



Internal Audit Technology Enablement

Insights on three ways internal audit departments can maximize the value from modern technology

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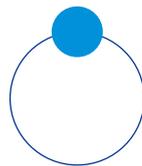




Introduction

Internal audit departments have to answer a challenging question: “how can we balance time-intensive compliance activities with the need to provide our stakeholders with high value insights?” On one hand, internal audit departments must continue to support mandatory compliance and regulatory efforts. This often includes US SOX and J-SOX activities that follow well-defined scoping, testing, and reporting processes. On the other hand, recent disruption in business operating models has further increased demand for internal audit departments to become business advisors, using their cross-functional position to provide unique, in-depth insights and recommendations to the stakeholders they audit.

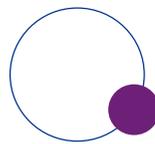
Just as companies have turned to technology to help them standardize, optimize, and automate their business processes, leading internal audit departments are using technology to help with both compliance and business advisory demands. Modern technology such as workflow tools, robotic process automation, self-service data visualization, self-service data analytics tools, and advanced cognitive services help three key activities:



Reduce effort

on low value-added activities,

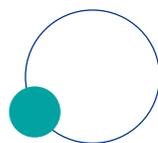
such as repetitive control testing, compliance monitoring, and project management activities;



Standardize and automate

high value-added activities

including ongoing continuous auditing / continuous monitoring processes that can detect fraud and duplicate payments



Build and deploy

specific advanced solutions

that offer unique insights through the use of external data sources, cognitive services, and predictive analytics

Reduce effort on low value-added activities

Leading internal audit departments are increasingly using technology to partially or completely automate activities within their compliance and annual audit programs. Using a process evaluation to estimate the “size of the prize” – a return on investment calculation that includes estimated savings, technical feasibility, and developments costs – these low-value activities can be identified for automation. Recent examples include:

- A US bank reduced US SOX control testing costs by 20% using robotic process automation
- A global automotive manufacturer reduced the effort to compile their subsidiaries’ US SOX control deficiencies and related information by 80%
- A US financial services company implemented continuous auditing of low-complexity analytics for asset-backed securities regulatory reporting.

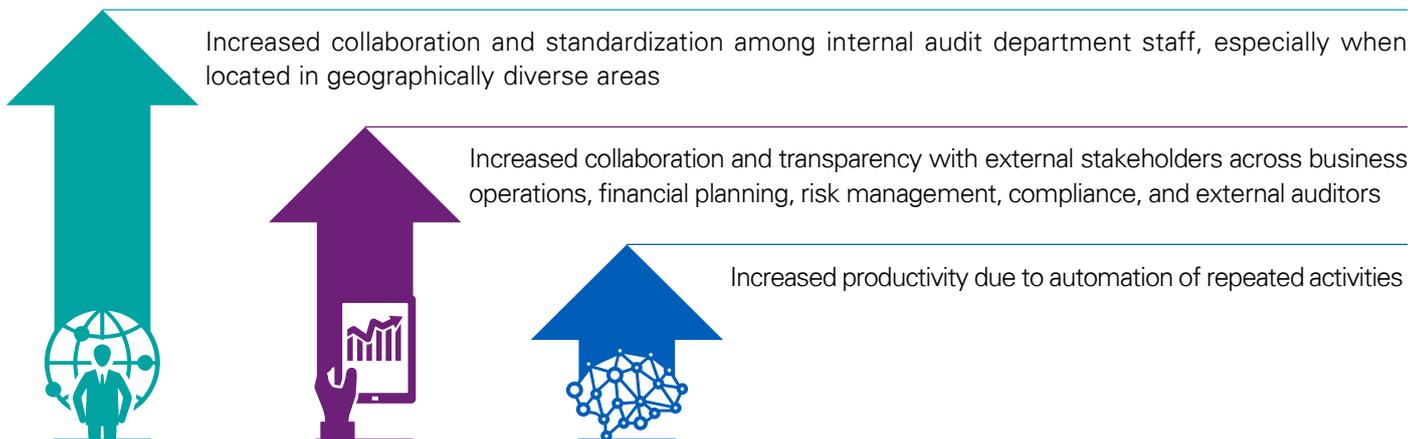
In addition to the immediate cost savings of automation, leading internal audit departments are also seeing other benefits, including:

- Increased reliance on internal controls by external auditors due to standardized testing approaches
- Expanded risk coverage through applying automation to analyze entire populations on a real-time basis; and

- Implementing continuous monitoring by transitioning automated control analysis to business operations

Although robotic process automation continues to be a key enabler of these automation activities, many internal audit departments are also turning to workflow and collaboration tools to reduce the effort in performing everyday activities such as coordinating document requests and providing status updates. Many internal audit departments report that building the business case for implementing these tools can be difficult; similar to business operations, the indirect costs associated with project management and coordination are sizable but difficult to quantify. The following factors should be included when assessing these tools:

Internal audit-specific technology platforms that focus on governance, risk, and compliance can provide an extra boost with off-the-shelf workflows, but many departments choose tools that are already in use by other areas of the business. This can have several benefits including reducing costs for initial implementation, simplifying ongoing maintenance, and reducing training costs for all stakeholders.



Standardize and automate high value-added activities

Leading internal audit departments also continue to invest in the activities that provide high value, unique insights to the business areas that they audit. Although areas such as risk assessment and data analytics often cannot be completely automated, a standardized approach and toolset allows significantly faster response times and better understanding of business processes. Some examples include:

- A US-based retailer that reduced their risk assessment effort by over 50% and moved to a quarterly assessment through the use of a survey tool to gather qualitative responses that were combined with continuous quantitative analysis of key risk indicators calculated via internal and external data sets
- A US-based healthcare company that implemented continuous auditing routines for pre-incident fraud analysis and duplicate payments throughout their purchasing process, leading to significant recovery of funds
- A multinational organization that transitioned automated Japan labor law compliance analytics and dashboards to HR management, enabling continuous monitoring.

Data analytics, when combined with a structured framework and approach for performing analysis, are a popular way to embed sustainable and repeatable insights throughout the audit process. Frequently, internal audit departments can leverage investments made by business operations, such as the implementation of a business intelligence or reporting system, as a basis for their own analytics. When combined with a strategy that addresses data, tools, people, and processes, data analytics provides a unique opportunity for significantly increased risk coverage. This includes broader coverage – across more divisions, locations, and business processes – and deeper coverage – across entire populations and time periods.

Self-service visualization tools also continue to make a significant impact on transforming the way that internal audit performs their analysis and communicates with their stakeholders. Purchasing is a common business process that benefits from a comprehensive dashboard, for example. Data – including purchase orders, vendors, and payments – can be automatically aggregated across global locations, allowing dashboards to be refreshed on-demand during risk assessments, audit scoping, planning, fieldwork, reporting, and issue follow-up.

When selecting data analytics tools for internal audit, assessment factors should include:



Cost, including ongoing maintenance or annual costs



Ease of use, training, and available support



Alignment and integration with existing IT infrastructure



Library of procedures for common business processes

Build and deploy specific advanced solutions

Once standardization and automation have been applied to both low- and high-value activities, leading internal audit departments are leveraging newly freed resources to pursue solutions that can further reduce risk in their organization. Typically, this includes revisiting areas that were previously determined to require human capabilities or judgment.

Given recent advances in cognitive technologies, pre-trained and highly accurate cognitive services can be applied to unique use cases. For example, computer vision techniques, including object detection and facial recognition, and natural language processing are available via cloud-based services or free, open source libraries. The low cost and high accuracy results in advanced, targeted solutions, such as:

- A US-based retailer that used object detection to automatically review thousands of hours of security camera footage, identifying points in time where

employees were not standing next to high-value, high-risk merchandise in their stores

- A US-based retailer that used predictive models trained with external and internal data, including demographics and census data, to accurately identify locations that were reporting higher-than-expected theft and inventory loss
- A US-based reseller that continuously performed product pricing comparisons against competitors through a custom “web crawler” and automated product matching

Natural language processing is also a popular technique for performing analysis on unstructured data. Although traditional data analytics faces limitations with analyzing contracts, policies, and other free-form text, natural language processing can identify key attributes from within these documents and make them available for further processing.

Conclusion

Leveraging modern technology, internal audit departments can reduce effort on low value-added activities, optimize and automate high value-added activities, and build and deploy specific advanced solutions. This helps internal audit tackle an increasingly difficult task: facing rapid business operating model disruption, they must provide significant coverage of risk and compliance while simultaneously fulfilling the role of a trusted business advisor.

Current risk and compliance coverage



Coverage possibilities



- ▣ Increase risk assessment quality
- ▣ Enhance productivity
- ▣ More reliance by external audit
- ▣ Broader risk coverage
- ▣ Lower costs
- ▣ Higher quality & unique insights
- ▣ Faster response
- ▣ Become a business advisor

Broader risk and compliance coverage

The comprehensive use of technology significantly benefits these roles by reducing the cost of compliance and allowing experienced internal auditors to spend more time identifying and eliminating complex risks.

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