



KPMG's 2009 IT Internal Audit Survey

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

ADVISORY



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Executive Summary



Many organizations face a continually changing set of pressures and dynamics in the current economic climate. Faced with shrinking markets, they can choose to rationalize, merge or contract. The technology thread which holds systems and processes together is at risk. As a consequence, IT Internal Audit plays an integral role in maintaining discipline and rigor across functions and geographies.

But how well IT audit responds to changing business parameters is, to some extent, contingent on the authority it commands within the organization and the influence it wields at executive and board level. Internal Audit should seek to raise its profile if it is to be taken seriously as a governance and enforcement tool.

How does it do that? As our survey reveals, Internal Audit should have a direct line to executive management and the Audit Committee. By cascading top level opinion on the value and content of Internal Audit's outputs and by communicating information on the issues that affect the business, the function can heighten its visibility.

To maintain that position, it needs to develop a closer relationship with the business while maintaining its independence and objectivity. It also needs to work in closer cooperation with the wider audit function to leverage understanding and efficiency. This powerful combination of technical and business know-how, underpinned by an understanding of operational and technology risk, can turn the function from cost centre to value builder.

IT audit as a discipline is maturing. To compete in this new and threatening environment, it needs to standardize, automate and speed up its analysis and reporting. It has to become more economic and efficient by reducing costs and using tools that improve the effectiveness and reliability of its output and its compliance and control.

The bar is raised. This survey reveals how companies across Europe, the Middle East and Africa are equipped to cope in an economy under pressure.

Foreword



Technology plays an ever-more critical role in the day-to-day running of organizations. As a consequence, it is becoming increasingly vulnerable to deliberate sabotage – a growing symptom, perhaps, of these turbulent times. Meanwhile unintentional data loss incidents and IT failures have increased. In this environment, the role and importance of IT Internal Audit takes on heightened significance for maintaining the security of commercial data and the reputations of corporate institutions.

In recognition of the increasingly vital role performed by IT audit, KPMG's IT Advisory practice commissioned its first-ever survey of IT Internal Audit functions in Europe, the Middle East and Africa (EMA).

In this report we combine analysis of processes and practices of nearly 300 organizations from at least 20 countries with our own insights from IT Internal Audit projects. We believe that you will find it an enlightening assessment of the state of IT Internal Audit in EMA.

We trust that this report will provide you with an opportunity to benchmark the efficiency of your own IT Internal Audit department and to broaden your understanding of the critical nature of IT Internal Audit to commerce.

KPMG's IT Advisory practice performs global and regional surveys on a regular basis covering many issues that effect business. This survey is part of these efforts.

And finally we would like to thank all of the respondents that participated in the survey, including many of our clients.



Ramón Poch
Partner
EMA Region Head of IT Internal Audit



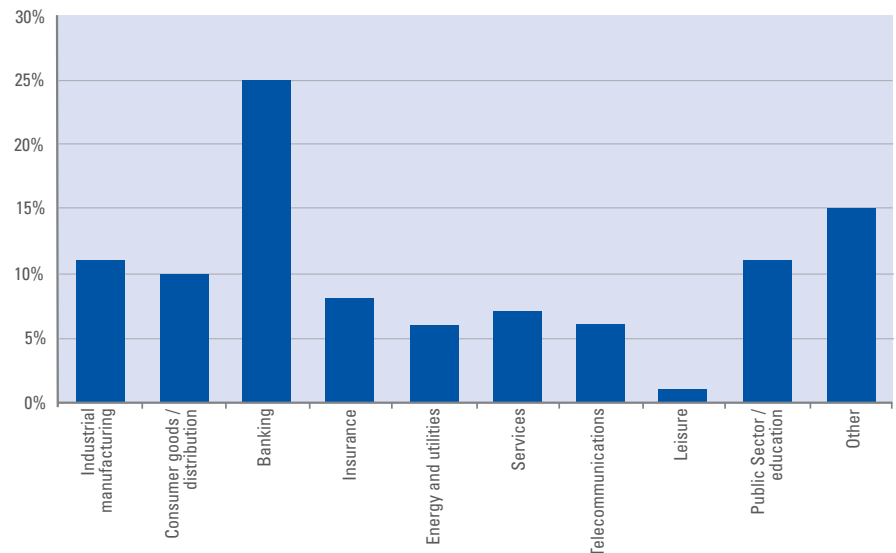
Rob Fijneman
Partner
EMA Region Head of IT Advisory

Survey Methodology

Between October and December 2008, 297 companies participated in a 52-question survey to identify current trends in IT Internal Audit methodologies and practices.

Respondents were drawn from a wide range of industry sectors (see figure 1) from across Europe, the Middle East and Africa. They ranged from C-level management to Chief Internal Auditors and IT Internal Audit directors. They also included CIOs and CFOs to give a broad and inclusive base for analysis and understanding.

Figure 1: Analysis of responses by industry sector



Source: KPMG International, 2008

Questions were answered in face-to-face interviews or interactively. Responses were recorded and analyzed by KPMG firms Internal Audit professionals.

Topics included:

- Organization of the information system audit
- Functions of the information system audit
- Types of project and methodology
- Project planning
- Communication and follow-up of project results
- Assessment and quality control
- Use of tools
- Professional skills
- Training and evaluation
- Professional progress

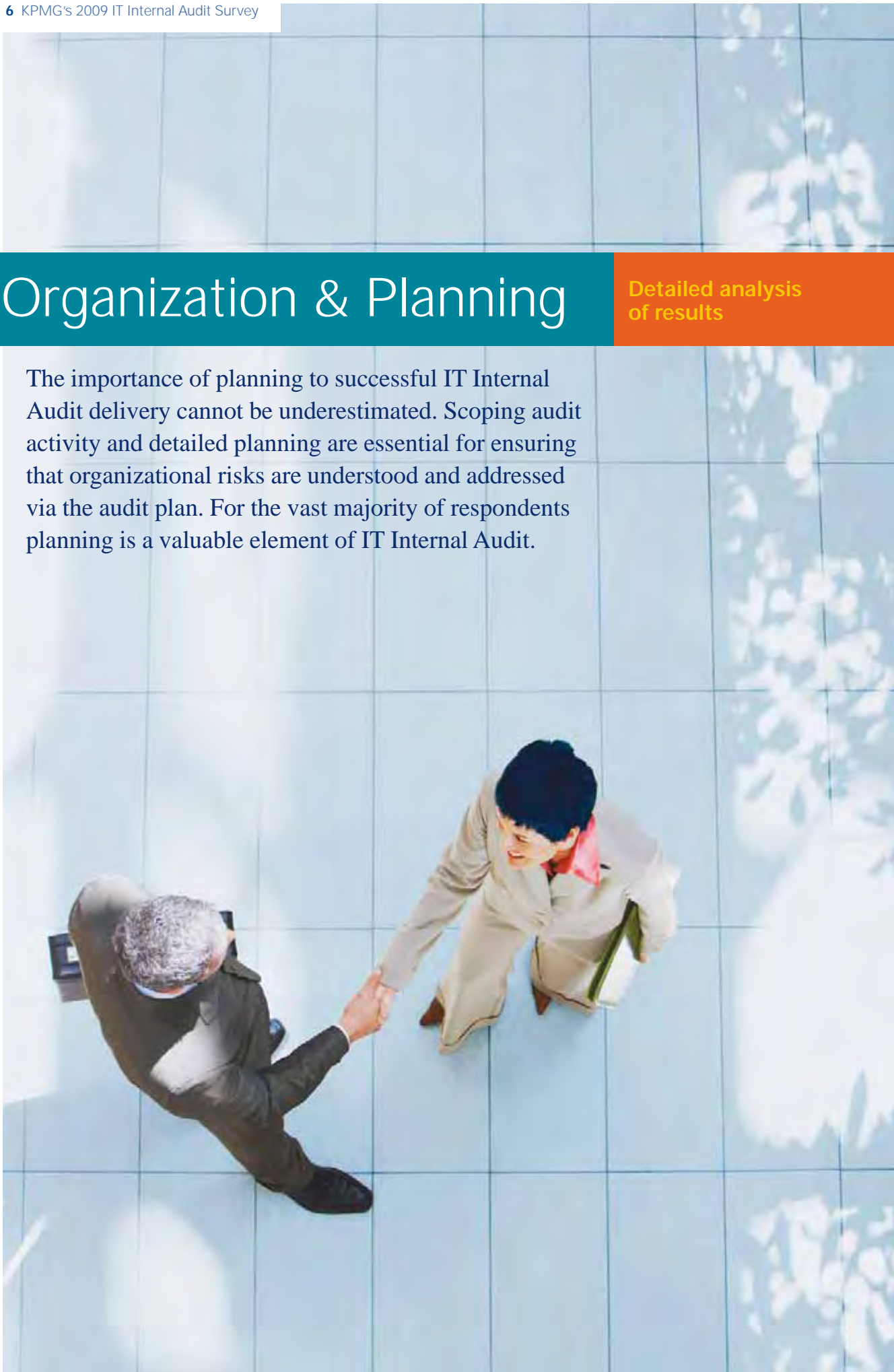
Our thanks goes to the companies and their representatives which participated in this first-ever EMA-wide survey of IT Internal Audit. We are also grateful for the support given by:

- The Institute of Internal Auditing in Belgium, Portugal, Spain and Sweden
- The ISACA local chapter in Belgium, the Czech Republic, Malta, Luxembourg, Spain (Madrid) and the United Kingdom.

Organization & Planning

Detailed analysis
of results

The importance of planning to successful IT Internal Audit delivery cannot be underestimated. Scoping audit activity and detailed planning are essential for ensuring that organizational risks are understood and addressed via the audit plan. For the vast majority of respondents planning is a valuable element of IT Internal Audit.



In today's business environment, technology is critical to the smooth running and operations of any company. For that reason, KPMG believes that IT audit is an essential component of overall audit activity. All too often, however, audit departments operate in 'silos' where IT audit is undertaken in isolation from other audit activity and, indeed, other IT assurance activity. For a wholly independent and impartial view, we believe that IT audit should be delivered as part of an audit, involving the wider audit team and, where appropriate, other specialists.

A formal audit planning cycle

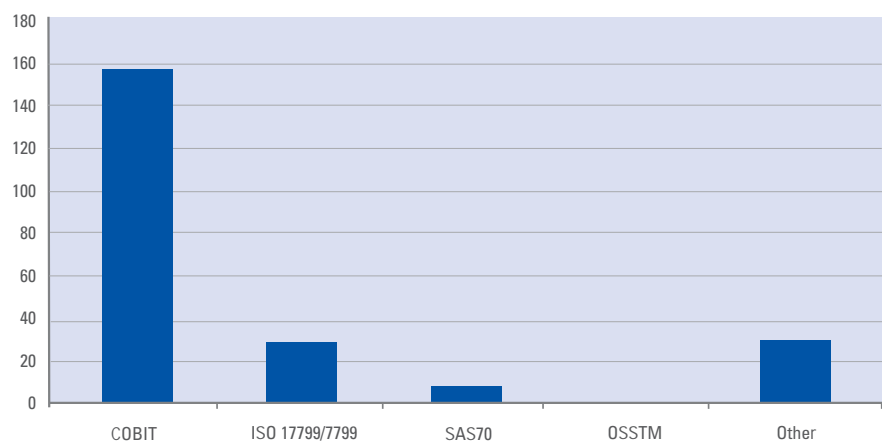
A formal audit planning cycle is adopted by 86 percent of respondents, with 78 percent undertaking planning on an annual basis. But is this sufficient in the current economic climate where business structures are under threat and frequently change and where risks are continually evolving?

KPMG firms advocate more frequent reviews of audit plans but find that just 16 percent of respondents have rolling or quarterly planning processes which can respond to changes in the business and its risk profile.

Planning tools

Standard risk and planning frameworks such as COBIT (Control Objectives for Information and Related Technology) are increasingly popular for planning IT audit activity (see figure 2) and are adopted by 75 percent of respondents. These frameworks deliver a structured approach to planning and focus the IT audit on the business and technological risks of the organization. However, one quarter of respondents do not use a planning framework which leaves the IT audit open to vulnerabilities and allows core risks to go unaddressed.

Figure 2: Standard frameworks/methodologies used



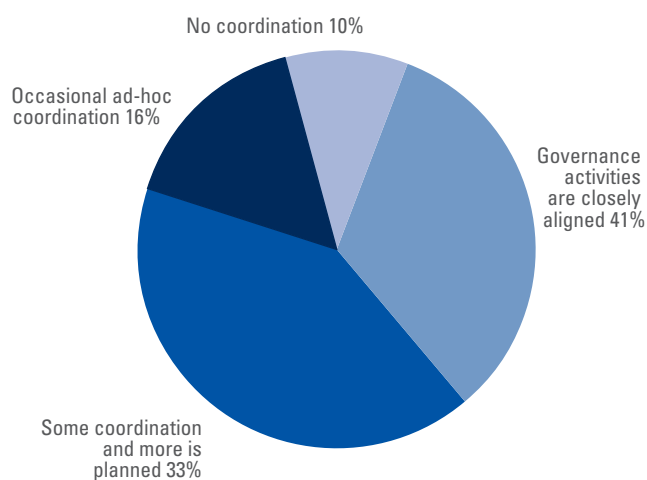
Source: KPMG International, 2008

Integration with wider audit and business activity

Critical to planning is the way in which IT audit is integrated into wider audit activity, including Sarbanes-Oxley compliance, Environmental Impact and Quality Control governance. It is encouraging to note that 41 percent of respondents align their IT Internal Audit with wider governance activities (see figure 3) and that others (33 percent) appear to be moving in the right direction with some coordination already in place and further alignment planned.

By working alongside client organizations, KPMG firms can help to ensure improved cooperation across audit teams. By leveraging and combining their audit skills and resources, the end result is a much better and reliable level of assurance for the business.

Figure 3: Coordination of IT Internal Audit with wider governance activities



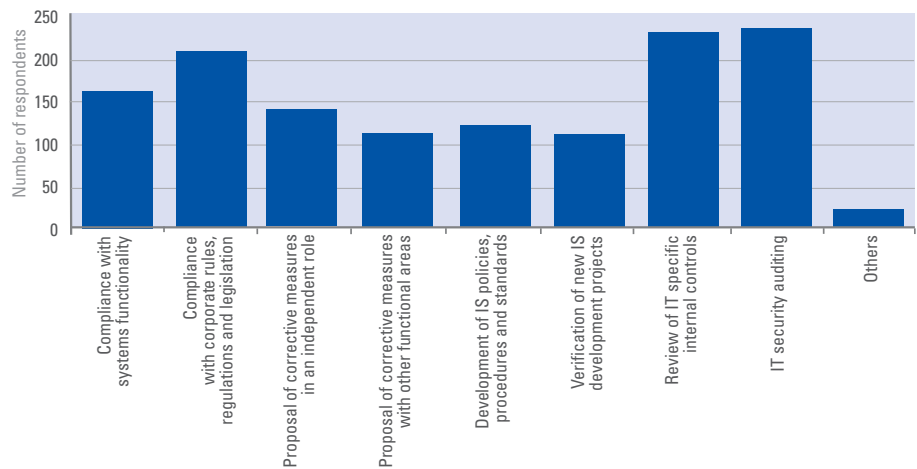
Source: KPMG International, 2008

There is a marked and encouraging shift from traditional to more proactive, value-adding activities undertaken by IT audit. Practitioners are working more closely with IT and business functions to deliver, for instance, assurance during live projects.

Care should be taken, however, to ensure that the independence and objectivity of auditors is not compromised by becoming involved in business and systems decision-making. Undue influence from other interested parties can adversely affect auditors' ability to operate impartially, damaging the integrity of the audit. Independence needs to be maintained right across the planning process and reporting lines.

By involving stakeholders in the planning process, audit teams can achieve better relationships and improved communications with the function to be audited and with management. This can help enhance the perception of audit within the organization and support the audit mandate.

Figure 4 illustrates that this loss of independence is a real threat as 38 percent of respondents report that their IT auditors are involved in verifying/authorizing new information systems



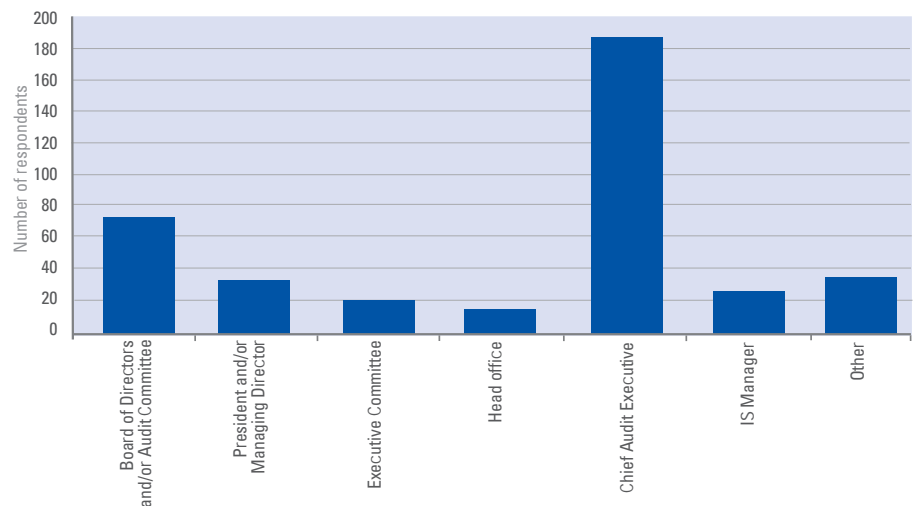
Source: KPMG International, 2008

Audit plan approval and reporting


The survey revealed that the Audit Committee approves the majority (63 percent) of audit plans. Disappointingly, 10 percent of audit plans are still approved at IT function level which may severely compromise a company's ability to maintain audit independence from the business activity.

Good practice, as defined by the Audit Committee Institute, is that the Head of Audit reports to the Board of Directors or the Audit Committee. Figure 5 illustrates that almost 30 percent of the surveyed organizations do not comply with this guidance. This could seriously impact the audit function's independence when auditing the business.

Figure 5: To whom the Head of Audit reports



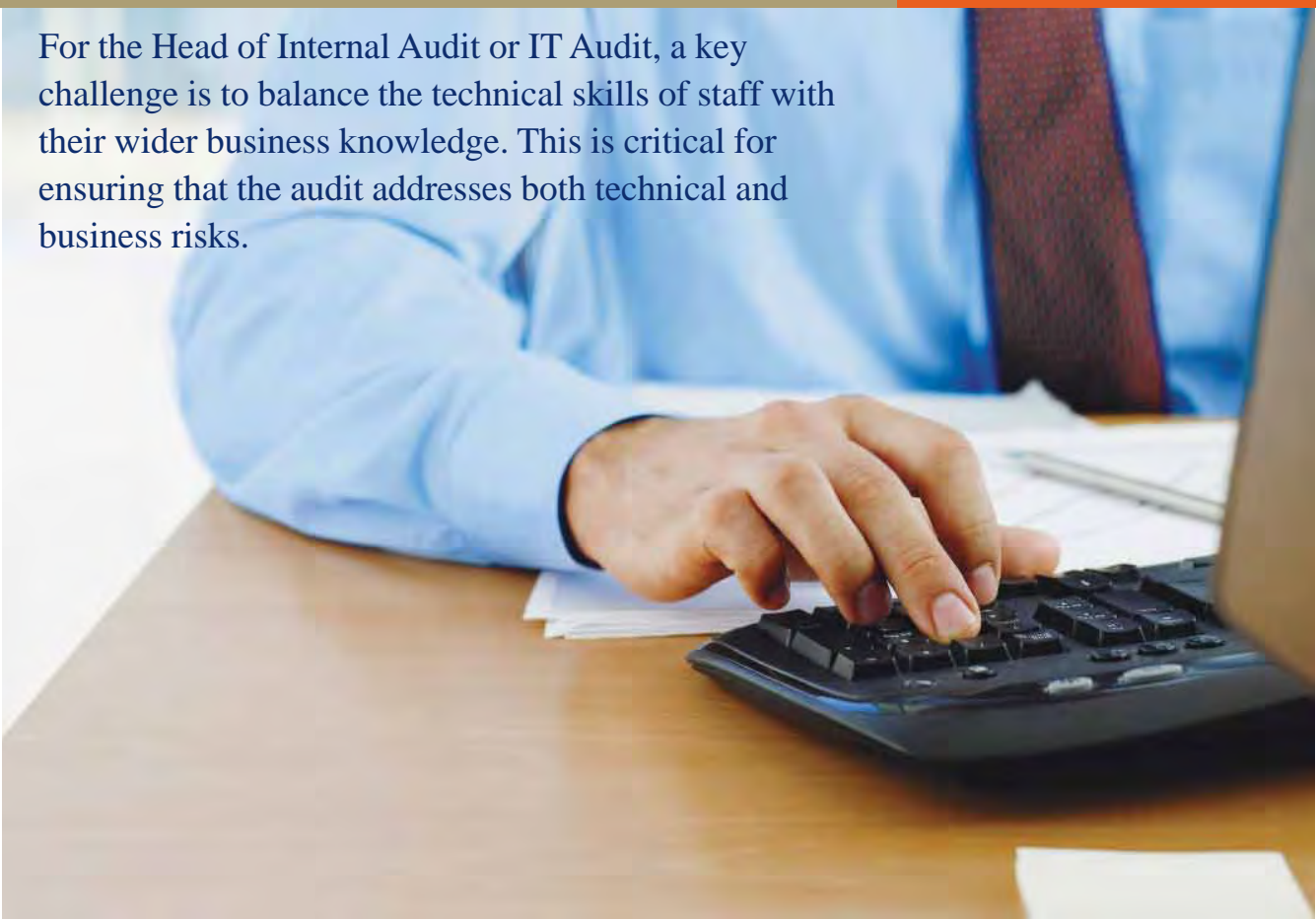
Source: KPMG International, 2008



Getting the right staff with the right skills and experience is critical for successful delivery of an effective IT audit plan. With skilled staff in high demand, training and developing existing staff may be an appropriate alternative to recruitment and can help to ensure that the right skills are in place within your organization.

Staffing and Skills

Detailed analysis
of results



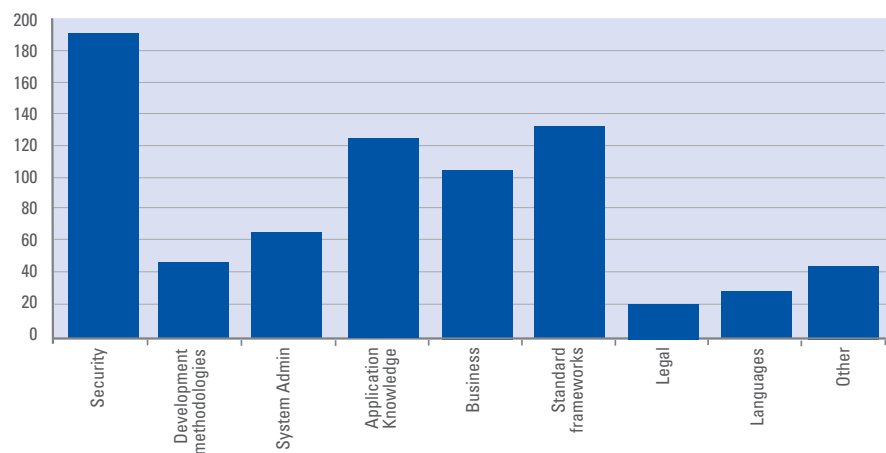
For the Head of Internal Audit or IT Audit, a key challenge is to balance the technical skills of staff with their wider business knowledge. This is critical for ensuring that the audit addresses both technical and business risks.

This can be achieved by encouraging IT and non-IT auditors to work more closely together in the workplace. The survey illustrates that 60 percent of Internal Audit engagement teams comprise a good mix of IT and non-IT auditors. While it is important that IT auditors are incorporated in the main audit activity, it should not be a one-way flow – IT auditors should be proactive in supporting their non-IT colleagues too.

Security skills

As incidents of data loss increase, (see KPMG Data Loss Barometer reports) the Head of Internal Audit should ensure that staff are appropriately skilled in data and information security. But these skills, as figure 6 illustrates, are in high demand. Knowledge of standard frameworks such as COBIT and applications such as ERP systems also top the wish list of Heads of Internal Audit.

Figure 6: Skills most in demand



Source: KPMG International, 2008

Train or recruit?

That 55 percent of the Internal Audit functions surveyed chooses to recruit skilled staff from outside the organization illustrates that appropriate skills are lacking in-house. But, in today's climate, where budgets tend to be severely constrained, recruitment is not always an option. As a consequence, there is a growing tendency to train and develop existing staff.

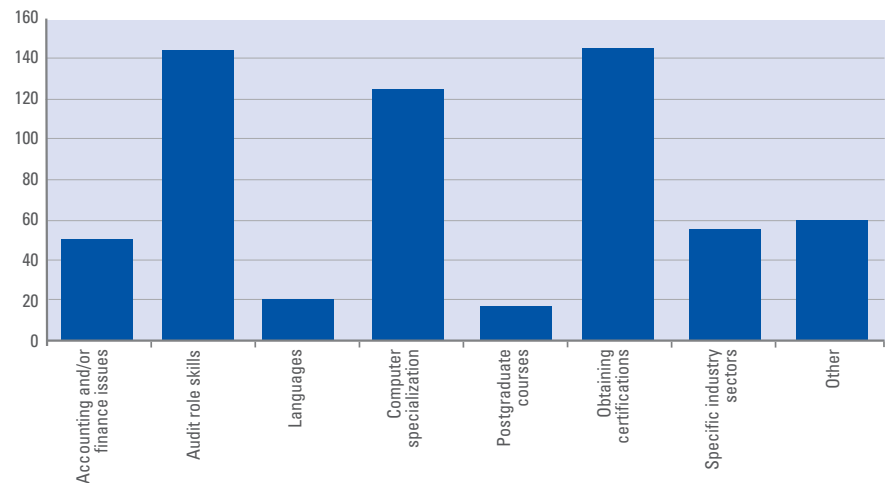
Although training is high on the agenda for most organizations, hours devoted to training are disappointingly low. The survey found that 29 percent of organizations devote less than one week per year to training staff. Furthermore, as figure 7 illustrates, a large proportion of that training time is focused on achieving certification rather than training to do the job.

Organizations should implement more formal staff development plans to identify skills gaps and future training and development needs. This brings the added benefits of improved staff retention, reduced reliance on external recruitment and increased staff satisfaction.



KPMG anticipates a rise in the use of external advisors – notably for ad hoc pieces of work – to help address the skills gap. This approach can be risky, but with careful management can be a cost-effective way of accessing specialist skills.

Figure 7: Training focus among surveyed organizations



Source: KPMG International, 2008

Outsourcing specialist work is another popular option for plugging the skills gaps. Over 120 of the organizations surveyed say they use outsourcing to access appropriate skills and resources. KPMG believes that this trend will accelerate in the next 18 months due to rising skills shortages.

Qualifications and evaluation

Formal development of staff is important for most organizations with 57 percent of respondents requiring IT Internal Audit staff to be CISA (Certified Information Systems Auditor) certified. For 90 percent, professional development is managed at individual and departmental level.

Worryingly, just 12 percent of organizations evaluate staff performance at the end of each audit engagement and many (31 percent) conduct only annual evaluations. KPMG believes that more regular staff performance reviews can help to identify improvement opportunities, leading to a more effective audit process.

Use of tools

Detailed analysis of results

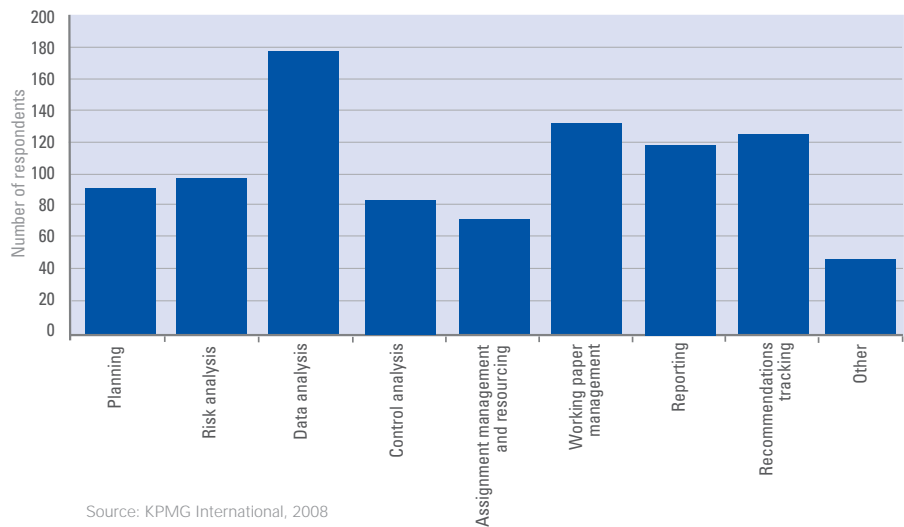
Audit departments need to use automated tools more widely. KPMG believes that the most technically proficient staff can lead the way in enhancing the efficiency of the IT Internal Audit process through automation.



From planning to reporting, auditors rely increasingly on automated tools to support the audit process. Tools are most commonly used for data analysis purposes, as figure 8 illustrates.

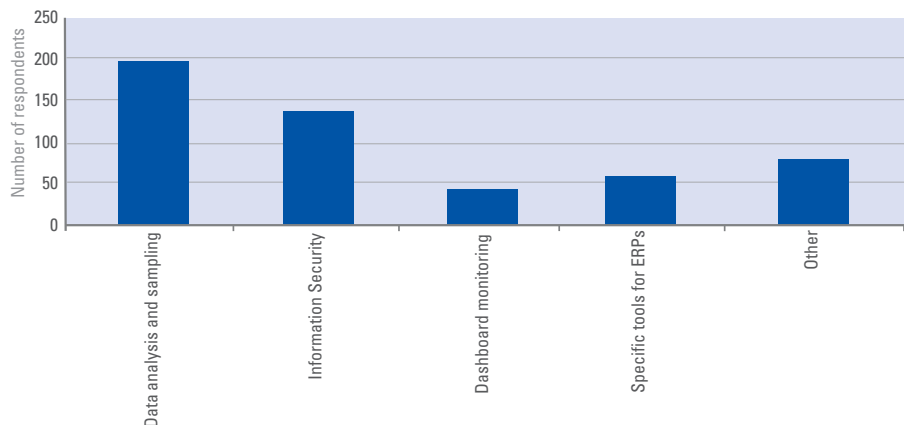
Surprisingly, however, tools that could help focus audit activity and make better use of IT audit resources are not commonly used in areas such as planning and risk and controls analysis. And despite plenty of interest in continuous auditing software, real development and rollout is lacking in many organizations.

Figure 8: Use of automated tools across the IT audit process



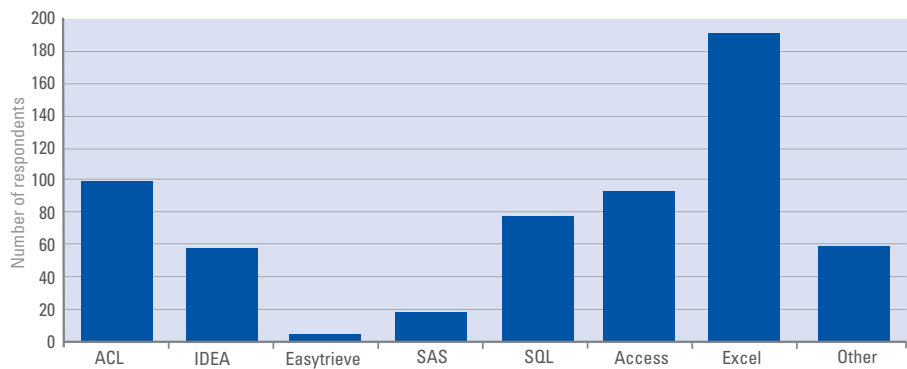
Despite data analysis tools being most common, a breakdown of the types of tools used to support IT auditors reveals that 33 percent of organizations do not actually use data analysis or sampling tools (see figure 9). As these tools can help to increase the reliability of audit conclusions, their absence could undermine the impact of audit activity in some organizations.

Figure 9: Tools used for audit tests



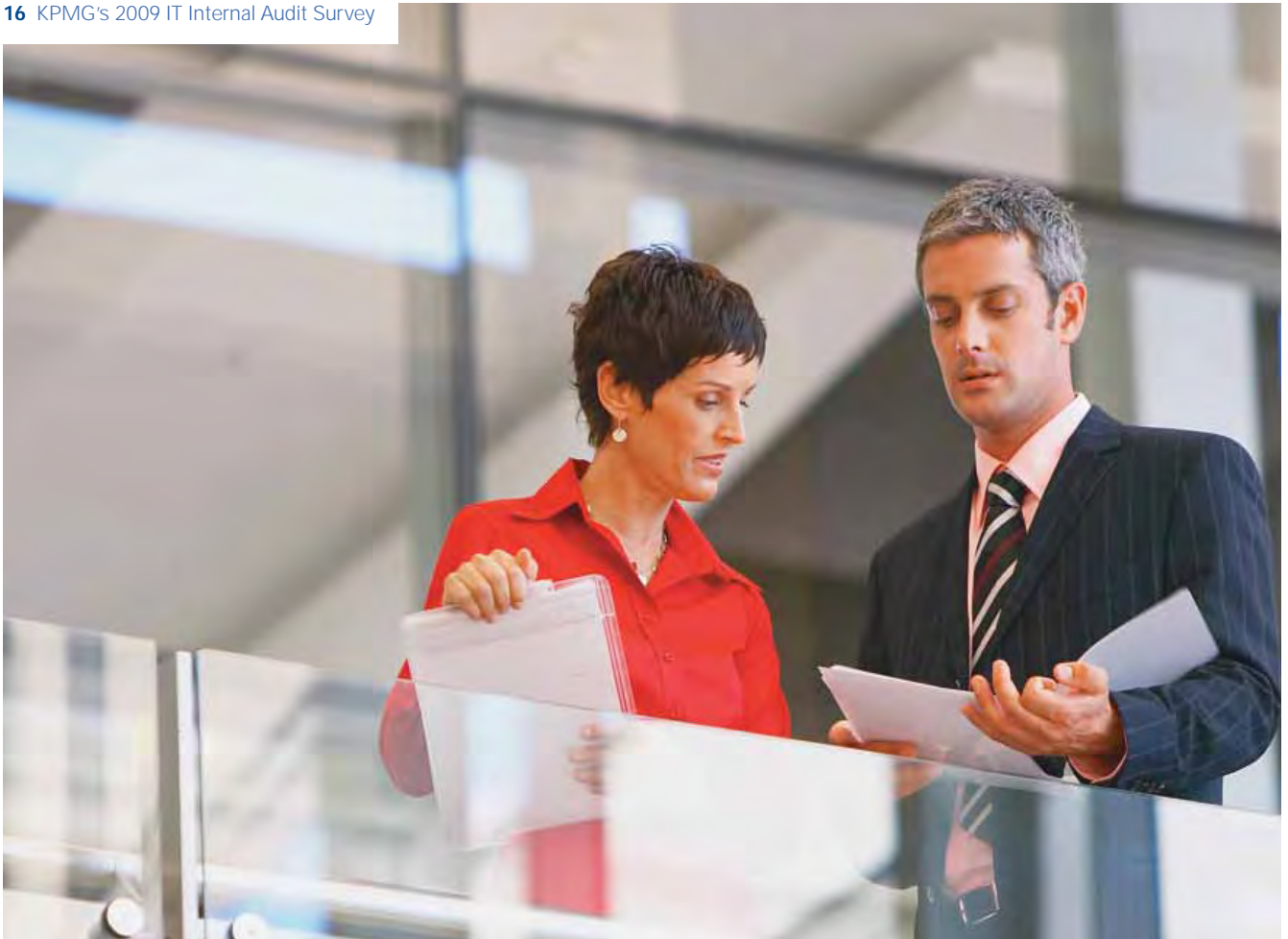
Readily-available tools such as Microsoft Excel® and Microsoft Access® are most commonly used by IT Internal Audit staff (see figure 10). While they are easy to understand and use, a drawback is that they do not deliver sophisticated data analysis nor have the potential to improve audit quality and efficiency as more dedicated analysis tools.

Figure 10: Data analysis tools used



Source: KPMG International, 2008





Reporting and Quality

Detailed analysis
of results



Who knows whether IT Internal Audit does good quality and important work? It counts for little if it is not communicated properly nor acted upon. By presenting findings to executive level management, there can be improved understanding of the issues that affect the business. Only then can you get buy-in from the business, top-down support and enhanced visibility for Internal Audit at management level.

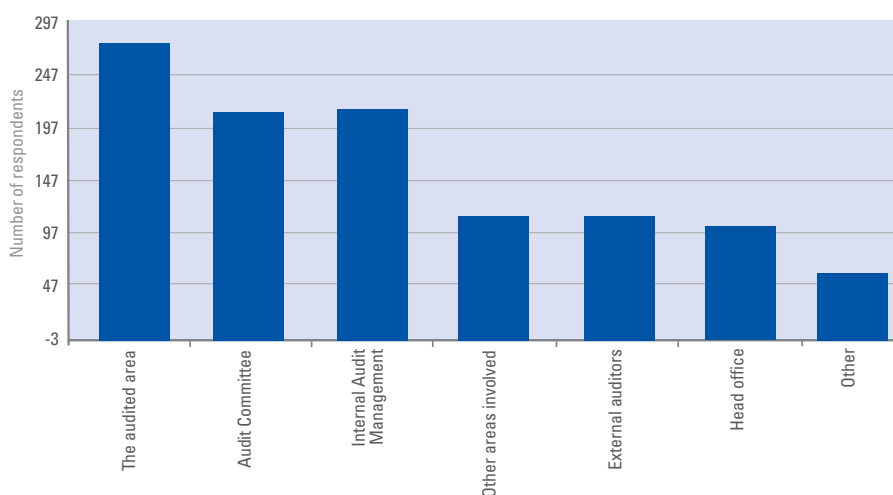
Almost all respondents (97 percent) communicate their IT audit findings and recommendations in a formal report. Of these, 80 percent have a standard report format which is intended to make content easier for recipients to digest.

However, over 80 percent fail to include an executive summary that pulls together the major findings and just six percent present their findings to executive level management. Furthermore, in 55 percent of cases, management comments are not incorporated into the report. This suggests that either the executive level does not take Internal Audit seriously enough or that audit does not discuss its findings before reporting. This has the potential to compromise the value of work performed by Internal Audit and the function's reputation within the wider organization.

On a more positive note, a significant percentage of organizations (72 percent) do report their findings to the audit committee (see figure 11). External auditors, however, only receive a copy of the report in 37 percent of cases, indicating a serious disconnect between internal and external reporting. It can be argued that the work of Internal Audit is irrelevant to external auditors yet opportunities could be missed for external audit to build on or to make use of work carried out by their internal counterparts.

Internal Audit is often perceived as a cost centre. Publishing success criteria is, KPMG believes, an effective way of communicating to management the value that Internal Audit delivers to the organization.

Figure 11: Who gets an audit report?



Source: KPMG International, 2008

Follow-up activity

It is encouraging to find that 98 percent of organizations follow up on recommendations made in the Internal Audit report. Typically the follow-up is undertaken by the Internal Audit function itself (71 percent) but, in eight percent of cases, the audited department takes on this responsibility. Internal Audit needs to be reminded that follow-up is their ultimate responsibility and that 'the buck' should not be passed.

Measuring quality

The quality of work performed by IT Internal Audit is measured by just over half (56 percent) of the organizations surveyed. The remainder has no quality control provisions in place and, in 41 percent of cases, undertakes only an informal assessment or, worse, no assessment at all. Furthermore, feedback from satisfaction surveys is given to only 44 percent of Internal Audit functions. How then can such organizations be confident that the service they deliver to clients is an acceptable quality?

What next?

Taking the following actions could make a big difference to your business:

- IT Internal Audit should seek to get closer to the business and to IT decision-makers. Professionals must demonstrate that business and technology risks are equally understood.
- In these turbulent times, the commercial and business landscape changes constantly. Review audit plans on a rolling or quarterly basis to help your business respond more rapidly to change and risk.
- Implement standard risk and planning frameworks to focus the audit on business and technological risk.
- Align your IT audit to other governance activities to benefit from scale and expertise.
- Encourage IT auditors to engage in other value-adding activities within the business without compromising their independence or the integrity of the audit.
- Ensure that audit plans are signed off at Audit Committee or Chief Audit executive level and that the Head of Audit reports to the Board of the Directors/Audit Committee.
- Integrate IT auditors and non-IT auditors to facilitate cross-learning of technical skills.
- Increase training in specialist skill areas such as IT security.
- Conduct end-of-engagement assessments to identify opportunities to improve skills and the efficiency of the audit process.
- Make better use of automated tools to handle volumes of data to enhance the reliability of audit conclusions.
- Make sure executive management reads the report and that comments are incorporated to enhance the perceptions and value of Internal Audit within the wider organization.
- Measure the quality of work undertaken by IT Internal Audit and implement satisfaction surveys. Communicate the results.

Sector Highlights

Based on our survey results many industry sectors had particular issues, including:

Energy and utilities

- Skills shortages in security and standard frameworks
- Only half of respondents use satisfaction questionnaires
- There is increased use of audit tools to automate audits

Industrial

- Only nine percent of respondents conduct specific intrusion tests
- More than 20 percent fail to perform risk analysis

Consumer and distribution

- The Audit Committee approves the IT audit plan at just over half of respondents
- ERP knowledge is lacking

Infrastructure, government and health

- IT audit expertise is lower than in other sectors
- Organizations outsource to get the skills they need
- Half the respondents align IT Internal Audit to other governance work

Banking and insurance

- 40 percent of banks lack deep technical knowledge and use external resources for their IT audit
- Less than 20 percent of Internal Audit time is scheduled for IT audit
- Skills shortages in security and applications.

About KPMG



KPMG is a global network of professional services firms delivering audit, tax and advisory services. We operate in 144 countries and have 137,000 people working in member firms around the world.

KPMG firms have undertaken wide-ranging IT Internal Audit projects with clients in diverse industries around the world. We support our clients locally and globally by making best use of our firms professionals across EMA and deliver co- and outsourcing as well as specialist audit skills.

Our firms' professionals can develop their skills and knowledge in KPMG's worldwide Centers of Excellence for IT Internal Audit. We continually build on and incorporate our extensive first-hand experience of IT Internal Audit practices into our training and development programs. We gather information on good industry practices and understand the potential risks and opportunities that go with the IT audit territory.

KPMG's network of Internal Audit and Risk & Control professionals offer established methodologies and forward thinking strategies, which are designed to preserve and enhance corporate value.



KPMG member firms contacts:

Austria

Michael Schirmbrand
Partner
+43 1 31 33 26 56
mschirmbrand@kpmg.at

Belgium

Damien Misonne
Senior Manager
+32 10 68 54 05
dmisonne@kpmg.com

Bermuda

Ohna de Bruin
Partner
+1 441 294 2640
odebruin@kpmg.bm

Czech Republic

Tomas Kudelka
Senior Manager
+420 222 123 388
tkudelka@kpmg.cz

Egypt

Mostafa Farrag
Partner
+20 2 3536 2211
mfarrag@kpmg.com

Finland

Janne Vesa
Director
+358 20 760 3000
janne.vesa@kpmg.fi

France

Cédric de Lavalette
Partner
+33 1 55 68 67 12
cdelavalette@kpmg.com

Germany (Düsseldorf)

Wolfgang Geesmann
Partner
+49 211 4757 131
wgeesmann@kpmg.com

Germany (Frankfurt)

Günter Kapitza
Partner
+49 69 9587 2310
gkapitza@kpmg.com

Ireland

Michael Daughton
Partner
+353 1 410 2965
michael.daughton@kpmg.ie

Italy

Davide Grassano
Partner
+39 348 30 80 188
dgrassano@kpmg.it

Luxembourg

Michael Hofmann
Partner
+352 22 51 51 79 25
michael.hofmann@kpmg.lu

Netherlands

Brigitte Beugelaar
Director
+31 20 6567450
beugelaar.brigitte@kpmg.nl

Nigeria

Olumide Olayinka
Partner
+234 1 4630294
olumide.olayinka@ng.kpmg.com

Norway

Lars Erik Fjortoft
Partner
+47 4063 9085
lars.erik.fjortoft@kpmg.no

Portugal

Gonçalo Carvalho
Senior Manager
+351 210 110 000
gcarvalho@kpmg.com

Russia

Boris Lvov
Partner
+7 495 937 4477
blvov@kpmg.ru

Serbia

Tatjana Vesel
Manager
+381 63 450 183
tvesel@kpmg.com

South Africa

Gerald Kasimu
Partner
+27 11 647 8827
gerald.kasimu@kpmg.co.za

Spain

Ramón Poch
Partner
+34 91 456-3400
rpoch@kpmg.es

Sweden

Roger Karlsson
Senior Manager
+46 8 7239397
roger.karlsson@kpmg.se

Switzerland

Gregor Frey
Partner
+41 44 249 22 45
gfrey@kpmg.com

Turkey

Erol Lengerli
Partner
+90 212 317 74 00
elengerli@kpmg.com.tr

UAE

Rajeev Lalwani
Partner
+971 4 424 8900
rlalwani@kpmg.com

UK

Warren Middleton
Partner
+44 113 2313646
warren.middleton@kpmg.co.uk

David Timms
Senior Manager
+44 20 73116618
david.timms@kpmg.co.uk

Contact us

EMA Region Head of IT Internal Audit

Ramón Poch

Partner

+34 91 456-3400

rpoch@kpmg.es

Global Head of IT Internal Audit

Warren Middleton

Partner

+44 113 2313646

warren.middleton@kpmg.co.uk

EMA Region Head of IT Advisory

Rob Fijneman

Partner

+31 20 656 7450

fijneman.rob@kpmg.nl

EMA Region Head of Internal Audit,
Risk and Compliance Services

John Abbott

Partner

+44 20 73118149

john.abbott@kpmg.co.uk

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