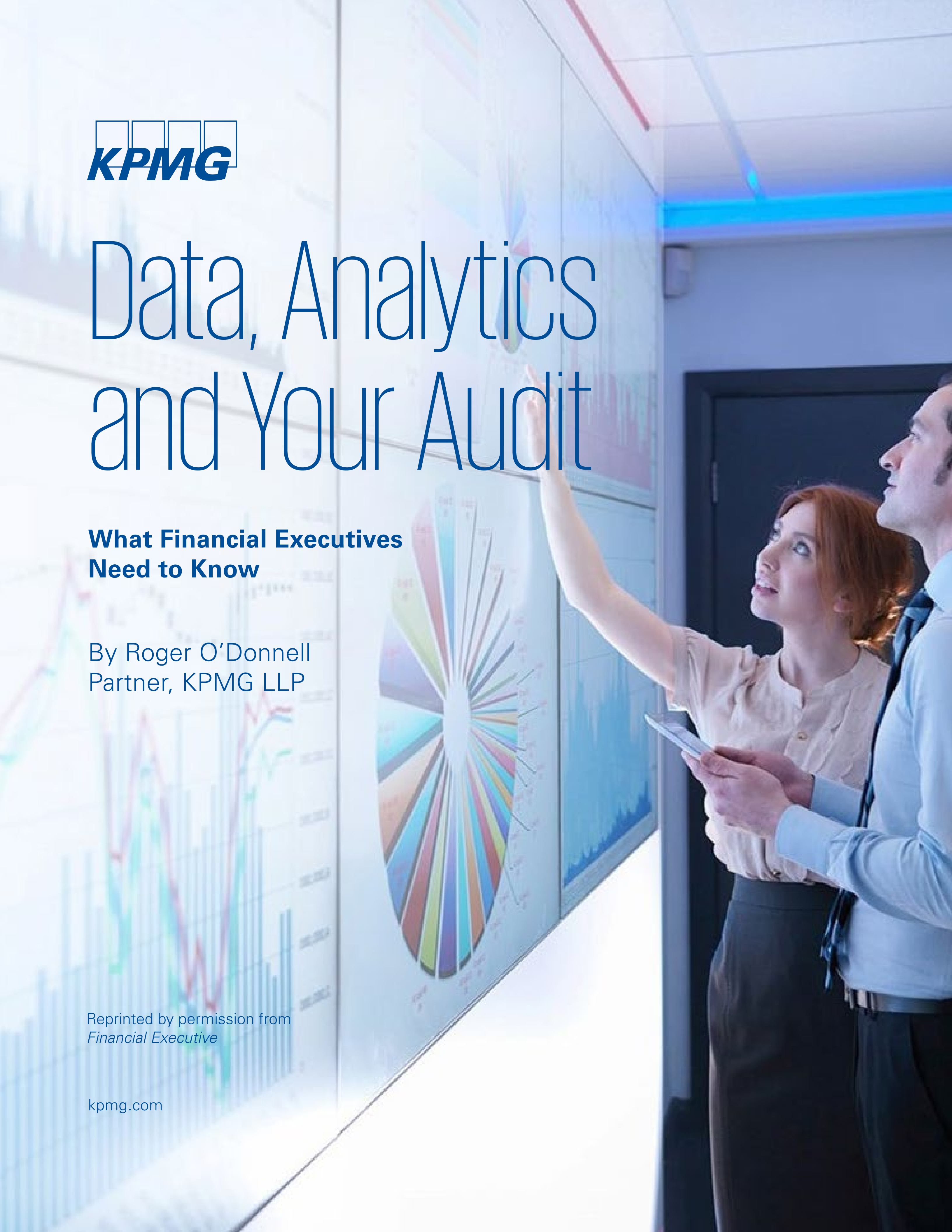

Data, Analytics and Your Audit

What Financial Executives Need to Know

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Financial Executive

Perhaps no business trend has generated quite as much buzz as the rise of "big data." While some elements of this technology are still over the horizon, the impact of data and analytics (D&A) on the conduct of audits – and on the broader world of financial reporting – is real, and it is happening now. As a financial executive, what do you need to understand about data and analytics to ensure that you can differentiate the hype from the substance?

The Auditor's Perspective

From the perspective of an auditor, the rise of D&A does not represent a fundamental shift in what we do. At its core, our business has always been about the analysis of data — auditors have been collecting and analyzing data, and providing conclusions on it, since the beginning of our profession.

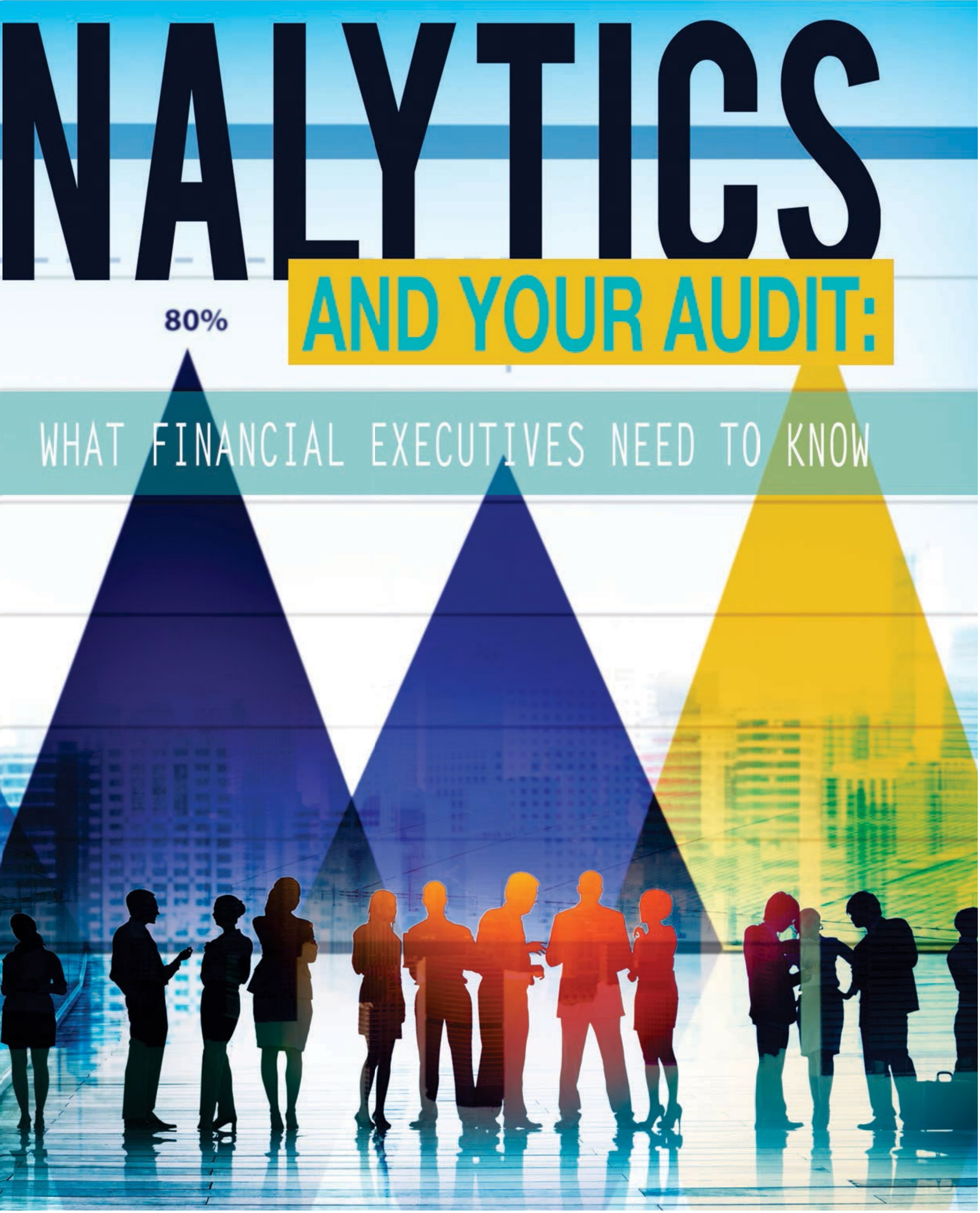
While the concepts aren't new, the quantity of information new D&A tools are able to handle, and the speed with which they are able to do so, is unprecedented. The historical manual audit moved at the speed of paper, with teams performing procedures over a sample of transactions, for example, to examine how an entity recognized revenue by validating it against cash received using bank records. This is a process that requires a heavy manual effort by both company staff and external auditors.

Going forward, the number of transactions selected via sampling in the past will be replaced by analyzing much larger ones – including up to 100 percent of available transactions. By extracting data directly from a company's financial systems and analyzing it along with internal and external information, such as third-party bank feeds using D&A capabilities, auditors can determine which transactions are higher risk on a much wider landscape of data, and do so in minutes or hours rather than days or weeks. This helps auditors to gain more visibility across complicated organizational structures and supports an ability to identify outliers and anomalies more comprehensively so they can concentrate their efforts in the areas of highest risk and reporting complexity.

Moving to this new paradigm is, in part, a response to the demands of the marketplace and improvements in technology.

What data and analytics means from an auditor's perspective, the impacts it brings to the quality and nature of audit procedures, and some key considerations for financial executives.

BY ROGER O'DONNELL


NALYTICS
80%
AND YOUR AUDIT:
WHAT FINANCIAL EXECUTIVES NEED TO KNOW

Many of the companies we audit are introducing sophisticated D&A capabilities to address increasing challenges and opportunities around the velocity and volume of data that exists. Audit committees, management and shareholders expect their auditors to keep pace and provide deeper insight based on the new capabilities and data volumes. A recently released Forbes Insights/KPMG report, "Audit 2020: A Focus on Change," found 53 percent of executives surveyed see data and analytics as transforming how audits are conducted and enhancing audit quality and effectiveness.

At the same time though, embracing the power of D&A is essential to auditors performing our duties as stewards of the capital markets. Audit quality is always our number one priority, and the use of D&A techniques on an engagement can drive audit quality in several ways. In addition to the increased depth that comes from D&A-powered analysis of significantly larger data sets, the use of automation for routine transactions increases the scope of financial information subject to testing. Furthermore, the enhanced business insights gained by auditors in a D&A-enabled audit can help them better focus their risk assessments and test work during the audit.

For example, auditors today may use analytical procedures that examine certain trends between accounts in the financial statements. D&A capabilities can enhance these analytical procedures by enabling more sophisticated statistical and analytical techniques while also taking into account independently correlated micro and macro economic data points that influence the information being reported. This makes the tests more robust.

In addition to the enhancements D&A brings to the quality of an audit engagement, it also empowers audit professionals to gain deeper insights into a company's operations. Powerful visualization tools can convey the 'story' hidden within the data, providing an essential aid in evaluating account relationships and gaining real-time insights on transaction flows.

In the retail apparel business, for example, as raw materials are spun into clothing and shipped to warehouses and stores around the world, D&A can help auditors evaluate the three-way match between purchase orders, delivery confirmations and invoice documentation. With the use of advanced visualization dashboards, this evaluation is presented via automated charting and graphics that depict account relationships and transaction flows, as well as authorization and segregation-of-duties conflicts.

D&A also answers important questions such as whether suppliers are being contracted and paid on standard terms, or

	ENHANCEMENTS TO AUDIT QUALITY	INSIGHTS PROVIDED
REVENUE & ACCOUNTS RECEIVABLE	Identifies discrepancies in price and quantity between invoices, sales orders and shipping documentation	Identifies stock-outs and customer orders outpacing shipped products
SEGREGATION OF DUTIES	Pinpoints areas of increased risk by identifying incompatible duty assignments and specific transactions where such duties occurred	Identifies internal control deficiencies related to users having the ability to perform two or more incompatible duties and specific transactions that could warrant management attention (e.g., process, control or business opportunity improvement)
PURCHASES AND ACCOUNTS PAYABLE	Analyzes purchases to identify significant or unusual items (e.g., invoice price discrepancies versus originally purchased products)	Identifies purchase trends and activity with vendors that are either not authorized or where there are concentrations of spending activity
SUPPLY CHAIN	Identifies risks resulting from the concentration of suppliers in a particular region	Identifies potential issues if suppliers are affected by regional disruptions or highlights country-specific or market concentrations of risk
SUPPLY CYCLES	Determines vendor cycles to understand average time between the purchase order and goods receipt to help determine impact on inventory costing, potential valuation concerns and the performance of the business that could signal the need for impairment considerations	Identifies vendors with long lead times that may impact production and operational targets to create risk in the supply chain

whether there are inconsistent procurement processes or misaligned cash flow practices. If so, there may be deficiencies in internal controls that need to be addressed.

When we talk to audit committees and members of executive management, we consistently hear that besides a quality audit, they want additional perspectives and insights on their performance, operations and risk exposures. Audit quality and data security will always be top of mind, but we believe audits can deliver new insights in a way that is entirely consistent with confidentiality and independence standards.

For example, we can provide benchmarking comparisons across entities and industries regarding how long it takes for an entity to close its books, how it processes invoices within their receivable and payable functions, which controls are in place and how they are designed, and the degree of automation that is used, to name just a few.

The chart on page 26 presents a few examples of areas in which the application of D&A in the audit enhances quality and provides valuable insights to auditors and clients on a company's financial operations:

By effectively extracting data directly from a company's financial systems and analyzing it along with internal and external information such as third-party bank feeds using D&A capabilities, the auditors can determine which transactions are higher risk on a much wider landscape of data, and do so in minutes or hours rather than days or weeks.

Internal Audit

The critical role that internal audit plays in the quality of financial reporting is just as pivotal when it comes to D&A. We like to tell people that the use of D&A in the audit is an evolution, not a revolution. From this perspective, the value of an audit doesn't solely come from the use of individual tools or the ability to extract data; instead, it comes from auditors applying professional judgment to the information that D&A can provide – and that applies just as much to your company's internal audit staff as it does to your external auditors.

Investigating and understanding the business reasons behind identified anomalies and exceptions, and helping to map D&A outputs against audit judgments, are critical activities that call for the client staff to be as equally engaged as your external auditor. As part of that natural evolution, it makes sense that internal audit begins to think of itself as a key control over maintaining data quality.

Information Technology

External auditors need an understanding of their clients' ERP and financial systems not only to audit within a specific company's IT environment, but also to maintain data confidentiality and security. Therefore, it is incumbent on us, as auditors, to carefully consider the mix of professionals and skills that will be needed, including the increased use of IT and data security specialists. The use of technology will also change the mix of personnel who external auditors work with at their clients. External auditors will be engaging company IT staffs more than before and likely requiring less time from a company's accountants to pull documents for testing.

In addition, a company's information technology team is the linchpin for data extraction and security. These two areas often present challenges when it comes to applying D&A to an audit engagement for the first time. Delays related to security approval or data extraction difficulties can cost an audit engagement valuable time. By focusing on these issues at the front end of an engagement, IT can add significant value to the audit by eliminating or reducing potential delays.

All of this said, it is essential for companies to build strong, well connected accounting and IT teams within their operations. Over the long term, a failure to develop the right mix of data-literate financial executives and finance-literate IT specialists could leave some smaller or less well-resourced companies feeling exposed and not confident in their own systems.

Chief Financial Officer

According to KPMG's Global CEO Outlook, a majority of the more than 1,200 global CEOs surveyed responded that the CFO is the function most likely to gain in importance over the next three-years. Bill O'Mara, KPMG's global head of audit, attributes this trend to the increased importance of how organizations manage their financial risk and internal controls. With a flat economy driving CEOs to pursue aggressive financial growth strategies, the CFO is in a prime position to perform a critical risk management role.

"Indications of the rising appetite for risk could create a volatile operating environment if executives don't simultaneously implement appropriate controls over their processes and financial reporting," O'Mara said in comments made upon the release of the report.

In addition, CFOs have been taking increasingly enterprise-wide responsibilities, for things ranging from the growth agenda to strategic transformation efforts. As CFOs consider these initiatives, and their potential impacts on key controls and financial reporting strategies, a strong understanding of how D&A can help — and a clear-eyed assessment of the capabilities of their own team and their external auditors — is essential.

Risk Management

Identifying, understanding and effectively addressing financial and business risks is a fundamental responsibility of audit committees and C-suite executives. External auditors play an essential role in identifying and understanding the impact of risk in the audit, often leading to observations and findings useful to management. For example, in auditing a consumer products manufacturer with a complicated international supply chain, auditors may use peer benchmarking and KPI assessment tools to evaluate supplier performance, as well as potential supply issues related to critical parts used in a product's assembly. In addition to pinpointing where components of products are made, D&A can help to identify risks resulting from the concentration of suppliers in a particular region, as well as changes in supplier payment patterns.

D&A technology can also link to external data sources that inform auditors about possible areas of significant reputational risk to an organization's brand value, such as doing business in countries with weak transparency index ratings. These types of assessments not only strengthen an auditor's understanding of a company's industry and operating environment, but can also lead to insights such as determining potential stock-outs or disruptions in the business that could affect future cash flows, or whether impairments and valuation concerns exist with various assets.

Audit Committee

With more responsibility falling to CFOs, the role of the audit committee as the ultimate arbiter of audit quality is more important than ever. While audit committees cannot be expected to understand D&A capabilities at the same level of detail as the company's IT and finance professionals, it is essential that they understand the value proposition at work — both in terms of the company's own investments, as well as the D&A capabilities of their external auditor. At the end of the day, the audit committee must have sufficient insight into the role of D&A in their company's financial reporting process and external audit to be able to gauge its impact on audit quality while understanding how technology is permanently transforming both the audit and business operations in fundamental ways.

It is imperative that financial executives look past over-hyped 'big data' projects and realize the D&A-powered audit is here, now, and is only going to become more prominent. Going forward, this will become the way audits will be conducted by virtually all major accounting firms, and it's critical that audit committees and executive management understand where the process is heading, the broad benefits, the essential role that technology will play, and how they can work with their internal and external auditors to effectively prepare for the requirements of tomorrow's financial reporting environment.

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