

# Data, analytics and audit

Getting ready for the era of data-driven audits

By **Jonathan Bingham**, Partner, KPMG in the UK  
By **Christoph Hellwig**, Partner, KPMG in Germany  
By **Jatin Patel**, Director, KPMG in the UK



Jonathan Bingham



Christoph Hellwig



Jatin Patel

It was only a matter of time before the rapidly evolving world of data and analytics (D&A) 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, most 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';

**The financial implications of a poor internal audit process are becoming much more serious. Regulatory fines and penalties are quickly increasing; some organizations have already faced stiff fines — representing between 2 to 5 percent of global revenues — for non-compliance or poor controls. On the other hand, the scope for losses from misconduct (such as rogue trading) has multiplied. For example, fines in the UK alone were anticipated to top US\$1.35 billion in 2015.<sup>1</sup>**

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<sup>1</sup> <http://www.reuters.com/article/us-britain-banks-fines-idUSKBN0TR1TK20151208>

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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

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. ■

## Contributors

### Jonathan Bingham

#### Partner

KPMG in the UK

**T:** +44 20 73115814

**E:** [jonathan.bingham@kpmg.co.uk](mailto:jonathan.bingham@kpmg.co.uk)

Jon provides assurance and advisory services to a whole range of financial services organizations — from smaller stockbrokers and payments institutions to large global banking groups. Jon has extensive audit experience on a range of financial services groups including banks, building societies, investment companies, stockbrokers and payments institutions.

### Christoph Hellwig

#### Partner

KPMG in Germany

**T:** +49 511 8509-5182

**E:** [chellwig@kpmg.com](mailto:chellwig@kpmg.com)

Christoph is an Audit Partner in the insurance sector with audit extensive experience in servicing the small and medium sized insurance market. He also provides advice on IFRS, benchmarking and IT tools.

### Jatin Patel

#### Director

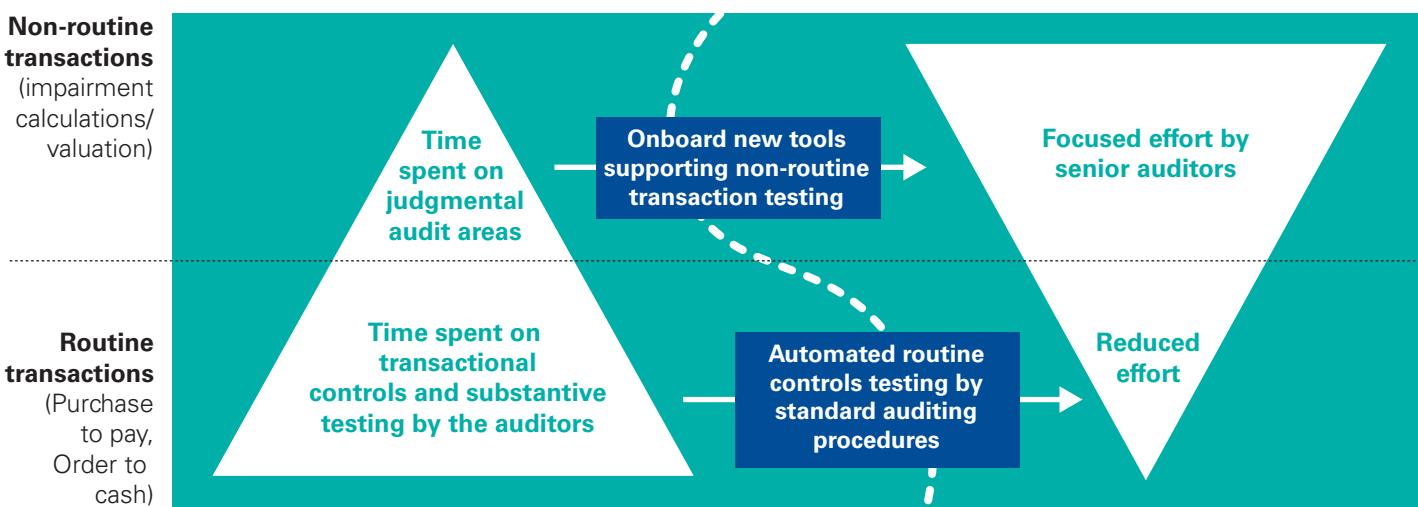
KPMG in the UK

**T:** +44 20 76942613

**E:** [jatin.patel2@kpmg.co.uk](mailto:jatin.patel2@kpmg.co.uk)

Jatin is a Director in the Investment Management and Funds Audit practice. During his 13 years with KPMG, he has worked on a number of large/listed asset managers and pension schemes. Now based in the UK, he has also worked in Australia and India.

## Apply supporting D&A tools to increase assurance



Source: KPMG International

[kpmg.com/socialmedia](http://kpmg.com/socialmedia)



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