data analytics environment. We would like to add that this is different from the situation when auditors perform data analytics themselves. In those cases, the data will be extracted directly from the databases of the client.
- The document mentions the use of external data. We consider that this is not different from current situations when external data is received from parties that could be identified. In general, reliance on external data results in procedures to validate accuracy and completeness of this data. On the other hand, we consider in this context also the use of open source data. With 'open source analytics', the auditor could face limitations to assess the accuracy and completeness of data. Given the fact, that companies use open-source data for several purposes we consider it relevant to evaluate how the auditor could use it. Especially, in the planning phase of the audit, to understand the client, we can imagine this could be of added value. We would like to ask the IAASB to elaborate more on the requirements for performing this type of analytics.
- The IAASB should, in our view, take a clear position on when the auditor is expected to apply what type of data analytics. This could be based on clear criteria for the level of maturity and dependency on information technology in the client's company. In this way, it is clear for stakeholders what should be available in the toolkit of the auditor considering the type of client

to be audited. The auditor can then identify what kind of knowledge and experience is needed to serve clients. We cannot expect that auditors serving small companies with a less mature IT environment have as much technological knowledge compared to auditors serving highly digitized companies.

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

- The challenge is to define data analytics and maintain auditing standards that are relevant in a rapidly changing technological driven era. The auditor should not be limited in innovation and its goal to enhance audit quality. We suggest to keep the auditing standards at a more generic level and provide additional guidance which can be updated and extended faster compared to the ISAs themselves.
- As previously mentioned, there is a need right now for more guidance on how and when to use the various types of data analytics (with consideration for SME audits), clarity on the conditions (such as for IT general controls), procedures to be followed to generate proper audit evidence, how to evaluate the outcomes of data analytics and documentation requirements.

(d) Is the DAWG's planned involvement in the IAASB projects currently underway appropriate?

- We believe that it is.
- Supervised pilot projects could be useful for audit practitioners, even in countries where using data analytics is still in an early phase of adoption and countries where regulators struggle with how to evaluate audit data analytics. Supervisors should be a mix of senior experienced auditors, academia, international/local standard setters and regulators. These pilots would offer the opportunity to gain experience with the various types of data analytics and share knowledge within audit practices. This should be an ongoing process, as technology will keep on developing. It would help standard setters to develop practical and ready to use guidance faster. It would also clarify the views of regulators.
- With respect to professional scepticism, specific types of data analytics could provide results and information that is free from human bias.

(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?

- We are not aware of any other initiatives beyond those noted in the Additional Resources section.

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.

- We agree, however, we suggest priority is given to developing practical guidance rather than standards. Practitioners in the field who already use data analytics need it.

(ii) Exploring revisions to ISA 520.2

- We agree, however, ISA 230 (Documentation) and ISA 500 (Audit Evidence) should have at least the same or even more priority.
- On the other hand, we suggest that consideration is first given to whether all types of data analytics fit into an existing standard. Data analytics could have its own standard and guidance. Of course, there may be some overlap with existing standards and in those cases, there should a cross-reference.

(iii) Hosting one or more conferences with interested stakeholders to collectively explore issues and possible solutions to the identified challenges.

- We consider engaging with stakeholders (and also regulators) in this way would be an effective and efficient way of collecting points of view and practical input for guidance to be developed or revised.

(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

- Agreed, however, there should be an emphasis on moving forward, facilitating audit practices in using audit techniques that are aligned with the current state of technology. Stakeholders (society, clients) expect auditors to use technological possibilities to enhance audit quality and use an effective and efficient audit approach.