Opportunities for the Assurance Profession: Actions Needed to Adopt Technology and Enhance the Value of the Audit

Based on findings from Chartered Professional Accountants of Canada (CPA Canada) and the Institute of Chartered Accountants of Scotland’s (ICAS) Future of Assurance Symposium held in Edinburgh, Scotland on November 2, 2018.

On November 2, 2018, exactly one year after CPA Canada and ICAS held their first joint symposium in Toronto to discuss and debate the future of the audit profession in the digital age and how technology might be used to enhance the audit, the dialogue resumed at a second symposium in Edinburgh to consider whether the same issues were relevant 12 months later.

The answer was yes – perhaps even more so. The Toronto event called on the profession to evolve in order to address challenges, seize opportunities and lead change in this era of ongoing disruption. In Edinburgh, the discussion took on an added urgency as a result of the string of recent corporate failures in the U.K. that put the profession under intense scrutiny and criticism. Trust in the auditor was perceived to be in decline and questions quickly turned to whether the scope of the audit should be expanded to other areas such as viability statements, cyber and alternative performance measures in order to regain lost ground.
The Edinburgh symposium reinforced the five critical calls to action necessary to evolve and advance the value and relevance of audit and assurance:

- Innovate
- Collaborate
- Educate
- Adapt
- Experiment

These will be the keys to navigating a business environment where disruption and rapid change are the new normal.

Led by two expert panels, an audience of auditors, academics, preparers, standard-setters and educators shared their views on two key issues affecting the auditing profession:

- the impact of technology on what is audited and how
- assurance over information beyond traditional financial statements.

### The Impact of Technology on What Is Audited and How

#### The current state of the use of technology by audit firms

The evolution of technology is impacting the audit market in different ways. Firms are not all using technology to the same extent within their audit approach. Even within individual firms, there is no guarantee technology is used and applied consistently. Significant activity and investment in new technologies and techniques are occurring within the largest firms, but the rate of change in smaller firms tends to be much slower. Regardless of the audit firm’s size, it is clients and the degree to which they have already adopted digital technology that are driving the adoption of technology by the profession.

For example, an entity’s financial statements may now contain a material crypto-asset balance and related crypto-asset transactions that create unique audit considerations that traditional audit procedures may not be able to address. Assurance providers have an opportunity to provide value to businesses by conducting control-readiness assessments as businesses prepare to use new technologies that bring their own unique risks.

When asked how they are using technological tools and techniques on audits today, of the auditors in the audience:

- 53% had applied technological tools and techniques in isolated areas of the audit
- 40% are using them in all areas of the audit
That said, while it is important for the profession to keep pace with technological advances and their clients’ use of technology, the potential benefits of embracing new technologies (e.g., enhanced audit quality, value creation for clients and greater staff engagement) can only be realized if technology can deliver high-quality audits. If that can be done, a more efficient audit process and new services will follow.

While many of the larger firms are developing their own tools, there is an opportunity for software developers to develop technology solutions for smaller practices (e.g., data analytics tools for audits).

An important part of the panel discussion concerned the challenge in managing the public’s view of what technology can achieve. One panelist discussed the widening of the “expectation gap” caused by the public’s understanding of what technology can achieve. For example, the public may believe that data analytics and artificial intelligence can verify 100% of an entity’s transactions and thus better detect fraud and reduce audit time. Another panelist cautioned, however, against overselling the results of the use of technology on the audit; internationally, surveys show that the actual adoption and successful use of technology lag far behind expectations.

**Challenges for the regulatory and standard-setting bodies**

Although global auditing standards apply regardless of the size and nature of the entity, the approach firms take to the audit and the technologies they employ varies. Revisions to both existing standards and new standards need to be principles based but built with an understanding of how emerging and evolving technologies can be used to meet audit requirements. Participants considered these points to be also relevant in the broader context of the IAASB’s initiative to consider how to revise the ISAs as they apply to audits of less complex entities, including whether to make extensive revisions to the ISAs or develop a separate auditing standard.

One symposium participant posed the questions: Should technology be made to fit with current auditing standards? What if new technologies are better suited than the audit model to provide assurance? These questions highlight the challenges facing the standard setters, such as the type of framework needed for data standards, the nature of the evidence and how to ensure the integrity of the data extracted.

When asked what they saw as the greatest barrier to technology being universally applied to all audits in the future, the audience responded:

- **71%** lack of appropriate expertise / knowledge
- **46%** perceived cost of investment was not commensurate with the benefit
- **39%** challenges around how to obtain sufficient appropriate audit evidence
Regulators are also working to respond to the rate of change. The current regulatory model has served the profession well and resulted in few market failures. Everyone in the corporate reporting ecosystem has a responsibility and needs to be part of this process. In Canada, for example, a multi-stakeholder working group (including standard-setters, audit regulators, securities regulators and the national professional accounting organization, CPA Canada) meets on a regular basis to identify and prioritise issues and discern where non-authoritative guidance for auditors may be needed.

Symposium participants shared their thoughts on the top priority for the profession in responding to advances in technology at audit clients. The responses are illustrated in the chart below:

**PROFESSION’S PRIORITIES IN RESPONSE TO TECHNOLOGY**

![Circle chart showing priorities]

<table>
<thead>
<tr>
<th>Priority</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rethinking the audit risk model</td>
<td>43%</td>
</tr>
<tr>
<td>Enhancing auditor training and development</td>
<td>26%</td>
</tr>
<tr>
<td>Supporting academic research into new audit techniques</td>
<td>15%</td>
</tr>
<tr>
<td>Encouraging updates in auditing standards</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

**What should be done to prepare for the future?**

In the next two years, the use of advanced data analytics and narrow AI as a tool to enhance audit testing is likely to increase. Beyond that, it is impossible to know how blockchain technology, advanced AI and quantum computing may impact professional accountants. A panelist at the symposium noted that looking beyond the next 10 to 15 years, technological singularity may be reached, where machines surpass the ability of humans to think and create. However, there will still be a need for some form of human judgment, a key element of the assurance process.

The assurance profession needs to be prepared to evolve and embrace developments in technology as they happen in order to determine how to use technology to advance the audit. The following are ways the assurance profession can use advances in technology to stay relevant and enhance the value they provide:

- **Education for auditors**
  
  Education is key to understanding and becoming comfortable with new technologies. Updated professional development courses, revisions to university programs and to the professional accounting curriculum should all be considered. Learning needs to be continuous.

  "We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten. Don’t let yourself be lulled into inaction”

  — Bill Gates
• **Education for audited entities**  
  When adopting new technologies, audited entities need to educate themselves about the necessary controls and processes to facilitate the audit. The profession needs to show entities the key elements of control needed for a successful audit.

• **Innovate and experiment**  
  Innovation and experimentation are needed when learning about and applying new technologies. Hands-on experience helps auditors better understand the associated opportunities and risks. A theoretical discussion of how data analytics and artificial intelligence work has limited benefits.

• **Adapt**  
  Audit teams need to adapt to the shift in knowledge required to perform audits. A symposium panelist explained how their audit teams increasingly use different specialist teams, including IT specialists, with an auditor as project manager. Firms should experiment with different models for engagement teams.

• **Collaborate**  
  To progress the use of technology in the audit, collaboration will be key:
  
  — Auditors and regulators need to work together. Auditors would share proposed use of technology on their audit, and audit regulators would be transparent about issues they may have with the approaches suggested.
  
  — Professional accounting organizations need to bring large and small firms together to identify proportionate technology solutions that work across the market; it is in the public interest to ensure high-quality audits are performed by all so that the reputation of the audit profession is maintained.
  
  — Professional accounting organizations, standard-setters, auditors and regulators need to work together to determine whether standards are still fit for purpose and relevant to evolving and emerging technologies (considering that 43% of symposium participants believe that revisions to the audit risk model should be a top priority for the profession) and where appropriate to develop non-authoritative guidance to explain the application of the standards in light of these new technologies.

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**Assurance Over Information Beyond Traditional Financial Statements**

**The current debate around broader assurance**  
The debate on assurance over information beyond the traditional financial statement (broader assurance) is very pertinent at this moment, particularly in the U.K., where the purpose and scope of audit is under the spotlight. There is a need to ensure that audit and assurance is fit for purpose for tomorrow’s world. Investors have access to more and more information and continuously use non-GAAP metrics and future-oriented, unaudited information to make decisions.
Guidance to promote consistency in reporting of performance measures
The Canadian Accounting Standards Board finalized and published their Framework for Reporting Performance Measures in December 2018. The Framework was created to help entities – from public and private companies, to not-for-profits and pension plans – improve the quality of financial and non-financial performance measures they choose to report outside the financial statements.

While investors value the audit, studies show they do not understand the audit. There have been many calls recently for auditors to “do more” and there are ongoing discussions around how the work of auditors should evolve to meet the developing needs of investors and the capital markets.

This prompted the IAASB to initiate a project on Extended External Reporting (EER) assurance to enable more consistent and appropriate application of the International Standard on Assurance Engagements (ISAE) 3000 (Revised) to EER by practitioners and to ensure trust in the resulting assurance reports.

Demand for other assurance services
When asked how often practitioners encounter demand for other assurance services, the audience responded as follows:

DEMAND FOR OTHER RESOURCES

In order to be credible and relevant we need to ask what does the market / investor need?
Where might assurance provide the greatest value?
The audience was asked what type of other assurance they believed would be of greatest value? The responses are illustrated below:

PERCEIVED VALUE IN OTHER ASSURANCE SERVICES

The prioritization of assurance over going concern and financial viability is in line with the rise of long-termism, Environmental, Social and Governance (ESG) investing, and the growing global adoption of Integrated Reporting. Financial statements remain important, but stakeholders are increasingly looking at information outside of these for a more robust picture of a company’s value creation story.

As a result, companies are now placing more emphasis on qualitative information included in management commentary such as the Strategic Report in the U.K. and the Management Discussion and Analysis (MD&A) in North America.

Going forward, external audits will be expected to move beyond historical data to include internal controls (whether controls over disclosure processes or controls over financial reporting, which already exist in the U.S.) or a more in-depth review of future-oriented information, which would have an impact on both cost and auditor liability. Can technology assist with providing assurance over such information? What are the appropriate criteria? And do they result in auditable information? Determining the best way to proceed will involve experimentation and an exploration of how to audit qualitative information and assess materiality of qualitative information.

Does the profession possess the appropriate skills to provide these new assurance services?
It is not yet clear how well the skills required to provide assurance on this type of information are embedded within the education of professional accountants. As educators, both ICAS and CPA Canada are currently reviewing their curricula to ensure they are relevant and future-proof. Training is needed to prepare professional accountants to be able to identify relevant risks (e.g., climate risk). But it is more than just the skills of the individual practitioner - guidance is needed on how to apply the assurance standards. The IAASB EER project is a good starting point.
At what stage of an accountant’s education / training would the skills required to perform new assurance services need to be incorporated? Here is what symposium participants think:

**TRAINING / EDUCATION**

Throughout an individual’s professional career: 63%
During post-qualification training (CPD): 43%
At the professional qualification level: 43%
At university / higher education level: 13%
Not sure: 7%
Do not believe there is a need for such additional skills: 0%

**What should we be doing to prepare for the future?**

How can the assurance profession recognize the market need for information beyond traditional financial statements and work to improve the trust and credibility of that reported information?

- **Collaborate**
  Auditors, regulators, standard-setters, preparers and those in governance positions should be collaborating to find ways to improve the trust in the profession and the credibility of reported information needed to protect the public interest. One party cannot make these changes; they need a collaborative effort.

- **Educate**
  There is a need to close the expectation gap by educating users of reported information on what the traditional audit encompasses and the value that assurance provides. For future professionals, new topics need to be incorporated into the curriculum (e.g., sustainability) and new training developed that will help them to anticipate new opportunities and challenges.

- **Innovate and experiment**
  To improve the credibility in reporting, professional accounting organizations can help by setting up “lab-like” environments such as the UK Financial Reporting Lab as a safe place to bring together multi-stakeholder teams (i.e., preparer, audit committee member, auditor and investor).
  - The teams can experiment and innovate by designing and performing assurance procedures over extended forms of external reporting.
  - As challenges are encountered, solutions can be determined and the value of the assurance provided can be highlighted (e.g., assuring consistency in reported metrics, providing credibility over non-financial information).
  - Following the recommended actions based on the technology discussion, the profession needs to consider how advancements in technology may assist in responding to some of the challenges of auditing information outside the financial statements (e.g., through use of data analytics and artificial intelligence).
• **Adapt**

  Going forward, users will be looking for different information (e.g., increased ESG disclosures, cybersecurity, alternative performance measures). As well, information will be reported in different ways (e.g., integrated reporting, sustainability reports, press releases / social media). Auditors will have to adapt to remain relevant and provide value; this may involve developing relevant criteria and guidance on providing assurance on qualitative information.