SECOND OPINIONS: HOW CAN AUDIT DATA ANALYTICS GENERATE VALUE FOR ORGANIZATIONS?

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Very often when we talk about the audit evolution, the term audit data analytics (ADA) comes up. Large international audit firms have been using ADA for years, but it is still not popular among small and medium practices (SMPs).

Thanks to the growing usage of cloud software, more and more companies, not only large corporations but also small and medium ones, have started automating their accounting process. The traditional ways of performing audits through face-to-face meetings with clients may not work anymore because they may no longer be involved in doing the debits and credits. As auditors, we need to know the way to find out stories from data.

ADA can help by analysing complete sets of data, which can help auditors to achieve a 100 percent population testing and detect unusual patterns in transactions. This is helpful due to the trend of regulators being increasingly concerned about how auditors develop their audit approach to address fraud risks. The use of ADA to test journal entries can provide a more objective judgement on the testing of journal entries.

ADA can bring more benefits to SMPs. For example, in substantive audit testing, the use of ADA can let auditors step away from a traditional blind sampling approach and instead focus on just a few anomalous transactions. This can drastically reduce manual workload and allow SMPs to take in more clients without the need to increase their staff numbers. This also makes work more interesting for staff. ADA also helps auditors to analyse the performance of their clients in aspects such as profitability, liquidity, industry peers' comparison or even identifying internal control deficiencies. Presenting these findings to clients is a way to make the audit fees go beyond issuing an unqualified opinion.

Adopting ADA also doesn't necessarily require learning a new programming language. Practitioners might think they need to learn languages such as Python, Alteryx or SQL, but in fact tools as simple as Microsoft Excel can also do ADA. There are also some cloud-based ADA tools in the market with user-friendly interfaces for those who do not have any programming skills. Many of these tools are also not too expensive, particularly when factoring in the cost savings they bring.

A checklist mindset and a "same-as-last-year auditing" approach is a thing of the past. SMPs need to embrace new technology to stay ahead of the audit evolution.

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Data analytics (DA) has become a necessity rather than an option for auditors as it provides insight based on the analysis of an entire data population instead of a tiny slice from traditional audit samples. For the internal audit (IA) function, with access to many data points in the organization, DA can serve as the thread to connect the dots to present the bigger picture, which enables the discovery of systematic issues and emerging risk trends.

Unstructured data accounts for 80 to 90 percent of the total data being created. DA can also be useful for organizations with unstructured data, such as text and speech. For example, a fintech company used DA and speech recognition to monitor its call centre several years ago. Traditionally, quality control checks only cover about five percent of customer calls handled by operators. Through speech recognition and DA, 100 percent of customer calls are monitored from various perspectives including call content (audio is converted to text), duration and emotion (from voice intonation). This not only provides better assurance and facilitates improved identification, but more importantly, it also helps to drive change in people's behaviour, as operators know they are continually being assessed, instead of only facing a sampled quality assurance check.

IA should critically challenge the status quo including how businesses and operation units use DA in the fast-changing landscape, instead of just adhering to existing procedures. This requires IA to stay on top of the latest developments and deploy ADA in its own audit processes.

With the continuing digital transformation, harnessing data and new technologies are inevitable for all of us. IA functions, no matter large or small, can all embrace ADA. For example, writing simple scripts on customer or transaction databases to identify abnormal patterns can help auditors prioritize focus areas before any deep-dive review to improve audit effectiveness. For further guidance, the Institute of Internal Auditors offers global technology audit guides and thought leadership on using DA.

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Whether focusing on internal or external auditors, organizations are demanding more effective and efficient audits as well as better value from the audit assurance process. These audit demands are being met by auditors incorporating high level ADA in the assurance process. The value proposition is being met by lower cost and/or higher effectiveness audits as well as suggestions to management about how to improve continuous monitoring and management of key risks. Examples include recommendations for installing continuous monitoring scripts in the IT system for data breach detection or actions to achieve cost reductions such as adding robotic process automation to accounting systems.

From the auditor perspective, audits are all about strategic risk analysis. Today's highly automated ADA improve these analytics by not only performing automated risk analysis at high levels of data aggregation but also drilling down into the underlying data necessary to detect other risks. They facilitate creating predictive models which anticipate client results. This improved risk analysis results in improved audits and valuable suggestions to the client for process improvement.

Audit effectiveness is improved by the ability to audit 100 percent of populations rather than just a sample of transactions, thus improving assurances. ADA can also be extremely effective in identifying outliers or fraudulent transactions. For example, a cluster analysis of all revenue transactions might spot unusual transactions in an extremely large population (think millions!) where the transaction clusters would otherwise be relatively undetectable.

Audit efficiency is improved by the automation of what previously was time consuming, tedious and repetitive audit testing. Auditors can create computer scripts for an audit which can be reused on subsequent audits. This saves time and money over the long run. For example, a script to download the general ledger from the main computer system and compute a variety of key analytic visualizations. Other scripts can provide real time notifications to the auditors and management about problems which occur.

Perhaps the greatest benefit of ADA is, through enhanced educational coverage, attracting to the audit profession (and retaining) highly creative individuals who seek a stimulating work environment where they can build personal competency through challenging, creative work activities.

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