Auditors Alliance

Annual Meeting HIGHLIGHTS

22 March 2019 - OECD, Paris

#AuditorsAlliance
The Auditors Alliance Annual Meeting – 22 March 2019, OECD Headquarters, Paris

Internal and external auditors shared their knowledge and experience for auditing in the digital age, with a focus on the following themes:

1. Auditing in an Age of Digital Disruption
2. Strategic Audit Analytics for Safeguarding Integrity
3. Snapshot of findings from the OECD’s Survey on Auditing of New Technologies
4. Innovations in Auditing and the Use of New Technologies
5. Artificial Intelligence and Automating Audit: Opportunities and Risks


High-level speakers and moderators, coming from five continents and representing internal and external audit communities, included:

Speakers included:
- Marcos Bonturi, OECD Director for Public Governance
- Seto Bagdoyan, Director, U.S GAO,
- Jorge Bermudez, Comptroller General of Chile
- Georges Bernede, former EUMETSAT
- Magdalena Cordero, Director, European Court of Auditors
- François Gautier, Inspector General and Head of Internal Audit, Ministry of Defence of France
- Alberto Gowland, Comptroller General of Argentina
- Minah Kang, Commissioner of Board of Audit and Inspection of Korea
- Stephen Lisle, Manager, Wales Audit Office
- Rona Mellor, Deputy Auditor General, Australian National Audit Office
- Oupa Mokgoantle, Executive, Auditor-General of South Africa
- Erzsébet Németh, Director, State Audit Office of Hungary
- Martin Rubenstein, Chief Audit Executive, Transport Canada
- Ilir Salihu, Deputy Auditor General, National Audit Office of Kosovo
- Phil Tarling, former Global Board Chairman, the Institute of Internal Auditors
- Tytti Yli-Viikari, Auditor General of Finland

During the sessions, the speakers presented insights from their countries and institutions, focusing on how new technologies, data and analytics are used throughout the audit lifecycle. Speakers provided a wide range of applications, such as measuring progress, identifying risks, defining audit plans and monitoring the performance of public policies. Participants and speakers also shared their perspectives on the challenges facing auditors in the years to come, from ensuring the quality and reliability of data to strategic experimentation and overcoming a culture of risk aversion.

The OECD thanks all the speakers and participants for making the 2019 meeting of the Auditors Alliance a successful and fruitful exchange, as stated by 93% of the participants that responded to our evaluation survey. We look forward to seeing you in 2020 and, until that, we will work with a focus on the feedback you provided us on the ways the OECD can support you throughout the year. Stay tuned for more exciting news to come!
The opening session explored the strategic challenges and considerations for public sector auditing in a digital era, drawing from the perspectives of the heads of internal and external audit institutions. Leaders of the Finnish, Argentinian and Korean audit institutions discussed the trade-offs of digitalisation, having identified that technology provides both risks and opportunities for auditors—risks in the sense that auditing in a digital age comes with new ethical considerations, but it also bring opportunities in terms of more effective and efficient audit processes.

The audience debated the reality that auditors are expected to innovate with new tools to adapt to digital advances, without neglecting the human and ethical aspects of using technologies. Moreover, participants highlighted the importance of not losing sight of the importance of human judgement when advancing with digitalisation. Finally, auditors can no longer apply the same methods as they have in the past. Technological change is leading to new professions that are emerging within the audit sphere. The debate emphasised the need for auditors with a wider ranges of skills to adapt to the changing digital environment.

“The auditors of today face a huge quantum leap in developing new tools, methods & expertise – but it’s not just about digital skills, it’s more and more about soft skills, human behaviour, and human ethical behaviour.”

-Tytti Yli-Viikari, Auditor General of Finland
Session 2: Strategic Audit Analytics for Safeguarding Integrity

“To leverage the full value of data analytics, there has to be a full-pledge executive level commitment within audit institutions to battle the fear of using new tools. Timely access, reliability and relevant technology – those are the fundamental ingredients for using data analytics.”
-Seto Bagdoyan, Director, U.S GAO

The second session focused on data analytics and how auditors are using new technologies in the fight against corruption, fraud, waste and abuse. With examples from the U.S., Chile and Hungary, the speakers emphasised that data analytics by itself is not the panacea to address audit risks, and audit institutions should have a tactical approach to yield full value. Additionally, it is important that auditors are aware of the programmes they are analysing, choosing the right data to analyse without becoming too mechanised in the process. Auditors’ judgement should drive the results from the data analytics findings. Regarding data, it has been discussed that all databases are a work in progress; there is no data that is 100% reliable. However, participants shared examples that can be implemented in order to assure data quality, such as the use of data reliability assessments. Sampling the dataset and running a series of checks would allow experts to find out if the data are sufficiently reliable. In the event the data are unreliable, that in itself can become the audit finding.

“Reliable data and good results can be ensured through creativity combined with scientific methods and knowledge. Fear can jeopardise the creativity.”
-Erzsébet Németh, Director, State Audit Office of Hungary
Session 3: Snapshot of findings from the OECD’s Survey on Auditing ans New Technologies

The third session was a brief presentation about the preliminary findings of the OECD’s Survey on auditing and new technologies, carried out with the support of an external consultant in the months leading up to the Annual Meeting. The 191 responses provided an indication about the challenges, trends and areas for improvement for auditing in a digital age, although the results were not generalisable. Respondents highlighted data extraction, statistical analysis and sampling as the priority areas for improvement. Obtaining resources and management support were ranked as the top challenges for implementing data analytics and new technologies. Respondents also highlighted internal resistance to change as a key obstacle to improving use of new technologies for auditing. The survey reinforced a broader awareness among respondents on where best to focus efforts for improved use of technologies in auditing. For additional insights from the survey, please refer to page 9.
Session 4: Innovations in Auditing and the Use of New Technologies

The fourth session explored the approaches for piloting and managing change within audit institutions and at the operational level. Internal and external auditors from Wales, Canada and the European Court of Auditors shared their experience when testing new approaches. Examples that have been highlighted were the experience with co-working and the importance of having a multidisciplinary team, but setting the right platform for people to work together effectively does not always come easy. The speakers highlighted the potential for cultural challenges, given that data scientists and auditors might have different languages and different mind-sets. For overcoming these challenges, some simple examples have been successfully implemented, such as promoting inclusive team dynamics through meetings and informal discussions.

Strengthening data literacy was also highlighted as an opportunity for audit institution to build capacities at an operational level. A key success factor that came out of the discussions was the importance of identifying seasoned individuals within the institution that understands both the organisational culture as well the technological needs. It was noted that the ECOLAB initiative in the European Court of Auditors, for example, grew from people who knew the organisation’s culture.

“Data analysts and auditors have to work together and understand each other. They have to collaborate. Without the support from data analysts, it will not work, but to enable that, they need to feel part of the team.”

Magdalena Cordero, Director of Information, Workplace and Innovation, European Court of Auditors
The final session focused on artificial intelligence and automating audit. Representatives from Australia, South Africa and the Institute of Internal Auditors shared their views on how audit institutions can adapt to the new demands for the profession in an age of digital disruption. Speakers highlighted how audit institutions invest time and resources for maintaining an edge in the digital era, which can include redesigning working processes. It also involves developing and fostering digital and interdisciplinary skills required in the future landscape of auditing. The participants reinforced how changing the ways people are trained can help ensure they maintain professional judgment and an openness to adapting. The importance of looking at recruitment processes, particularly to attract and retain young people, was also noted.

The speakers gave examples about artificial intelligence (AI), and it was noted that AI systems are developed by humans and may contain biases. These are new risks that are embedded in organisations, and will ultimately put an emphasis on better understanding of data infrastructure, the validity of models, analysis of data quality, evaluation of AI performance and assessment of human elements. As a conclusion, consensus emerged that new competencies and upgrading of skills are required in order to develop the auditor of the future.

“You must decide to be a leader or a follower.”
Rona Mellor,
Deputy Auditor General,
Australian National Audit Office

“Look for curious people and people with the versatility to learn new skills and who are not resistant to changes. Invest in new talents and abilities. Start small, be nimble and flexible and use a fast and agile approach similar to the environment adopted by the tech start-ups.”
-Oupa Mokgoantle, Executive, Auditor-General of South Africa
In the weeks after the Annual Meeting, we developed survey questions that were sent to participants to gauge what was most interesting and useful in terms of content, what we did well, and what could be improved in the future. 86 members responded.

Overall, the responses were very positive: 93% of the meeting participants rated the event as at least Good. 80% of respondents indicated that they made new contacts at the event, which could lead to future collaboration. The majority of the participants - 92% - rated the convenience of attending the Meeting on Friday of the Integrity week as very high or high.

Although the majority of Meeting participants felt that overall the event was a success, and that a meeting of auditors allows for interesting interactions, it would have been beneficial to have some perspectives from the the private sector (e.g. the tech industry) and auditees.

“What participants thought about the meeting

“Very open atmosphere, interesting and well prepared presentations and moderators, a lot of good practices and practical examples, challenging questions.”

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“This year’s meeting was even better than the last year’s one. The speakers were all of great quality and experience and discussions with participants were very interesting.”

“What participants thought about the meeting

“Meeting room layout was much more conducive this year to promote exchanges between panellists and participants. Very dense programme. Excellent panellists. Good moderators.”

“It would be good to have a virtual community where we could keep in touch discussing all of those issues, all year long.”

Respondents have shared several suggestions on the ways the OECD could support the participants throughout the year in order to benefit from the community of internal and external auditors. The majority of the suggestions highlights the need for promoting knowledge sharing across the the Auditors Alliance community.

75% of the participants said they would be interested in contributing to an online platform, or some other mechanism, to develop case studies for internal and external public auditors to share experiences on challenges, good practices and solutions.

Finally, the main topics that have been marked as of interest for discussion at an Auditors Alliance meeting are (ranked by preference):

- Auditing and the Sustainable Development Goals
- Auditing for integrity and ethics
- Auditing at all levels of government (national, municipal and local)
- Measuring impacts of audits
- Incorporating indicators and risk-based approaches
- Auditing and cyber-security
“Having access to a network of colleagues for consultation on specific topics of interest. See how others have got on with certain activities, so as to avoid re-inventing the wheel.”

“Some members can share some information about significant or successful audit results. I mean not full reports, but summaries about interesting audit outcomes and suggestion to improve internal control.”

“Attendees could be asked to email their favourite recent publication or something they came across that is resonating with them, as a way to start to build an AA library.”

**Summary of Insights from the OECD’s Survey on Auditing and New Technologies**

**Background on the survey and respondents**

The OECD conducted the survey to inform the dialogue at the 2019 Auditors Alliance meeting and direct future areas of research and exchange among members of the Alliance. The OECD received 191 responses to the survey. The survey was distributed widely through various channels (e.g. email distribution lists and social media) to the community of internal and external auditors that had registered with the OECD’s Auditors Alliance. Given the approach, the respondents were not random and the results are not generalisable to all public sector auditors. Of the 191 responses, 91 respondents worked as external auditors, 68 as internal auditors, and 32 persons identified their role as “Other.” Respondents worked mostly with Supreme Audit Institutions and Government/ National Institutions (Figure 1) from different countries and regions (Figure 2). Respondents covered a broad range of institutions in terms of size of the budget they audit, from less than EUR 10 million to over EUR 1 billion. The survey was conducted in collaboration with Georges Bernède, former Chief Audit Executive of the European Organisation for the Exploitation of Meteorological Satellites.
Figure 1: Where do the survey respondents work?

- Government/National Administration: 37%
- Supreme Audit Institution, Cour des comptes, Tribunal de Cuentas, Rechnungshof
- Other
- State owned Company operating under public rules and regulations
- Regional Administration

Figure 2: Which countries do survey respondents represent?

- Europe: 33%
- MENA: 7%
- Australia/NZ: 4%
- South America: 9%
- Central America: 1%
- North America/Canada: 1%
- Far East: 2%
- India: 2%
- Asia: 1%
- Africa: 0%
Performance audits and IT audits appeared to be the most taxing for respondents in terms of staff hours devoted relative to the number of audits, while financial and compliance auditing were the most active areas.

In addition to those above, the survey covered other background questions to understand the respondents’ auditing environment and context. For instance, procurement/contracting, the financial sector, physical infrastructure and information technology were key focus areas for the respondents’ audit work. The survey also had questions about the “intensity” of work within audit areas, measured by the number of audits and the number of staff hours devoted to different types of audits, such as financial, performance, compliance, IT, forensic and governance audits. By this “intensity” measure, financial and compliance auditing were the most active areas, followed by performance audits, while forensic auditing was the least active area. Unlike other types of audits, for both performance audits and IT audits, the aggregate reported staff hours allocated to these audits exceeded the actual number of audits conducted. This could suggest that these audits are more demanding relative to other audits in terms of the number of auditors needed, and possibly skills required, to conduct such audits.

Respondents reported systematic use of data analytics for financial audits, but responses suggest opportunities for improving the use of data analytics for auditing other types of audits.

The survey included questions about auditors’ knowledge and actual use of computer-aided audit tools (CAAT) and data analytics. Results showed broad use of Microsoft Excel, including basic usage and Visual Basic for Applications. Respondents reported a fair knowledge of data extraction tools (e.g. SAP/AIS, ACL, IDEA, Tableau), as well as limited experience on collaborative tools (e.g. Teammate). Respondents did not indicate use of any cloud-based tools. Respondents provided their perceptions about whether data analytics was used systematically or on an ad-hoc basis (or never) for different types of audits. Financial audits were the most common application of data analytics reported, although across different audit types there was a high number of respondents reporting that they never used data analytics or used it on a case-by-case basis. This suggests a potential growth area for auditors to explore more systematic uses of data analytics for different types of audits.

**Figure 3: Use of Data Analytics by Audit Type**
Respondents primarily use data analytics to detect irregularities, and responses highlight opportunities for auditors to improve the use of data analytics for assessing performance.

Overall, respondents indicated that they largely use data analytics for detecting irregularities, which could include the identification of red flags for fraud, waste and abuse (Figure 4). Respondents indicated an emphasis on internal data or data provided by government entities or private companies for detecting irregularities, with some respondents noting the use of open data for said purposes. Responses showed a limited use of data analytics in the context of performance assessment, the reasons for which would require additional follow-up and research. One possibility is that there is an untapped potential to use data analytics for assessing performance, which could include monitoring and evaluation activities or forecasting, for instance. It is also conceivable that the nature of the question led respondents to consider performance assessment as the role of another entity, and outside their purview or mandate as auditors. Moreover, concerning data analytics and artificial intelligence (Figure 5), implementation seems to be in the early stage of development across a range of possible uses, including identifying audit topics within the audit universe, testing internal controls and detecting irregularities.

Figure 4: Why do you use data analytics and what data sources do you rely on?
Respondents identified data extraction tools, statistical analysis and sampling as the top 3 priorities for improving the use of new technologies for auditing. Financial resources, high-level commitment and tool selection were the top 3 challenges respondents selected for implementing CAAT and data analytics.

Respondents ranked the top priorities for improving the use of new technologies in their work among a list of areas, including those below. Those not listed included issues like electronic signatures and approval of audit reports, as well as web-based distribution of audit reports. The table below display the ranks in terms of the number of respondents that selected the particular issue as the top priority. For instance, 31% of respondents ranked data extraction tools as the top priority area for improving their use of new technologies when auditing. On the other hand, 19% of respondents said sampling was the third most important priority for them.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Data extraction tools</td>
<td>1 (31%)</td>
</tr>
<tr>
<td>Statistical analysis</td>
<td>2 (29%)</td>
</tr>
<tr>
<td>Sampling</td>
<td>3 (19%)</td>
</tr>
<tr>
<td>Collaborative report drafting</td>
<td>4 (18%)</td>
</tr>
<tr>
<td>Recommendations follow-up automation and integration in the IT system</td>
<td>5 (20%)</td>
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The auditors surveyed were also asked to rank the challenges they face in implementing CAAT and data analytics, based on a list of challenges provided. “Getting the necessary budget” was ranked as the top challenge by 21% of respondents, whereas 18% of respondents said “selecting the most appropriate tool” was the top challenge.

<table>
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<tr>
<th>Issue</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Getting the necessary budget</td>
<td>1 (21%)</td>
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<tr>
<td>Getting this initiative recognised by the Management as an important audit activity (e.g. getting the adequate priority)</td>
<td>2 (17%)</td>
</tr>
<tr>
<td>Selecting the most appropriate tool</td>
<td>3 (18%)</td>
</tr>
<tr>
<td>Training effort</td>
<td>4 (17%)</td>
</tr>
<tr>
<td>Complying with cyber security regulations</td>
<td>5 (20%)</td>
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When considered in combination with other questions, the challenges noted above provide additional insights to the issues auditors face to effectively do their work in a digital age. For instance, the heavy reliance on Excel coupled with the need for improved data extraction tools suggests specific opportunities to identify better tools that can support auditors in data management and pre-analytical processing of data. Responses to other questions echo this consideration, as respondents reported limited use of automated data extraction tools. Improving in this area could help auditors to manage heavy workloads and reduce the risk of missing information or data corruption.

Likewise, with the exponential growth of financial data and digitalisation of objective evidence (records of financial transactions, purchase orders, signature, invoices, etc.) technology may help examine, inspect and analyse the data. In that way, the workload that is necessary when working and relying solely on spreadsheets could be better allocated. Technology could also be used by public sector auditors for enhancing their communication strategy, by more efficiently extracting the data and transferring the information (e.g. from audit papers to findings, from findings to recommendations, from recommendations to follow up), which could reduce manual intervention, and the risk of errors and loss of data.

**Concluding remarks**

The results of the survey provide a window into the reality auditors face when auditing in a digital age, and they signal opportunities, challenges and trends that can inform future discussions and research. The results of the survey are not generalisable and merely represent the perceptions of a subset of the over 600 members of the Auditors Alliance. Bearing this in mind, the survey establishes some guide posts for both apparent and hidden opportunities to improve auditors use of new technologies. For instance, this includes exploring the possible need and options for making use of data analytics to assess performance, going beyond the use of analytics for detecting irregularities, as well as developing ways to encourage management buy-in for experimenting with and institutionalising CAAT and data analytics. The results may also help auditors to prioritise their efforts and avoid wasting time and resources on initiatives with limited or uncertain impact (e.g. crypto-currencies and artificial intelligence, by and large, were not top priorities among respondents, while foundational issues for improving CAAT and analytics remained at the forefront.)

Additional questions in the survey asked auditors about future trends that they perceive in their work. Over two-thirds of respondents highlighted big data and the use of external data as two major trends on the horizon, and nearly as many noted the importance of cloud computing accounting as a future trend. Indeed, with the growth of financial data and the digitalisation of evidence (e.g. records of financial transactions, purchase orders, signature, invoices and delivery forms), the government auditor faces a heavy burden that new technologies, automation and analytic techniques can help to alleviate in terms of supporting analytical capacity as well as reducing the risk of error or data loss. Keeping pace with this evolution is critical not just for auditors to do their work, but also to keep pace with broader digital transformation in government.
The Auditors Alliance is a unique forum for public sector internal and external auditors to share insights and expertise on their audit practices.

It aims to:
• Create a space for bringing together public sector auditors to share better practices and overcome challenges.
• Facilitate institutional partnerships in the spirit of mutual learning and targeted co-operation, matching the needs and skills of different auditors and audit entities.

More information at oe.cd/auditors-alliance