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How technology is *helping audit committees to see the bigger picture*

The growing sophistication of technology, and particularly data analytics, is giving audit committees a broader and deeper view of their companies than ever before. *Sally Percy* reports.

Technology is transforming how companies do business and exposing them to new risks and opportunities. It is also ushering in a new era of audit. Thanks to the emergence of powerful tools and techniques, technology now has the potential to improve audit quality and provide companies with new and valuable insights. So what is the impact of technological advances on the audit committee?

The real game changers are the new technologies that are being applied to the audits themselves, because of the far-reaching insight they offer to audit committees. Data analytics, in particular, is transforming the way that audits are conducted, because it enables auditors to move away from auditing small samples of data to auditing large samples, or even entire datasets.

"In the past, we would have tested a sample of data to see whether people were complying with the travel and expenses policy, for example," explains Dave Dillon, Chair of the audit committee at multinational conglomerate 3M and US railroad franchise Union Pacific. "Now, in the digital world, most companies can get every single expense report reviewed because the additional cost of doing that is so small."

Another powerful use case for data analytics is in fraud detection. Julie Brown, COO and CFO of luxury brand Burberry and Audit Committee Chair for pharmaceutical company Roche, explains: "With journal postings, for instance, you can search for entries over weekends, outside normal business hours, or by staff who wouldn't normally make them, to pick up signs of fraud or manipulation of the accounts."

She continues: "With data analytics, an auditor can identify risks very easily and tailor the testing to do recalculations of higher-risk areas. So, in retail, the auditor could use analytics to recalculate an expected stock provision based on the aging of stock. It could then compare that with the stock provisions the client has put in place. So it's a good way of doing top-down analytical checks on data."

Steve West | Dr. Maurice Ngai | Julie Brown | Nasser Munjee | Dave Dillon

Nasser Munjee, who is Audit Committee Chair for five Indian companies, confirms this. "The role of financial control, as well as internal audit, has been vastly improved by the use of technology over the last three to four years," he says. "It's brought much more oversight and predictive oversight."

Undoubtedly, data analytics is giving audit committees access to valuable insights that they never had in the past. "We can assess the results of data analytics to understand why something has happened," says Dr. Maurice Ngai, Audit Committee Chair of China Communications Construction Company and other listed companies in China. "Then we can question management."

"Data analytics is helping higher-quality discussions to take place between the audit committee and the auditor," notes Andrew Gambier, Head of Audit and Assurance at global accountancy body ACCA, "and anything that helps the audit committee to reflect upon their own independence and their role in governance is extremely helpful."

THE VALUE OF DATA

Higher-quality audits don't just rely on higher-quality technological tools, however; they also rely on higher-quality data sets. Munjee notes that few companies today have their data in a state where analytics can be applied to it effectively, making this an area where audit committees are driving change.

"A lot of audit committees have to spend a lot of time on making sure management is putting in place a suitable database," he says. "This is fundamental to financial control, because risk management systems need to be informed by accurate data."

Brown agrees. "You need to ensure that you've got a solid database, or a set of data and foundational rules in place, so that when you extract the data, it becomes meaningful," she says. "It's really important to get good data quality going into any analytics. With technology, what you get out is only as good as what you put in."

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>
> **Andrew Gambier, ACCA**

She adds that mindset is critical to the successful application of data analytics to the auditing process. "Moving from traditional models of auditing and data capture does require a different set of skills and an understanding of how the outputs and the data can be used," she says. "So it's important to ensure that people are trained to treat data as a company asset, and that the teams in the business get behind the cultural shift so that the data pool can be harnessed in new and innovative ways."

The pressure on companies to keep data safe explains why cyber risk is a prominent item on audit committee agendas. Steve West, Audit Committee Chair of US technology company Cisco, says the audit committee there reviews cyber risk at its "deep dive" meetings and monitors the cyber risk environment using a dashboard that it shares with the rest of the board. Cyber security is also a top priority for Munjee, who says: "Companies must have sufficient defenses, because they are going to be hacked, whether they like it or not."

THE POTENTIAL OF AI

Some companies are also starting to adopt artificial intelligence (AI). "It is being used," West confirms, "but it seems to be a slow-as-you-go development."

He believes AI is the "next frontier" for audit, after data analytics. One possible future use case for AI is the analysis of unstructured data such

as emails, social media posts and conference call files to search for evidence of fraud. Another is the extraction of key information from large numbers of contracts, such as leases.

Dillon believes that AI is already adding more logic to the "reasonableness" test that examines the validity of accounting information. "In the past, auditors would look at statistical variances and ask, 'Is that reasonable and can I explain why those variances occurred?'" he says. "Today, you can use AI to come up with more 'reasonableness' analyses than you could have in the past. That gives you a more thorough assessment of the quality of the data."

Other emerging technologies that have the potential to transform the audit include robotic process automation, which can be used to generate audit-ready work papers, and drones, which can be an effective way for auditors to conduct inventory counts in remote locations.

Together with data analytics and AI, these technologies could bring about substantive improvements in audit quality in the future. "Auditors are trying extremely hard to see how they can use technology to improve their audits," says Gambier.

ASK THE EXPERT

Given the importance of digitalization to company strategy and operations, should audit committees and boards always include at least one director who is a dedicated technological specialist?

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> **Steve West, Cisco**

"Neither the Burberry nor the Roche board has got a nominated digital or technical non-executive director," Brown explains. "But we have got people who are specialized, or who have a background in digital technology capabilities. It's part of the board skillset."

West says: "You should have someone on your board, or maybe a few people, who are conversant with technology and who can ask the right questions. These might include, 'How do we use blockchain?' Or, 'Do we think AI has any application for us to improve our ability to monitor our expenses?'"

Another option for boards looking to improve their oversight of technology outside the audit committee would be to set up a dedicated digital committee. There is no sign that these are in widespread existence, however.

"None of the companies I've worked with has a digital committee," says Dillon. "I could see the need for one if you had a very specific strategic

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Julie Brown, Burberry and Roche

application of digital in your company, but otherwise I don't actually see much of a need for that. But I do think there's a need to have a member of the board of directors with a stronger technology background than the others."

Audit committee members are required to understand what technology is capable of rather than be expert technologists themselves, and the same principle applies to today's finance leaders. "As a CFO, you don't have to be an expert in technology because you have other people in the organization, such as data scientists, who are the experts," says Brown. "But you need an understanding of what technology is capable of and what good looks like."

"I would say that technological skills are moderately important," says Gambier. "The real advantage comes from having a vision about how technology can be used to do things differently. An example might be the month-end process. Is there a way of mechanizing some of that process to reduce the time and effort involved in preparing the information?"

Ngai argues that, ultimately, all finance leaders need to embrace digital disruption. "It's everywhere," he says, "so finance leaders should be preparing their teams for the challenges that come with it, and understanding how they can use big data in their decision-making.

"They also need to work with other departments in the company, not only to ensure the accuracy and completeness of data, but also to establish how it can improve the efficiency and profitability of the company."

WHAT NEXT?

Change is happening but the reality is that, while emerging technologies have the potential to further transform both the audit and the way the audit committee works, this transformation is still a work in progress. Technology does not yet have all the answers to the problems audit committees face. So what can't technology do today that audit committees would ideally like it to do?

"Judgment," answers Ngai swiftly. "There's a lot of judgment involved with our work and technology could help with that. It could help us to uncover issues that may be critical to the future performance of the company so that we can prepare for it today, rather than wait until it happens. I also think timely communication with external auditors is another area where new technologies can help."

Munjee is looking for simplification. "Things are too complex, and technological developments are moving too fast for the human mind to catch up with what is happening. Is there a tool that would simplify matters to allow us to see more clearly?"

It is likely that audit committees will see technological tools that address these issues, and others, before too long.

"The rate of technological change is absolutely staggering," says West. "I've been in this business for 30 years, since before the internet, and I think the rate of change is only going to increase. If you're on a board that's not really looking at technology and understanding the impact of it and how you may be disintermediated by technology, you're in a world of hurt."

Brown believes that, as the use of technology becomes more pervasive within organizations, and the risks of using emerging technologies are more widely understood, there may be a requirement to audit algorithms. Oversight of that auditing process would naturally fall within the remit of the audit committee. "I am sure this will be a key role for audit committees going forward," she notes.

"Digital is evolving in audit as it is in every other part of the world," Dillon concludes. "There's no end game here. It's just understanding where it is today and where it will be tomorrow." ■

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