



The innovation imperative

Forging Internal Audit's path to
greater impact and influence

Deloitte's 2018 Global Chief Audit Executive research survey

Operational Risk 





Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

Foreword

Our 2018 Global Survey of Internal Audit leaders reveals that the impact and influence of the Internal Audit function has strengthened since our 2016 survey—for some, but not all, Internal Audit groups. This, together with other findings, indicates that, while a good number of Internal Audit functions have made progress toward greater impact and influence within their organizations, many others still struggle to do so.

This report, which presents the results of our 2018 Global Chief Audit Executive (CAE) survey, reveals key facets of the current state of Internal Audit worldwide. Prominent among these is the finding that functions with strong impact and influence are embracing new approaches to Internal Audit. They are adopting advanced analytics and new technologies. They are broadening their services into areas such as culture assessments, and they are addressing talent needs through alternative resourcing models. In summary, they are doing things differently, which means they are innovating.

At the same time, enterprises in every industry are innovating, and that is driving the need for Internal Audit to innovate. Most organizations—certainly those positioned to succeed in our climate of constant disruption—are employing new business models and technologies, developing new processes and ways of working, and partnering with third-parties in new ways.

To keep pace with the evolving needs of their organizations, Internal Audit groups also need to innovate, which can be challenging on several fronts. Fortunately, our 2018 survey of more than 1,100 Internal Audit leaders in 40 countries points to specific things that Internal Audit functions can do, and are doing, to drive success.

Being innovative does not mean changing every aspect of Internal Audit planning, execution, and reporting. Nor does it mean pursuing every new technology that comes along. Being innovative means understanding how the organization is evolving and how best to apply new approaches and technologies to serve the organization's needs while optimizing resources. This often entails identifying small steps that one can take to improve current activities; developing pilot projects to test new methods; and assisting stakeholders in identifying risks and issues associated with new things they are doing. Every Internal Audit group, regardless of size or budget, can craft innovative approaches to meeting the ever-changing needs of the organization.

We would like to take this opportunity to thank the Internal Audit leaders who participated in this year's survey for their candor and for the light they have cast on the challenges and opportunities facing Internal Audit groups worldwide, in organizations of all sizes, across a range of industries.

This report distills their views and indicates a clear path forward for Internal Audit functions that want to enhance their impact and influence by providing assurance more efficiently, advising management more insightfully, and anticipating risks more proactively as their organizations and the broader business environment continue to evolve.

The innovation imperative



Terry Hatherell
Global Internal Audit Leader
Risk Advisory



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

As organizations adopt and execute new strategies and harness risk while pursuing new opportunities—the Internal Audit function provides vital support, and is poised to do more. Particularly in the current environment of ongoing disruption, executive teams and boards benefit from the objectivity, integrity, and enterprise-wide, holistic viewpoint that Internal Audit provides.

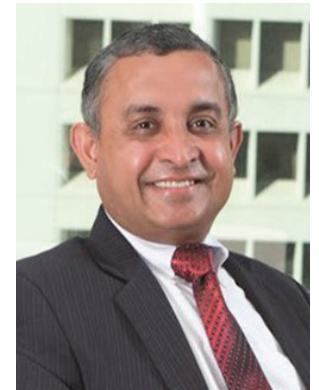
Several trends, including digital disruption, pace of technology changes, new business models, changing regulation, and complex third-party relationships spawned by business ecosystems have driven a shift in the role of Internal Audit. This shift extends the role of Internal Audit from providing only assurance to also advising stakeholders, from being reactive and looking only backward to becoming proactive and also looking forward, from focusing only on protecting assets to also assisting in creating value. This shift generally calls for innovation within Internal Audit.

As this survey shows, Internal Audit functions are indeed innovating in areas ranging from advanced analytics, agile practices, robotic process automation, dynamic and visual reporting, culture assessments and alternative talent models. This survey also indicates that Internal Audit functions engaged in innovation are enhancing their impact and influence within their organizations.

We believe the importance of Internal Audit's role will continue to increase in stature and grow. Executive teams and boards who share this belief position themselves to use risk to power performance with broader awareness, heightened risk intelligence, and far better results in terms of gains realized and losses avoided. As your Internal Audit function continues to evolve and innovate, Deloitte's Internal Audit professionals stand ready to assist you.

To learn more, please visit us at www.deloitte.com/operationalrisk.

The innovation imperative



Sam Balaji
Global Business Leader
Financial & Risk Advisory



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

Executive summary

The following are the key findings of our 2018 Global CAE research survey:

Internal Audit's impact and influence are stronger—but awareness and views of the function across the organization still need to improve.



Our 2016 survey found that 28 percent of CAEs believed their functions had strong organizational impact and influence; that figure has improved to 40 percent. In addition, while 46 percent believe that the broader organization is generally very aware of Internal Audit, only 33 percent believe the function is viewed very positively. This may point to an opportunity for some Internal Audit groups to focus on the issues and risks of most importance to stakeholders and to engage in education and branding in support of the function across the broader organization.

Key challenges facing Internal Audit include a shortage of new skills, while analytics is the highest priority.



When asked about key challenges, over one-third of CAEs cite missing skills and talent. When asked about key strategic priorities, about 50 percent individually cite strengthening their talent pipeline, partnering with the business, and enhancing quality. These challenges and priorities are related in that implementing analytics—cited by over 60 percent as a key priority—can free up resources to focus on partnering with the business and enhancing quality, yet analytics talent is in short supply. Alternative resourcing models, such as co-sourcing and offshoring can help address skills shortages as well as budget issues.

Internal Audit innovation is linked to stronger impact and influence.



In general, the results of this survey indicate that groups that have adopted innovative approaches and methods tend to have greater impact and influence than those that have not. For example, more than two-thirds of respondents with strong impact and influence expect to increase their investment in Internal Audit innovation. When asked about what they believe will be the key innovative development impacting Internal Audit over the coming three to five years, the majority of respondents, together, selected what we believe will be the most innovative developments that will impact and transform the Internal Audit function: data analytics (22 percent), RPA/cognitive technologies (15 percent), predictive analytics (14 percent), risk anticipation (13 percent), and adopting agile approaches (8 percent). This points to a recognition by Internal Audit groups that innovation is on the horizon—and they will embrace it.

Resourcing models are evolving—but must evolve faster.



Among Internal Audit functions using an alternative resourcing model, most (80 percent) use these models to access specialized skills. This may reflect the fact that getting access to much-needed, specialized skills is the most often-cited challenge in making more of an impact (37 percent). Yet about one-quarter of Internal Audit groups have no alternative resourcing model, and guest auditor and rotation programs see relatively low usage. Alternative resourcing models, particularly offshoring and co-sourcing (used by over 50 percent of respondents), help to fill skill gaps, effect knowledge transfer, and enhance budget flexibility.

Advanced analytics is seeing greater adoption.



Our 2016 survey found that only 7 percent of functions were using advanced analytics, a figure that has rapidly increased to 21 percent in this year's survey. (Advanced analytics includes data mining, statistical analysis, pattern recognition, predictive analytics, and other capabilities beyond basic data extraction and spreadsheet-based analysis.) While encouraging, that number has room to grow given our experience which indicates that advanced analytics is the key to more efficient audits, automated assurance, and risk anticipation. Meanwhile, 84 percent typically use data query and manipulation and 56 percent use basic analytics. Lack of analytics skills and training are cited as the key barriers to more rapid adoption.

Agile practices are gaining momentum.



Adopting Agile Internal Audit methods provides ways of enhancing flexibility in audit planning, execution, and reporting. For those reasons, 56 percent of Internal Audit groups are either using Agile Internal Audit methods or are considering adopting them. This is impressive for a relatively new approach to internal auditing. Internal Audit functions that have embraced this method are exposed to many benefits, including more timely audits, streamlined documentation, engaged clients, empowered Internal Audit teams, and insightful results.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

RPA is making inroads.



RPA substitutes scanning and software for human performance of repetitive tasks, making it a serious consideration for many Internal Audit groups. The two percent of groups that have already adopted RPA are on the leading edge of Internal Audit innovation. Another 21 percent are considering or researching use of RPA in Internal Audit. At the same time, Internal Audit groups will need to assist the broader organization in understanding where RPA may be practically applied. This technology is not a futuristic dream, but a practical reality ready for implementation in the right situations right now.

Cyber risk assessments are conducted by only about half of Internal Audit groups.



As applications, digitized processes, Internet of Things (IoT) devices, and use of cloud services expand within the enterprise, cyber risks increase dramatically. Yet only about half of Internal Audit groups are conducting cyber risk assessments, while about four in five devote less than 10 percent of their audit plans to cyber risks. Expanding coverage of cyber risks—a high-profile issue for senior executives and boards—can greatly enhance impact and influence.

Organizational culture audits are conducted by less than 30 percent.



About 70 percent of Internal Audit groups are not conducting assessments of organizational culture. Among those that are, many are in Financial Services (34 percent, versus 28 percent in Technology, Media and Telecommunications and 23 percent in Consumer Products—the three leading industries), given that financial services regulators often expect Internal Audit to review culture. Organizations in every industry face risks arising from culture breakdowns, as well as the need to build a culture that will enable the organization to implement its strategies and achieve its goals. Internal Audit has a critical role to play here.

KPIs are used by most groups, but need updating.



About 85 percent of Internal Audit groups use KPIs, with engagements completed, stakeholder satisfaction, and management action plans completed the most common. These are legacy measures that have been used for decades, and Internal Audit can better serve stakeholders and itself by looking to include additional measures aligned with stakeholder expectations. What is measured will be mastered. Therefore, KPIs can usefully be expanded to include cost savings or revenue opportunities identified (now used by almost a quarter of respondents) and other updated metrics that capture positive impacts on the business.

Reporting is poised to become more agile and dynamic.



Only eight percent of Internal Audit groups surveyed note that the form of their reporting depends on the audit objectives, and only 14 percent report within a week of completing fieldwork or during the audit (in place of issuing a final report). In general, stakeholders' reading time is limited, and risks and issues emerge rapidly—meaning reporting must become increasingly more streamlined and visual. The one-third of functions that take more than a month to issue their findings and the majority of functions that issue standard written reports may enhance their impact and influence by communicating their insights in a more timely and compelling manner.

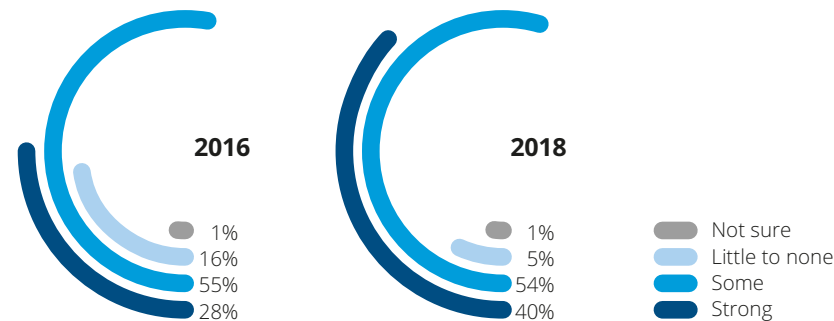
Every Internal Audit group can innovate.

Although innovation often involves technology (and budget), Internal Audit innovation typically entails a change in mindset, one that is more forward-looking, engaged with stakeholders, and focused on delivering business value. Someday, cognitive technologies and real-time reporting will be features of every Internal Audit function. Yet innovation must also occur in audit work, stakeholder relationships, and even the mission of the function. That mission builds upon providing assurance, which is foundational, and extends to advising management and anticipating risks. Innovation in mindset is a change that every Internal Audit function can embrace right now.

Internal Audit's impact and influence have strengthened

Our 2016 survey found that only 28 percent of CAEs believed their functions had strong impact and influence within the organization. That figure has improved to 40 percent. But that still leaves 60 percent of CAEs believing their functions do not have strong impact and influence.

Impact and influence of the Head of Internal Audit and broader Internal Audit function



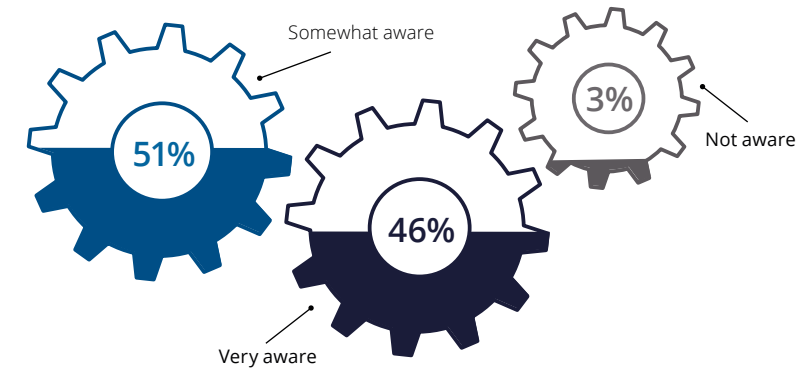
Awareness of Internal Audit is good, but views of the function could improve.

Most CAEs believe their broader organizations are aware of Internal Audit's capabilities and services, but not all believe that their functions are viewed very positively: 46 percent believe stakeholders are very aware of their function, yet fewer—33 percent—feel their function is viewed very positively (although 53 percent see their functions as being viewed somewhat positively).

In many cases, these findings may indicate a need for Internal Audit to deliver more value around issues and risks that impact the organization's ability to achieve its goals—and to improve reporting, communication, and internal branding.

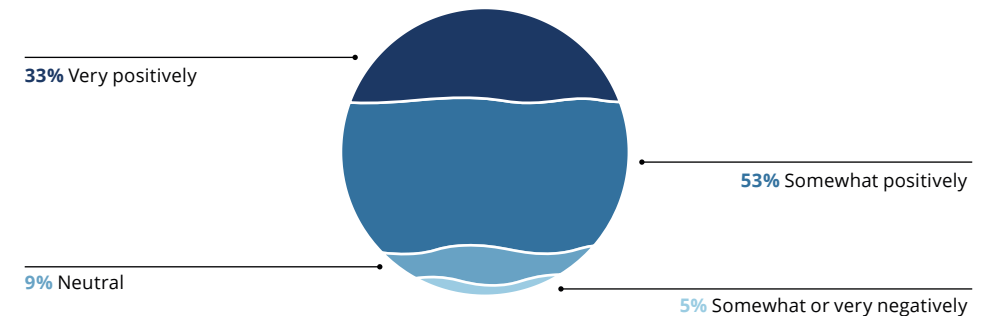
While organizations are generally aware of the Internal Audit function's capabilities and services...

Extent to which the broader organization understands what the Internal Audit function does



...Internal Audit is not always viewed positively within the organization.

Understanding how the Internal Audit function is perceived by the broader organization



This often entails taking new approaches—that is, innovating. In specific sections of this report, short sidebars—titled “What are high-impact functions doing?”—will show that relatively high percentages of functions with strong impact and influence tend to already engage in activities that can be described (and are defined in this survey) as innovative, such as Internal Audit analytics, Agile Internal Audit, and RPA, and intend to invest in further innovation going forward.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

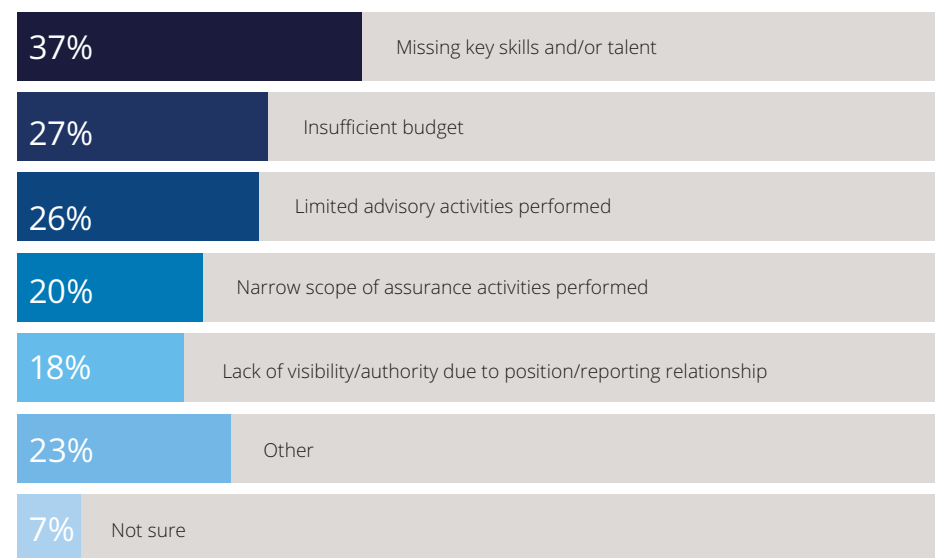
Toward the function of the future

Contacts

Missing skills present a key challenge...

The most often-cited key challenge to making more of an impact within the organization is missing skills or talent, with budget cited second most often.

Key challenges faced by the Internal Audit function in making an impact

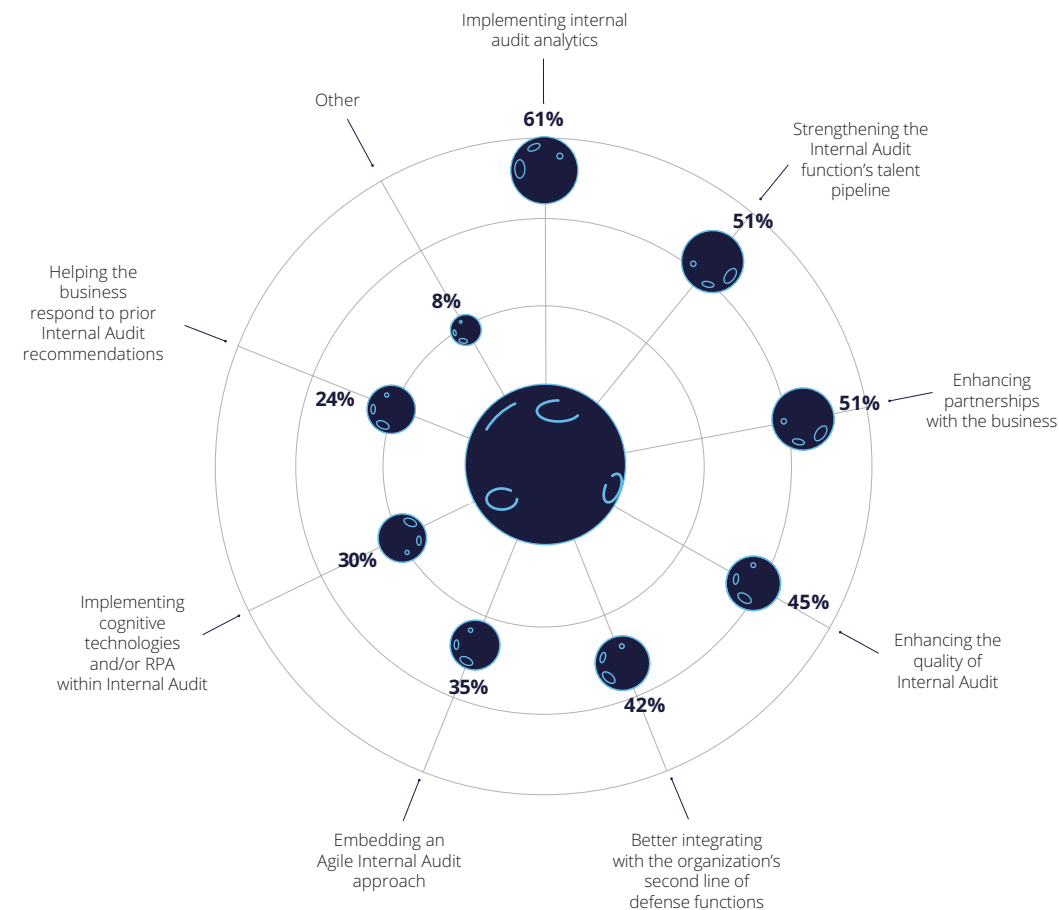


...while implementing analytics is the leading priority.

Many CAEs see their function's leading strategic priorities over the next three to five years as implementing Internal Audit analytics, strengthening their talent pipelines, partnering with the business, and enhancing quality. This raises the question: How can functions make these priorities realities?

The innovation imperative

Key strategic priorities for the next 3-5 years





Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

Making Internal Audit priorities realities

Internal Audit groups need to carefully consider how they can address their priorities if they are to deliver value as their organizations evolve. For example, regarding the four most often-cited priorities:

- **Implementing Internal Audit analytics** primarily calls for accessing the right talent—whether by hiring or training staff, or considering alternative models, such as co-sourcing, to provide either temporary or sustained support and expertise. In addition, internal auditors must accept that waiting until they have “perfect data” is not a viable plan. Functions that have successfully adopted analytics have gained access to analytics skills and talent and are working with the data they have (while helping the organization to improve data quality and accessibility).
- **Strengthening the talent pipeline** calls for making Internal Audit a magnet for talent. A strong brand within the organization will certainly help, as will the view that Internal Audit represents an excellent opportunity for career acceleration, which successful rotation programs can establish. In addition, as the function becomes more engaged, dynamic, nimble, forward-looking, and innovative, it will attract like-minded individuals.
- **Enhancing partnerships with the business** calls for identifying risks to the organization's assets and processes, and to its strategies, key decisions, and responses to developments. While retaining its objectivity and independence, the function can—via advisory services—assist in identifying enhancements to business performance, and weigh in on major decisions, key issues, and strategic risks, and thus act as a trusted and valued advisor.
- **Enhancing the quality of Internal Audit** calls for providing continuous assurance over core processes and controls to free up resources for advisory services. Automated core assurance applies technologies to enable continuous monitoring and auditing of processes, accounts, transactions, and controls to enhance both management's and Internal Audit's efficiency and effectiveness. In addition, certain methods, such as Agile Internal Audit, provide ways of achieving greater flexibility in audit planning and execution, as well as more timely insights and relevant reporting—all of which enhance quality.

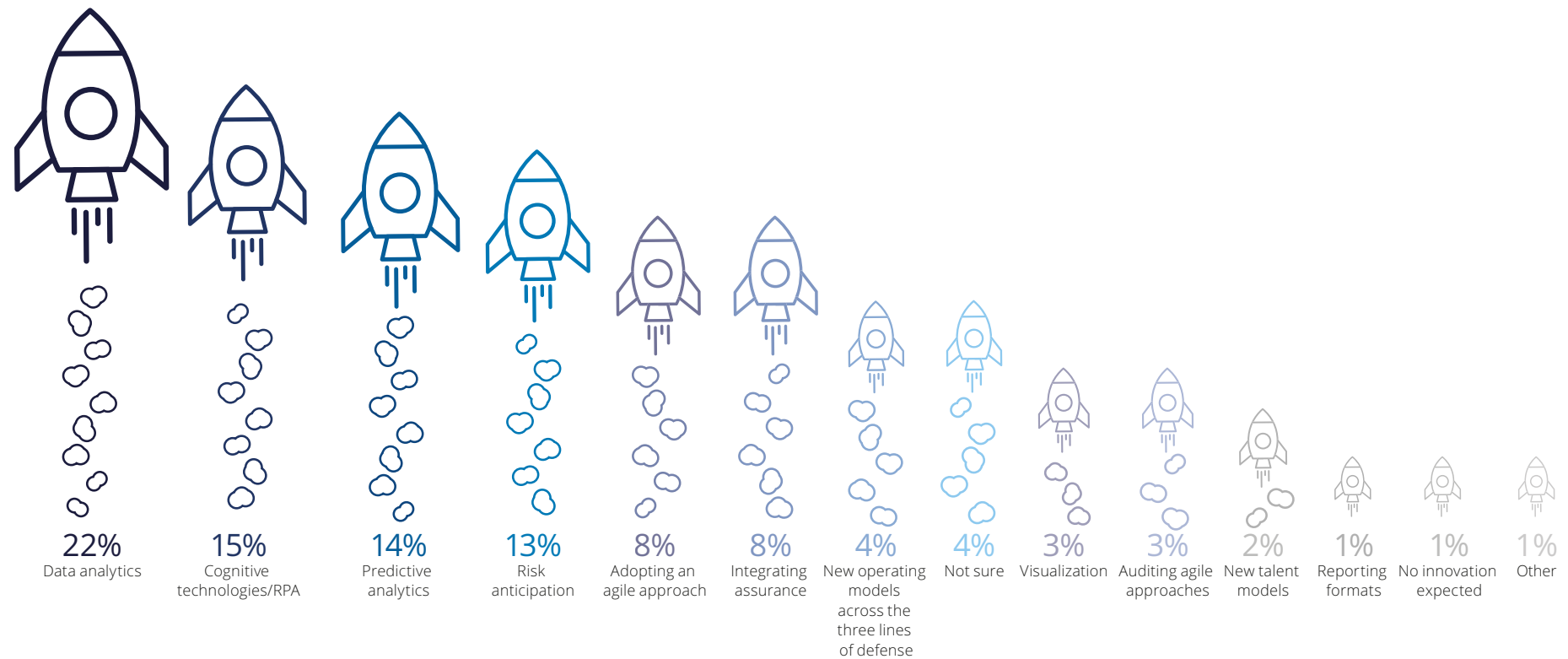


Innovation is now the imperative

CAEs are realizing that legacy methods of delivering services will not meet stakeholders' evolving needs. They expect innovative developments, such as data analytics, cognitive technologies, predictive analytics, risk anticipation, Agile Internal Audit, and integrated assurance, to impact their functions in the next few years. Most of these activities can be considered innovative and—as appropriate to the function and the organization—should at least be considered by Internal Audit groups seeking to keep pace with stakeholders' needs.

Innovative developments impacting Internal Audit

Key innovative developments impacting Internal Audit over the coming 3-5 years*



*Figures do not add to 100% due to rounding.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

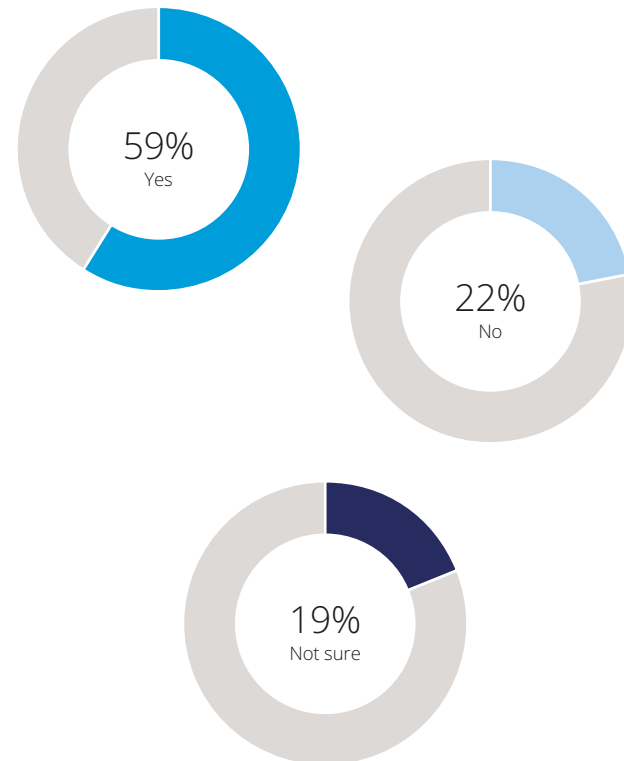
Toward the function of the future

Contacts

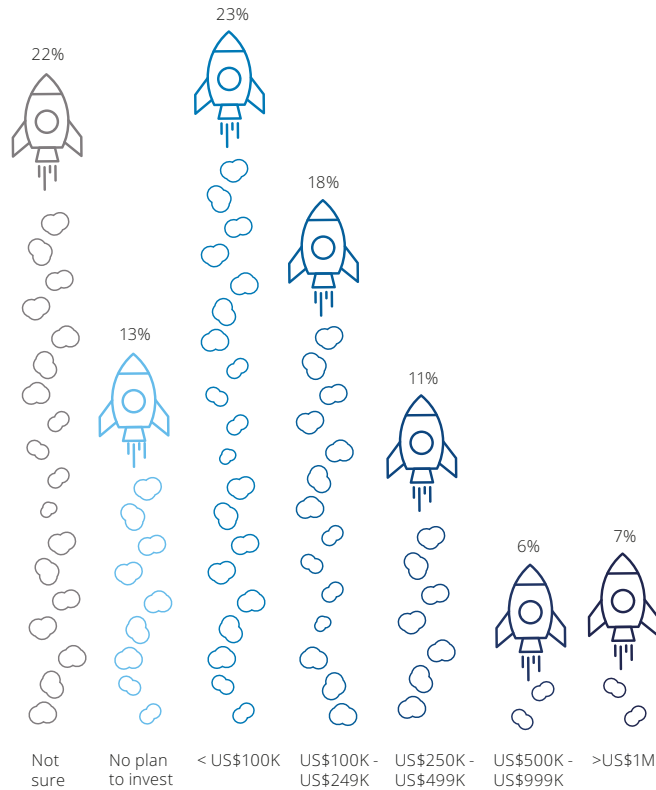
Innovation requires investment

A majority of the Internal Audit leaders surveyed expect an increase in their function's investment in innovation over the next five years. Most expect to spend more than US\$100K over the next five years.

Increase in investment in innovation by the Internal Audit function



Expected investment in innovation over the next 5 years



Investment in IA innovation is expected to increase

Fifty-one percent of functions with relatively smaller overall Internal Audit budgets (under US\$1 million) expect to increase their functions' investment in innovation—indicating that it is not just large functions that are innovating. In addition, 47 percent of functions that plan on increasing their level of investment in innovation plan on investing up to US\$250K. This is promising, given that innovation can be undertaken without multi-million dollar investment.

While budgetary priorities are specific to each individual company and function, Internal Audit groups that do not budget adequately for innovation might consider the impact that a lack of innovation might have on their ability to serve their organizations' evolving needs.

What are high-impact functions doing?

Among CAEs who believe they and their functions have high impact and influence, 71 percent plan to increase their investment in innovation.

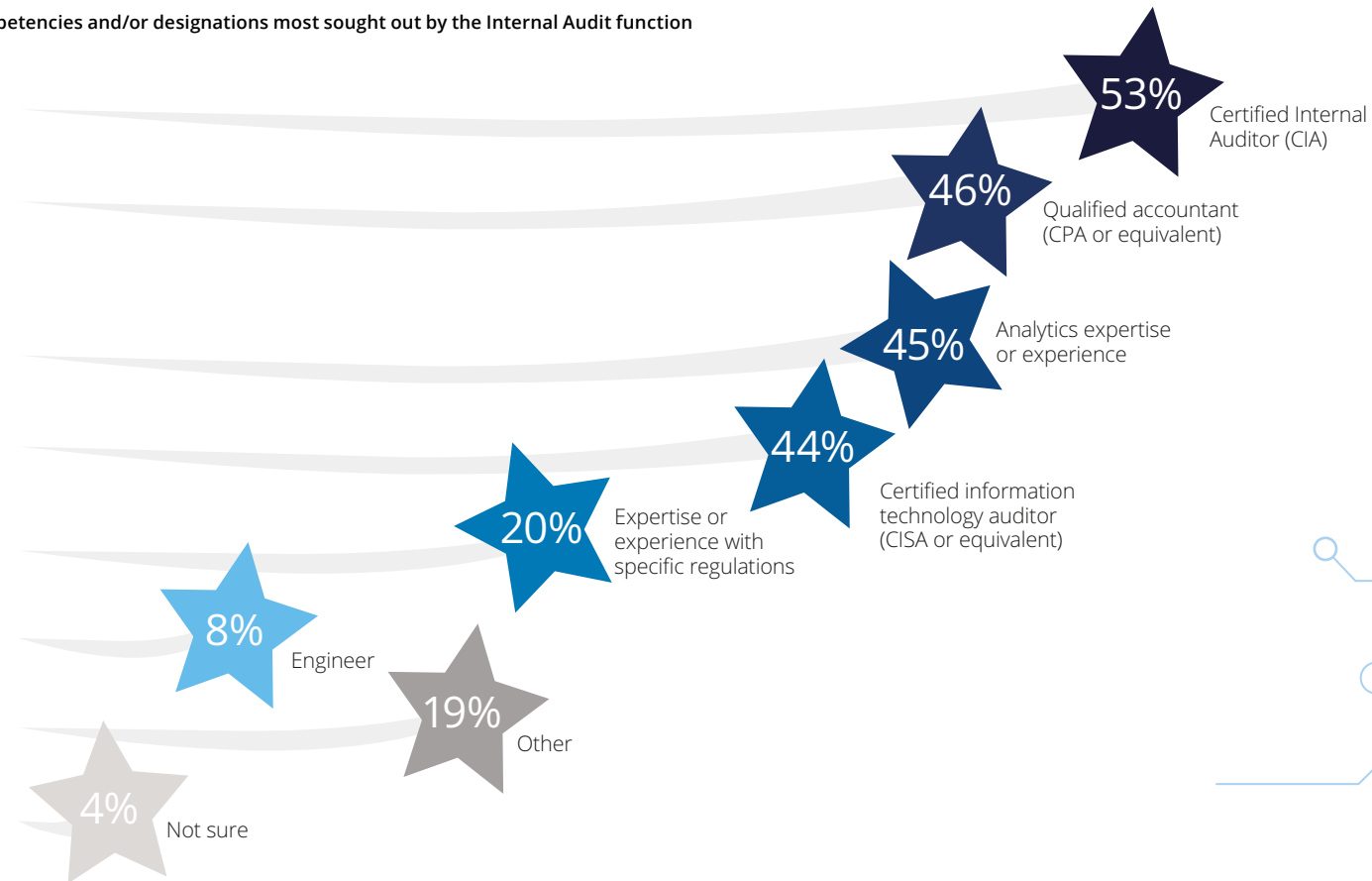
This suggests a positive relationship between innovation and organizational impact and influence, bearing in mind that innovation goes beyond adopting technology to include the transformation of Internal Audit work, value delivered, and, in the case of Agile Internal Audit methods and updated reporting, stakeholder relationships.

Resourcing models must evolve faster

Apart from seeking CIAs and CPAs, Internal Audit recruitment efforts tend to target certified IT auditors and experts in analytics—specialists in high demand. Not coincidentally, the most commonly cited reason for using an alternative resourcing model is specialist skills.

Internal Audit groups are also seeking “other” competencies—cited by nearly one in five—which may include polymaths (people who combine diverse skill sets) and “purple people” (those who combine sophisticated data analysis skills or “red skills,” with communication skills, business acumen, and political sense or “blue skills”), both of whom are becoming increasingly useful in Internal Audit.

Competencies and/or designations most sought out by the Internal Audit function



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

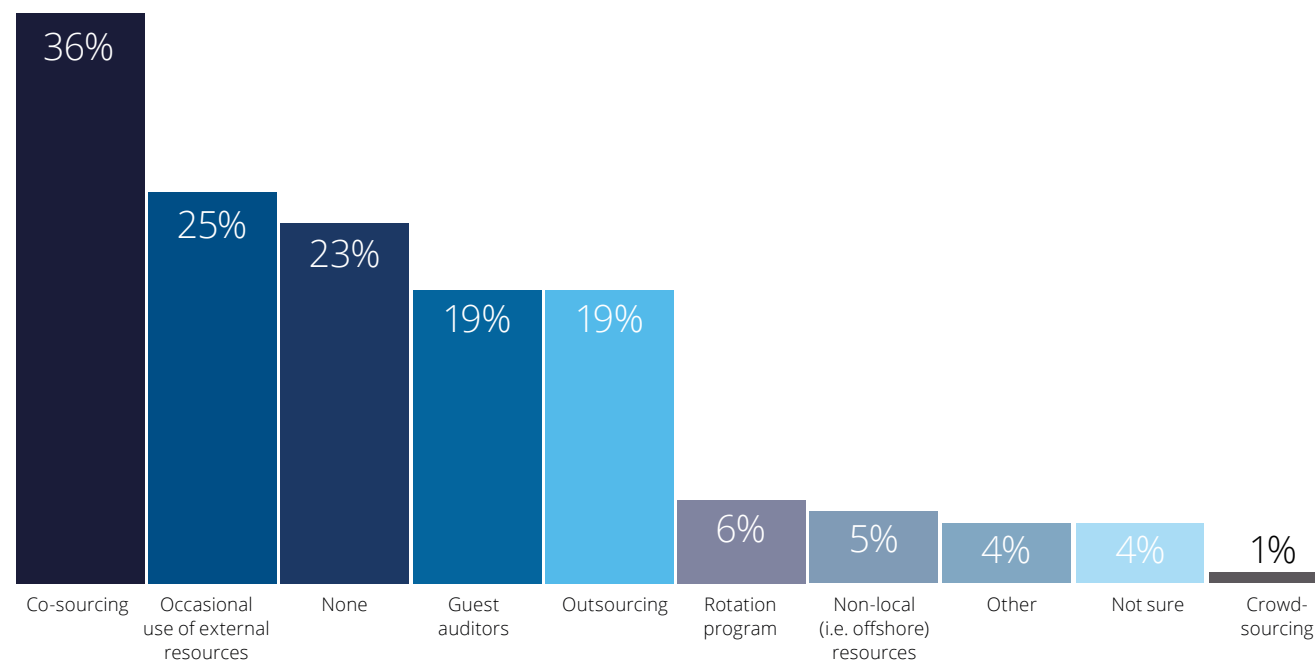
Contacts

The resourcing mix

Internal Audit groups use a mix of resourcing models to deliver their audit plans. Resources external to the organization are used in over two-thirds of cases, and guest auditor programs are used in one-fifth. Alternative resourcing provides access to the newer skills needed to keep abreast of disruptive developments and emerging risks and, in the case of offshoring, potential cost advantages.

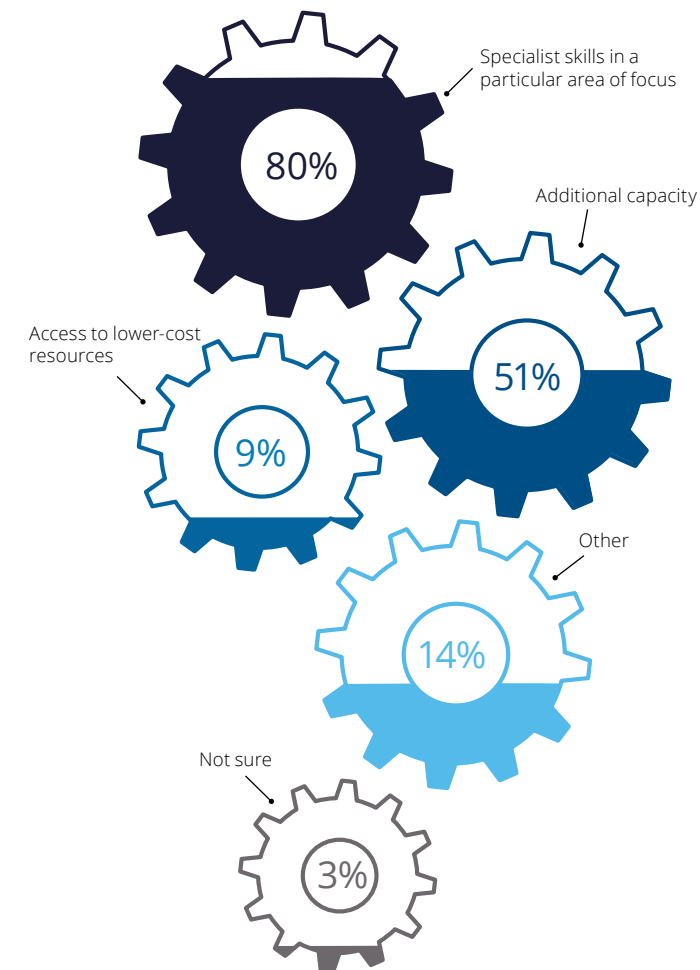
In addition to providing flexibility, alternative resourcing models can help build the Internal Audit function that the organization needs now, rather than accepting lack of skills as an ongoing limitation. This is particularly the case with skills related to emerging risks and advanced analytics and continuous auditing through automation—areas that are evolving quickly and in which talent is in very high demand.

Alternative resourcing models used by the Internal Audit function



The innovation imperative

Primary reason for utilizing alternative resource models





Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

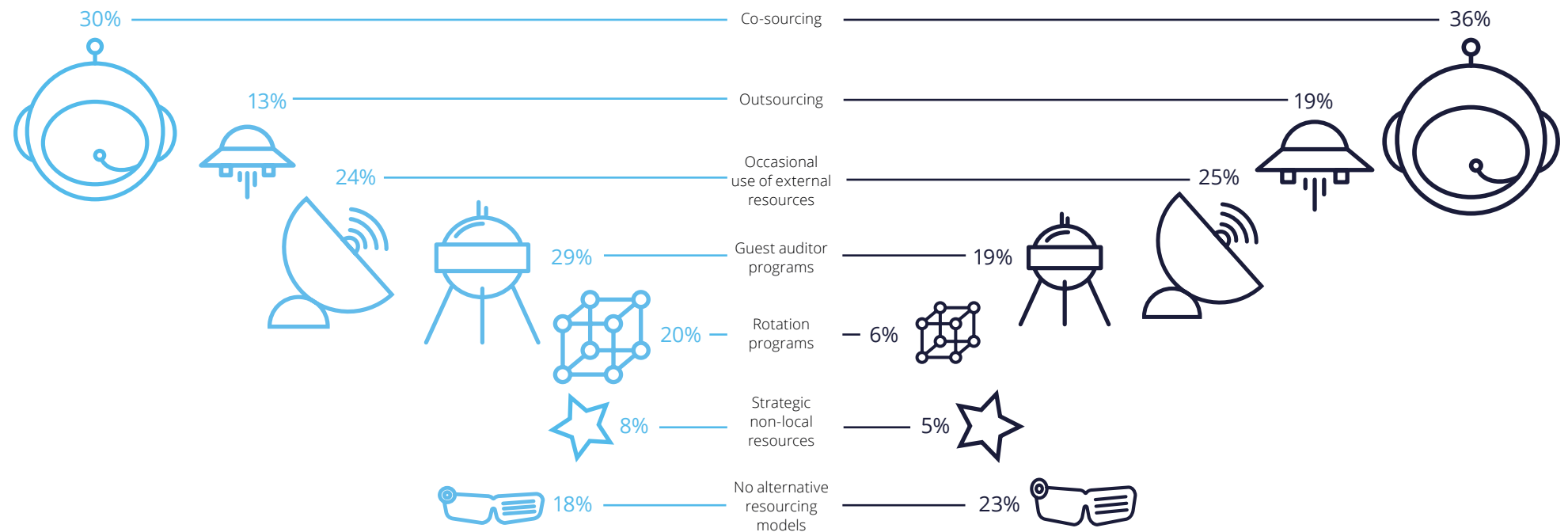
Contacts

Progress has been made

In 2016, we asked CAEs about specific resourcing models they expected to use over the next three to five years. Progress since the last survey has exceeded CAE expectations when considering the use of external resources, such as co-sourcing and outsourcing. Meanwhile, nearly one in four Internal Audit groups still do not use alternative resourcing models, despite citing challenges in accessing the skills and talent they require.

Resourcing models expected to be used by the Internal Audit function over the next 3-5 years (2016)

Resourcing models currently used by the Internal Audit function



Co-sourcing, outsourcing, and occasional use of external resources are seeing utilization ahead of, or in line with, CAEs' expectations in 2016, but guest auditor programs and especially rotation programs are lagging. This may reflect internal factors such as the need to strengthen Internal Audit's brand or difficulty in locating needed talent, as well as intense marketplace competition for specialized skills such as analytics and cyber.

Use of advanced analytics is up, but there's still far to go

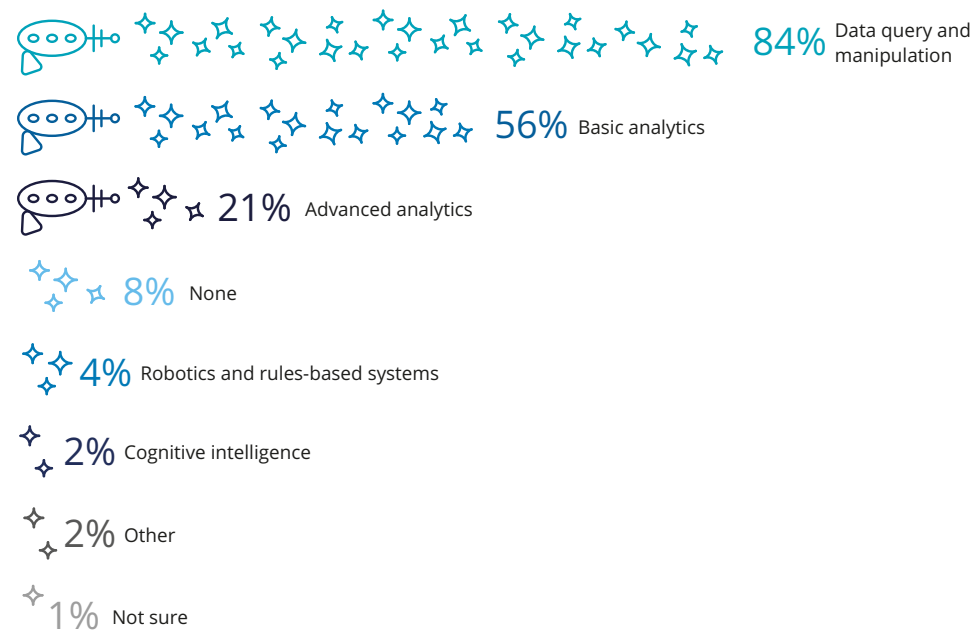


- Foreword
- Executive summary
- Internal Audit's impact and influence have strengthened
- Innovation is now the imperative
- Resourcing models must evolve faster
- Use of advanced analytics is up, but there's still far to go
- Enhancing the process—Agile Internal Audit
- Robotic Process Automation (RPA) is making inroads
- Only half of Internal Audit groups are assessing cyber risks
- Internal Audit is considering culture more frequently—but not frequently enough
- Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives
- Written reports dominate
- Toward the function of the future
- Contacts

While the majority of Internal Audit groups still typically use basic analytics (56 percent) and data querying and manipulation (84 percent), since our 2016 survey, use of advanced analytics has tripled from seven percent of Internal Audit functions to 21 percent.

Types of analytics used

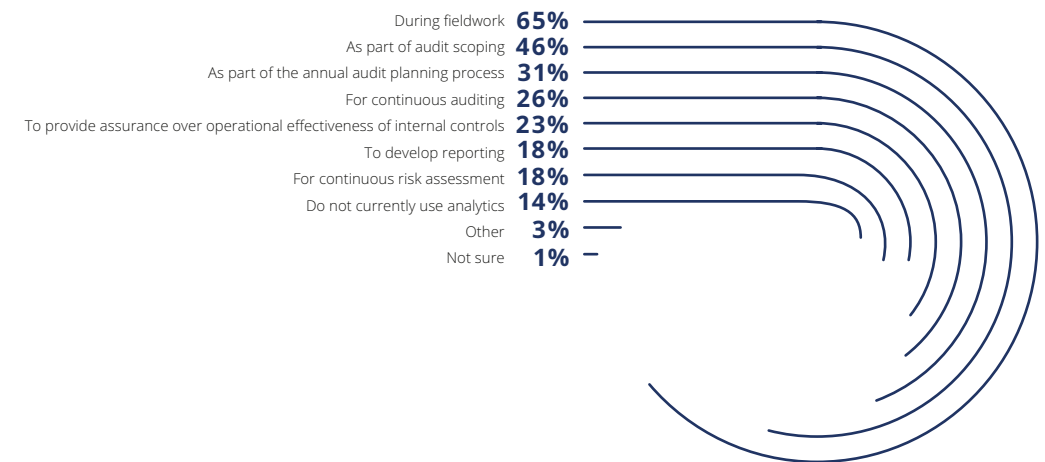
Types of analytics techniques 'typically' in use within the Internal Audit function



Analytics is underutilized in audit planning, and continuous auditing should increase

The results indicate that, in practice, analytics is most often deployed during fieldwork and, less often, in higher-impact activities such as audit scoping and planning. Since our 2016 survey, use of analytics to perform audit scoping, which typically enables Internal Audit functions to deliver more value by focusing on areas of higher risk, increased from 37 percent to 46 percent. However, use of analytics to perform continuous auditing—a key step toward more efficient and effective audits—remained substantially unchanged: 25 percent in 2016 and 26 percent in 2018.

Deployment of analytics by the Internal Audit function





Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

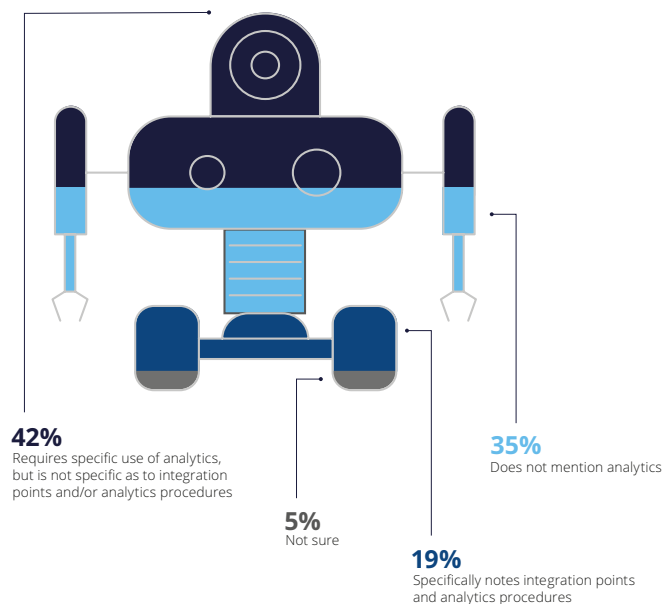
Toward the function of the future

Contacts

Integrating analytics into Internal Audit methodology

Adopting analytics calls for deliberately integrating them into Internal Audit's methodology. While 42 percent of functions surveyed require the use of analytics, only one in five Internal Audit groups report having specific integration points and procedures built in to their methodologies. This unstructured use of analytics leaves the audit process vulnerable to reduced quality and inefficiencies, as Internal Audit teams may struggle to identify opportunities to leverage analytics or may do so inconsistently.

Integration of analytics as part of the Internal Audit methodology*



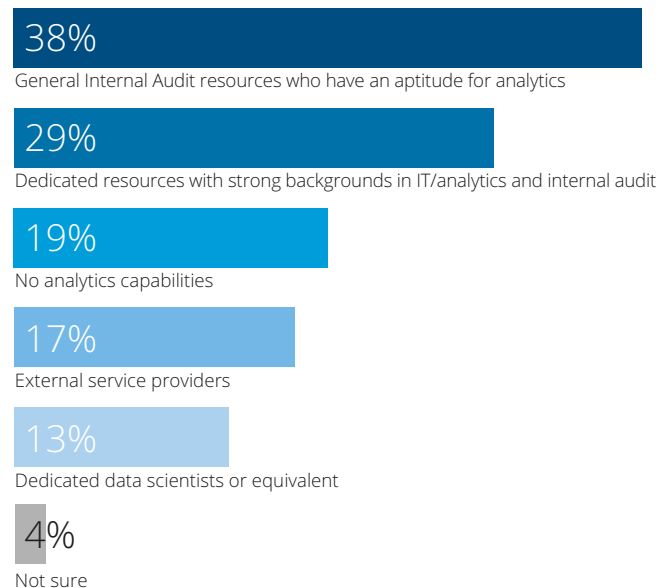
*Figures do not add to 100% due to rounding.

Analytics talent is present, but more is needed

More than 40 percent of functions have either dedicated team members with strong analytics backgrounds (29 percent) or dedicated data scientists or equivalents (13 percent). Those that do not have dedicated team members generally use resources from within the broader Internal Audit team or external resources.

The nearly 20 percent of Internal Audit functions that have no analytics capabilities should consider using external service providers or providing analytics training to current team members to strengthen their analytics capabilities.

Capabilities of the Internal Audit function's analytics team

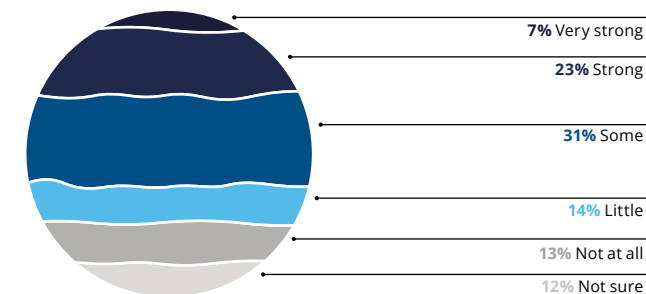


The innovation imperative

Committing to analytics training

Analytics training plays a strong role in addressing the skills and talent issue, yet less than one-third of CAEs report that their broader organization has a very strong or strong commitment to Internal Audit's analytics training program.

Organization's commitment to the Internal Audit function's analytics training program



What are high-impact functions doing?

Of the Internal Audit functions whose organizations are very strongly committed to Internal Audit analytics training, 72 percent demonstrate strong impact and influence.

These high impact and influence groups recognize the power of analytics to help them deliver both more efficient assurance and more insightful advisory services.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

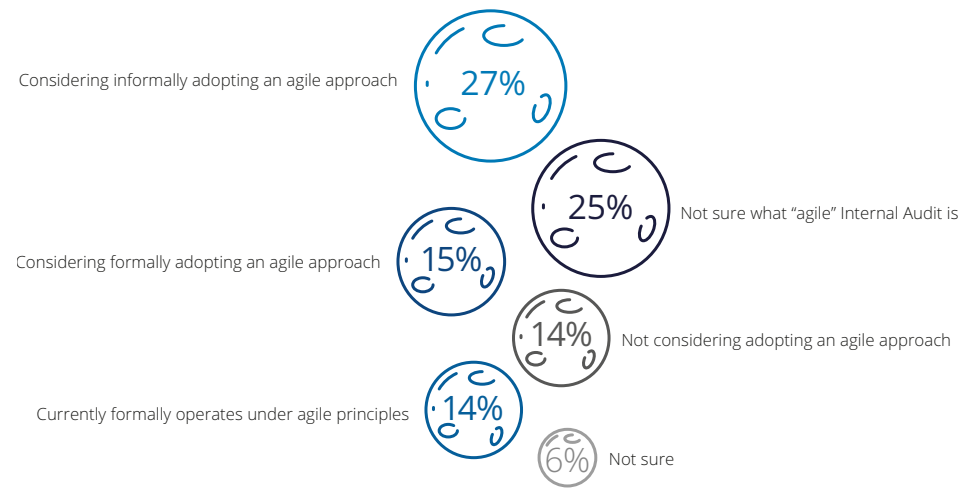
Toward the function of the future

Contacts

Enhancing the process—Agile Internal Audit

Agile Internal Audit—the application of principles and practices of agile development to Internal Audit work—is rapidly winning acceptance, with 56 percent of CAEs already indicating that they are either using agile or considering doing so.

Adoption of agile approach by the Internal Audit function*



*Figures do not add to 100% due to rounding.

These findings reflect many companies' goal of achieving strategic and operational agility in order to respond to a fast-paced, often disruptive business environment.

What are high-impact functions doing?

Among Internal Audit groups that use an agile approach, over half indicate having high impact and influence in their organizations.

These groups understand that Agile Internal Audit not only increases the efficiency and effectiveness of Internal Audit work, but also fosters more collaborative and business risk-focused relationships with stakeholders.

Agile Internal Audit—an overview

Agile Internal Audit uses an iterative, time-boxed approach to planning, fieldwork, and reporting. Audits are executed by self-organizing, cross-functional teams with an emphasis on collaboration and frequent communication with stakeholders. Reflection on what did and did not work well is built into the process to promote continuous improvement.

Based on the experiences of Internal Audit functions that have piloted this method, Agile Internal Audit has the potential to:

- Define a shorter path to more insightful results—with up to 20 percent less budget
- Engage auditees earlier and more frequently
- Generate less documentation and fewer words, but more frequent communication
- Accelerate Internal Audit cycle times and redeployment of resources
- Strengthen Internal Audit team engagement and empower Internal Audit teams to decide, with stakeholders, what to do, how much to do, and when to do it

As explained in Deloitte's Agile Internal Auditing publications¹, principles from agile development can enhance Internal Audit flexibility, responsiveness, resource allocation, speed, value delivered, and stakeholder relationships—all of which are now "must haves" if the function is to increase its impact and influence.

¹ *Becoming agile: A guide to elevating internal audit's performance and value Part 1: Understanding Agile Internal Audit*, Deloitte Development LLC, 2017 <<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-advisory-agile-internal-audit-part1-introduction-to-elevating-performance.pdf>> Part 2: Putting Agile Internal Audit into action, Deloitte Development LLC, 2017 <<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-advisory-agile-internal-audit-part2-putting-agile-ia-into-action.pdf>>



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

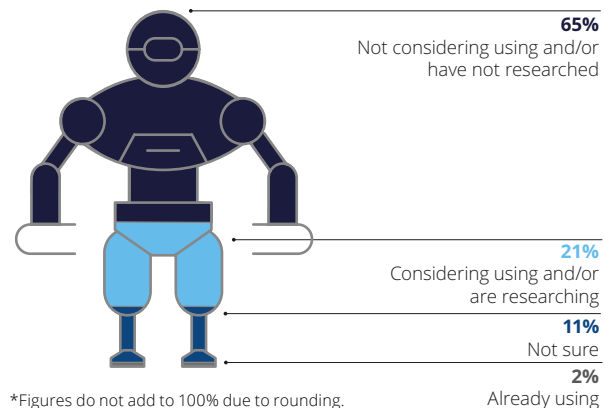
RPA is making inroads

Innovative Internal Audit groups are applying Robotic Process Automation (RPA) to the many repetitive tasks that internal auditors perform (see sidebar). RPA, particularly when coupled with cognitive technologies and machine learning, should—in the very near future—free Internal Auditors to spend more of their time developing insights and advising stakeholders.

RPA applies to functions of all sizes: 56 percent of Internal Audit groups using RPA have 10 or fewer full-time employees, and 30 percent have five or fewer. Even more notably, 63 percent of these groups have an Internal Audit budget of US\$1 million or less. In fact, smaller groups may benefit more from the labor-saving benefits of RPA.

RPA also has application regardless of industry; for example, the survey found that 33 percent of current users are in Financial Services; 19 percent in Technology, Media and Telecommunications; and 22 percent in both Consumer Products and Energy & Resources.

Use of RPA as an enabling technology in Internal Audit*



RPA—The future of Internal Audit is here

The term RPA might conjure visions of walking, talking robots or, at least, physical machines that process paper documents. RPA is neither. It is simply software—a program that relieves humans of the burden of performing repetitive rules-based tasks. This software can include cross-functional and cross-application macros, enabling it to access and cross-reference multiple databases and application-based processes.

What can RPA do?

- Open emails and attachments
- Access the web and enterprise applications
- Move folders and files
- Copy and paste
- Fill in forms
- Read, and write into, databases
- Scrape data from the web
- Make calculations
- Extract structured data from documents
- Follow “if/then” rules and decision trees

Consider the possibilities that RPA opens for internal auditors, such as using it to assign initial risk ratings, complete attribute testing procedures, and retrieve exceptions to populate lists within work papers.

Internal Auditors must also understand how and where RPA is being used within their broader organizations, and the risks associated with that use. RPA is seeing rapid adoption across most industries, given that most transactions and documents have been—or soon will be—digitalized. When a business or function adopts RPA, Internal Audit should ensure that the associated issues and risks have been evaluated and that controls have been properly designed and implemented.

What are high-impact functions doing?

Among Internal Audit groups that use RPA, 63 percent have high impact and influence in their organizations.

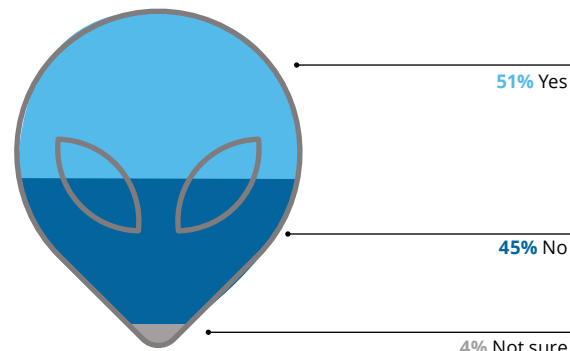
As RPA is admittedly a leading-edge innovation in Internal Audit, this high percentage may indicate that groups with high impact and influence are also among the most innovative.

Only half of Internal Audit groups are assessing cyber risks

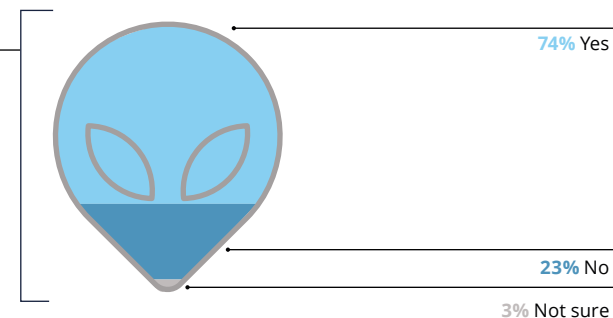
Cyber risks may generate significant strategic, financial, operational, and reputational risks to the organization. Yet only half of Internal Audit leaders note that their groups have conducted cyber risk assessments. Among those that have conducted them, three-quarters have developed a cyber audit plan on the basis of the assessment. The one-quarter that have not developed a cyber audit plan may lack the necessary skills to carry out a cyber risk audit or might be considering the identified cyber risks to be either negligible or already addressed.

Internal Audit must monitor cyber risks carefully, particularly when businesses, functions, or teams adopt or develop new apps or devices (such as IoT devices) or use new services (such as cloud providers). Meanwhile, about half of Internal Audit groups devote less than five percent—or none—of their audit plan to cyber risk. These risks are proliferating and Internal Audit, management, and the board must be aware of them and satisfied with the steps being taken to address them.

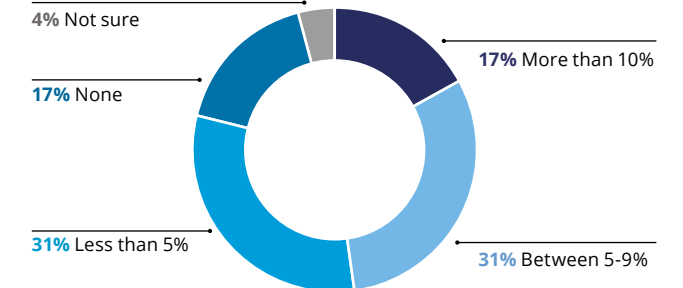
Conducted a cyber-focused risk assessment



Developed a cyber Internal Audit plan based on the results of the cyber risk assessment



Percentage of Internal Audit plan related to cyber risk



What are high-impact functions doing?

Among Internal Audit groups that have high impact and influence in their organizations, 64 percent have conducted a cyber-focused risk assessment.

These organizations no doubt realize that cyberthreats present strategic, financial, operational, legal, and reputational risks that may not be captured by more IT-based assessments of cybersecurity. In addition, boards are now demanding less technical, more business-focused cyber risk reviews than may typically be provided by the CTO, CIO, or CISO.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

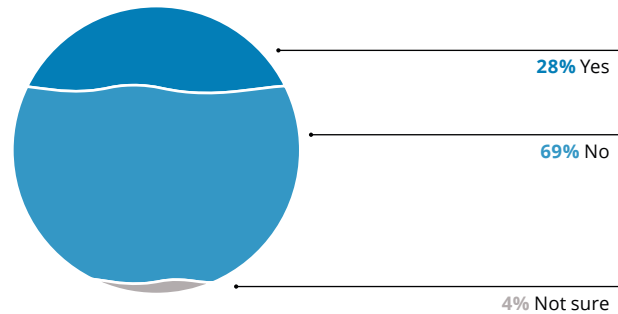
Contacts

Internal Audit is considering culture more frequently—but not frequently enough

Breakdowns in organizational culture, as reflected in conduct that fosters risk events, have become all too common. For example, incidents have included allegations of inappropriate sales practices across a number of industries. Such risk events are one reason that regulators and business leaders have focused more intensely on organizational culture in recent years.

Yet less than 30 percent of Internal Audit functions have evaluated their organization's culture in the past three years. In many cases—quite likely in most cases—this may imply that Internal Audit has never evaluated the organization's culture.

Formally evaluated the broader organization's culture within the past 3 years*



*Figures do not add to 100% due to rounding.

In our experience, stakeholders increasingly expect Internal Audit to have a perspective on organizational culture, particularly in light of its systemic impacts. Given Internal Audit's objectivity, skills, and enterprise-wide perspective, the function is well-positioned to ascertain whether risks arising from culture have been identified and addressed. In addition, Internal Audit should be assessing the organization's efforts to evaluate and monitor the culture.

What are high-impact functions doing?

Among Internal Audit groups that have evaluated their organization's culture over the past three years, 51 percent consider themselves to have high impact and influence.

In exercising their governance roles, boards have become increasingly aware of culture as a driver of conduct and behaviors that can generate risks. Such boards typically expect Internal Audit to evaluate their organization's culture and the processes the organization has in place to influence and monitor culture.

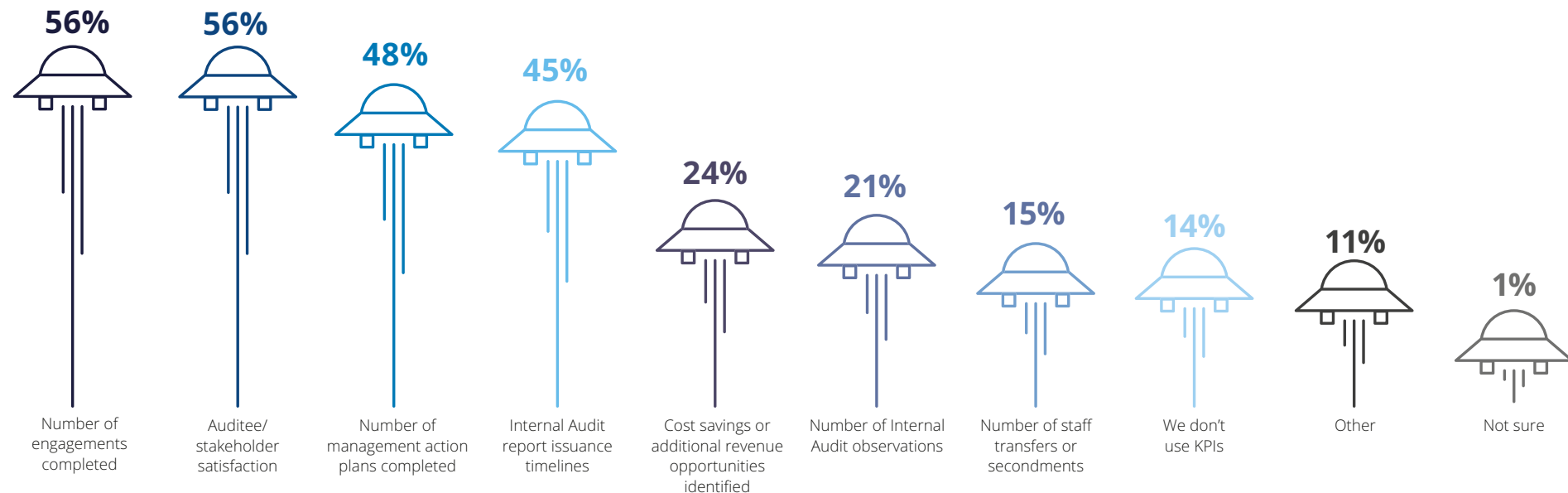


KPIs can be better aligned to Internal Audit's objectives

Eighty-six percent of Internal Audit functions use KPIs, as all functions should, given the importance of tracking performance and progress. But almost all of those KPIs are of the legacy variety and will do little to foster new behavior, increase value delivered, or enhance stakeholders' views of the function. For example, the emphasis placed on certain KPIs can shape internal auditors' behavior; if leaders focus on number of engagements completed, people may focus on "getting audits done" rather than on delivering insights and having an impact.

Therefore, it is useful to challenge traditional KPIs and to develop and track measures that reflect broader priorities, such as how the function works with the business, risks identified, impact on business results, and new value added—that is, outcomes that enable Internal Audit to enhance and gauge its impact and influence.

KPIs used to measure success and impact on the broader organization



While auditee/stakeholder satisfaction and management action plans completed are very important, KPIs should also include measures that reflect new priorities as well as traditional ones. For example, the 24 percent of functions that track cost savings and revenue opportunities are on the right path, as they are measuring direct impacts on the business as they emerge from their audit findings.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

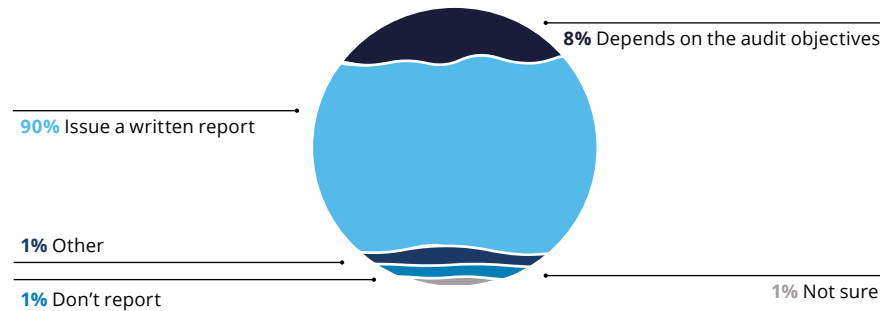
Contacts

Written reports dominate

Nine in 10 Internal Audit groups issue a written report—a figure one would historically expect to see. When well-suited to the objective and well-written, there is no concern. However, Internal Audit functions must bear in mind that written reports that are overly long and lacking in useful insights and practical application to the business fail to serve stakeholders' (and Internal Audit's) best interests.

The eight percent of respondents who noted that the reporting of their results depends on the audit objectives are thinking of different ways in which to present their insights to ensure the message is received clearly and with optimal impact.

Primary way in which Internal Audit results are delivered*

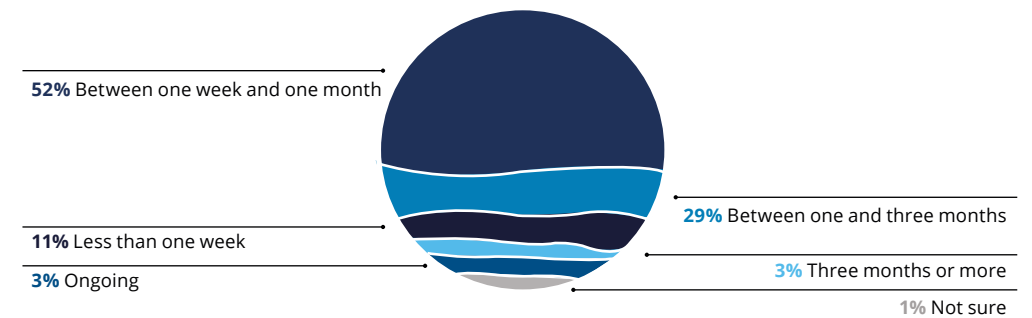


*Figures do not add to 100% due to rounding.

Reporting is becoming more dynamic

To become more dynamic and relevant to the business, reporting should become more real-time, particularly reporting on risks, controls, and issues that can impact execution of strategy and attainment of goals. Nearly two-thirds of Internal Audit functions deliver their reports within one month; however, about one-third take longer, suggesting insights may be delivered too late to optimize the impact.

Typical delivery timeframe for Internal Audit observations*



*Figures do not add to 100% due to rounding.



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

Toward the function of the future

As this survey indicates, Internal Audit functions can enhance—and, in many cases, have already enhanced—the impact and influence they have within their organizations. And innovation—not only technology-enabled but also in working methods, approaches to stakeholders, and services provided—is the key to success.


In this report, we have identified areas that Internal Audit groups with strong impact and influence have focused on. Often, these areas involve technology-enabled innovation, such as advanced analytics or RPA, but they've also included cyber risk assessments and evaluations of the organization's culture—areas where any Internal Audit function can provide a point of view to management and the board, without investing in technology.

Not every Internal Audit group can be or should be at the leading edge of innovation. Nor can any group be at the leading edge in every area. But every group can and should innovate in ways that meet the evolving needs of the organization. This means understanding management's strategy and the board's governance priorities, and the risks to the strategy and the organization, and then providing the support that stakeholders need.


Innovation can begin in small ways; for example, Internal Audit teams can start by identifying current inefficiencies in their processes and activities. This can generate ideas for the use of technologies, such as visual dashboards and collaboration tools (such as shared drives), and activities, like training in data-extraction, to reduce those inefficiencies. From there, more advanced steps can be taken to become more innovative so as to strengthen impact and influence.

Here are key considerations which can enable you to become more innovative and, as a result, more impactful and influential within your organizations:


1. Accelerate adoption of advanced analytics.²

 Our experience correlates strongly with the findings of this survey—that Internal Audit groups must continue to prioritize adoption of advanced analytics. There are straightforward methods for accessing and cleaning data, inexpensive tools for organizing and analyzing it, and tremendous benefits to be gained from these types of analytics. Though budget constraints may make it difficult to hire a dedicated full-time analytics team, there are many alternative resourcing models available that will provide flexible access to the needed skills while building the in-house talent pool. Advanced analytics revolutionizes audit planning and fieldwork. It's the driver of continuous monitoring and automated assurance. It powers predictive risk identification and insight generation. And it enables contemporized reporting. Every Internal Audit group, large or small, should be embracing advanced analytics.


2. Automate core assurance.

 Advanced analytics, coupled with RPA and real-time reporting mechanisms such as dashboards, can enable a function to provide continuous assurance over core financial and operating processes. Ideally, this would include automated root-cause analysis of incidents or problems, which in turn can indicate behavioral, process, and other solutions. Automating core assurance reduces the resources dedicated to routine assurance while increasing the quality of Internal Audit's coverage. It also frees resources to analyze why issues occur and to work on remediation, in concert with the businesses and functions.

3. Apply Agile Internal Audit principles.

 Given the need to provide more services more efficiently, Internal Audit should look for ways to update approaches to audit planning, execution, and reporting. Applied to Internal Audit work, agile principles and practices generally generate more collaborative interactions with stakeholders, faster audits, streamlined documentation, and greater value.³ Agile Internal Audit also leads to greater engagement on the part of Internal Audit team members. It's a more dynamic and real-time approach to identifying issues and allocating resources, on both sides of the audit—and it is working in most of the organizations that have tried it.

4. Innovate to “future proof” the function.

 Rather than auditing to Internal Audit's existing capabilities, identify key issues and risks and develop or access the capabilities needed to assist stakeholders in addressing them. Seek areas where the organization is innovating—with new technologies, processes, and third-parties—and identify the related risks and work with stakeholders to ensure effective control and monitoring. Commit to becoming more collaborative with stakeholders, and to changing the brand and the story where needed, as well as to delivering insights, advice, and risk anticipation. Develop an innovation-driven, as opposed to compliance-driven, mindset. Use pilot projects to build a case for Internal Audit initiatives. Seriously consider structured approaches to Internal Audit innovation, which have proven quite effective.⁴



Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process—Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

Contacts

5. Consider next-gen resourcing models to secure needed talent and skills.



Traditional recruitment efforts often fail to address the skills gaps identified in this survey, but they are not the only option available to Internal Audit functions. In particular, where budget constraints or the frequency or specialization of needs are challenges, alternative resourcing models are strong alternatives. Given the chicken-and-egg conundrum of Internal Audit having to become more innovative if it is to attract certain talent, but needing certain talent in order to become more innovative, alternative resourcing models—particularly co-sourcing—present attractive options. Meanwhile, stagnating due to lack of the right talent and skills presents the least attractive option.

6. Advise and anticipate—don't just provide assurance.



While assurance is a core responsibility of Internal Audit, advising management clearly falls within Internal Audit's role and most stakeholders' expectations. Expanding the function's advisory role is key to maximizing the value that Internal Audit delivers, particularly in times of disruptive change and emerging risks. Advisory services around the three lines of defense in risk management, controls effectiveness, integrated assurance, organizational culture, and change initiatives are examples of areas where Internal Audit advisory can provide the most value.

² *Internal Audit Analytics: The journey to 2020*, Deloitte Development LLC, 2016 <<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/risk/us-risk-internal-audit-analytics-pov.pdf>>

³ *Becoming agile: A guide to elevating internal audit's performance and value Part 1: Understanding Agile Internal Audit*, Deloitte Development LLC, 2017 <<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-advisory-agile-internal-audit-part1-introduction-to-elevating-performance.pdf>> Part 2: Putting Agile Internal Audit into action, Deloitte Development LLC, 2017 <<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-advisory-agile-internal-audit-part2-putting-agile-ia-into-action.pdf>>

⁴ *Perspectives: Internal Audit innovation*, Deloitte, 2017 <<https://www2.deloitte.com/us/en/pages/advisory/articles/internal-audit-innovation.html>>

Every Internal Audit group can innovate. Although some innovation may involve technology and budget, the real innovation needed in Internal Audit typically involves a change in mindset. The desired mindset is more forward-looking, more engaged with stakeholders, more focused on delivering business value and insights than the traditional Internal Audit mindset.

Someday, advanced analytics, cognitive technologies, and visual reporting will be embedded in every Internal Audit function. But apart from technology, innovation must occur in approaches to Internal Audit planning, execution, and reporting, in stakeholder relationships, and even in the mission and remit of the function, which is not only to provide assurance, but also to advise management and anticipate risks.

Those are innovations that every Internal Audit function, CAE, and internal auditor can begin making right now.





Foreword

Executive summary

Internal Audit's impact and influence have strengthened

Innovation is now the imperative

Resourcing models must evolve faster

Use of advanced analytics is up, but there's still far to go

Enhancing the process— Agile Internal Audit

Robotic Process Automation (RPA) is making inroads

Only half of Internal Audit groups are assessing cyber risks

Internal Audit is considering culture more frequently—but not frequently enough

Key performance indicators (KPIs) can be better aligned to Internal Audit's objectives

Written reports dominate

Toward the function of the future

[Contacts](#)

Contacts



Terry Hatherell
Global Internal Audit Leader
thatherell@deloitte.ca



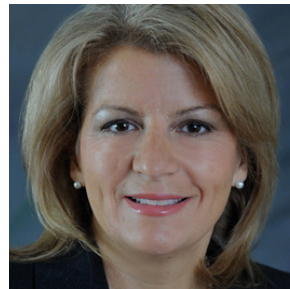
Peter Astley
EMEA Internal Audit Leader
pastley@deloitte.co.uk



Neil White
Global Internal Audit Analytics Leader
nwhite@deloitte.com



Iona Kumpula
Global CAE Research Survey Lead
ikumpula@deloitte.ca



Sarah Adams
Global IT Internal Audit Leader
saraadams@deloitte.com



Ronan Langford
Swiss Strategic and Operational Risk Leader
rlangford@deloitte.ch



Steffen Pietz
Swiss Internal Audit Leader
spietz@deloitte.ch



Deloitte.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited (“DTTL”), its global network of member firms and their related entities. DTTL (also referred to as “Deloitte Global”) and each of its member firms are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more.

Deloitte is a leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax and related services. Our network of member firms in more than 150 countries and territories serves four out of five Fortune Global 500® companies. Learn how Deloitte’s approximately 264,000 people make an impact that matters at www.deloitte.com.

This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms or their related entities (collectively, the “Deloitte network”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

© 2018. For information, contact Deloitte Touche Tohmatsu Limited.