Technological resources: using technology to enhance audit quality

Duncan & Toplis Limited Response

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Using Technology to Enhance Audit Quality

Technological innovation and audit quality

Q1: Do you agree that the increasing use of technological resources, including AI and other advanced tools, enhances the quality of audits, beyond the benefits derived from efficiency gains. If so, what are the indicators of enhanced quality?

R1: Yes. Advances in technology enable the testing of significantly more data than has previously been possible, giving a more complete picture of a given population that in turn is more likely to identify errors. For example, every sales transaction can be reviewed in a relatively short period of time, with incomplete or unusual transactions all being identified for further testing. This is opposed to the traditional approach of testing a relatively small sample of transactions that may miss the outliers. One potential indicator of enhanced quality could include documentation that a large proportion of transactions have been subject to analysis.

Q2: Do you believe that challenger firms are currently at a disadvantage in the use of new technology? If so, what remedies would you suggest?

R2: Overall yes. Although they have access to a growing pool of commercial products they simply don't have the resources (financial and knowledge) on the scale available to the Big four. Outside of the Big four and certainly outside of the top ten, firms would be unlikely to be able to support internal development of software or new technology.

Potential remedies could include the sharing of software between the Big four and challenger firms, but this would clearly create a commercial conflict. Alternatively, there could be standard packages to use (i.e. an FRC (or similar) developed package, but this would likely be an obstacle to innovation and may quickly become obsolete.

There are certain innovations in the development of a standard data model and availability of open source 'knowledge graphs' that could help to narrow this gap. This would allow challenger firms to quickly access the data of new clients and to be able to interrogate the data. However, without in-house development there is likely to remain a disadvantage with challenger firms.

Q3: Other than investment, what do you believe are the key challenges auditors face in the increasing utilisation of automated tools and techniques within the audit process? Again, what remedies would you suggest to overcome these challenges?

R3: There would remain the issue of high-quality data. Smaller audited entities may well have less high-quality data systems and therefore the data smaller audit firms are dealing with may be less compatible with advances in software.

There is also the shortage of suitable individuals with the appropriate technology skills. It is thought more likely that they would be more attracted to roles within the Big Four currently. The use of a standardised data model in smaller entities may help with the first issue. The

second may involve the incorporation of data analytic tools into the major accountancy qualifications/external training to be provided to more experienced auditors working for small firms.

Q4: Does the current assurance model or the auditing standards represent an obstacle to technological innovation? If yes, then what specific standards, objectives, requirements or guidance cause practitioners particular difficulties?

R4: Overall, no. It is the interpretation of the assurance model and auditing standards that is more likely to create an obstacle. However, it would be beneficial is auditing standards were updated to explicitly reflect the use of data analytics/other technology. For example, current standards refer to the testing of controls or substantive testing. Standards should clarify exactly where data analytics sits. The standards could also clarify how the use of data analytics should be documented.

Q5: Do you believe the current level of training given to auditors – both trainees and experienced staff – is sufficient to allow them to understand and deploy the technological resources being made available?

R5: Overall, no. Many auditors may still not even use an electronic-based auditing package, never-mind make use of data analytic techniques. We believe that the ICAEW are introducing data analytics into their training programme, but without regular, practical use of said technology they will not have the experience to properly utilise the tools available.

Artificial Intelligence, Machine Learning and Natural Language Processing

Q6: What firm-wide controls do you believe are appropriate to ensure that new technology is deployed appropriately and consistently with the requirements of the auditing standards, and provides high quality assurance which the firm can assure and replicate more widely?

R6: The technology used must be controlled at a firm-wide level, with limits being put on the ability of users on changing parameters. Any requests to change must be discussed by an appointed committee within the firm and documentation of those changes must be robust.

Q7: Are you aware of the use of new technologies in analysing and interpreting information provided by auditors – including, for example, auditor's reports? If yes, then do you foresee implications for the form and content of auditor's reports?

R7: Yes, we are aware of technology that can detect different elements of reports. There may be increased difficulty in getting such technology to reliably interpret reports, especially with the proposed changes to ISA 700 being implemented. ISA 700 requires a significant amount of non-boiler plate language to be used.

Looking at this from another perspective, if auditors are aware of what language may cause issues for entities, they may change their reports to not include certain words or phrases. Clearly, this could give rise to ethical issues.

Q8: What do you see as being the main ethical implications arising from the greater use of technology and analytics in an audit?

R8: The main ethical issue will be the maintenance of barriers between those using the technology and those designing it. The results must remain objective.

Data Standards and Extraction issues

Q9: Do you believe there is value in the UK having consistent data standards to support high quality audit, similar to that developed in the US?

R9: Absolutely. The consistency of the structure of data and how that data should be handled and linked is key. This isn't just from an ethical perspective or quality aspect, but also one of competition. Standardised data would allow for easier transfer from one auditor to the next. The implications that GDPR may have on data standards is important.

Q10: Do you agree that threats to auditor independence may arise through the provision of wider business insights (not as part of the audit itself) drawn from the interrogation company data? If so, what measures would mitigate this risk from crystallising?

R10: Yes, that threat may arise, if audit firms offer additional services as a result of the insights they obtain through interrogation of company data through the audit process. If auditors have full access to standardised data and knowledge graphs could be applied, then auditors could easily provide wider business insights. To mitigate against this there are various options. For example, specific legal terms regarding the use of the data. There may even be limits put on the type of knowledge graphs that could be used for audit assignments. There could also be the requirement (at least for some types of audited entity such as PIEs) that auditors cannot provide other services and therefore would not spend time looking at other insights. For audits of non-PIEs, the use of different teams could mitigate the threat.

Audit Documentation

Q11: Do you agree that audit documentation can be more challenging when an audit has been conducted with automated tools and techniques? If so, please identify specific areas where is a problem.

R11: Yes. Fundamentally the reviewer needs to understand what they are reviewing and have confidence in the information given. That is the main challenge, having enough individuals with enough knowledge to be comfortable reviewing the information presented. Updates to auditing standards should make explicit what the documentation requirements are for using data analytics.

Data Analytic Exceptions

Q12: Have you encountered challenges in dealing with the volume of 'exceptions' arising from the use of more complex or comprehensive data analytic procedures?

R12: Yes. If the parameters are not correctly set-up at the planning stage of an audit, then too many exceptions can be generated. This may also be caused by poor quality data in the first instance.

Use of Third-party Technology Providers

Q13: Do you agree that the use of third-party technology vendors raises potential ethical challenges for auditors and, if so, which potential safeguards would you see as effective in reducing this threat to an acceptable level?

R13: Potentially. It would be required for vendors themselves to be open to internal-controls testing/open publication of reviews into the products they produced. For example, an 'audit' report on the outcomes of using the software on independent data and a subsequent review against standardised results.

Q14: Do you agree that the increasing usage of third-party providers presents challenges in audit documentation and, where relevant, how have you dealt with this?

R14: Yes, there needs to be standards for the reports, so that reports from one piece of software can easily be compared other software. The third-party provider needs to make it clear how their software works and enable auditors using the software to fully understand how it works.