1	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?	Over recent years we, and the BDO network more broadly, have invested significantly in audit technology, both in terms of developing our own proprietary technology as well as purchasing off-the- shelf technologies. Although we expect to benefit from some efficiency gain, this was by no means the leading factor in driving our desire to invest. Rather these investments have been aimed primarily at audit quality. Audited entities are evolving ever increasingly complex business models and implementing increasingly sophisticated systems and technologies of their own and, they, themselves, need to prepare financial and corporate reports in compliance with a substantial body of laws, regulations and standard. As for audit quality, we operate in a constant improvement environment; we demand this, the users of our audits demand this, and regulators demand this. It is therefore essential that we continue to invest in the latest technologies. However, these technologies, in themselves, will not positively change the indicators of audit quality. High quality audits fundamentally rely on training and deploying the highest quality individuals, frequently at a global network level, within an environment where behaving ethically and achieving high quality work is the backbone of the firm's culture.
2	Do you believe that challenger firms are currently at a disadvantage in the use of new technology? If so, what remedies would you suggest?	Any firm that does not have the resources, or who chooses not to use those resources, to invest in audit technology will, in the longer term, be at a disadvantage with regards to auditing the most complex entities to the highest of standards. However, as noted in our answer to question 1, it does not necessarily follow that the act of simply investing in technologies will improve audit capability and quality. We have observed firms investing heavily in some technologies that have either failed to have a significant impact on auditing or, have had a relatively short useful life. This experimentation, research, and development is of course an inherent part of innovation and one that should lead to competitive advantages. Equally, we are also seeing many of these technologies flow down from a proprietary status to one where they are provided by third party suppliers. This phenomenon does provide for a wider range of audit firms to utilise similar technologies with relatively short lead times, should they have the appetite to invest in the training and application.

		This environment whereby some firms invest heavily in audit technologies, and where others wait for them to be available in the wider marketplace, will continue to enable the profession as a whole to increase, and compete on audit quality. This in itself though, will not result in all firms auditing the most complex and sophisticated entities. The Kingman, CMA and Brydon reviews together examined the regulatory environment, the market structure and the scope of audit. It is only by forming a cohesive package of reforms across the financial reporting ecosystem that the, so called, "challenger firms" will have the desire, means and opportunity to compete.
3	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?	As noted above, purchasing or developing technologies is only the first step in being able to use them to produce a high quality audit. Increasingly sophisticated technologies require significant investment in the training of staff and integration into the overall audit methodologies. Upskilling audit teams consists of both training of existing staff but will also, inevitably, requires bringing new skills into the audit team, for example by employing specialists who are not auditors and have not been through traditional audit training. In terms of remedies, more attention needs to be given to Brydon's recommendations on the new auditing profession and the skills that new auditors need. In order to change the skills base in audit teams, the qualification will need to evolve. For example, do all auditors still need to be accountants; the validity of the current onus and emphasis on accounting entries, tax etc. should be questioned in the context of the auditor of the future; the importance of a technology qualification route.
4	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?	No, we do not believe that the current assurance model or the auditing standards represent an obstacle to technological innovation.
5	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?	Training is of such significance that it has featured in almost all of our answers to this consultation. We note above our thoughts regarding professional training leading up to qualification. Beyond this, investment in training is very much a decision for each firm and individual; its sufficiency is equally dependent on these decisions.

		As a firm, we believe in the value of training and have invested heavily in it. We have also found though, that as technologies become increasingly complex, both in regard to audited entities systems and our own audit tools that a smaller group of specialist and champions is needed to fully understand the complex IT environments and achieve the full benefits that our tools can offer. Related to this, one should not underestimate the pace of change of technology with corporates and the absolute need for management, and those charged with governance, to have an appropriate degree of understanding of these technologies. It is only by fully understanding complex systems that a CFO can properly be confident that the entity's control environment is appropriately designed and applied to produce high quality, reliable information.
6	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?	We believe that the way in which technology is developed and deployed is an important factor in its ability to contribute to high quality audits. All of our proprietary audit technologies have been designed from the outset with their main purpose of being used in our audits. Because of this, we have focussed on complete documentation, robust testing, high quality training and a controlled roll-out; all designed to enable our firm to achieve the best quality outcomes, and in compliance with ISQC1. However, we appreciate that technologies with grand promises of value are being invented frequently and that there is certainly demand to use them in a shorter timeframe than such diligence allows; a lightly-tested product with inadequate training and a fragmented roll-out, might meet certain user expectations but will not produce a high quality outcome.
		These factors are even more critical in the context of global audit networks. Many of our technologies are globally deployed and we need the assurance that technologies used globally by all our network firms are inherently reliable and appropriately used; our development processes allow for this.
		Similarly, currently only an emerging issue, but in the future as technologies become increasingly sophisticated challenges may arise in relation to using component auditors outside of the network. To some extent the proposed ISQM 1 starts to recognise such issues and we anticipate that this will require, from all firms and networks, more stringent documentation around new technologies to ensure that they are fit for purpose and are reliable.
7	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?	We do not have examples of such technology in relation to investors using it to review audit reports. If such technology is used then, like all tools, it will be important for the users to understand not only the value it brings but also the limits of such technology. The messaging in audit reports is very specific to the facts and circumstances or the organisation and often requires the use of nuanced language. If used inappropriately, as a blunt instrument, such technologies could lead to inappropriate conclusions and misinterpretations.

8	What do you see as being the main ethical implications arising from the greater use of technology and analytics in an audit?	<ul> <li>The ethical and independence issues in emerging technologies are significant and are likely to become even more so as technology evolves.</li> <li>With regards to independence, currently some of the more challenging areas include: <ul> <li>Non-audit services: ensuring standards and application material keeps pace with technology developments;</li> <li>Self-interest, self-review and management threats related to business relationships when providing or licencing technology and services to clients.</li> <li>Similar threats when providing increasingly valuable insights into clients business and systems as a by-product of audit procedures;</li> </ul> </li> <li>Independence aside, there are a number of wider aspects of ethics that are impacted by emerging technologies, including: <ul> <li>Early stage, but concerning, research concerning the fallibility of Al in terms of important ethical issues such as bias and discrimination</li> <li>The use of data</li> <li>IA and machine learning in the context and application of the fundamental principles of a professional accountant, including aspects such as requirements in the IESBA Code regarding Professional Competence and Due Care.</li> <li>Questions as to the extent to which the decision making of Al should be transparent</li> </ul> </li> </ul>
9	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?	Yes, a common data standard has numerous advantages. It could form the backbone on which future technologies can build; allowing for much easier conversion of data for use in tools and has value for both structured and unstructured data, as well as reducing the barriers to entry for smaller firms.
10	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?	Yes. This is a complex area to consider but, at its simplest, it risks blurring the line between being an auditor and an advisor; particularly where these insights are key to management decision making and provided regularly. Also, whilst not strictly an ethical issue, the increasing deployment of identical technologies at audit firms and audited entities also has implications for scepticism and the predictability of audit testing; both of which are important factors in delivering a high quality audit.

		These are not a future issue, they are considerations for auditors now. The independence risk is mitigated by using one's professional judgement as to when such insights start to impinge on independence. The reality is that the facts and circumstances are so complex and nuanced that this is likely to remain an area where professional judgement should be properly exercised. In our view, any attempt to reduce this down to a simply blunt 'rule' risks resulting in the unintended consequence of denying entities valuable insights that ultimately benefit shareholders and other s172 stakeholders.
11	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.	Yes, documentation can be challenging, particularly where the 'decision making' in the technologies lacks transparency. Our observations are that this these challenges are particularly prevalent if a tool has not been designed from the very outset as an 'audit technology'. If tools are designed with documentation and transparency in mind from the outset then this is often less of an issue. Transparency and the crystallisation of documentation, at the time of use, we believe will become even more important as machine learning and AI technologies become more prevalent. We can foresee difficulties where decisions made by machine change from one day to the next based on dynamic data points, which will be difficult or impossible to explain in hindsight.
12	Have you encountered challenges in dealing with the volume of 'exceptions' arising from the use of more complex or comprehensive data analytic procedures?	This is cited as a common difficulty. Typically, we find this is encountered where the selection criteria is ineffective in highlighting 'true exceptions'. However, even in these situations it is often valid to consider the result helpful in stratifying the population into ones with different risk characteristics, and subject them to more traditional audit testing techniques.
13	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?	Third party vendors provide a valuable role in a competitive and open audit market. Their role in providing audit technology is not new, it has been a function of the audit market for many years. Similarly, the benefits and challenges they brings are not new. The most pressing ethical, audit quality and documentation challenges are similar to the ones detailed elsewhere in our answers, however, the difference perhaps is that the purchaser of the technology (the audit firm) has less insight and transparency into the quality and reliability of the technology and is not able to perform their own assessments e.g the extent to which AI technologies is inherently biased.
14	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?	The majority of our audit technologies are proprietary and developed in-house. To the extent we use third party providers, we have not experienced any significant issues.

Ideally there would be some form of third party review of technology that vendors could provide to users similar to an ISAE 3402 report. If this were available, auditors would not need to do their own du diligence and testing of any solution used. This will become even more critical once ISQM1 is adopted.
We have not yet used these types of product.