

## Guidance on unlocking the value of Internal Audit functions by implementing Data Analytics / Science: Webinar June 18,2021

The webinar has welcome up to 258 participants.

### 1. Introduction

Nowadays, never before has data and computing capacities so freely been available, data analytics and sciences based method become a key enabler to provide timely assurance. Mastering the underpinning methods and acquiring the relevant skills is a must have for auditors. The [paper](#) published de-mystifies the topics and provides practical guidance for internal audit practitioners and examples in the insurance industry.

Panellists of today are all practitioners and try to master data and data analytics as a core element of internal auditing.

### 2. Panel discussion:

#### **Data analytics and Data science**

To define this term is quite impossible. Data science is a term quite new. For audit, data science can be applicable for all cycle of audit work: from planning to testing to selection and visuals for audience including board and committees. Data analytics impact the value chain: different application are concerned such as risk assessment (data-led decision), risk data control environment, making sure that data are bring from all part of the organisation (including customers); data analytics relates to IT systems and operational problems. We look at data related to personal, recruitment, holidays, office management, etc. and can select better samples. Data analytics shape the audit cycle and it represents a great opportunity to give more assurance on the outcomes quality. Mathematical skills are becoming more and more part of the internal audit skills.

#### **Key benefits**

Data analytics and science increase the accuracy and the reliability of the audit. Trust is key in the audit process and these techniques/methodologies help internal audit deliver their mandate to a higher value

Data science can inform about the unknowns, allow us to be more forward looking, using predictive analytics within the risk identification space. It also allows to be efficient (e.g. testing 800 documents a day vs a week by traditional methods) and to reuse, repeat testing. We have an opportunity to review all the current tests and replace them or make them

automatic with the use of data led testing. Standardising the testing also helps identifying patterns in the data and evaluating the risks within the control environment.

The benefits are for the internal audit as a collective function, but also as auditors as individuals. It provides auditors with needed background and tools allowing them to cope with a fast changing environment, it creates new auditor profile, more data-savvy. As a consequence the data skills result in better business understanding: analysing full data set instead of samples allows to spot trends- and anomalies; analyse data from various sources allows a more complete view. It facilitates agile audit and results in a deeper business knowledge. It facilitates deeper discussion on issue and strengthen the discussion with business stakeholders. It is a really added value and a way of establishing stronger relationship with the auditees. Internal audit becomes a more credible partner.

Standardization of tests provided by data analytics means repeatability and possibility to automate: from a board and audit committee perspective this implies an internal audit function that is able to switch from more routine task to focus on more risky areas; from individual auditors perspective, this means enhancement of the job, as they can switch from everyday tasks to more added value activities.

Finally, a data-driven internal audit function is more competitive on the market, capable to seek and attract new talents.

A Poll is run and 85% of the participants use data analytics in their organisation.

### **The journey**

There is no one size fits all solution to start a data journey, it depend on the size and the maturity of the business. The management of data is part of a change program and it takes time: it is complex, it requires culture change and a strong management of difficulties. Discussion on data management can be a change agent. It is advices to start somewhere and to start with high skills (business analyst, business knowledge, presentation skills and data specialist), you need to start transforming the organisation culturally and make it intuitive. Data scientists are needed a where large data sets are available and judgement needs to be applied.

Tools are relatively cheap and you don't need an expensive tool to make an impact.. You can start with low cost and generate high impact with one analysis, then you can see where your organisation is up to in terms of data maturity.

It is important to choose wisely where to start: staying one step ahead of the business can create a large impact but can be done in a simple way.

Before you start, you need a clear strategy and a vison and a plan of how to get there. 24 months could be meaningful. The plan must cover multiple aspects: having people with

the right skills, the appropriate technology to support the strategy, the operating model to support the journey and a strong sponsorship and communication. Then, you implement your roadmap, you define quick wins, deliverable relatively easily to achieve but with high potential to demonstrate visible success, which is key to motivate the people and face possible resistance to change.

### **Main obstacles**

One of the most common pitfalls is the resistance to change, data analytics needs to become the new normal, a natural component of every audit. The key elements to overcome this obstacle are: a continuous communication (regularly share the progress in the roadmap, explain why data analytics is useful) – having inclusive approach (the team must feel to be part of the journey, leverage on champions to get closer with the local teams, to gather the feedbacks with them, you can adjust the journey where appropriate) – to deliver practical examples of tangible values (need to see concrete things showing evolution and amelioration).

The data quality is an issue in the journey but this should be overcome and not block the journey.

### **3. Questions & Answers**

What is the best positioning of data analytics in an internal audit function: central or decentral? Based on a recent study by PWC, 50% of organisations have created a central function; 43% have a hybrid (centralised/federated) meaning that 93% have some sort of central analytics functions, so this can be seen to be a standard way to start and see where you go. In terms of operating model, we currently pick up data scientist with business skills and audit interest. We expect in the coming years a higher proportion of capable auditors with data analytics. Some organisations create a small team that does only analytics or some combines with the other audit tasks. The auditors in the future will have to combine audit capabilities and data analytics and business knowledge.

How to recruit data scientist? We need to provide a very good career path because there is a big competition with a lot of big companies...A mix of upskilling auditors and new hiring is a good formula.

#### **4. Conclusion**

The biggest win for internal auditors with data analytics are not only about testing but it crosses all element of the audit cycle (from risk based analysis to planning, root cause analyses, communication,...). There are a lot of techniques and applications available in the market. It is important to focus on the internal audit department strategy to decide on the organisation : the central or outsourced approach or an hybrid model. Finally, everyone needs to decide what fits best with the company. The move towards data analytics/data science must be perceived by everyone. The big bang is not recommended, the journey needs to grow.

Finally, the big benefit of the journey is to provide important insight and increased assurance for the Board, Audit Committee and not just historical information.