

13 February 2017

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Dear Sir,

**RESPONSE TO THE INTERNATIONAL AUDITING AND ASSURANCE STANDARDS BOARD (IAASB) REQUEST FOR INPUT, *EXPLORING THE GROWING USE OF TECHNOLOGY IN THE AUDIT, WITH A FOCUS ON DATA ANALYTICS* (THE PAPER)**

The Institute of Singapore Chartered Accountants (ISCA) commends the IAASB's efforts in exploring the growing use of technology in audits to advocate audit quality and remain relevant to the profession.

To solicit meaningful feedback for this important topic, ISCA undertook the following initiatives to seek views from key stakeholders:

- (i) Conducted a one-month public consultation to seek feedback from its members;
- (ii) Organised a focus group discussion to engage diversified key stakeholders, including directors, auditors, academia, regulators and internal auditors from government agencies, to obtain their views on the questions and proposals in the Paper; and
- (iii) Discussed the Paper with members of the ISCA Auditing and Assurance Standards Committee.

Our comments are included in our response to the selected questions in the Paper as follows:

- (1) Has the IAASB considered all circumstances and factors that exist in the current business environment that impact the use of data analytics in a financial statement audit?**

Generally, we are of the view that the IAASB has done a comprehensive analysis of the circumstances and factors that impact the use of data analytics in a financial statement audit. Notwithstanding that, we would like to highlight some other challenges faced in the current business environment.

### 1.1 Lack of framework

One key fundamental challenge is the lack of a framework to guide auditors in the application of data analytics in their audits. As the field of data analytics is still relatively new to the audit profession, the dearth of guidance to point auditors in the right direction when they encounter practical difficulties does not encourage the widespread application of data analytics.

For example, with the voluminous data to analyse, auditors ought to have a more thorough understanding of the client's business and be better equipped to respond to potential false positives which may be encountered during the analysis. In practice, however, many auditors may be unsure about the amount and type of work to be performed on such false positives which can be excessively voluminous, not only to the auditors but also to the client, to deter the use of data analytics.

Another example is the uncertainties over the amount of client's confidential data that can be retained subsequent to an audit and what constitutes sufficient appropriate audit evidence on data analytics engagements. This leads to challenges in the drafting of engagement letters to clients, particularly on data protection clauses, as well as the maintenance of audit working papers.

Please refer to our response in Q3 for further elaboration.

### 1.2 Data acquisition

During the data acquisition phase, ensuring data integrity is critical. The key lies in how to ensure availability, accuracy, consistency and completeness of the data retrieved from the client's information systems. Data acquisition is especially challenging for entities which use proprietary systems or multiple standalone systems which are not integrated (i.e. different data sets from different systems). If the data extraction is not done properly and there are doubts over the usability of the data obtained, substantial time and effort could be expended in understanding the data structure, data acquisition and cleansing. This may put off auditors from using data analytics. Also, auditors may face resistance from clients in providing highly confidential data for fear of data pilferage and/or leakage. To give assurance to clients, there should be some guidance over how the data should be safeguarded at the auditors' end. Please refer to our response in 3.1.

### 1.3 Data security

Furthermore, the risk of cyber attacks also plays in the minds of clients and auditors. Cyber attacks on enterprises are increasingly prevalent. Even the information technology ("IT") systems of well-established enterprises had been compromised resulting in loss of confidential information.

For the clients, they may perceive releasing data to the auditors as a potential risk and hence unwilling to do so to facilitate the application of data analytics. For the auditors, cyber attacks have a profound effect on the reliability of the source data used in data analytics procedures. Corrupted or manipulated data could cause the auditors to arrive at the wrong conclusion when employing data analytics procedures. The increased use of cloud or other third party servers further complicates matters.

#### 1.4 Knowledge gap

Knowledge gap between data specialists and auditors within an audit firm can create different set of challenges. Data specialists and auditors need to communicate effectively with each other. However, the data specialists are often not audit or accounting trained and as such, unaware of the fundamental requirements of the auditors. This increases the risk of unreliable or inappropriate results being obtained when non-auditors are running the analyses.

Similarly, within the client's entity itself, the lack of knowledge on data acquisition coupled with inadequate communication between the IT team and finance team can pose a challenge in extracting the right data.

#### 1.5 Litigation risk and expectation gap

We believe that one of the barriers to the adoption of data analytics is the perception by auditors of increased litigation risks. There is a difference between “testing 100% of client’s data” and “analysing 100% of client’s data”. However, with access to almost 100% of the client's data, clients may have the misconception that auditors carry out 100% testing, to the extent of expecting auditors to detect fraud. Hence, auditors may not be willing to use data analytics until their clients have a more realistic expectation of the amount and type of work being performed.

Data pilferages, leakages and security issues may also lead to higher litigation risks for auditors. When the integrity of confidential data, while in the possession of auditors, are compromised during cyber attacks, auditors may be held liable for any reputational or monetary losses suffered by their clients.

### **(2) Is the IAASB’s list of standard-setting challenges accurate and complete?**

Generally, we agree with the IAASB’s comprehensive list of standard-setting challenges listed in the Paper. We would like to share some other challenges for the IAASB’s considerations.

In particular, special attention should be given to the auditor's responsibilities relating to fraud in an audit of financial statements in International Standard on Auditing (ISA) 240 *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements*. The IAASB may wish to consider if any changes are required for this standard and where necessary, provide guidance on how auditors could deal with red flags identified during data analytics procedures.

Some of our stakeholders also queried if the application of data analytics will have an effect on the materiality planning considerations. When data analytics is applied on almost 100% of an entity’s data, the concept of materiality may be undermined. The IAASB may wish to consider if any clarifications are necessary to ISA 320 *Materiality in Planning and Performing an Audit*.

**(3) In your view, what should the IAASB's and DAWG's next steps be?**

**3.1 Framework**

The IAASB should consider developing an overarching framework for data analytics to provide guidance to auditors on the use of data analytics. To give more focus, this framework should be a standalone document with references made to relevant ISAs. On a related note, we are of the view that the use of data analytics in an audit requires professional judgement and should not be mandated in the ISAs. At this nascent stage, the use of data analytics is not practical for all engagements, especially in group audits where it is challenging for the group auditor to control the competency level of its component auditors.

In addition to addressing the challenges highlighted in the Paper, the framework could also cover the following areas:

- Conditions where data analytics could be effectively applied;
- Scenarios where the use of data analytics is not practicable;
- How data analytics can be applied to different audit procedures (e.g. risk assessment, analytical review, substantive testing) or different audit phases (e.g. audit planning including risk assessment, test of controls, performing substantive procedures);
- Extent to which substantive audit procedures may be reduced by leveraging on data analytics;
- Documentation required on the auditor's professional judgement whether or not to apply data analytics in an engagement;
- Documentation required on what constitutes sufficient appropriate evidence when applying data analytics;
- Classification of the results from data analytics between test of details and substantive analytical procedures as the exceptions could be dealt with differently;
- Amount of work to be performed on false positives, the outliers, the remaining non-outlier population and the exceptions noted. Correspondingly, what constitutes "exceptions" should also be clearly defined;
- Procedures to test the accuracy and completeness of source data extracted from IT systems (including third party servers) before it can be subject to data analytics procedures;
- Data retention;
- Measures to be implemented by auditors to safeguard the data confidentiality so as to give clients greater assurance over data protection; and
- Restrictions imposed on auditors in using the data only for the specific purpose made known to the data owner. For example, auditors should not be allowed to use data to build benchmarking database for consultancy use.

To supplement the framework and to promote learning and sharing of best practices, the IAASB can also explore developing case studies to illustrate the application of data analytics in audits.

### 3.2 Outreach initiatives

We agree that the IAASB should continue to engage key stakeholders such as accounting firms including the SMPs, regulators, preparers and those charged with governance, to understand their key concerns and challenges, as well as to clarify any misconceptions on the responsibilities of auditors arising from the use of data analytics. Such engagements will go a long way towards garnering greater acceptance from all constituents in the audit value chain on the use of data analytics. Hence, there is a pressing need to impress the following areas on the relevant stakeholders:

- Using data analytics in an audit does not mean testing 100% of a population;
- Analysing 100% of the population does not imply that the auditor is able to provide a higher level of assurance than the current reasonable assurance opinion or that the meaning of “reasonable assurance” has changed;
- Application of data analytics in an audit does not guarantee that all frauds will be detected;
- Professional judgement and professional scepticism will not be replaced by the use of data analytics. Instead, more accurate and focused information generated by data analytics tools will enhance professional judgement and professional scepticism; and
- Data analytics can offer the depth of analysis that traditional audits cannot deliver.

### 3.3 Collaboration between internal and external auditors

The IAASB may also consider promoting closer collaboration between the external and internal auditors to leverage on the results of data analytics. For example, as internal auditors are not delineated by materiality in their work, “immaterial” data exceptions generated by the external auditor’s data analytics tool could be shared with the internal auditors for analysis from a control effectiveness standpoint.

### 3.4 Competency framework

In addition, the IAASB could consider developing a competency framework to encourage auditors of the future to acquire other relevant skill sets such as IT skills. This will help narrow the knowledge gap with data specialists. Furthermore, to effectively analyse the data acquired, it is essential for auditors to enhance their analytical skills to be able to critically and adequately identify exceptions from the analysis generated by the data analytics tool. The role of professional accountants will evolve such that professional accountants of the future need to be multi-skilled, even in non-accounting areas, in order to adapt to the digital age. The IAASB could consider working with the education sector or the International Accounting Education Standards Board to incorporate such skills into the audit and accounting curriculum.

### 3.5 Timeline

The IAASB should also establish an estimated time frame with key milestones for this project to monitor its progress and to keep stakeholders updated on any developments or delays.

### Other comments

Broadly, most of the stakeholders agreed that the audit profession needs to move forward in tandem with times to embrace developments in new technologies, including data analytics, to enhance audit quality. However, they had mixed views on whether data analytics is merely an audit tool to facilitate the audit process or is it a conceptual change to the fundamental audit framework which should be integrated as part of the auditing standards. Notwithstanding that data analytics may just be an audit tool in today's environment, the IAASB should consider, amongst other factors, the rapid development of exponential technologies such as blockchain and bitcoin, internet of things (IOT), robotics, artificial intelligence and cognitive computing and how these technologies may impact the fundamental audit framework in the future.

Should you require any further clarification, please feel free to contact Mr Kang Wai Geat, Assistant Director, Technical Advisory and Professional Standards, or Ms Zoey Xie, Manager, Technical Advisory and Professional Standards, at ISCA via email at [waigeat.kang@isca.org.sg](mailto:waigeat.kang@isca.org.sg) or [zoey.xie@isca.org.sg](mailto:zoey.xie@isca.org.sg) respectively.

Yours faithfully,



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