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Data & analytics and continuous auditing

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The role and objectives of internal auditing around the world continue to evolve, expanding beyond controls testing and compliance with regulations and policies. Now is the time to drive your internal audit (IA) function to create business value by improving risk management and enhancing performance through the use of data & analytics (D&A) and continuous auditing.

Leveraging D&A and continuous auditing processes to create value

Companies are increasingly striving to effectively leverage D&A and achieve continuous auditing capabilities within the IA function. Companies encounter many emerging risks including the growing compliance burden and economic uncertainties, increasingly complex and borderless fraud schemes, and decreasing margins. To overcome these risks, organisations need to eliminate operational inefficiencies, and adopt innovative ways to assess and manage risk and enhance performance.

IA has an important role to play in helping organisations confront these risks. The use of D&A tools and techniques is helping the IA function fundamentally transform and improve audit approaches, and creating value for the organisation by improving audit quality.

Fundamental questions regarding D&A

How exactly can IA best utilise the benefits from D&A? What are the most common scenarios seen today for implementing D&A capabilities? What steps are needed to successfully implement D&A?

This booklet aims to address these fundamental questions by introducing a structured approach to implementing an appropriate D&A solution for your IA function.

Enhancing D&A benefits

A mature D&A process can benefit the IA function by automating the collection, formatting and mapping of key organisational data, and applying various tools to analyse and interpret the data in a more meaningful and effective way. This can result in more focused audits that have the ability to focus on specific areas of risk, conduct more dynamic audit planning and seek a greater balance of controls versus transaction analysis based on the underlying business issues and risks.

The use of D&A tools within a continuous auditing process provides a greater degree of assurance regarding the effectiveness of the controls and the accuracy of transactions, while significantly reducing audit costs, resources and time.

A structured approach to implementing a suitable D&A and continuous auditing solution

- Have you obtained audit committee and senior management buy-in?
- Have you devised a comprehensive D&A strategy and business case aligned with your IA missions and corporate strategic direction?
- Do you have a cost-efficient, practical and user-friendly technology platform?
- Do you have an implementation and execution plan?
- Have you developed key performance indicators (KPIs) that measure the performance of your D&A efforts?

Embedding D&A in your internal audit routine

Better internal audits with D&A

Data quality and integrity have always been key to performing a robust internal audit. Recent efforts by organisations around the world to improve their own D&A capabilities, combined with the market developing more advanced D&A capabilities, have been instrumental in improving internal audit quality. That in itself has already delivered immeasurable value.

More sophisticated organisations are now starting to look for deeper insights from their internal audit in order to better understand their performance and risk profiles across departments, business units and peer groups.

Using D&A, internal auditors may uncover insights about an organisation's purchasing processes that would allow management to assess opportunities to drive efficiency or better leverage their enterprise resource planning (ERP) investments by relying more on automated controls. In doing so, organisations can better address specific challenges and achieve more streamlined production.

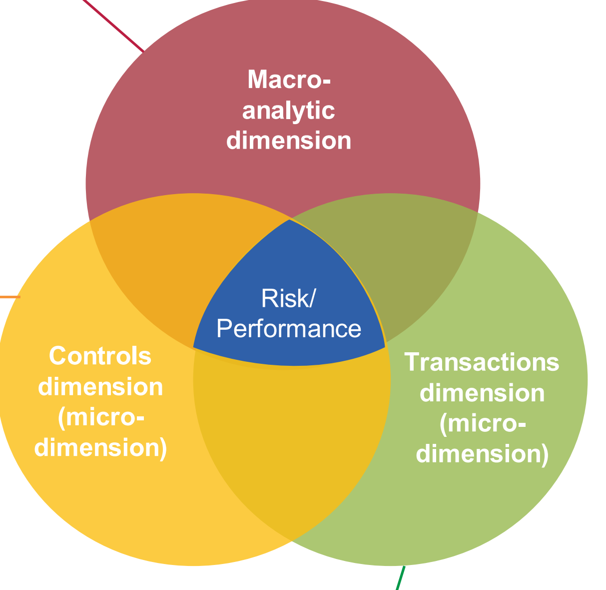
We believe that enhanced internal audit quality combined with new insights equals value – value to the users of the internal audit reports, value to the audit committee and key stakeholders in terms of the quality and effectiveness of the internal audit report, and value to the boards and management teams in terms of the decisions they make.

Conducting D&A in three dimensions:

Macro-analytic dimension
The macro-analytic dimension provides a broad perspective for effective analysis of business issues across the organisation. For example, it identifies differences in key metrics to detect unusual trends, patterns or results that may signal a larger issue that deserves a closer look.

Controls dimension
The controls dimension incorporates financial controls management, segregation of duties, etc. This dimension is very effective at providing security permissions for authorised users and blocking unauthorised users. However, it is limited as it does not address issues involving authorised users making mistakes or committing fraud, for example.

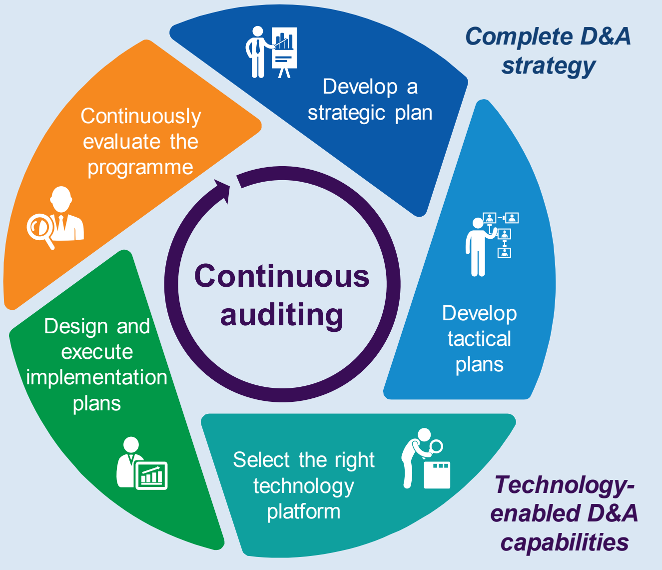
Transactions dimension
The transactions dimension drills down to include transaction-based exception analysis and business rule management. Essentially, this dimension focuses on the effectiveness of the controls in place, as well as identifies control gaps that may be exploited. It addresses the potential of authorised users performing unauthorised activities, either intentionally or unintentionally.



Structured approach for implementing a suitable technology-enabled D&A and continuous auditing solution

"With D&A, organisations have the ability to review every transaction – not just sampling – which enables a more efficient analysis on a greater scale. In addition, leveraging D&A also accommodates the growing risk-based focus on fraud detection and regulatory compliance."

"If implemented properly, D&A and continuous auditing can help IA departments simplify and improve the audit process by increasing operational efficiencies, reducing costs, and detecting potential fraud, errors and abuses earlier – all while providing a higher quality audit. It is also increasingly becoming a way for organisations to create value."



Develop a strategic plan	• Define the objectives you are trying to achieve • Assess current and future state maturity to perform a gap analysis • Identify key stakeholders and define the success criteria and related measurements • Build an effective business case • Consider using a pilot to validate the strategy and support the business case
Develop tactical plans	• Perform risk assessments to identify valuable areas of focus • Design governance and a reporting structure for continuous auditing activities • Integrate D&A into internal audit methodology and processes • Evaluate D&A skills and competencies • Consider using a pilot to validate tactical plans
Select the right technology platform	• Analyse the infrastructure and data availability • Design a conceptual solution to align with the strategic and tactical plans • Evaluate and select an optimal solution • Prepare for implementation
Design and execute implementation plans	• Manage organisational change • Design and establish data connection/extraction, analysis and reporting mechanisms, including risk- and performance-based analytics, dashboards, scorecards, reports, and alerts • Design and deliver training • Identify focus areas for implementation to satisfy strategic objectives
Continuously evaluate the programme	• Regularly evaluate the programme's effectiveness, and refine as necessary • Consider additional areas for expansion and maturity • Evaluate opportunities to extend into the business

The IA function can deliver significant added value if it operates through an integrated technology platform; incorporates risk assessment, D&A, knowledge and experience; and achieves continuous auditing capabilities. In particular, it could monitor emerging risk, assess risk coverage and facilitate data-driven decisions to provide actionable insights into the strategic drivers of the business that would optimise both business performance and risk mitigation.

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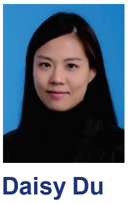

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