Transforming Internal Audit through data analytics
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What is driving demand for Internal Audit analytics services?

Increased focus on risk, compliance, and transparency has required Internal Audit groups to develop a deeper understanding of the business. They must evaluate a wealth of information to identify patterns, trends, anomalous behavior, and ways to improve the Internal Audit value proposition.

- Pressure on Internal Audit groups to audit closer to the business and develop an informed position on risks
- Organisations need to do more with less in terms of managing risk and compliance issues
- Regulatory expectations to monitor business activities are increasing
- Competitive pressures are forcing organisations to innovate
- Data is growing exponentially, and the technologies to analyse it are maturing rapidly

Trends that are transforming Internal Audit

By leveraging new analytics-focused tools, techniques, and approaches, internal auditors are able to lead the way in responding to this new business reality and position themselves as accelerators of organisational change.

How have Internal Audit groups responded?

While the demand for Internal Audit analytics services is strong, our research indicates that switching to a more data-driven audit approach has proved challenging for organisations that may lack the specialised resources and capabilities necessary to transform entrenched processes and mindsets.

According to CAEs and other internal audit professionals we surveyed, increased reliance on Big Data and business analytics should be the top focus for Internal Audit in the next 12 months.
Getting started: embedding analytics throughout the audit lifecycle

To increase the maturity of data analytics in the profession, Internal Audit departments must overcome historical barriers. In addition to building the appropriate specialised skill set and acquiring the right technology, it is critical to embed data analytics across the Internal Audit lifecycle.

As part of effective planning, it is important to determine how the audit methodology will change to fully leverage the use of data analytics. Points to consider across the audit lifecycle include the following:

Risk Assessment
- What historical trends does the data show that provide insight into business risks (i.e., business unit or specific location’s profit margin quarter over quarter)?
- What groups within the organisation should Internal Audit partner with to capture and evaluate this data?

Planning
- What baseline analytics should Internal Audit conduct to determine the level of audit effort required?
- For example, in a shared service center audit, can Internal Audit evaluate the group’s proposed KPIs and actual performance to see what specific processes might be higher risk?

Scoping
- For each risk/audit objective, has a data analytic been considered and the source of data identified?
- Could Internal Audit leverage previously requested data?

Fieldwork
- Are your analytics conducted and results in hand prior to your auditors going to the field, and what scoping changes were made as a result?

Reporting
- How will your audit approach change if this area or process would need to be audited again?
- What one or two analytics would help determine if a problem still exists or might be emerging?

Monitoring
- How has your Internal Audit function traditionally illustrated the results of the data analytics conducted?
- Could your findings be communicated through a few succinct points using graphs or charts?

Key phases and benefits of an analytics-driven approach

1. Risk Assessment/ Monitoring: Utilise interactive maps to highlight critical audit issues and the need for potential follow-up audits to ensure remediation has been conducted.
3. Fieldwork: Target outlier transactions using a risk-based approach to replace traditional sampling procedures.
4. Reporting: Visually support findings related to performance against KPIs.

- Deeper business understanding to assist in audit intelligence
- Lower existing and future costs through automation of processes
- End-to-end testing for process and control verification
- Identifying anomalies and patterns for high risk, leading to enhanced coverage
- Effective communication of key issues and findings through dynamic dashboards
- Audit functions that are more relevant to the business and to boards
Our approach to developing the Internal Audit analytics function

This flow presents our thought process in strengthening Internal Audit analytics, which centers on three core competencies:

1. **Identify Data Sources**
   - Review and identify data sources between source systems, reporting data, and application level data.

2. **Define Frequency**
   - Define data source required on an on-going basis (daily, monthly, quarterly) and one-time needs.

3. **Repeatability**
   - Develop both manual and automated processes to reduce burden in gathering data.

4. **Define Resources**
   - Define concentric circles of core team, analytics champion, and department-wide skill set uplift.

5. **Choose Technologies**
   - Identify capabilities and needs in terms of analytics, visualisation, data management, and monitoring solutions.

6. **Create Training**
   - Create programs and incentives to develop analytical mindset and competencies.

7. **Develop Methodology**
   - Develop execution and quality standards for analytics across audit planning and controls testing.

8. **Create Awareness**
   - Ensure technology tools within department align to methodology and support ability to track methodology adherence.

9. **Share Wins**
   - Define “success metrics” and communicate and share wins across department to shift culture.

PwC can advise and assist in building and then delivering the following core components of a broad data analytics capability:
Change is essential

How we can transform internal audit in the current information revolution

Data analysis can improve the quality of the internal audit work in the following areas:

The right mix of capabilities

Providing a blend of assurance and advisory skills, our Risk Assurance practice is able to leverage deep experience from PwC’s strong footprint in China and Hong Kong. We have the largest dedicated team in Asia with over 2,000 professional staff and 100 partners, providing local knowledge and experience. Our partners and staff are dedicated to providing objective and tailored business insights and solutions.

- 100% transaction coverage
- Automate = Continuous and repeatable
- Detailed and concrete exploration
- New perspectives and dimensions

- Target high risk and abnormal transactions
- Automate = Testing throughout the year
- Increase business insight
- Improve communications
Contacts

If you would like to continue the conversation, please contact our team

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