The rapidly evolving world of data and analytics (D&A) has permeated the audit process. And today, new approaches to audit are rapidly emerging, offering significant competitive benefits to those able to take advantage of the data-driven environment. But while the value of a data-driven audit should be fairly clear, many financial services organizations are struggling to integrate these new approaches into their internal control/systems environments. Given the heightened scrutiny of financial services, which is leading to the growing risk of regulatory fines or actions, we believe financial services organizations should be pushing harder to realize the benefits of enhanced data tools.
The growing imperative of audit
For financial services organizations, the need for robust assurance processes has never been clearer. Over the past decade, vast amounts of new regulations have been handed down to financial services organizations of all types, demanding massive amounts of data across a wide range of operational areas.

Some large global banks already submit anywhere from 5 to 10 million different pieces of data — per quarter — to regulators. But the challenge isn’t necessarily the volume of data that is required but rather the quality of the data. The new higher data standards require a model of assurance that is moving from, say traditionally, 90–95 percent confidence levels to something much higher. Using traditional means to achieve this higher level of confidence is likely impossible or punitively expensive.

Not surprisingly (particularly given that regulators are increasingly holding executives personally responsible for some regulatory requirements), many executives at financial services organizations are now looking for better quality assurance, not only to better manage risks but also to achieve a level of competitive advantage in their markets.

A new approach emerges
Financial services organizations know the power of D&A. Most banks have been working feverishly to apply D&A to areas like customer experience, loan assessments and customer segmentation.

Many investment management houses either use or rely on sophisticated D&A algorithms for automated trading. And some would argue that the insurance sector was the original pioneer of long-range predictive analytics.

Internal auditors also know the power of D&A. Indeed, at its simplest, audit is all about collecting massive amounts of data and correlating it against other internal and external sources to uncover new insights about the business. The introduction of modern D&A tools and approaches takes the audit to the next level.

At the same time, the potential sources of data available for external audit have evolved dramatically. Today, huge pools of external data are being aggregated and companies are able to access it, providing auditors with an unprecedented ability to benchmark internal data against external sources. Across the financial services industry, many now appreciate the value of benchmarking and are realizing, for example, the value of asking for more of the data from Lloyds of London to access the quality of their book, by getting more detail on industry loss ratios.

The value of these pools of data to the external audit process is obvious. Today, financial services organizations are not only able to see if their controls and governance are robust and complete, they are also able to benchmark how they compare to their local, regional and global competitors. Investment management houses, for example, can benchmark their daily fund performance against their competitors’;

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1 http://www.reuters.com/article/us-britain-banks-fines-idUSKBN0TR1X20151308
banks can achieve competitive views into the entire markets’ derivative positions; and insurers can compare the robustness of their statutory and regulatory reports enabling executives to assess the completeness of their information based on a holistic view of the market.

Simply put, the adoption of new, more sophisticated tools and the availability of vast pools of data mean that executives are more likely to find out about issues in their controls and data from their internal auditor rather than through a letter from the regulator.

Running as fast as they can
While the value of a data-led internal audit process is becoming increasingly clear, our experience suggests that few have yet to fully adopt a data-driven internal or external audit process.

The reasons for the slow adoption are varied. In the insurance sector, the absence of industry-wide standards, the need to maintain data records over a long time period (greater than 50 years) and decades of inorganic growth have led to disparate systems and data silos that make it difficult to achieve a single view of the data. In the investment management sector, a history of underinvestment into infrastructure is inhibiting the value of new tools and data pools. In the banking sector, the need to meet capital requirements is siphoning investment away from new projects.

Ask the internal audit department why adoption of new techniques has been slow and they will probably tell you that they are already running as fast as they can just to keep up with current regulatory requirements. Most have been begging for additional resources to meet their existing workload; adopting a new approach seems a bridge too far for most internal audit departments today.

Start with the data
Interestingly, the biggest challenge facing financial services organizations today likely isn’t project fatigue, infrastructure or availability of capital, it’s the quality of the data.

That is why we often recommend that our clients start by examining their data controls, governance and strategy. What data is being collected and reported? Is it reliable and timely? Is it fit for purpose? Can its lineage be verified? More often than not, organizations quickly come to realize that the information required is inconsistent, fragmented and siloed. Data controls and governance must be fixed.

We also recommend that our clients examine their data ‘culture’ and capabilities. The reality is that new D&A tools and techniques require a different skill set than traditional internal audit, and it will take some time for banks, insurers and investment management houses to develop or recruit the right data scientists, business analysts, technology developers and math geeks to properly implement a new data-driven approach. Management, too, must become more data-driven.

It doesn’t need to be difficult
Thankfully, many of these barriers are now starting to fall away. Gone are the days when financial services organizations needed to pull their data from various

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systems and dump them into massive data warehouses; new tools and approaches mean that data can now be ‘plucked’ from the appropriate system and integrated — in near real time — to provide reliable and valuable insights.

At the same time, new visualization technologies are taking some of the complexity out of the data. Indeed, a number of organizations (including KPMG) now offer executives the ability to view all of their data — and uncover important data correlations — in a fully immersive visualization space that helps them see their data from virtually every angle, unlocking new perspectives and inspiring new strategies.

New tools and technologies for process mining are also rapidly emerging that enable companies to improve their process and save costs. More than US$12 billion was invested into FinTech start-ups in 2014, and many of these companies are focused on solving challenges related to data integration, analysis and control within the financial services sector. Traditional service providers are also investing in new ideas and solutions. KPMG Capital, for example, has made a number of investments into D&A companies with solutions that promise to improve not only our audit services, but also provide our clients with more clarity on their risk profile.

Make it a priority
Given the size and scope for regulatory fines, the financial implications of poor controls and the competitive value that can be harnessed from new, data-driven audit approaches, we firmly believe that financial services executives should be making audit a priority within their D&A strategy.

Data tools can be used to identify risk and provide organizational insights by matching different data bases of structured (transactional) and unstructured data; applying data visualization to unstructured data. With the free flow of data that new tools provide for non-routine transactions, organization can increase assurance through the evaluation of areas where controls are weak or ineffective, perform anti-fraud procedures and challenge the valuation of assets.

Those able to adopt these new approaches — and embed them into the organization as part of their data transformation — should achieve significant competitive advantage. Those unable to do so struggle to get out of the vicious cycle of regulatory scrutiny, fines and reputational damage.

Apply supporting D&A tools to increase assurance

<table>
<thead>
<tr>
<th>Non-routine transactions (impairment calculations/valuation)</th>
<th>Routine transactions (Purchase to pay, Order to cash)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time spent on judgmental audit areas</td>
<td>Time spent on transactional controls and substantive testing by the auditors</td>
</tr>
<tr>
<td>Onboard new tools supporting non-routine transaction testing</td>
<td>Automated routine controls testing by standard auditing procedures</td>
</tr>
<tr>
<td>Focused effort by senior auditors</td>
<td>Reduced effort</td>
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</tbody>
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Source: KPMG International

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