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cutting through complexity

KPMG's 2013 IT Internal Audit Survey

The status of IT Internal Audit in Europe, the Middle East and Africa

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**KPMG's 2013
IT Internal Audit Survey**

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The status of IT Internal Audit in Europe,
the Middle East and Africa

Contents

Foreword

This is KPMG's second IT Internal Audit survey which follows our initial study in 2009. During this period, companies have faced sustained and prolonged pressure to manage costs and maximise efficiencies. Meanwhile, IT risks have increased, new opportunities have arisen and compliance and regulation requirements have grown. A consequence of these changes is that IT Internal Audit has the opportunity to add real value, by being central to managing core risks and improving business performance.

This survey captures the current strengths of IT Internal Audit across Europe, the Middle East and Africa (EMA region), and offers insights into what is driving changes seen since our previous survey in 2009.

We have based our report around the following question:

How do you organise, plan and govern IT Internal Audit to support success, utilise the right people and tools and focus on the risks that matter to provide real assurance to stakeholders?

In this report we combine analysis of the processes and practices of over 400 organisations from 21 countries with KPMG member firms' insights from IT Internal Audit at some of the world's leading organisations. We hope that you will find it a valuable and insightful assessment of the state of IT Internal Audit in EMA and will provide you with information which can be used to broaden your understanding of the critical contribution IT Internal Audit can make to the business.

Finally, we would like to thank all of the respondents that participated in the survey, including many of our member firms' clients.
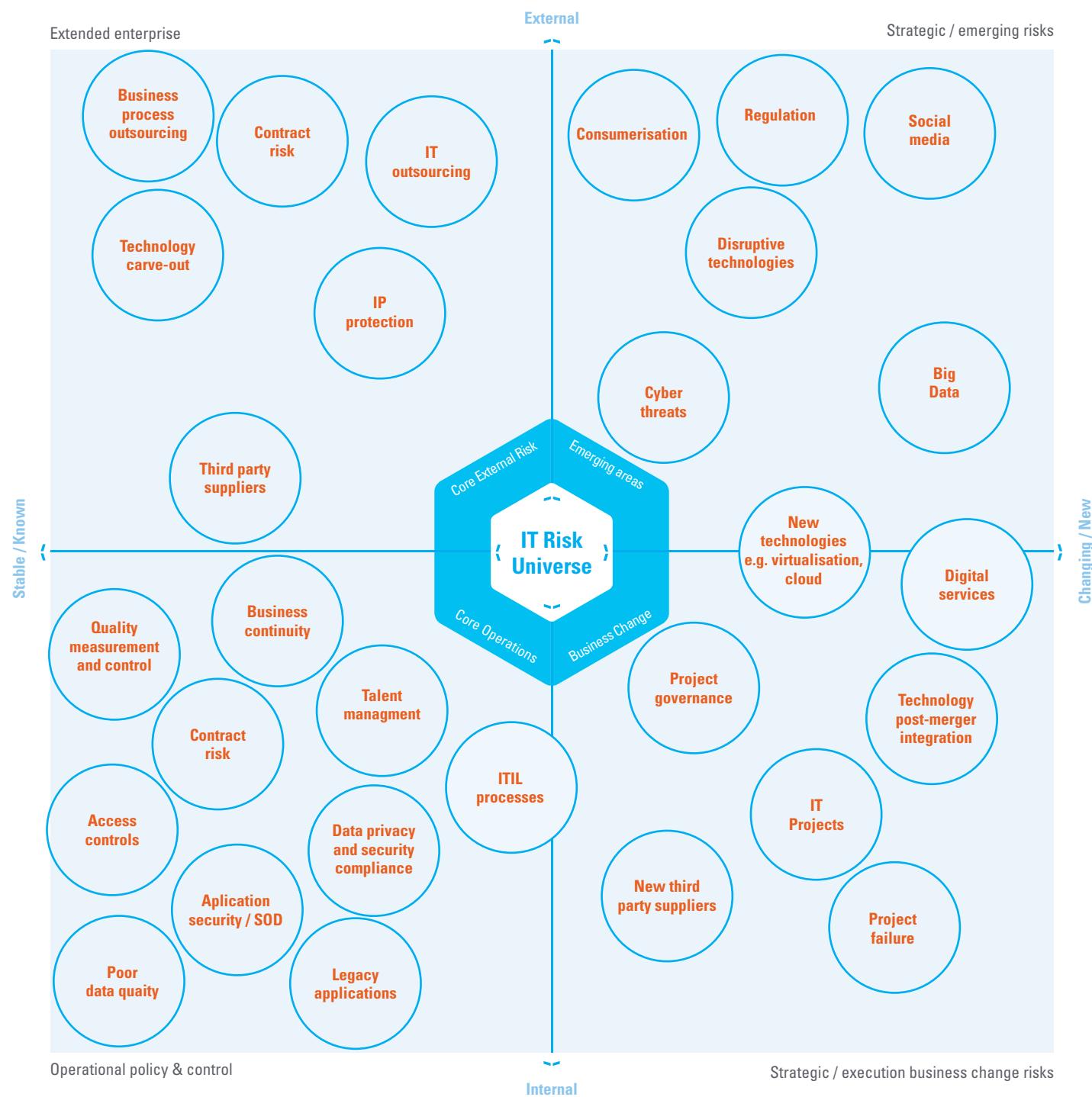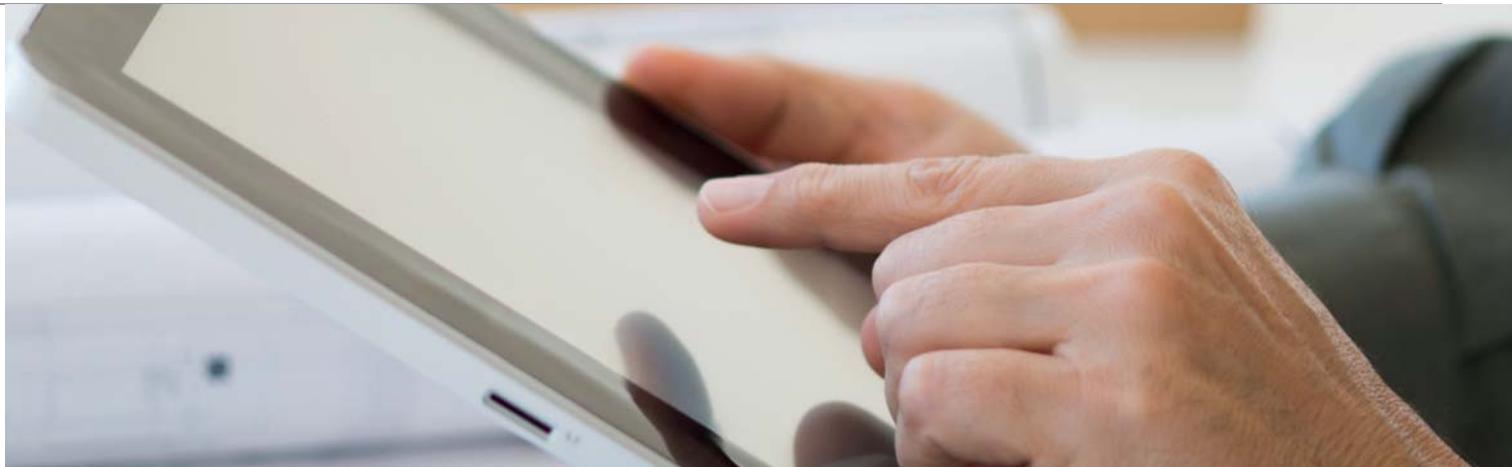
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Executive summary

⟩ IT risk universe | Figure 1

Extended enterprise

External

Strategic / emerging risks

Business process outsourcing

Contract risk

IT outsourcing

Consumerisation

Regulation

Social media

Technology carve-out

Disruptive technologies

IP protection

Big Data

Cyber threats

Third party suppliers

Core External Risk

Emerging areas

IT Risk Universe

New technologies e.g. virtualisation, cloud

Stable / Known

Changing / New

Digital services

Quality measurement and control

Business continuity

Core Operations

Business Change

Talent managment

Project governance

Technology post-merger integration

Contract risk

Access controls

ITIL processes

IT Projects

Data privacy and security compliance

Aplication security / SOD

New third party suppliers

Project failure

Poor data quaity

Legacy applications

Operational policy & control

Internal

Strategic / execution business change risks

Source: KPMG in the UK

Demand for assurance over technology-related risk has never been higher. Software as a service, cyber security, Big Data and cloud computing being examples of some of the challenges being faced.

A key aspect of technology risk is the extent to which it sits outside traditional business boundaries (see Figure 1).This shows the contrast between the internal control environment and the external environment vertically, and the stable business with aspects of change horizontally. Many of the biggest issues facing organisations today are in the top-right quadrant.

IT Internal Audit is a key resource that many organisations look to for insights. It has a critical role to play in helping organisations understand their overall IT risk profile, providing assurance for the controls currently in place and highlighting opportunities for improvement.

In light of this, KPMG recently conducted a major survey of IT Internal Audit provision for over 400 organisations across Europe, the Middle East and Africa,

using a combination of face-to-face interviews and an online questionnaire.The participants in this survey were Heads of Internal Audit, Heads of IT Internal Audit or Chief Risk Officers.

The key highlights include:

〉 IT Internal Audit will increasingly need to focus on new and emerging risks and ensure they are resourced with the right specialist knowledge internally through training, or externally to address those risks.

〉 78 percent of organisations cite lack of skills or capabilities as a reason for dissatisfaction with IT Internal Audit, and yet only 33 percent of organisations bring in external support.

〉 Based on responses, many organisations make their decisions on IT Internal Audit coverage on team capability or cost constraints, instead of focusing on their risk profile.

〉 Boards could challenge IT Internal Audit plans more thoroughly: less than half of respondents were satisfied with their IT Internal Audit, despite Board level approval of the IT Internal Audit plan for the majority of those organisations.

〉 There is an opportunity to align IT Internal Audit with other governance functions: Only 53 percent of organisations believe that IT Internal Audit is well aligned with other governance activities, with 16 percent indicating either occasional or no coordination.

〉 In a number of organisations surveyed, higher quality could be achieved by performing quality assurance of IT Internal Audit activities, using a framework in delivering audits and evaluating performance.

How do you organise, plan and govern IT Internal Audit to support success...

Most IT Internal Audit functions report through a Head of Audit, and to an Audit Committee. This is supported by the survey respondents showing that the vast majority of IT Internal Audit plans are approved by either the Head of Internal Audit (58 percent) or the Board or Audit Committee (23 percent).

Though there is a slight improvement from 2009 (41 percent), only 53 percent of respondents considered their IT Internal Audit capability to be closely aligned with other governance activities, with 16 percent reporting only occasional or no coordination (see Figure 2). Though this represents a slight improvement from 2009, a far more coordinated approach would have been expected, with related governance activities such as internal controls, regulation, sustainability requirements, health and safety and quality assurance on programme development. The lack of alignment may have serious implications for efficiency and may result in duplication or gaps in coverage.
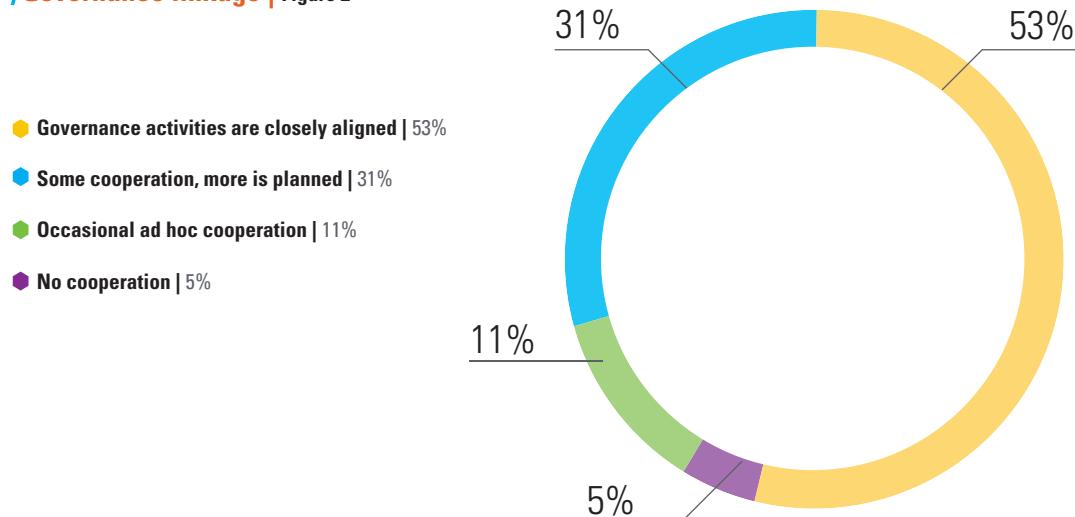
IT Internal Audit planning is typically risk-based and formally approved at a senior level. Eighty-two percent (78 percent in 2009) of IT Internal Audit plans were set annually. KPMG's view is that organisations should consider whether an annual cycle creates too long a period between planning activities, especially in view of rapid changes in technology risks and regulation. We anticipate this may be more relevant in financial services where some leading organisations revise their detailed plan every three or six months in order to address emerging risks.

Fewer than half of the survey participants said that they were satisfied with the IT Internal Audit service they receive. Further investigation suggested a number of reasons for this level of dissatisfaction (see Figure 3). The issues include:
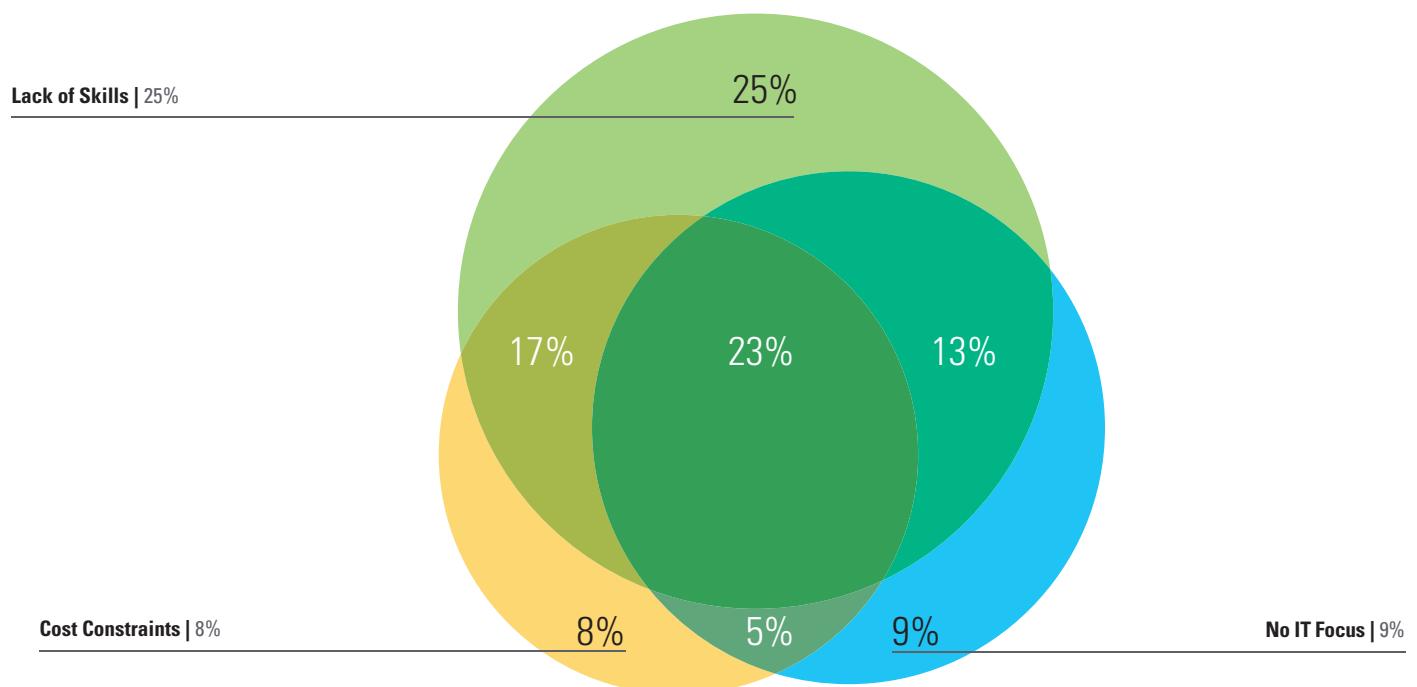
› A lack of skills and capabilities within the team (78 percent).

› Cost constraints which prevented recruitment or seeking external support (53 percent).

› A lack of focus from key stakeholders (50 percent).

Governance linkage | Figure 2

- ● **Governance activities are closely aligned |** 53%
- ● **Some cooperation, more is planned |** 31%
- ● **Occasional ad hoc cooperation |** 11%
- ● **No cooperation |** 5%

31%   53%

11%

5%

Source: KPMG's ITIA Survey 2013

Figure 3

Lack of Skills | 25%   25%

17%   23%   13%

Cost Constraints | 8%   8%   5%   9%   **No IT Focus |** 9%

Source: KPMG's ITIA Survey 2013

Such issues might negatively influence a risk-based approach and having a lack of the necessary skills could predispose Internal Audit departments to focus on more familiar, traditional areas.

By analysing the intersections of the main issues outlined on pages eight and nine, there was found to be an interesting interplay of the different characteristics. Ninety-one percent of organisations believe they are deficient in both skills and capabilities or in funding to deliver the capability. In a time of significant IT change and with new challenges from, for example, cyber threats, it seems risky to operate with insufficient Internal Audit coverage. Twenty-three percent of respondents acknowledge that they suffer in all three of these areas, i.e. lack of focus, cost constraints and lack of skills (see Figure 3).

While 71 percent cited either a lack of skills and capabilities or cost constraints as their main reasons for dissatisfaction, 70 percent of those who were dissatisfied do not use third parties and therefore do not have access to third parties´ skills, experience and efficiency.
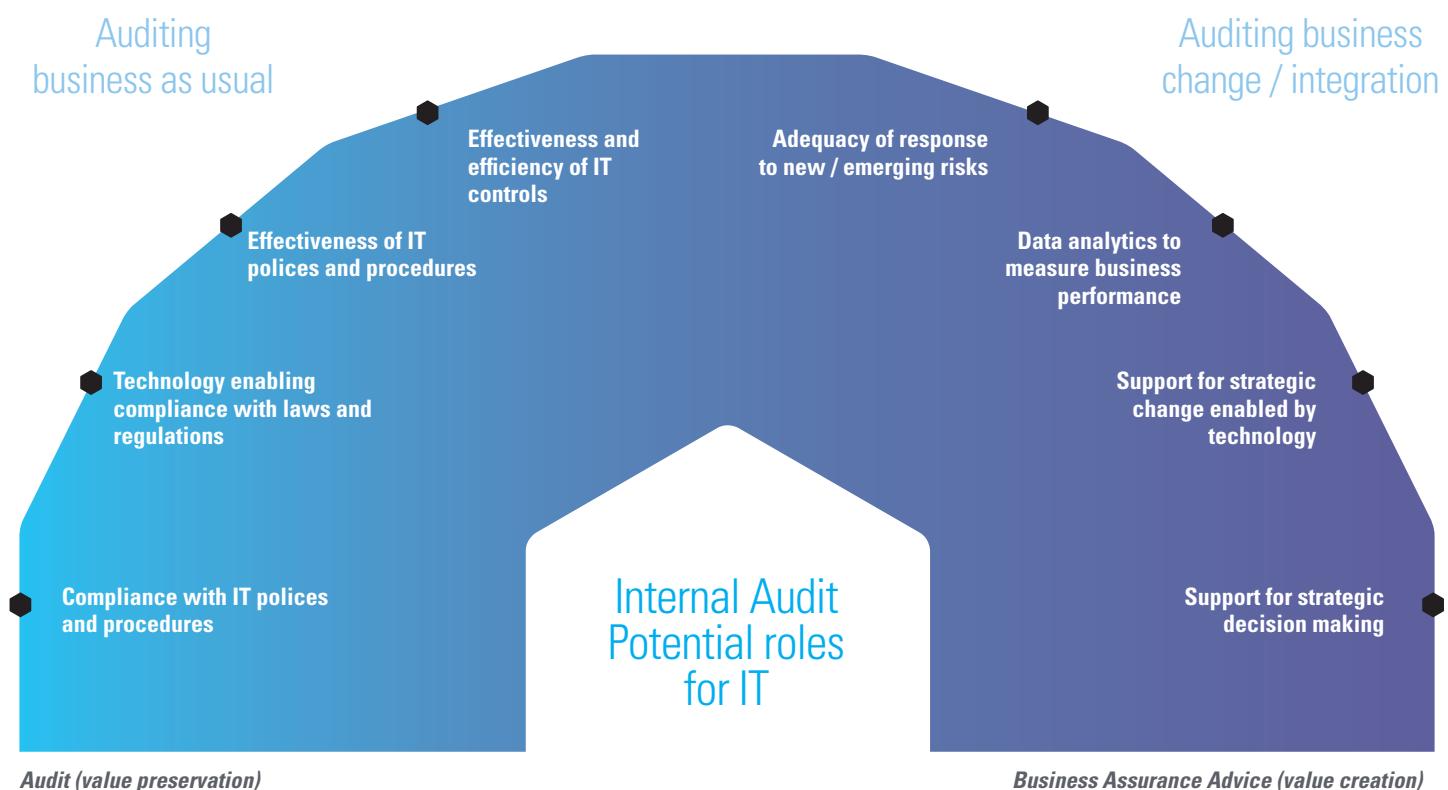
❯ Positioning of IT Internal Audit

Internal Audit can position itself in a number of different ways. For example, it can focus on compliance, consider the effectiveness of controls, focus on emerging risk or potentially take a more strategic role.

Survey findings suggest that organisations leaned towards the 'value preservation' segment used on control effectiveness and compliance, as shown in Figure 4. In the future, with increasing maturity, it is likely that the focus will shift towards the strategic and emerging risks. As a result, organisations will require more from assurance providers, particularly as IT becomes even more central to daily business, and even more complex and challenging.

Most organisations see their IT Internal Audit focus as primarily to the left of the dial in Figure 4, 'auditing business as usual' rather than auditing the changing IT environment. Survey respondents scored their main areas of focus in priority order (see Figure 5). The category with the highest score was 'Effectiveness of IT policies and procedures'. Organisations will always need to have coverage of business as usual, however, it is expected that over time organisations will increasingly need to focus on the business change and the integration agenda.

〉KPMG's IT Internal Audit Maturity Model | Figure 4

Auditing business as usual

Auditing business change / integration

Effectiveness and efficiency of IT controls

Adequacy of response to new / emerging risks

Effectiveness of IT polices and procedures

Data analytics to measure business performance

Technology enabling compliance with laws and regulations

Support for strategic change enabled by technology

Compliance with IT polices and procedures

Internal Audit Potential roles for IT

Support for strategic decision making

Audit (value preservation)

Business Assurance Advice (value creation)

Source: KPMG in the UK

〉Survey results: focus for IT Internal Audit teams | Figure 5

〉Effectiveness and efficiency of IT controls	
〉Compliance with IT polices and procedures	
〉Data analytics to measure business performance	
〉Effectiveness of IT polices and procedures	
〉Support for strategic decision making	
〉Adequacy of response to new/emerging risks	
〉Support for strategic change enabled by technology	

0%   5%   10%   15%   20%   25%   30%   35%

Source: KPMG's ITIA Survey 2013

...have the right people and tools...

› The right people

Getting resourcing right, with the right skills and experience and the right blend of internal and external talent is critical to the delivery of an organisation's IT audit plan.

IT Internal Audit is predominantly resourced in-house, with only 31 percent of respondents using IT Internal Audit services from external providers (See Figure 6). This represents a small decrease since KPMG's 2009 survey (33 percent). However, for organisations which do use third parties there has been an increase in the extent to which they use third parties with more than 10 percent of respondents using them for more than 80 percent of their IT Internal Audit needs.

› ITIA resource structure | Figure 6

- 🟡 Resources from the Internal Audit Department | 56%
- 🔵 Third party provider, e.g. professional services firm | 31%
- 🟢 Resources from other departments | 13%

Source: KPMG's ITIA Survey 2013

› Specialist knowledge

When specialist knowledge is needed to deliver the audit, then surprisingly, for 43 percent of respondents, the most likely action was to postpone the audit. This indicates organisations are choosing their audits based on cost or capability constraints, not on the risk faced. This is not a sustainable approach to addressing the risks of the IT environment. Other organisations look to external support (see Figure 7), for a range of reasons, to help ensure their risk profile is addressed.

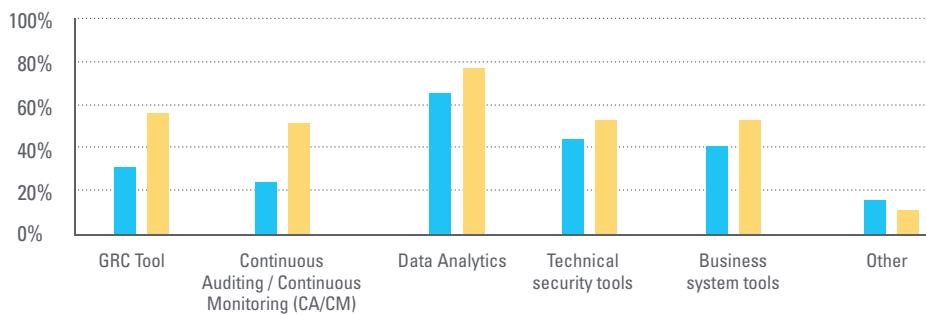## › Reason for using third party audit expertise | Figure 7

🔵 2009 🟡 2012

Source: KPMG's ITIA Survey 2013

❯ Anticipated usage of internal audit tools | Figure 8

● Currently Used
● Anticipate Future Use

Source: KPMG's ITIA Survey 2013

❯ Use of tools in the audit process | Figure 9
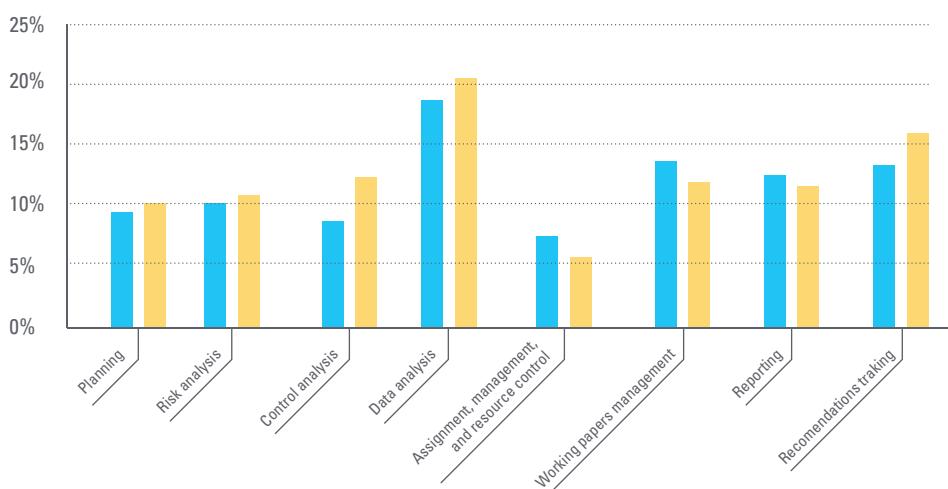
● 2009 ● 2012

Source: KPMG's ITIA Survey 2013

❯ Automated audit tools

Based on KPMG member firms' experience, usage of tools is inconsistent in IT Internal Audit teams, and tends to reflect prior experience of team members rather than a response to the demands of specific audits or strategies. However, it is evident that some companies are using tools, and the survey shows a marked increase in the anticipated use of tools across all categories to above 50 percent, as shown in Figure 8, it is unlikely that this ambition can be realised without increased investment in tools and the resources to use them. Considering the pressures in costs and the expanding IT risk portfolio, IT Internal Audit teams of the future will need to do much better in this area to increase efficiencies and perform a more effective audit.

Tool usage is most common for data analytics (20 percent) but respondents using tools also used them throughout the audit life cycle, see figure 9.
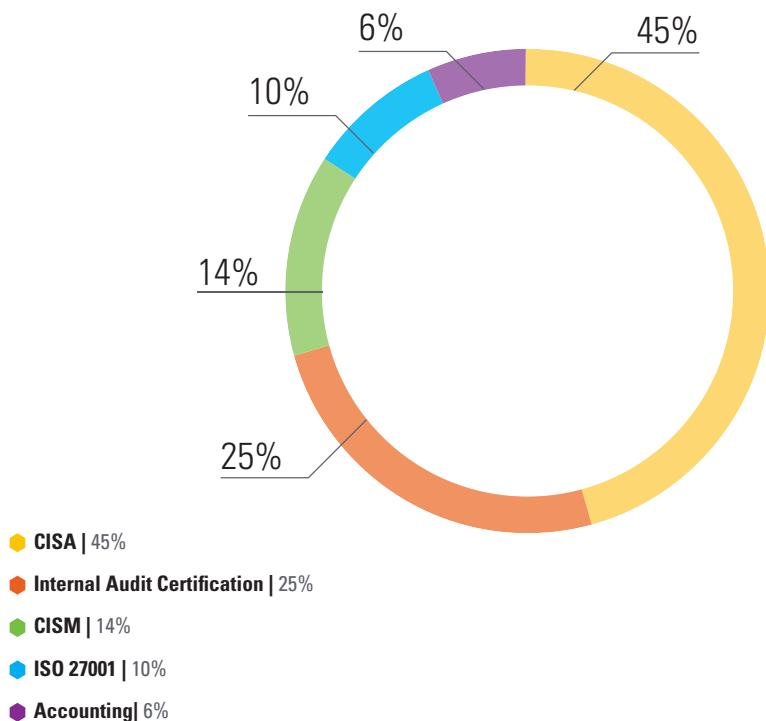
❭ The right skills

In the light of what has been said about IT Internal Audit capabilities and the need to address risk, formal staff development continues to be critical to success.

IT security skills are the single most desired skill within IT Internal Audit departments – which reflects the fact that IT security continues to be the key area of concern for many companies.

As shown in Figure 10, Certified Information Systems Auditor (CISA) is the most required qualification (45 percent). However, only 25 percent of respondents are offering this as a training course to their staff. Furthermore, as shown in figure 11, only 16 percent of organisations are offering specialist IT training to their staff, despite the majority (over 70 percent) expecting to require specific skills such as cloud and virtualisation knowledge beyond the 2013 financial year.
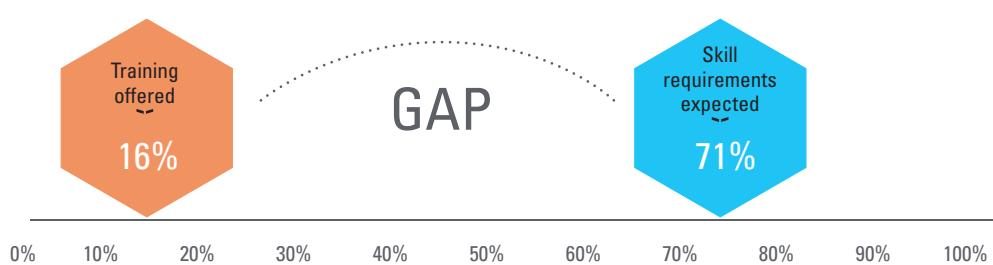
This appears to indicate that there may be an expectation gap between what companies would like to address and what their capabilities allow.
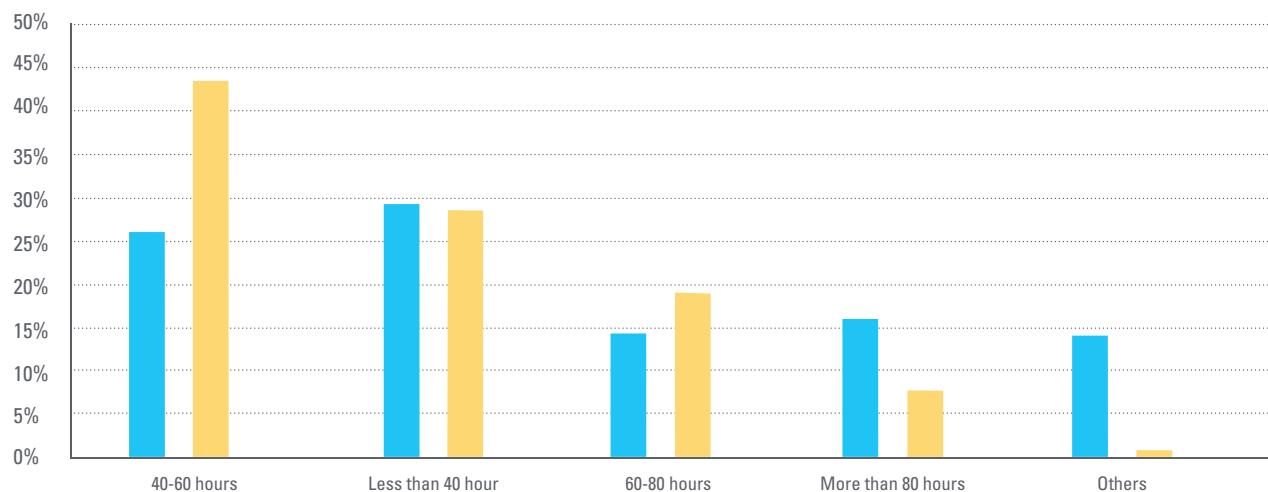
❭ Qualification required | Figure 10

- ● **CISA |** 45%
- ● **Internal Audit Certification |** 25%
- ● **CISM |** 14%
- ● **ISO 27001 |** 10%
- ● **Accounting|** 6%

Source: KPMG's ITIA Survey 2013

❭IT training gap *(training offered vs. skills requirements expected)* | Figure 11

Training offered
16%

GAP

Skill requirements expected
71%

0%   10%   20%   30%   40%   50%   60%   70%   80%   90%   100%

Source: KPMG's ITIA Survey 2013

› **Management of professional development |** Figure 12

● **2009** ● **2012**

Source: KPMG's ITIA Survey 2013

› **Retaining and building knowledge in IT Internal Audit**

Maintaining the broad expertise required to address the numerous IT risks faced by organisations is an investment, particularly in view of the rate at which technology and its associated risks emerge and change. While the majority of respondents provided more than 40 hours* of training for their IT Internal Audit team members each year (see Figure 12), 28 percent of respondents provide less, if any at all. This may result in teams with more limited capability to audit those risks identified in IT audit plans.

*The minimum threshold of Continuing Professional Education (CPE) requirements for many professional organisations such as Information Systems Audit and Control Association (ISACA) is 120 hours over a three year period.

...and focus on the risks that matter...

Drilling down into individual audits, it is critical that risks are identified, and that leading practices are used as a framework for IT Internal Audit assignments.

Nearly a quarter of respondents stated that they were not using a framework in delivering their IT audits. This is slightly down from just over a quarter in 2009. Without the use of a recognised framework methodology, it is difficult to understand how an objective measure can be applied.

COBIT is the most widely used framework, followed by ISO 27001 and ITIL. Also, more specific methodologies and frameworks are used in work such as project audits, where PRINCE2 would feature (see Figure 13).

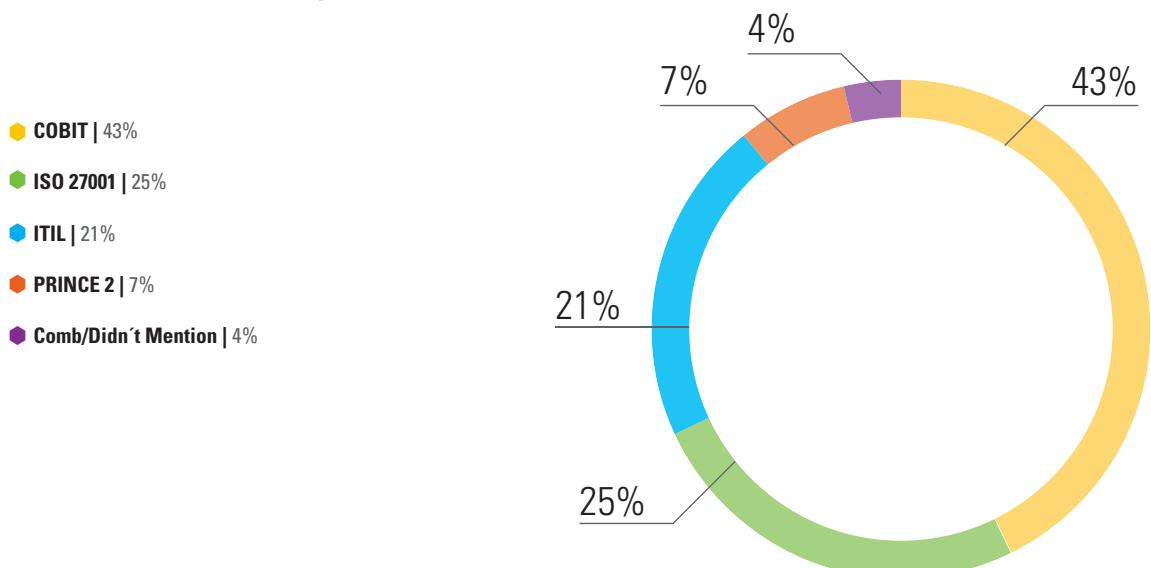## ❭ Key topics in the last two years

IT Internal Audit is at a crossroads. KPMG member firms' experience in the market and the survey results clearly support this view. The perennial topics that teams have focused on have been general IT controls, technical IT security and cyber security, outsourcers and assurance over major IT programmes (plus regulatory issues, especially within financial services organisations). These core concerns also continue to be areas of focus going forward (see figure 14).

However, the reality is that the future holds many new challenges. Well over half of IT Internal Audit plans expect to cover new topics such as cloud computing and virtualization,

social media, continuous auditing and continuous monitoring and mobile computing during the next two years. These areas show a significant increase of focus.
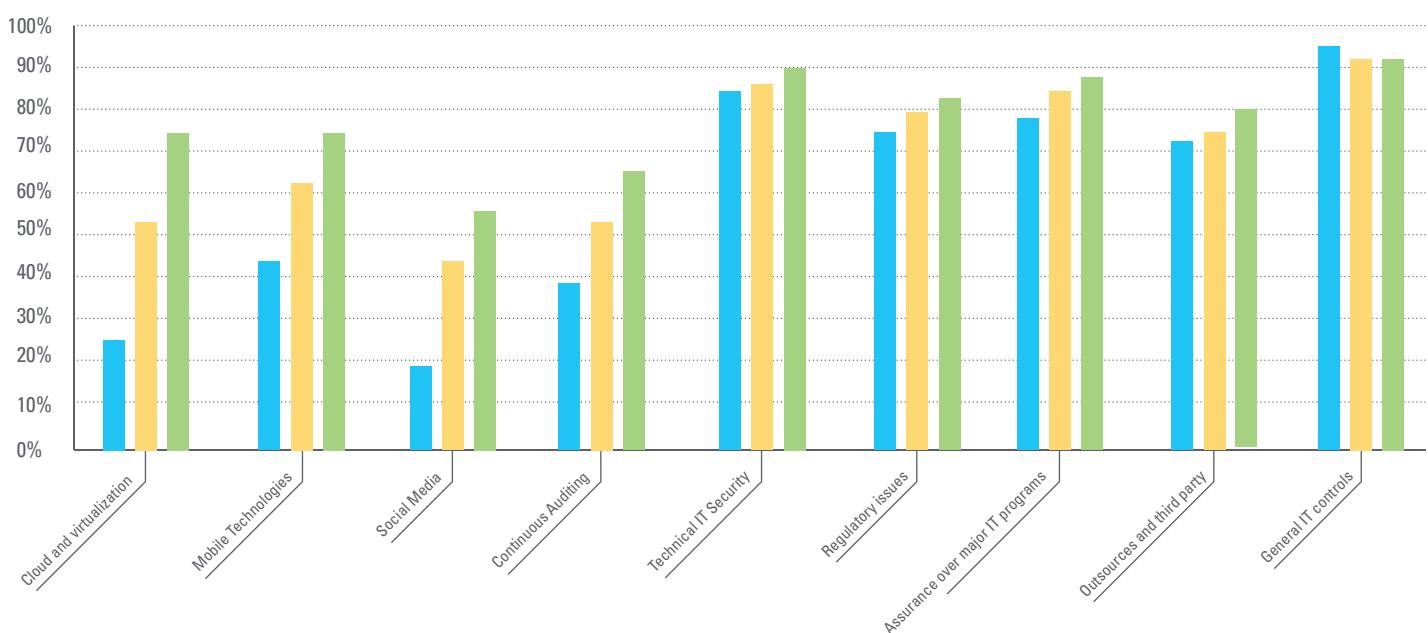
Organisations will need to source the skills and expertise to deliver assurance for these newer areas rapidly, as they become core to IT Internal Audit plans. Failure to act means that IT Internal Audit teams will face an ongoing expectation gap between what their stakeholders are concerned with, and their capabilities to deliver.

〉IT audit framework used | **Figure 13**

- ● **COBIT |** 43%
- ● **ISO 27001 |** 25%
- ● **ITIL |** 21%
- ● **PRINCE 2 |** 7%
- ● **Comb/Didn´t Mention |** 4%

Source: KPMG's ITIA Survey 2013

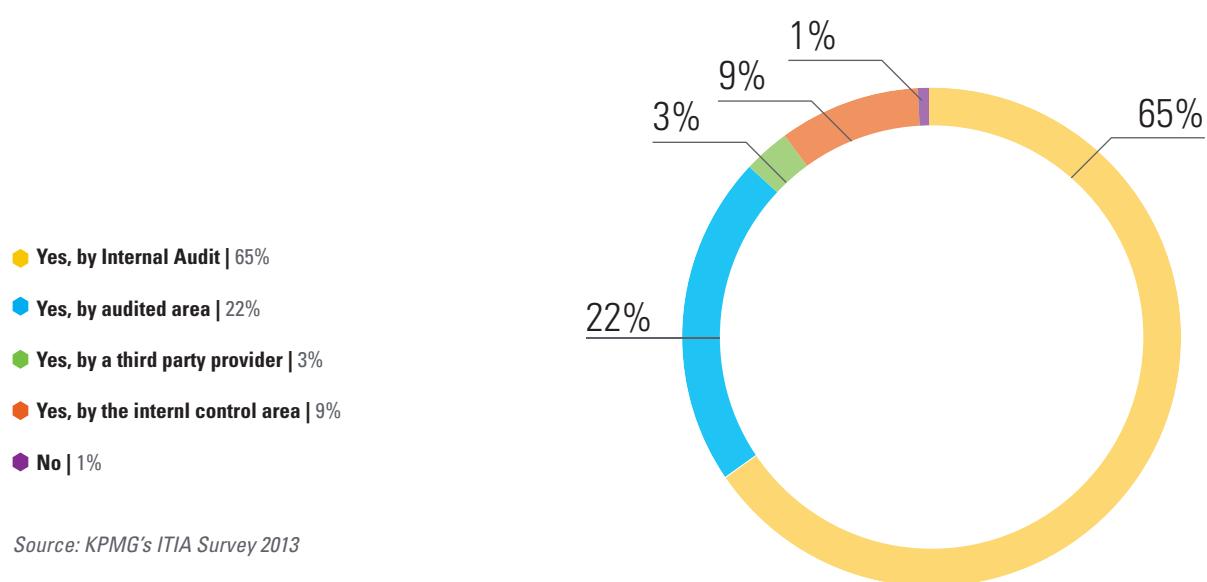## 〉IT Internal Audit topics – coverage comparison | **Figure 14**

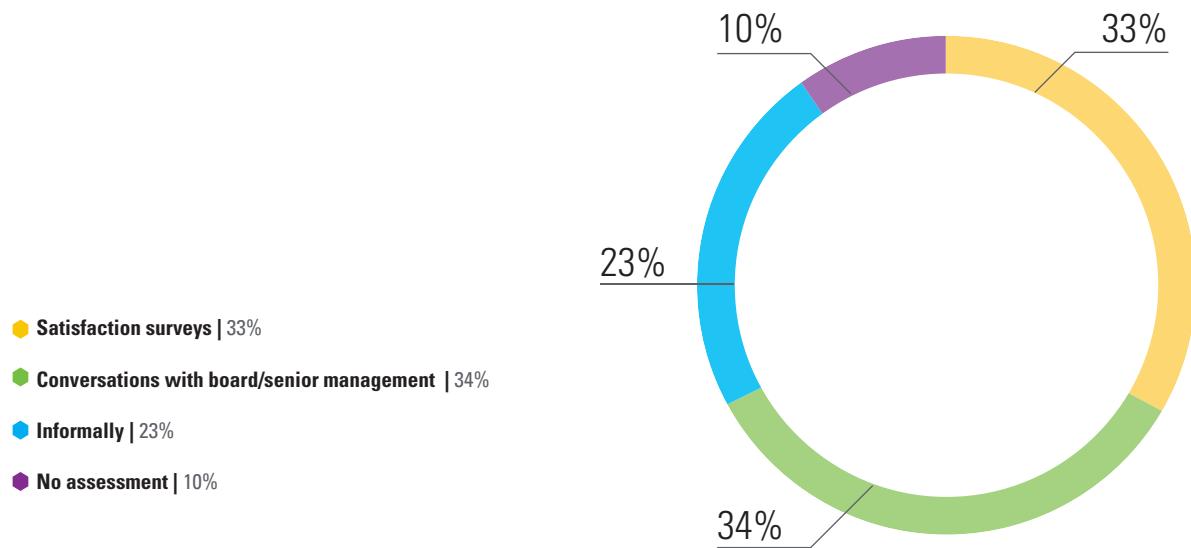● **Covered in previous years**   ● **Resourced to cover in FY2013**   ● **Expect to cover in FY2013 and beyond**

Source: KPMG's ITIA Survey 2013

...to provide real assurance to stakeholders?

⟩ Monitoring authority | **Figure 15**

- ● **Yes, by Internal Audit |** 65%
- ● **Yes, by audited area |** 22%
- ● **Yes, by a third party provider |** 3%
- ● **Yes, by the internl control area |** 9%
- ● **No |** 1%

Source: KPMG's ITIA Survey 2013

⟩ IT Audits result evaluation | **Figure 16**

- ● **Satisfaction surveys |** 33%
- ● **Conversations with board/senior management |** 34%
- ● **Informally |** 23%
- ● **No assessment |** 10%

Source: KPMG's ITIA Survey 2013

Unless IT Internal Audit gets its message across to the right stakeholders at the right time, the value of the work diminishes greatly.

As highlighted, planning is generally approved at Audit Committee or Board level. Likewise, the survey found that reporting is directed to the same stakeholders. However, for a significant minority (just over one quarter of respondents), reports are taken to Finance Director, Managing Director or CEO level. Not reporting to an independent Audit Committee could lead to a lack of rigour or incentive to take action to address audit findings.

› Monitoring the execution of remediation actions to audit findings

Of course, the purpose of IT Internal Audit is to provide assurance, to act as a catalyst for change and to measure whether agreed actions have been implemented.

Three quarters of organisations have either Internal Audit or internal control functions monitoring the implementation of findings. However, 22 percent of respondents leave monitoring the follow up to the area of the business being audited (see Figure 15). This is a significant increase from 2009 results (8 percent). If controls are not enhanced, or improvement opportunities not grasped, IT Internal Audit is less effective.

› QA activity

Despite the majority of respondents considering quality assurance (QA) activities, nearly a third undertake no QA activity in addition to their IT Internal Audit work. Interestingly, of the respondents that indicated there is no QA over IT Internal Audit, 48 percent were dissatisfied with their IT Internal Audit function. This reduced to 20 percent for those who do perform QA activities. Some organisations may find they do not have the capability in-house to conduct QA, which evidently constrains effectiveness.

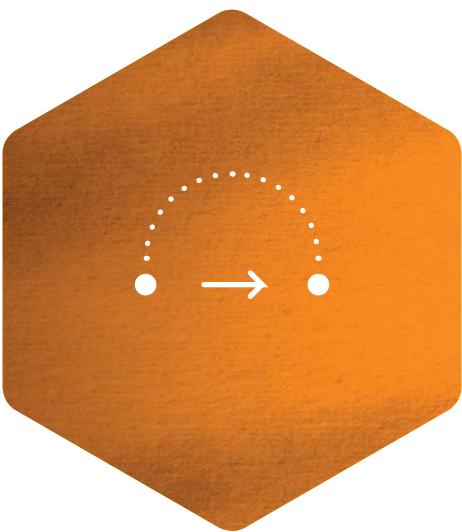### › Evaluating performance on an audit-by-audit basis

One third of organisations report having no formal evaluation of IT audits or of 'client satisfaction' (see Figure 16). This is similar to what was found in 2009. While good practice is to have an assignment satisfaction process, often the real value is in the conversations with the Board and senior management and IT Internal Audit teams should not ignore this.

Actionable insights

IT Internal Audit will increasingly need to focus on new and emerging risks and ensure they are resourced with the right specialist knowledge internally through training, or externally to address those risks.

78 percent of organisations cite lack of skills or capabilities as a reason for dissatisfaction with IT Internal Audit, and yet only 33 percent of organisations bring in external support.

Based on responses, many organisations make their decisions on IT Internal Audit coverage on team capability or cost constraints, instead of focusing on their risk profile.

Access training or external support to help ensure coverage of new and emerging risks is broad-ranging and rigorous.

Challenge stakeholders on whether budget has taken due account of the organisation's risk landscape and the need for skilled, independent challenge.

Boards could challenge IT Internal Audit plans more thoroughly: less than half of respondents were satisfied with their IT Internal Audit, despite Board level approval of the IT Internal Audit plan for the majority of those organisations.

Engage stakeholders proactively on IT risk topics to help ensure appropriate coverage of key risks.

There is an opportunity to align IT Internal Audit with other governance functions: Only 57 percent of organisations believe that IT Internal Audit is well aligned with other governance activities, with 16 percent indicating either occasional or no coordination.

Engage other governance functions to increase efficiency and effectiveness of overall coverage.

In a number of organisations surveyed, higher quality could be achieved by performing quality assurance of IT Internal Audit activities, using a framework in delivering audits and evaluating performance.

Implement appropriate quality assurance, audit to a framework, and conduct performance evaluations to improve quality and objectivity.

Summary of respondents

> **Participant countries**

Austria	Greece	Portugal
Belgium	India	Romania
Czech Republic	Italy	South Africa
Denmark	Luxembourg	Spain
Egypt	Netherlands	Sri Lanka
Finland	Norway	Switzerland
Germany	Poland	United Kingdom

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