

# The ongoing audit transformation

From data analytics to robotic process automation and artificial intelligence, audit has come a long way, and it looks to be going further at a rapid pace.

BY KEVIN SHEEHAN

**W**hile innovation may have been traditionally associated with the advisory arms of professional services firms, innovation in audit departments has raised the bar in recent years. It is enabling firms to transform their audit practice. The progress made is extraordinary and the pace at which we are now able to implement change is accelerating.

## Embedding innovation

Innovation is at the core of the changing audit quality agenda. It shapes the design and execution of audits, how accountants collaborate with clients and how they can bring value that goes far beyond a true and fair opinion on the financial statements. It's not just about having smart tools, it's about creating and sustaining a culture of innovation throughout the practice and making innovation work for clients. In Deloitte, this required a mind-set change from our audit professionals at all levels – getting the correct tone at the top was critical right across our audit leadership.

Equally as important is creating an environment where audit professionals at all levels are encouraged to challenge the status quo, to develop

and share ideas in the knowledge that we listen and act wherever possible. Some of our most impactful innovations such as D.Price and D.FX, (pricing and foreign exchange tools) have come from members of our audit teams who identified an opportunity and had the tenacity and support to follow it through.

Today, we have a more diverse range of skill sets within our audit practice than ever before. This has not happened by accident – firms are purposefully recruiting and investing in specialists such as data analysts and data scientists.

## The power of analytics

Advanced data analytics and visualisations are already embedded within our audit processes. Firms are recognising that data analytics represents the single greatest opportunity to transform the audit process by:

- Enhancing audit quality;
- Providing greater insight to our clients;
- Providing accountants with a more rewarding experience; and
- Driving efficiencies in the audit process.

Analytics, appropriately scaled, forms part of Deloitte's audit strategy for all audit engagements. Our vision for analytics is simple: we want every audit client to benefit from the power of analytics and we want to support every one of our audit practitioners to become a 'black belt' in analytics by the time they complete their professional training contract.

The deployment of analytics engines, like Deloitte's Illumia, on audit engagements enable accountants to perform a stronger risk assessment process, which means that audit procedures are focused on the areas of greatest risk. In many cases, accountants will be able to perform tests across 100% of the population in order to identify trends and outliers requiring further investigation.

Analytics is driving changes in terms of when and how often audit procedures are performed. Given that audit routines can be pre-coded, they can be performed more often during the audit cycle. Rather than waiting until the end of the financial year or for the interim audit, audit routines can be performed at agreed intervals (monthly, quarterly) with

results being provided to clients on a more frequent basis. The move to a more continuous audit ensures that potential issues are being highlighted to management at the earliest possible time and provides a greater level of flexibility on the timing of audit procedures.

### Data acquisition

The success of analytics depends on the quality and availability of data. Some existing platforms have the ability to extract data in various ways, including through continuous feeds, enabling data analysis throughout the year. Enhanced data

traditionally have been executed by humans which are now being done by machines. Our experience has shown that an RPA strategy can deliver great efficiency for clients and significantly reduce, if not eliminate, processing errors.

However, our experience has also shown that just because a machine is responsible for processing transactions, it does not mean that all transactions will be processed correctly. In essence, a machine will only do what you program it to do and so any design flaw in the process could apply to all transactions processed and lead to errors.

larger samples or even entire populations and simultaneously deliver higher quality audits and better client insights.

Blockchain is the emerging technology that has the potential to cause the greatest level of disruption for the audit profession. While this potential disruption may be a number of years away, some commentators have suggested that the potential impact on the auditing profession could be as significant as the impact the internet had on industries such as travel or retail.

Blockchain is a distributed general ledger which records all transactions that have happened, when they happened and other key details. While Blockchain is often associated with the cryptocurrency Bitcoin (Blockchain is the general ledger on which Bitcoin transactions are recorded), the potential use cases for Blockchain are far reaching. This is an area where, in three years' time, we may still be underwhelmed by the impact that Blockchain has had on our profession but, when looking back in 10 years' time, we may be shocked by the level of disruption that has actually taken place. At Deloitte, we'll see the progress first-hand at the Deloitte EMEA Blockchain lab based in Dublin.

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extraction is key to optimising the capability of analytics. For many, this is where the challenge lies; the analytics engine may be strong, but if the auditor is not able to easily extract data – due to unstructured data, a lack of standardisation in data format or the challenge of having many different enterprise resource planning (ERP) systems in existence – performing audit analytics can become a more challenging process.

### Emerging technologies

There are a number of emerging technologies, such as robotic process automation (RPA) and artificial intelligence (AI), that are already impacting how audits are executed. Many clients have implemented an RPA strategy, particularly in cases where tasks are centralised in a shared service centre, driving significant efficiencies in their back office operations. More and more, auditors are evaluating the impact of processes or controls that would

Regardless of how small it might be at a transaction level, the error could accumulate over time and become material. RPA does represent a great opportunity to tackle large volume/routine tasks and automate them, and is clearly relevant from an audit efficiency and talent perspective.

AI is the theory and development of computer systems that are able to perform tasks that normally require human intelligence. For example, Deloitte's contract interrogation solution, Argus, uses natural language processing (NLP) and machine-learning technology to analyse large volumes of contracts at amazing speed. This enables the auditor to profile populations based on defined criteria and identify any exceptions requiring investigation. Smart visualisation of results enables better decision making and, ultimately, better outcomes for our clients. Working with technology such as AI provides the opportunity for auditors to work smarter, analyse

### The audit of the future

It is clear that the rate of change in our profession is accelerating and I strongly believe that the audit of the future will be very different to the audit of today. I believe that audit will undergo a digital revolution, equivalent to the revolution that took place when laptops replaced pens and paper.

I believe that the audit of the future represents an exciting opportunity for our profession, presenting great opportunities for our clients and people.



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