



The Audit and Engagement Team of the Future
Highlights from the Seventh Annual CAQ Symposium
Breakout Discussions
Chicago, Illinois
August 9, 2015

At the 2015 annual CAQ Symposium, attendees were assigned to smaller groups to discuss issues raised in one of the two panel discussions: *Impact of Data Analytics on the Audit of the Future*, and *Corporate Social Responsibility Reporting and the Role of the Auditor*. Each breakout group, comprised of research academics, senior practice leaders, and regulators, was assigned a set of questions to address.

Below is a brief summary that provides highlights of those discussions. The statements made by the attendees during these discussions do not necessarily reflect the views of the CAQ or its member firms.

I. Impact of Data Analytics on the Audit of the Future

Audit firms are making major investments in technologies that will facilitate the use of advanced data analytics in the audit of financial statements. The integration of data analytics into the audit methodologies of the firms is still in the early stages as they explore how best to capture the data, analyze, and interpret it.

a. Data Sources

The data analytics conducted by audit firms today primarily use structured financial data obtained through the issuer client, such as journal entry transactions. Many firms are exploring the incorporation of structured and unstructured nonfinancial data, but this is not as advanced as extraction from company financial data systems. Several practitioners noted that the structured nonfinancial information maintained by a company is generally maintained in reporting systems that are not part of the financial data.

Data capture is not always straightforward. The practitioners explained that, even within a single issuer, one may have to deal with disparate Enterprise Risk Planning (ERP) systems. Multinational clients can present challenges with respect to a lack of standardization of data.

Data extraction is very complicated. There is no one-size-fits-all solution. Each issuer is unique, and so the steps taken for data capture must be tailored for each entity. This makes scalability of data analytics a challenge.

b. How the Data Are Used for the Audit

Data analytics can be employed for different aspects of the financial statement audit. Client acceptance/retention, risk assessment, and audit planning tend to be the more common tasks for which firms are utilizing data analytics. Several participants suggested that client acceptance decisions are often based on “soft” judgments, such as tone at the top of the organization. Databases used in analytics may not capture the information needed to make those judgments, although it was suggested that textual analysis of unstructured data sources could help with this.

One participant pointed out that data visualization tools can be transformational in understanding risk, insofar as it removes a potential barrier to the auditor who may not have a statistical background. Data

visualization is also an effective means of communicating issues with the audit committee and management because it transforms tables of data into more readily understandable charts and graphs.

Data analytics are being used for some substantive analytic procedures. It allows auditors to look at more data to uncover potential issues. For example, the auditor can apply substantive testing to all of a company's payroll instead of testing just one pay-raise cycle. The auditor can develop expectations of payroll expense, run tests based on those expectations, and investigate those cases where there is a difference.

Analytics can help to more readily identify significant unusual transactions and related party transactions by automating the review process.

c. Challenges

New technologies provide auditors the opportunity to look at significantly more data than ever before, but processing 100 percent of a company's data, such as journal entries, can result in the identification of a very high level of exceptions. A major challenge for the audit team will be how to distinguish between the "exceptional exceptions" and just outliers, and then plan audit procedures around those decisions. Some issues that will need to be addressed if data analytics come to play a larger role in the audit include: *Do auditors need to test all of the outliers, or can they focus on just the high risk outliers? How do you know when to end the exceptions testing?* The firms need to continually refine the algorithms used in the running of data analytics to minimize the creation of false positives. One participant suggested that the companies may not want the auditor to spend resources refining the algorithms.

A challenge identified by several participants was how best to train auditors to understand what the data are showing, how to interpret the results, and make judgments on audit procedures based on the results. Partners want to understand what's in the "black box," and they have the experience and expertise to put the information into context. Younger staff may not have that context. It was also mentioned that data analytics is not a substitute for skepticism and professional judgment. Auditors will still need to apply both when assessing the output of data analytics used in the audit.

It is not clear how the increased use of data analytics will sync with Public Company Accounting Oversight Board (PCAOB) auditing standards or PCAOB inspections. Some participants suggested that the standards may need to be updated and/or that PCAOB inspectors may need to become knowledgeable about the potential for data analytics to improve audit quality. Another suggested that the profession may need to develop a framework for documenting data analytics so that it is clear in the work papers how the firm defined risks, how the firm assessed those risks, how the data analytics provided insight, and what were the procedures conducted as a result of the analytics. There was some discussion about whether data analytics could be considered audit evidence.

d. Education/Talent Development

Several breakout questions focused the participants on the skillset that the audit profession is looking for in the auditor of the future.

Engagement teams will need people who can analyze large datasets and communicate or translate the output for the team members who then can put the data into context of the financial statement audit. The necessary skillset may go beyond what is learned today in accounting information systems classes.

One of the most important skills that students need to develop and refine continues to be fundamental to the audit: critical thinking. There was some discussion about the best way to teach this. It was suggested that classes should make more use of case studies and move away from rote memorization, which one academic suggested comprised the first three years of undergraduate accounting education.

Practitioners identified areas that incoming auditors should have exposure to: statistics, internal controls/business process flows, and data analytics. New auditors should understand basic tools like *ACL* and/or *Idea*. They should be able to run queries and understand how to interpret the results of those queries. To become a licensed CPA, students need 150 credit hours. Some obtain the additional 30 hours through an M.S. in accounting, but others take various undergraduate courses to meet the 150-hour requirement. Some participants wondered how the audit firms might influence students in their course choices. Currently there is very little pay differential between a new auditor with an undergraduate and a graduate degree. One idea was to provide a salary bump for students who specialize in data analytics as part of their master's or undergraduate work.

The academics expressed keen interest in having case studies and other resources that they could use to expose their students to the power of data analytics. In the current curriculum, students are only required to take one or two auditing classes, and so it is a challenge to add content to the syllabus of the auditing classes.

To attract new talent, members of academia and the profession agreed that there was a need to make auditing more appealing to students. They also need to do a better job of showcasing why auditing is an attractive profession.

e. Research

Academic research can inform practice. One research area of interest to the academics was analysis of key inputs into compensation arrangements for company management and how that plays into the auditor's risk assessment. Data analytics would provide an opportunity delve into compensation arrangements for even middle management staff. Researchers could also look at how data analytics affect key calculations like materiality.

II. Corporate Social Responsibility (CSR) Reporting and the Role of the Auditor

a. Demand for CSR and Assurance Services

Participants at the breakouts discussed the demand for CSR information. Investors tend to be the main source of demand, according to several participants who have been involved in this area. Currently about 80 percent of the S&P 500 companies issue some type of a GRI sustainability report. There was some discussion about whether companies report on all the major CSR issues, or just the ones where the results show the company in a favorable light.

The demand for assurance around CSR reports is on the rise. One participant who is familiar with the AICPA task force on sustainability reporting and assurance, indicated that the demand for CSR assurance will grow at about 9 percent per year, unless there is some external incentive, such as a regulatory mandate or shareholder pressure. Demand for assurance also can come from other companies. For example, Starbucks wants to test the CSR compliance of its vendors. Around 50 percent of the global economy takes part in assurance around some aspect of its CSR reporting, as compared to less than 10 percent of U.S. companies. Participants noted that one issue with assurance around CSR is the lack of agreed-upon standards for metrics.

b. Assurance Engagements

Assurance engagements on CSR reports are being conducted by the large public accounting firms as well as boutique consulting firms. The non-auditors often include recommendations in their assurance reports,

and can do so because they are not bound by auditor independence requirements that the auditing profession is subject to.

Regardless of what type of firm is performing a CSR audit, there seems to be a movement toward the reports providing limited assurance. Materiality is very difficult to establish for many of the CSR areas. CSR assurance needs to be based on a range, and not a single point estimate, according to some participants, but they noted that many CSR assurance reports focus only on whether companies adhere to their claims around processes that they follow.

A major issue with CSR reporting is the challenge of compiling the information needed to opine on a company's claims; the internal control systems and processes around these issues may not exist. One participant noted that even within a company that has controls in place, there may be a lack of consistency with how the control systems are implemented at different locations or subsidiaries, further complicating the assurance process.

c. Cybersecurity

Companies are very concerned about cybersecurity risks since these attacks can have major reputational and financial implications. As such, cybersecurity risks have been making their way into the financial statement audit as part of the overall risk assessment process. One participant likened cybersecurity to litigation risk: until it manifests itself, it doesn't directly impact the financial statements. A company's IT general controls should address cyber-risks, and this should be part of the auditor's assessment of the control environment.

Companies face the prospect of hundreds of cyber-attacks daily, and insurance brokers and shareholders may want some sort of cybersecurity-related attestation. Although there are a number of cybersecurity consultants, few, if any, provide assurance services, due in large part to litigation risks.

d. Research

Academic research has provided insights into the merits of CSR reporting and assurance, but more can be done. Future research could focus on how to assess the quality of CSR reporting. CSR restatements could prove to be an interesting area for research as well. A third idea is to explore whether CSR reporting companies have better market performance or tend to be better preparers of financial statements. In addition, behavioral research could focus on the value that report users find in CSR assurance.