The digital transformation within financial statement auditing is underway. Technology innovation has the potential to deliver more efficient audits, a better client experience, and more meaningful insights.

**Leveraging Technology to Deliver Auditing Insights**

March 2022

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**Introduction**

According to the World Bank, the total market capitalization for publicly traded securities worldwide was well over $90 trillion in 2021. Interestingly, most of that number is based solely upon the full faith and accuracy of financial statements. It is not a stretch to say that the global economy is kept afloat based on the belief that the data on financial statements is accurate and trustworthy. The independent financial statement audit is a tool to establish and maintain that trust between businesses and their stakeholders. Recent accounting developments and increasing regulatory scrutiny have made compliance a top of mind issue for financial leaders. The stakes are incredibly high for both corporations and auditors.

Here are some of the key issues that are critical to many audits:

- **Information delays.** Auditors often find themselves waiting on information from clients. This can slow down or even derail the audit process.

- **Constantly shifting regulatory landscape.** Revenue recognition rules and other reporting standards change frequently around the world.

- **Remote working.** For many years, auditing was a very high-touch event with lots of face-to-face meetings and onsite work. This practice has changed dramatically since the pandemic and now requires greater investment in digital transformation of processes and procedures from both parties.

- **Overabundance of dated legacy applications.** Many companies are still in the beginning stages of digital transformation and still rely on older legacy applications in critical areas like investment management or procurement.

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**AT A GLANCE**

**KEY TAKEAWAYS**

The world of auditing is changing rapidly. It is important for audit firms to understand these trends and work to adjust their technology and/or processes to harness these changes to deliver more impactful audits.
The Cost of Dated Technology and Manual Processes for Audits

The market is undergoing digital transformation at a rapid pace. IDC’s recent *Future Enterprise Resiliency and Spending Survey* reveals that nearly 55% of respondents see digital transformation as a key driver in upgrading their technology infrastructure. Still, there are some auditing service providers using dated technology and processes, which can impact the efficiency of an audit and the amount of value it brings to a business. Some of the biggest negative impacts to a successful audit due to dated technology include:

- **Inefficient data management.** Data is at the heart of any audit. Yet data management can be one of the biggest challenges for auditors to overcome. Delays in receiving financial information from clients' supporting documents like invoices, purchase orders, or statements of work can make it difficult to organize information and digitize it to create/maintain a fully searchable audit trail. In addition, a lack of advanced data management tools like robotic process automation (RPA) and artificial intelligence (AI) can make harnessing client data, once received, a major struggle.

- **Lack of transparency.** Audits mired in dated technology and manual processes — both from the client and the auditors — struggle to provide accurate and meaningful status updates to clients. Any monitoring of the audits’ progress is done by sporadic phone calls and check-ins with auditing points of contact. In addition, the lack of transparency limits the auditor’s ability to track and flag outstanding issues as they arise, which can negatively impact the client experience.

- **Lack of insights.** Inefficient audits waste resources on manual tasking and low-value activities like verifying mislabeled inventory or doing follow-ups. These are resources that could be better deployed toward identifying financial anomalies and spotting outlier patterns, which can lead to more robust audit outcomes and insights that may lead to business process improvements.

Benefits

Like any number of larger businesses, auditing and accounting firms have been motivated to adopt the latest technology to increase efficiency and flexibility. According to IDC’s research, the market for the digital transformation of professional services is expected to reach over $208 billion by 2025.

Where will digital transformation have its biggest impact initially on the industry?

- **Data management.** Technologies like APIs and RPA have the potential to interface with the client’s system to transfer critical audit-related data in real time without human intervention. Not only does this speed up the manual tasks associated with compiling audit information, it also greatly reduces the risk of human error. Technologies like AI and machine learning (ML) offer auditors the ability to analyze vast amounts of business data quickly. This allows them the opportunity to test 100% of the client’s transaction instead of sampling. AI also sharpens the auditor’s ability to find key patterns that can lead to valuable insights.

- **Resource management.** Part of the difficulty in performing an audit at scale is monitoring and managing all the milestones and tasks associated with it. Mobile time tracking gives audit managers a more accurate view of time spent on specific tasks. Automation and process workflow management tools allow for an even distribution of tasking and the reduction of lower-level manual tasks. These and other tools enable audit managers to deploy assets to more critical areas like risk analysis/assessment.
» **Client communication.** Digital collaboration tools and real-time updates provide clients with an unprecedented view into the progress of the audit. Data visualization tools present the audit’s status to clients, and dashboards allow them to drill down to detailed levels. Virtual meeting technology can be integrated to keep clients updated when performing remote aspects of the audit.

**Trends**

The world of auditing is changing rapidly. It is important for audit firms to understand these trends and work to adjust their technology and/or processes to harness these developments to deliver more impactful audits. Here are a few of the most pressing trends reshaping the auditing world (see Figure 1):

» **Demand is growing for assurance services.** Auditing is quickly moving beyond the financial statements to include key areas like environmental, social, and governance (ESG) and environmental, health, and safety (EHS). The latter will be especially relevant as the work-from-home movement continues to shift and develop.

» **Cybersecurity is becoming more essential.** Security is a multifaceted issue due to the rise of cybersecurity threats and payment fraud. Auditing firms with modern solutions are better able to analyze client transaction flows for fraudulent patterns.

» **Business models continue to evolve.** Subscription business models are set to grow rapidly in the coming years in nearly every sector. The rapid rise of mixed/hybrid business models (i.e., traditional and subscription based) pose a new level of complexity for revenue recognition and audit management.

» **Remote working is here to stay.** The pandemic disrupted business and required remote work, creating a new sense of urgency to move away from legacy payment solutions. Auditing firms already deploying modern online/cloud auditing tools found themselves well suited for the changed circumstances.

» **Digital currency is gaining acceptance.** As cryptocurrency exchanges grow in number and cryptocurrency decreases in overall volatility, payment software will have to adopt supporting functionality. Digital currency markets will have a profound impact on financial areas like AP, AR, and treasury and the auditors analyzing data from these departments.
**FIGURE 1: Trends Reshaping Auditing**

Source: IDC, 2022

**Considering PwC**

PwC is one of the largest providers of assurance, advisory, and tax services in the world with a network of firms in 156 countries with over 295,000 employees. PwC’s approach is designed to strike a balance between its focus on people and leading-edge technology to serve as a foundation for its auditing services. The company’s auditors are digitally upskilled to leverage a range of technologies that are built around Aura, its comprehensive audit platform. Figure 2 is a summary of Aura’s key benefits and functionality:

- **Secure data extraction.** A set of APIs extracts data directly from the broader financial ecosystem, including the client’s systems of record in an automated and secure fashion. Aura ingests the client’s data and moves it into a cloud-based data lake allowing the other PwC software tools easy and secure access to audit-related data. AI, including updated optical character reading (OCR) and ML, is used to handle unstructured data like invoices, leases, and contracts. The solution offers ERP-agnostic, secure data transfers, and it can also show the users and clients the data transfer status, which is critical.

- **Single, seamless cloud-based platform.** Aura acts as the system of record or ERP built as a single instance used on every PwC audit. Aura is designed to ensure better quality and consistency throughout the audit. It facilitates every
stage of the auditing process, including risk assessment, planning, audit execution, and audit reviews. Aura also has workflow management features allowing users to allocate tasking and procedures to optimize auditing resources.

» **Advanced analysis.** Aura includes web-based technologies that auditors use to scan/interrogate vast amounts of business-critical data in a more efficient way. Big data analytics are harnessed to perform analysis and testing on the various types of business transactions including investment transactions and intercompany transactions. It offers auditors the opportunity to interrogate 100% of business transactions instead of the typical transaction sampling. Built-in visualizations and benchmarking help PwC auditors find anomalies faster, identify audit risks, and deliver meaningful insights faster through data analytics. Aura's technological advances are enhanced by custom automations and innovative solutions.

» **Improved communication.** Aura uses a secure web-based collaboration tool that permits information sharing at every stage of the audit process. Information and key audit documents can flow between project team members and to the client on a real-time basis. A built-in dashboard allows all authorized users to perform detailed status checks and quickly identify audit-related issues and upcoming milestones. The interface can be securely accessed from anywhere including mobile devices and tablet platforms.

**FIGURE 2: PwC Audit Technology Solutions**

The engine that powers your audit.

- **Exchanging quicker**
  Saving time for you and us

- **Analyzing deeper**
  Focusing on areas of relevant risk

- **Auditing smarter**
  Enhancing quality and efficiency

Source: PwC

To help push current innovations forward or to fill gaps within niche operations or vertical markets, PwC has developed an employee-led laboratory where features and applications can be built, tested, and downloaded by other PwC project
teams. This "sandbox" provides a collaborative platform for PwC employees to explore and experiment in an effort to push the company's digital upskilling efforts forward while applying the same security and data management protocols as the other aspect of the PwC product portfolio.

**Challenges**

As technology progresses, new challenges arise. Here are a few of the key challenges PwC is continuing to focus on as the market continues to shift and evolve, including:

» **Digitally upskilling the employee base.** One of PwC's strengths is its experience with audits of all kinds and sizes. However, the auditing landscape of tomorrow will demand a new breed of auditors. These auditors must be as comfortable with balance sheets as they are with new automation technologies and database structures. Data analytics tools will help smooth the transition for many, but they will only be able to go so far. Auditors of tomorrow must be able to think digitally as well. PwC has already made heavy investments in upskilling its workforce globally, but this will be an ongoing challenge for all auditing service providers.

» **New data streams.** As technologies continue to transform client businesses, auditors will have to adapt to new data sources. For example, many supply chain and logistics companies are integrating blockchain technology to key documents like bills of lading and manifests. Businesses are using IoT technology for vehicle fleet management and asset management. Tools like PwC's Aura must continue to adapt and adjust rapidly to keep pace. PwC has made this a priority for its technology portfolio with recent investment and resource allocations. PwC communicated its plans to continue its investment in this area to ensure that Aura is on the leading edge of data lake technology, API technology, and the rapidly evolving world of ML algorithms.

» **Highlighting the human auditor.** While technologies have the potential to eliminate certain tasks and make audits more efficient, there will always be a need for the human auditor's experience, intuition, and judgment. PwC must continue to recognize the importance of hiring, training, and recognizing auditors for using technology to enhance — not diminish — their interactions with clients. This will demand that PwC continue its efforts to work to make sure its AI/ML functions don't overlook the human element and that data analysis can be done intuitively. PwC's leadership has reinforced how this approach is central to their strategy.

**Conclusion**

There are a number of trends reshaping the auditing service landscape that will require a new wave of innovations to meet ever-changing client expectations. Solutions like PwC's Aura will be the foundation of this new wave.

IDC believes that innovation and digital transformation will be key aspects of the new post-pandemic reality. For auditing service providers, it is imperative they embrace innovation and transformation as not only part of their technology infrastructure strategy but as core aspects of their corporate culture and identity. Continuous auditing, applying advanced AI, and working with regulators on how to adapt auditing standards to the new post-pandemic world will become increasingly important.

In IDC's opinion, PwC, via its Aura platform, has demonstrated a commitment to placing innovation at the center of both its employee experience and its client experience. As a result, PwC is well positioned to
meet the challenges outlined in this document and should be on the short list of any enterprise looking for an auditing services provider that has crafted an experience built upon a modern digital platform.

About the Analyst

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As a research director, Kevin Permenter provides insights and analysis across multiple Fintech market segments including accounting, revenue management, corporate tax, accounts payable, accounts receivable, treasury and enterprise payment management. Kevin leads qualitative research efforts, which drive a series of technology buyer-focused documents and end-user surveys. Kevin's research includes a particular emphasis on the interplay, challenges, and trends driving financial application deployment and its role in the evolution of the complex financial technology ecosystem.

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