15th February 2017

Data Analytics Working Group,
International Auditing and Assurance Standards Board,
529 Fifth Avenue,
New York, NY 10017

Attn: Bradley Williams – Principal

**Re: Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics**

We are pleased to respond to the request for input from the IAASB’s Data Analytics Working Group (DAWG) on its document “Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics”.

Inflo was founded on a principle of making innovative auditing software and Data Analytical techniques available to all in the accounting profession. We work with a wide range of national and regional mid-tier and independent audit firms in the United Kingdom and overseas to help them understand and begin to use technology and Data Analytics to complement their existing processes and methodologies. We believe this provides us with a unique perspective on the current views of many audit firms starting to explore this area.

Openness is another fundamental principle of ours. We spend a great deal of time and effort performing demonstrations or hosting workshops with professional institutions, regulatory bodies and other stakeholders, sharing the insights and practical examples they need to perform their role in advancing the profession. This response letter articulates our views based on our team’s experience, the discussions we have had and the workshops we have held to explore this area.

If you would like to discuss any of our comments, please do not hesitate to contact me.

Yours sincerely,

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IAASB Request for Input – Inflo Response

Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics

Request for Stakeholder Input
The following contains our responses to the IAASB and the DAWG.

Major points

1) The audit profession is at a critical junction. Advanced auditing techniques and technology have to date only been within the reach of the largest accountancy firms. Such firms have the internal resource to fully evaluate how these advanced techniques fit into existing audit standards and can develop detailed guidance and policies alongside such technology. As these techniques are made available to small and medium sized practices, who do not have such levels of internal resource, a more active involvement is required of standard setters and regulators to guide, promote and monitor adoption of new ways of performing a traditional service.

2) In a fast paced and continually evolving market there will naturally be a tendency to question when is the right time for the IAASB to become more actively involved. However, we feel now is the right time to start reviewing the impact Data Analytics is already having on the audit and how well these new techniques fit with auditing standards written before such techniques were imagined. This is important to ensure auditors do not simply add Data Analytics on top of their current approach for fear of not fully appreciating or being given credit for how new testing techniques can replace traditional methods.

3) The term Data Analytics, and audit technology more generally, is much misunderstood and misinterpreted. This has in part been due to large firms using technology and Data Analytics as a marketing differentiator in audit tendering. While the ability of these firms to promote the benefits of technology has enhanced the outside perception of the profession, standard setting must be based on the factual use and application of such techniques. Data Analytics in its current form represents an incredibly broad range of techniques which impact the audit process in entirely different ways. To be able to consider and evaluate how Data Analytics impacts standard setting it must first be broken into some constituent parts, each representing different use-cases and therefore impacting different areas of existing auditing standards. While not a complete list, some of these constituent parts comprise:
   - Risk assessment – e.g. graphical analysis of a population or account balance to determine approach.
   - Testing selection – e.g. characteristic tests to select journal entries for testing.
   - Reperformance – e.g. to reperform 3-way match testing on a control population.
   - Vouching – e.g. comparing a full portfolio of investments to test to external valuation data sources.
   - Business process analysis – e.g. analysing all revenue entry combinations to follow them from invoice to cash, testing process flows and settlement.

4) Existing auditing techniques are becoming outdated against modern business, degrading the value of the audit service. Sampling, a concept designed to review a representative number of items from within a homogenous population, is being used as the only method of economically auditing Small and Medium-sized Enterprises (SMEs), who can have hundreds of thousands or even millions of transactions during an audit period. Data Analytics provides a way of designing and executing a highly effective audit across such entities and thus retaining and enhancing the value of the audit service. The IAASB’s proactive involvement in this area would provide audit firms with the reassurance required to move away from dated techniques to more effective and reliable alternatives.
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Specific Questions

(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?

5) The list compiled by the IAASB is a fair summary of the circumstances and factors which have impacted the use of technology and Data Analytics in a financial statement audit prior to 2017. Large firms have had to address these factors through the use of existing technology, often not designed for auditing, complemented by bespoke software development and specialist data scientist teams to create a way of performing Data Analytical techniques at scale. As is often the nature with technological advances, these are no longer the circumstances and factors faced by firms considering the adoption of technology more specifically designed software tools.

6) Tools designed more specifically for external auditing can immediately address most of the challenges previously faced by large firms adopting Data Analytics. Inflo is one such tool, providing external auditors with a unique end-to-end Data Analytics solution. Firms implementing such tools face a significantly reduced list of challenges, considered below:

- **Data acquisition** – the process of acquiring data from clients has been simplified and automated, providing clients with a range of extraction options. The transformation process from each source accounting system can also be automated along with the data validation and completeness checks. This means auditors do not have to work with raw accounting data in a wide range of formats or resolve data quality issues.

- **Resource availability** – because the data extraction, transformation and load (ETL) process can be automated, as well as the traditionally manual work to perform validity and completeness checks, centralised resources or data scientist specialists are no longer required to support Data Analytics technology.

- **Investment in re-training / re-skilling** – simplified user interfaces can mean auditors need minimal additional skills, as they interact with a consistent viewpoint across all clients. Specific training and guidance can even be provided to users in more effective methods, such as video-on-demand incorporated into the software tool, significantly reducing the investment required in training.

- **Legal and regulatory challenges** – cloud based solutions are able to maintain one version of a system which is mirrored in different territories to comply with jurisdictional laws and regulations. Each system and associated databases can be territory segregated in the appropriate jurisdiction to comply with local laws and regulations.

- **Cost of technology** – while not mentioned in the IAASB paper, a key challenge has been the level of investment required to build a bespoke software solution, with no guarantee the tool created would be economically viable and no certainty the outputs could meet regulatory expectations. Only the largest firms could commit to such research and development spend. The existence of pay-as-you-use services with no implementation costs, where the outputs align to auditing standards and methodologies, completely removes this barrier to entry and allows accounting firms of all sizes to explore this area at a pace they are comfortable with.

7) Further, in relation to the other challenges listed:

- **Conceptual challenges** – audit firms should not be concerned by clients being unfamiliar with the audit approach or why items have been selected for testing. Unpredictability is a key requirement of the external audit. The service must evolve rather than being “same-as-last-year”.

- **Regulators and oversight authorities** – it is the responsibility of regulators to be “experienced auditors” (as defined by ISA 230), which includes “audit processes” (paragraph 6,c,i) and the responsibility of the audit firms to ensure documentation is sufficiently understandable for an “experienced auditor” to draw the same conclusions. Concerns over the views of regulators remains a key barrier to firms fully adopting Data Analytical techniques. Regulators must consider whether retrospective file reviews are sufficient for them to be aware and understanding of new auditing techniques.
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(b) Is our list of standard-setting challenges accurate and complete?

8) We believe clarification of the components of the broader area of Data Analytics (paragraph 3) will greatly assist with the completeness and accuracy of the list of standard-setting challenges. The key ISA standards impacted by Data Analytical techniques are likely to be 230, 240, 315, 330, 500 and 520.

9) ITGCs are not a requirement for utilising Data Analytical techniques in an external audit engagement, nor does a lack of ITGCs impair the value of such techniques. However, the auditor’s understanding of how transactions are recorded in the client accounting system, including the granularity of transactional records in the general ledger versus sub-ledgers, does impact the level of audit evidence which can be drawn from Data Analytical techniques upon specific ledger data sets.

10) We feel greater emphasis is needed regarding the more detailed planning requirements of the review of IT systems and transaction processes. While some might argue the existing ISA 315 standard covers such requirements, the current level of work performed by auditors at the planning phase of external audits is typically lacking in the transactional understanding which would strongly complement Data Analytical techniques. Revising standards for the purposes of incorporating Data Analytics provides the opportunity to emphasise in ISA 315 the key IT and transactional review requirements.

11) While touched on in the paper, there is some consideration required with regards to information prepared by the entity (IPE) vs third party evidence. The line between these two types of information is becoming blurred, for example in some accounting systems a feed from a third-party banking provider means the items in the client system are automatically matched to third party evidence. More sophisticated Data Analytics apply a concept of analysing transaction flows from source to end point and then performing substantive procedures to third party evidence of the end points, which represents a subtle difference in the method of obtaining audit evidence, using a combination of IPE and third party evidence.

12) At this time the use of Data Analytical techniques is entirely optional for accounting firms. However, acknowledging the advancement in complexity of modern businesses, in certain circumstances audit test objectives cannot effectively be achieved through manual techniques. One such example would be journal entry testing, where we feel the requirements of ISA 240 and expectations of regulators are incredibly challenging to meet through manual effort. A rebuttable presumption that Data Analytics is used to perform journal entry testing on all but the most basic entities would be one possible, and positive, proposal. Areas such as Risk Assessment and Group engagements lend themselves very well to Data Analytics and firms should be expected to use more advanced techniques to improve the quality of such important audit work.

13) The paper states that being able to test 100% of a population does not imply that the auditor is able to provide something more than a reasonable assurance opinion nor that the meaning of reasonable assurance changes. While clearly the definition of reasonable assurance is unlikely to be re-evaluated the methods and techniques used to arrive at this opinion are becoming ever wider, fragmenting the basis of opinion. Take for example revenue testing, where one audit firm agrees 15 revenue transactions to supporting evidence, applying a statistically flawed sampling logic. Compare this to a firm using Data Analytics to test every revenue transaction during the year. Both firms give the same audit opinion on the SME, so the users of the financial statements are unaware of any difference in the basis this opinion was formed upon. But how can these two different approaches represent the same level of assurance? And with no way of articulating this assurance difference, what incentive do audit firms have to enhance the quality of their services?
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(c) To assist the DAWG in its ongoing work, what are your views on possible solutions to the standard-setting challenges?

14) IAASB should not be looking to add prescriptive guidance to standards based on current capabilities. The standard setting process is necessarily prolonged to ensure suitable time for key stakeholder consideration and thorough impact evaluation. In the world of technology rapid advancements in capabilities are imminently achievable in this consultation timeframe. This would invalidate efforts which are too prescriptive before they are even implemented. Instead the IAASB should consider whether their role could be to set the overarching framework and some defining principles and boundaries in relation to what is and is not an appropriate way to utilise Data Analytics in an external audit engagement. The current ISAs allow auditors to apply professional judgement when performing audit work. Could this concept not be extended to the area of Data Analytics and their use within the defined framework?

15) Following on from this, regulators have a key role to play under this scenario, monitoring innovation versus the defined framework. This would mean regulators are closer to developments and better able to input on the effectiveness of the standards and interpretations. Could such involvement be performed more prospectively rather than retrospectively?

16) IAASB’s existing processes for drafting and implementing new standards may need consideration given the pace of change. How can appropriate time for consideration be balanced with sufficiently timely advancement? Faster paced, smaller, incremental changes may be favourable if large scale change will be prolonged.

17) If these techniques are to be embraced across the Small and Medium-sized Practices (SMPs) in the profession such firms must be better represented in discussions regarding standard-setting. While the paper touches on issues for SMEs / SMPs, the opportunities for Data Analytics to transform the audit service performed over SME’s are so compelling that there must be stronger representation of SMPs in standard setting. Standards and techniques designed for listed entity audits are not necessarily transferrable to audits of SMEs.

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

Yes.

(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?

Not that we are aware of.

(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.

(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.

Assuming the IAASB receives a strong response to this request for input these views, combined with the position and views already laid out in the paper, should provide the IAASB with sufficient perspective to focus attention on revisions, where appropriate, to ISAs. Ensuring key stakeholders are appropriately represented in any considerations prior to standard setting will strongly complement the work performed to date.
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Background to Inflo

Inflo is a unique provider of a complete end-to-end Data Analytics solution to accounting firms. Inflo specialises in data extraction, process automation and Data Analytics for external auditors, provided through a secure cloud-based environment. Inflo’s Apps concept allow auditors to use Inflo flexibly on a client-by-client basis to perform innovative audit tests, on any device, anywhere.

Inflo is complementary to existing audit documentation tools and audit methodologies, meaning firms can minimise the change required to adopt new auditing techniques. With no implementation costs and a pay-as-you-use pricing model, firms of all sizes use Inflo to quickly embrace the possibilities of Data Analytics on their real clients.

To find out more visit www.inflosoftware.com

To view a key note speech on Data Analytics for external auditors by Inflo CEO Mark Edmondson visit www.youtube.com/watch?v=JMJuGw1wEwg

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