

AI based Audit

Technology Capability as Imperative: Why AI is a Must in Auditing

In the last issue of this newsletter, we addressed trust in reporting in a digitized world. We explained how Big Data and artificial intelligence (AI) will influence auditing in the future. In this article, we discuss how we are already using AI today.*

Potential of AI in an audit context

In an audit, AI can be applied in various ways – spanning from the planning and risk assessment phase to the journal entry testing and reporting phase. AI technology can process large amounts of data (e.g., journals, bank statements, contracts) and reconcile data much faster than an auditor could ever do – and with fewer errors. AI technology substitutes traditional audit procedures and enables a more effective way of analyzing client information and risk identification – in short audit quality will be strengthened.

*Artificial technologies, as referred to in this article, relate to machine learning and Generative AI.

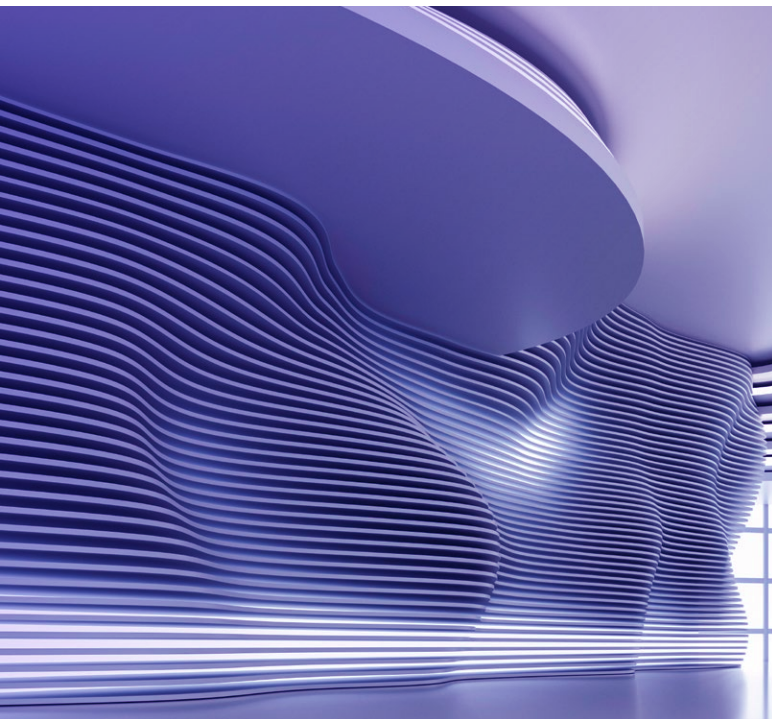
“AI is the new electricity. Just as 100 years ago it transformed industry after industry, AI will now do the same.”

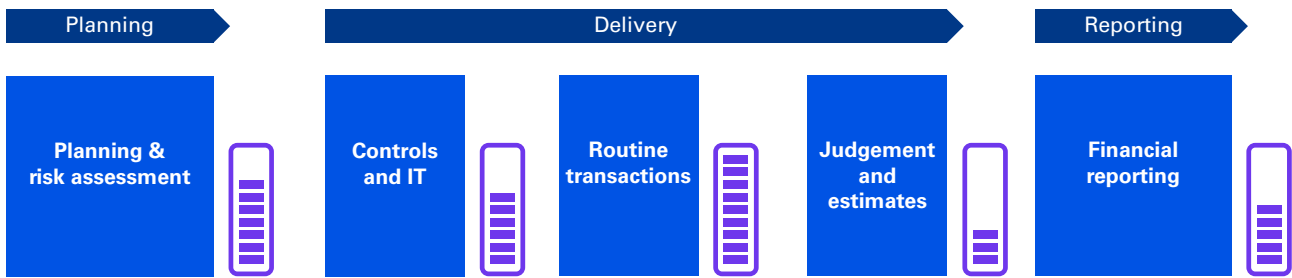
Dr. Andrew Ng

Globally recognized leader in AI learning and Generative AI

From a broader perspective, Larry Bradley, KPMG’s Global Head of Audit, announced last December the launch of KPMG Trusted AI approach. The approach is built on 10 key principles. Amongst others, transparency, explainability, data integrity, reliability, security, and privacy were key principles that he outlined and are lived when we implement our audit-specific AI solutions.

An audit contains various elements where AI adds value. The image below shows a simplified audit process, divided into its key phases. To what extent AI supports the individual audit phase is visualized in the load bar. It is evident, that each phase benefits from the technology. However, it is also clear that this is a journey over the next months and years to make full use of these potentials.





How can AI support the audit?

AI-based audit technology (such as KPMG Clara) is typically interlinked with other supporting technology that helps auditors to focus on most relevant areas/risks. Compared to traditional audit procedures, auditors are looking for a needle in a haystack using statistical sampling methods. More recently, Data & Analytics have allowed the process to be more industrialized and means that auditors can more easily distinguish between standard and outlier transactions (needles). As a result, the audit focus shifts more to outlier transactions. Artificial intelligence is an additional layer that brings the outlier and anomaly detection a step further. With Data & Analytics and AI tools, 100 percent of the population is analyzed and the needles (outliers/anomalies) are detected in a very effective and reliable manner.

Using AI in audits means a shift from traditional audit procedures to more technology audits – or in other words – the importance of the Technology/IT Auditor will increase and in parallel the profile of a Financial Auditor will be enhanced with more tech-savvy skills.

Where is AI applied today?

As illustrated in the above image, routine transactions have the highest potential to be covered by AI-enabled technology. Data & Analytics have already impacted this area positively by analyzing 100 percent of the population. As the analysis criteria in this method is more static, AI can adjust and define these criteria based on patterns and historical information.

Rethink the status quo

Use case [Journal Entry testing](#):

AI is mostly applied in Journal Entry Testing (JET). AI has in this regard the power to transform the way how Journal Entry Testing is performed.

Testing journal entries is typically a year-end activity, whereas the process starts with a definition of high-risk criteria and ends with the identification of the related journal entries. These criteria are based on the understanding of the organization and underlying fraud-risk indicators. While this seems a logical order, AI could change this sequence by starting with the high-risk journals first.

Instead of starting with the criteria, the AI tool identifies high-risk journal entries and discloses identified criteria – derived from the underlying data set – and validated by the auditor. This supports the planning and risk assessment process early in the year and allows for an approach that is more focused on audit areas that have a higher associated risk.





A “must do” becomes technology enabled

Use case Information Testing:

Artificial intelligence enables a more targeted and effective information testing approach. As information testing is an integral part of most audits, the potential is material. A possible tool is DataSnipper, which is an intelligent automation tool that makes use of Microsoft Excel. As a result, the reconciliation between samples in Excel against supporting information becomes more effective. In addition, the review process also benefits from this technology as it takes the reviewer to the underlying source information. The process starting from extracting data, processing, analyzing, and reviewing becomes more and more integrated and fully technology enabled.

Choosing the right audit technology — your technology landscape is the driver

Companies are investing in more modern, harmonized, and centralized processes and ERP systems and are therefore benefitting from technology and ERP-provider’s capabilities in Data & Analytics, Automation and AI.

Depending on the client environment and its maturity level of digitization, auditors should combine their audit technology toolbox with the client’s technologies to ensure the most suitable coverage for the audit. Through this mix, a more tailored audit approach can be established that considers the client’s investments and process variants to the highest extent possible — and this is by design! As every client has a different maturity level and starting point, the approach and mix of tools are evolving over time mirroring the individual developments and client journeys.

To leverage the client’s technology and routines, the auditor must understand and test the underlying solution (e.g., code, algorithm). Our experiences in leveraging the client’s technology and infrastructure are positive throughout our use cases. In the past, these use cases were predominantly in the area of Data & Analytics and will move into AI very fast.



Technology should be applied where it adds value

Technology should be applied where it provides the highest value. Technology should not be applied for the sake of applying technology. Technology should add value to the audit and the client.

To decide whether a tool is useful or not, the following principles and guiding questions could help:

- Does it improve audit quality?
- Does it strengthen internal controls?
- Does it provide valuable insights?
- Is it a game changer?

Every technology has a cost – therefore, these principles help to ensure that technologies are used that bring the highest value for all stakeholders.

Managing risks is crucial

Technology tools (including AI), that are applied in audits, are assessed, and tested in detail. Every technology goes through a detailed and strict due diligence process where amongst others transparency, security and privacy aspects are assessed and evaluated. Having a robust due diligence process in place is important for building trust in technology.

Risks such as data integrity, statistical validity, model accuracy, transparency, fairness, resilience, and reliability should be drivers behind AI technology developments.

Attract talents

The gap between a traditional audit and an AI-enabled audit is material. In recent times, bodies such as EXPERTsuisse and universities are incorporating audit technology techniques such as Data & Analytics and Emerging Technologies in their curriculum to respond and to keep track with technology developments, not limited to the audit industry, but in the finance domain in general.





Changes in skills are required

Using technology in audits requires different skills. Connecting the dots between processes, data points and risks are becoming key elements. Therefore, the understanding and knowledge of technology and finance are already becoming more intertwined. For instance, employees are exploring technology and finance knowledge during their CPA education. This model is not new and is already being implemented more often as companies are realizing the need to retain existing talent and attract new talents that ultimately understand finance and IT.



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What does not and will not change?

Understanding and knowing technologies' limitations and required steps to validate the outcome remain key. The technology can be best in class, however, the person behind the screen remains the decisive piece in the puzzle. Therefore, knowing the client and having robust client interactions remain essential to making the correct interpretations and conclusions.

Conclusion

Artificial intelligence is a technology that is already applied in various scenarios – further exploration is ongoing with the aim of making better use of finite resources and to augment an auditor's professional judgement. The end state has not been achieved yet as we all are in the middle of the adventure. People's change management and the right skill mix are key success factors to applying AI-technologies in the right way and to drawing the right conclusions. The person behind the tool remains key – today and in future!

Questions to ask your organization

- How digitized are business processes and supporting information/documents?
- How is the due diligence process functioning to address relevant AI risks?
- What key principles are in place and how are they ensured?
- What is the status of our data quality and data governance?

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