KPMG

The evolution of risk and controls

From score-keeping to strategic partnering

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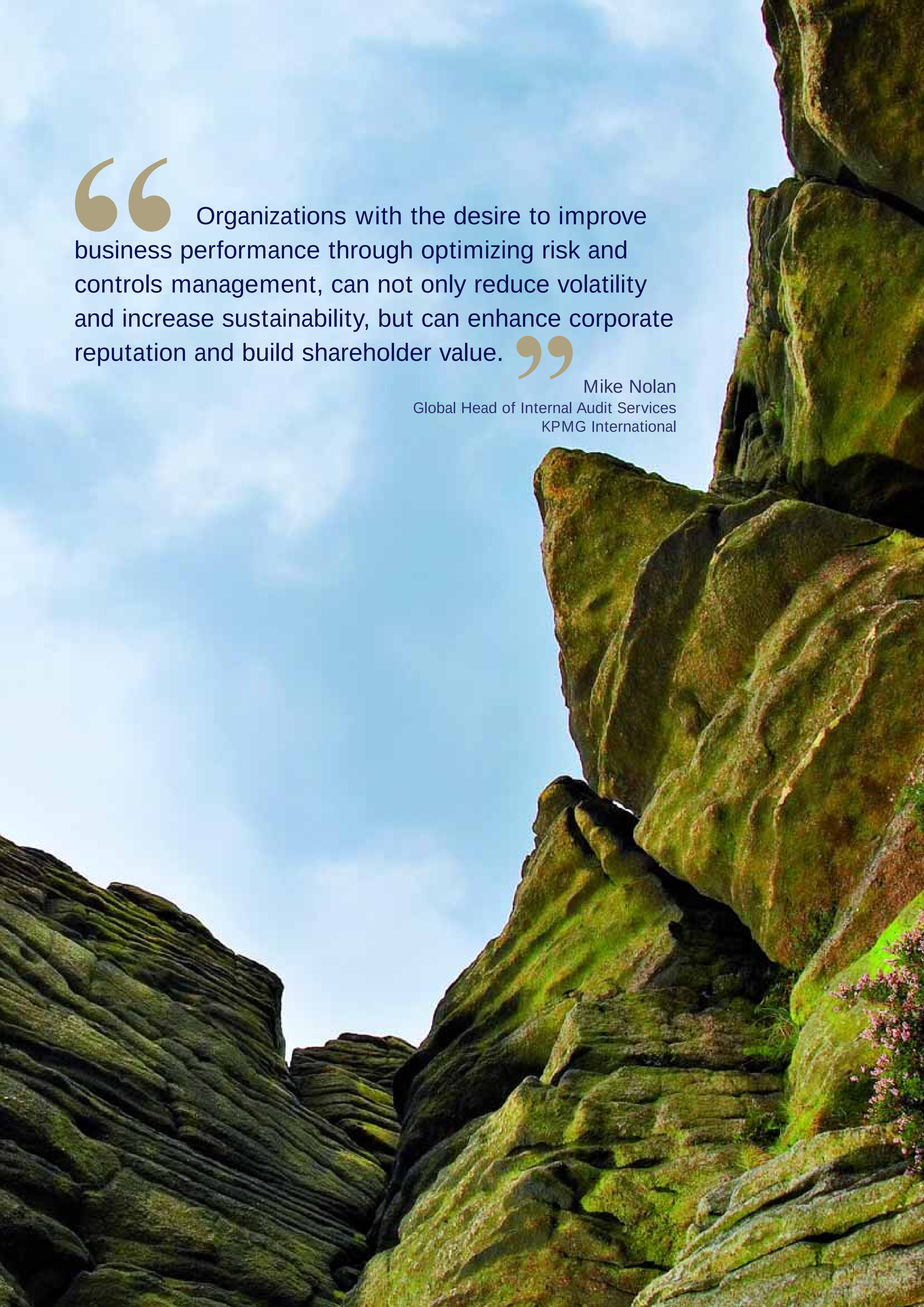

> “Organizations with the desire to improve business performance through optimizing risk and controls management, can not only reduce volatility and increase sustainability, but can enhance corporate reputation and build shareholder value.”

Mike Nolan
Global Head of Internal Audit Services
KPMG International

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About the research

KPMG International commissioned the Economist Intelligence Unit to write *The evolution of risk and controls: From score-keeper to business partner*. The report is based on the following research activities:

The Economist Intelligence Unit conducted a global survey of 435 senior executives, half of whom work for companies with more than US$1bn in annual revenue. The survey reached a very senior audience, including CEOs, CFOs, heads of internal audit and audit committee chairmen, as well as risk managers and compliance officers. Respondents were drawn from a cross-section of industries.

To supplement the survey, the Economist Intelligence Unit conducted a program of interviews with senior risk and controls executives from a number of major companies. We are grateful to the following participants for their valuable time and insights:

Raj Singh
Chief Risk Officer
Allianz

Mark Carawan
Internal Audit Director
Barclays

Ian Rushby
Group VP and General Auditor
British Petroleum

Thomas C. Wilson
Chief Insurance Risk Officer
ING Group

Robert Brewer
SVP and Chief Compliance Officer
Office Depot

Rob Kella
Chief Risk Officer
Qantas

Andreas Grunbichler
Group Chief Risk Officer
Zurich Financial Services

The views and opinions expressed herein are those of the Economist Intelligence Unit and do not necessarily reflect the views and opinions of KPMG International or KPMG member firms. The KPMG comment sections were written by professional from KPMG member firms.

Foreword

Global companies are looking to risk and controls management to become more strategic and forward looking with a focus on creating as opposed to merely preserving value.

In this context they will be looking to their advisers to offer a genuinely holistic, integrated, future-focused and process-oriented approach to risk and controls. The risk management policy has a key role to play here in establishing the organization's risk philosophy and tolerance as well as setting clear guidance on how risk is viewed by the organization's people.

Those organizations that succeed will be those with the strategic vision to see that sophisticated risk and controls management has the capability to deliver beyond the basic goals of reducing potential financial losses and meeting regulatory and compliance requirements.

Organizations with the desire to improve business performance through optimizing risk and controls management, can not only reduce volatility and increase sustainability, but can enhance corporate reputation and build shareholder value.

Pressure to deliver a quantifiable return on investment in risk varies according to territory and sector. In achieving the step-change from value preservation to value creation, KPMG member firms can draw on our global experience and knowledge, as well as our cross-sectoral insight.

The evolution of these concepts and related topics are addressed in this research, commissioned by KPMG International from the Economist Intelligence Unit. It focuses on the key questions that today's global organizations ask of themselves and their advisers regarding risk and controls:

- How can we transform an expensive compliance obligation into a real business advantage?
- How can we deliver significant and quantifiable operational and financial value from the risk spend?
- How do we reconcile increased efficiency with increased risk and controls management?

It is only in answering these questions that organizations can progress from value protection and preservation to value creation.

This report aims to address the rapidly evolving risk environment with a specific focus on some of the key areas of risk and controls structures, barriers and challenges to be overcome, and areas of innovation.

It concludes by presenting a vision of leading practice in strategic enterprise-wide risk and controls management.

I trust you will find this report beneficial in supporting your own drive to embed a culture of excellence in risk and controls management and in unlocking the potential of value protection and enhancement in your organization.

Mike Nolan
Global Head of Internal Audit Services
KPMG International

Executive summary

The profile of risk management and internal controls has been rising steadily for several years, thanks to a potent combination of regulatory change, geopolitical instability, and the growing complexity of conducting global business. Companies have increased their levels of investment in this area and most expect to see this trend continue in the future.

As the risk and controls functions receive greater boardroom attention and become more deeply embedded in the organization, expectations of their aims and outputs are changing. Once largely focused on avoiding loss and complying with regulations, risk and controls are now increasingly required to show that they also add value – namely, that they make a measurable, positive contribution to the business.

This shift in focus requires companies to think differently about the design and scope of their risk management, internal audit and other controls functions. Adding value to the business typically means that these functions participate fully in broad strategic issues, such as mergers and acquisitions, as well as contributing to more focused business decisions, such as those related to product development. Risk management, in short, is increasingly seen as a partner to the operating business as well as a key strategic tool of the Board.

As part of its broad mandate to ensure that companies have the proper mechanisms in place to deal with the risks they face, internal audit is also becoming involved in value-creation activities. This means that, rather than being a function that looks predominantly backwards to analyze financial results, it is increasingly likely to play a forward-looking strategic role.

This research, which is based on a global survey of 435 senior professionals, conducted by the Economist Intelligence Unit, looks at how a variety of companies are redefining the roles and objectives of their risk and controls management. While it highlights that there is a gradual shift in the focus for risk and controls, it also reveals that there is still some way to go before the transition from scorekeeper to business partner is complete.

The main research findings include the following:

A variety of factors are changing the scope of risk and controls

The need for robust and effective risk and controls management has rarely been more pressing and companies are responding with increased investment

and attention to the relevant functions. Key factors that are driving this trend include a focus on risk and controls management by the board, regulatory pressures, cost and efficiency considerations and the emergence of new business risks. As they continue to seek market and geographic growth opportunities, senior executives are also calling on risk and controls professionals to contribute more substantively to strategic decisions.

Coordination is the key to success

A majority of respondents – 59 percent – say that coordination between risk management and internal audit is better now than it was three years ago. It is clear, however, that there is still some way to go, as only 31 percent of respondents say that they are successful at coordinating with other sources of assurance. To remedy this problem, some companies are opting for an integrated assurance approach, whereby sources of assurance coordinate their objectives across a common framework. This can help to reduce the duplication of tasks and increase efficiency at the same time as ensuring that risks are identified, assessed and managed.

Cosourcing of internal audit is becoming more widespread as companies require specialized skills

Respondents report that a shortage of resources is a significant barrier to effective risk and controls management, especially in the context of ever-widening responsibilities of the functions.
While wholesale outsourcing of internal audit remains unusual, 39 percent of companies say that they outsource some aspects of the function. A number of interviewees questioned for the report corroborate this, indicating that they would outsource specific tasks for which the skills do not exist in-house.

A limited awareness of risk remains a significant barrier

Despite progress being made in raising the profile of risk and controls and coordinating their activities more closely, an awareness and understanding of risk remains limited in many companies.
While companies are encouraging closer cooperation between risk management and individual business units in the hope that this will enable risk information and expertise to be fed more easily into investment decisions, business units need to be held to account.

Innovation points the way to greater effectiveness and efficiency

In order to increase the effectiveness of risk and controls and reduce costs, respondents report a strong appetite for the use of innovation and technology. In the next three years, 56 percent of respondents expect to implement controls transformation, a program of process and performance improvement that aligns controls more closely with the needs of the business. Other innovative approaches under consideration include continuous monitoring and auditing, which 43 percent intend to implement in the next three years, and enterprise risk management, which 42 percent expect to implement.

Risk and controls management is no longer confined to “keeping score”

Asked what would need to change for their risk and controls to meet the company’s goals more effectively, the most popular response was that it needs to have a more strategic focus, while the third most popular was that it needs to be more forward-looking. But while this trend towards risk and controls being more strategic in its outlook is certainly underway, there is some doubt among respondents that this objective will be met. Only 48 percent of respondents are confident that they will be able to ensure that their risk and controls are aligned with the strategy of the business over the next three years, and just 49 percent are confident that they will be able to apply their risk and controls management to improve business performance.
This suggest that, while there is an appetite for a shift in risk and controls to a more strategic role, the right tools, competencies an culture are not yet in place to ensure this transition.

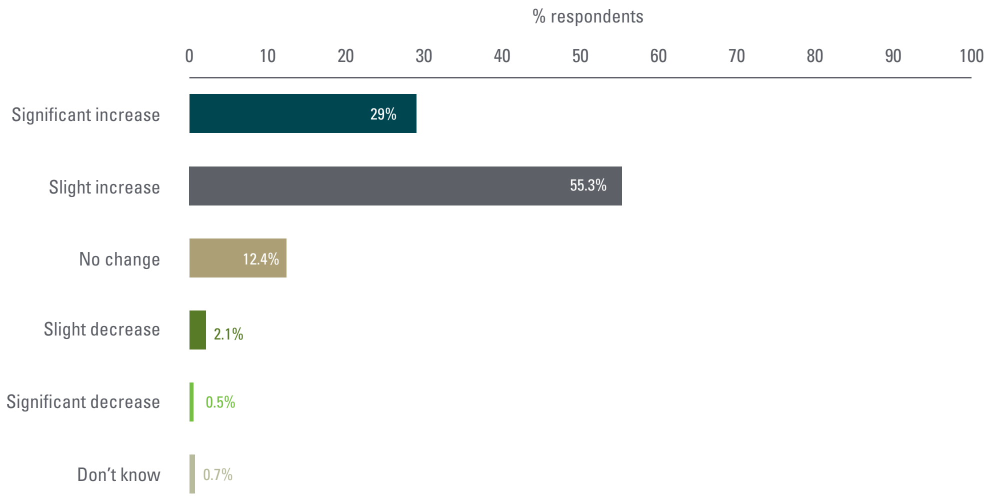
Economist Intelligence Unit

A changing risk environment

A growing appreciation of the complexity of risks facing organizations, combined with a broader awareness of the importance of risk in the business community, has ensured that the profile of risk and controls has rarely been higher. Companies across the board are increasing their investment in the risk and control functions and now expect them to perform a more diverse role than has traditionally been played.

> "There is an increasing sophistication in the business world around risk management matters, and the level of common understanding is rising."
>
> Andreas Grunbichler,
> Group Chief Risk Officer, Zurich Financial Services

Change to levels of investment and resources over the next three years



Source: Economist Intelligence Unit 2007

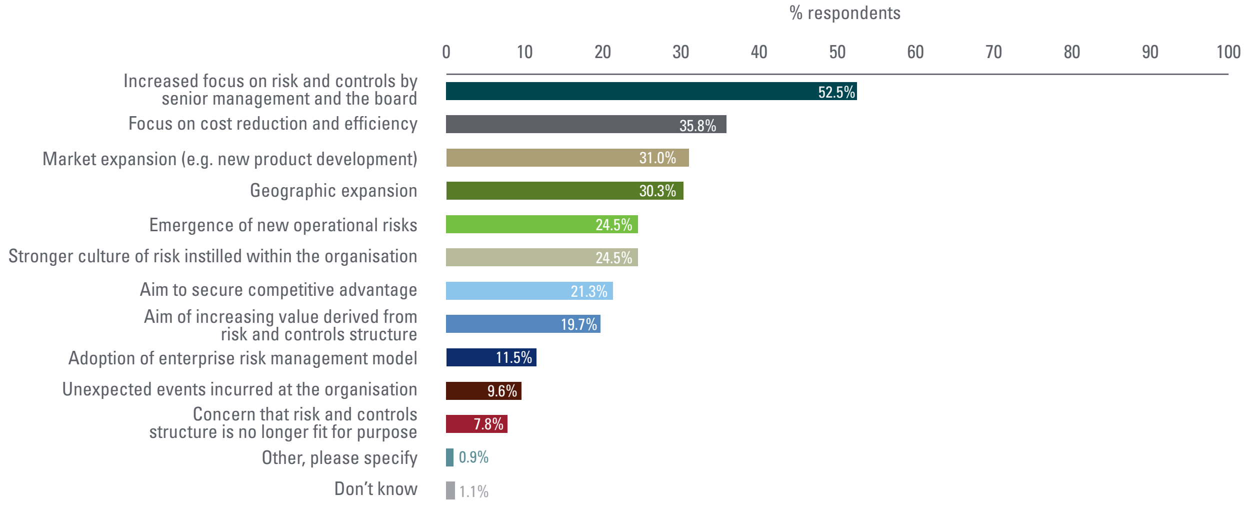
Influences from within the organization

The changes that are taking place in the risk and controls environment are being driven by a combination of internal and external factors. According to this survey, the most influential internal factor is the increased focus on risk and controls by senior management and the board, which is cited by 53 percent of respondents.

In identifying risk and controls as a management priority, senior executives set a "tone from the top" that encourages a stronger culture of risk to be instilled throughout the organization. Respondents recognize that this culture is becoming more embedded – it is cited by 25 percent as being a factor that is influencing the development of risk and controls – but as we shall see later in the report, there are barriers that continue to prevent deeper integration of risk with the overall business.

Internal factors influencing the development of risk and controls

Multiple responses allowed – to a maximum of three



Source: Economist Intelligence Unit 2007

The second most popular factor, cited by 35 percent of respondents, is a focus on cost and efficiency. As sources of assurance proliferate and as companies are required to manage a growing number and variety of risks, there is a danger that costs can escalate dramatically. Greater attention to cost and efficiency – whether through the use of technology, outsourcing or better management coordination – is therefore likely to remain high on the agenda.

The past few years have been characterized by a strong shareholder focus on growth, with the vast majority of companies seeking to introduce new products and services, and expand into new geographic markets. With market and geographic expansion the third and fourth most important factors driving investment in risk and controls, it is clear that the risk function is becoming more involved in these proactive business decisions – perhaps by evaluating the regulatory, credit or reputational risks associated with launching a new product.

"In the past, new products were introduced by product managers," says Mr. Grunbichler. "Now, before we go into market with a new product, we look at it from a risk management perspective, asking for example whether this product might shift the company's overall risk profile."

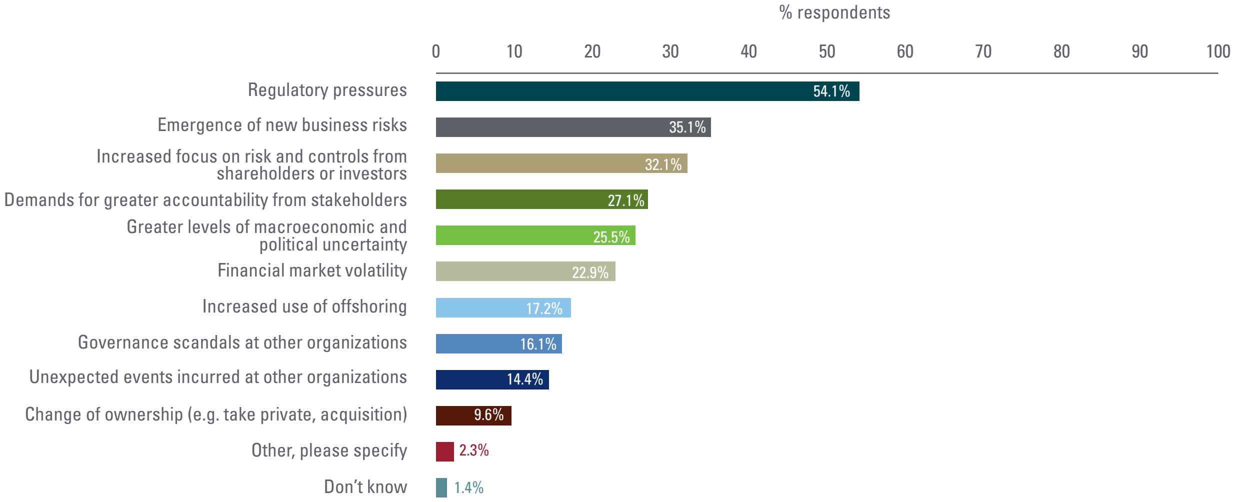
With emerging markets becoming an ever more important part of many companies' growth strategies, the risk and controls functions are even more likely to be called upon to contribute their views. The volatility, political uncertainty and immature regulatory environment that characterize many of these markets, greatly increase the complexity of conducting business, and it is only through the use of systematic risk management that these opportunities can be effectively evaluated.

Influences from the broader business environment

Turning to the external factors that are driving the development of risk and controls management, respondents cite regulatory pressures as providing the strongest impetus. It is clear from this that, whatever the shift in focus of risk and controls to a more strategic role, compliance with regulations will continue to remain a core activity for the functions.

External factors influencing the development of risk and controls

Multiple responses allowed – to a maximum of three



Source: Economist Intelligence Unit 2007

Trends such as globalization, the boom in outsourcing and the increasing reliance on technology have all created new risks for companies to manage, and this is a development that respondents recognize – the second most significant external factor driving the development of risk and controls is the emergence of new business risks, which is cited by 35 percent of respondents.

For example, greater supply chain complexity has made it much more difficult for companies to monitor the quality and business processes of their suppliers. This has been illustrated in recent months by a number of product recalls involving goods manufactured in China, including toys, toothpaste and dog food. If they are to reap the benefits of their lean and efficient supply chains, companies will need to be extremely vigilant for these new, and often very severe, risks that may lurk within their complex network of business relationships.

Dialogue with external stakeholders – whether shareholders, analysts or non-governmental organizations – is also seen as a factor that will influence the development of risk and controls. Around one-third of respondents cite increased focus from shareholders as being a factor, and 27 percent cite demands for greater accountability from stakeholders. This reflects a trend in recent years for much higher levels of shareholder activism across a broad range of topics, including executive compensation, environmental performance and corporate governance.

KPMG comment

The tao of risk and controls: future-proofing the organization

Historically, value preservation issues have driven the risk and controls agenda. Regulatory and compliance pressures as well as the tougher corporate governance regime demanded by regulations such as Sarbanes-Oxley, ‘J-SOX’, the EU’s 8th Company Law Directive and AS/NZ 4360.

However, major companies are beginning to realise that they are spending too much time observing processes and are not putting enough effort into business improvement. The driver now is to go beyond value preservation, (essentially a focus on controls), to value creation with its performance focus on cost reduction and enhanced efficiencies. This has the additional advantage of helping to deliver other intangible, but nevertheless real, benefits such as greater discipline in the decision-making process; greater confidence in the decisions reached; and achieving consensus in risk management.

By adopting an appropriate approach, business leaders can ensure that risk assessment makes a significant contribution to value creating activities such as finance transformation, mergers and acquisitions activity, post-merger integration, strategic sourcing and operational improvement. They will discover that risk assessments can be instrumental in achieving the all-important targets of improving risk awareness, reducing losses, improving performance and enhancing shareholder value.

The drivers for change however, are not merely internal. As management’s emphasis on risk and control grows so too does the interest of institutional investors and major risk ratings agencies such as Moody’s and Standard & Poor’s. The latter are now adopting new tougher evaluation criteria for enterprise wide risk management and are specifically assessing both an organization’s appetite for risk and its capacity to control it. This can be seen as an acknowledgment by the analysts of the tangible benefits and competitive advantage reported by those companies with clear risk and controls frameworks in place.

Senior management teams are likely to come under intensifying scrutiny to see whether they have conducted a robust risk assessment, whether they understand their exposure to risk over a designated period and what the critical factors are. The rigor of processes, management’s commitment and competence and the appropriateness of the framework will all be measured by the agencies and analysts alike. Such scrutiny will drive the need to get input from independent sources of risk advice as well as from the internal audit and risk management functions.

As appreciation of the complexity of risks grows, corporations will increasingly turn to enterprise risk management. Determining the key strategic objectives and identifying what factors can affect the achievement of these objectives is fundamental. A premium will therefore be placed on gauging the level of existing and potential threats and risk appetite. This can be achieved by aligning risk to strategy, and linking risk to the performance agenda and the organization’s key performance indicators (KPIs).

In the risk arena, leading edge corporations are also addressing the changing profile of risks. These organizations recognize that most current investment is concerned with financial risk whereas the greatest impact is from non-financial risks. While credit, market and financial risks are generally well-handled by organizations and reputation risk management is adequate, the processes for human capital risk, information technology risk and resilience-related risks (climate change, terrorism, pandemic) are generally weaker.

In the current climate, even minor losses that reflect a lack of control could have a significant impact in terms of reputation, regulatory investigation or a downgrading in credit rating that would greatly outweigh the financial risk.

Getting the structure right

As risk and internal controls assume a more central role in the management of today's organization, companies need to think carefully about the way in which they structure the risk and controls functions to ensure efficient operation and deliver maximum benefit.

"Companies have to make sure that the right decision processes are in place and that they have the right systems for reviewing matters in a timely manner,"

Thomas C Wilson,
Chief insurance Risk Officer, ING Group,

Large organizations tend to use a variety of sources of assurance, beginning with line managers and facilities managers, rising through the ranks to central risk managers, quality assurance managers, financial and accounting managers and internal audit professionals, and culminating with board-level committees overseeing risk management and controls. Each is designed to provide a line of defense, ensuring that risks are effectively identified, measured, monitored and mitigated.

Coordination is a key to success

Having in place a strong set of defenses is crucial, but equally important is the need to coordinate these activities. Today, many companies have a wide range of sources of assurance, and the danger is that these entities can duplicate work and create an unnecessary cost burden for the business. A "silo" approach to risk and controls also increases the likelihood that knowledge is not shared effectively and that internal turf conflicts arise.

Companies in the survey report they are making progress in improving coordination. A majority of respondents – 59 percent – say that coordination between risk management and internal audit is better now than it was three years ago. They are also confident in their ability to report internally on risk and controls, with 59 percent considering themselves to be successful in this area.

However, this improvement in coordination does appear to be rising from a fairly low base. Asked about their effectiveness in areas of risk and controls management, just 31 percent of respondents felt they were successful at coordinating with other sources of assurance.

Approaches from the corporate world

The way in which this coordination takes place varies from company to company. In some cases, risk management and internal audit report to the same manager. In other cases, risk and controls are organizationally separate, but develop joint databases, use common terminology and coordinate their efforts to avoid over-burdening operating units. According to a third approach, internal audit is set up explicitly as a second-check to risk management and is instructed to develop its own, separate risk management model.

Office Depot, a U.S. supplier of office products, offers an example of coordinating risk and controls by having both report to the same executive. The two units were combined in early 2005, when Chief Compliance Officer Robert Brewer was promoted to his current role. "We wanted a place where risk is looked at in a coordinated way," he explains. At around the same time, the department took on the task of implementing a company-wide enterprise risk management (ERM) program. He assigned that project to internal audit rather than risk management, because it had the proper skills in place.

Qantas, the Australian airline, adopts a similar approach, with the internal audit unit residing within the group risk and assurance segment. Although internal audit has a dotted reporting line to the chief executive and the board audit committee, the department reports administratively to the Chief Risk Officer, Rob Kella. "I was previously head of internal audit," he explains, "and had a dotted line reporting relationship to the board audit committee. We maintain that relationship, but internal audit now reports administratively to me."

Zurich Financial Services offers an example of a company that keeps risk management and internal audit separate, but ensures that they coordinate their work. It introduced an integrated assurance project, under which the two departments agreed on common definitions of risk terms and built a joint database, called a risk and controls inventory. This provides an overview of risks in each line of business, including the steps taken to improve each product's risk profile. "The focus of the inventory is not just on measuring and controlling risk, but on adding value by creating more profitable products," says Mr. Grunbichler.

Barclays, a British bank, uses a hybrid structure, under which internal audit both works with and second-checks the activities of risk management. Mark Carawan, Internal Audit Director at the company, describes how the arrangement works. "The internal audit function evaluates whether management has identified all the relevant risks," he says. "To do this we develop our own risk universe, so that we do not assume that management has necessarily identified the complete risk universe. We then compare and contrast our universe with that of group risk, as well as other control functions, also taking into consideration reference points external to the Group."

Alongside this independent role for internal audit, Dr Carawan says that he also works closely with the Chief Risk Officer, attending both board risk and board audit committee meetings together and focusing management attention on the expected standards of a good risk and controls system. "Our joint task is to drive adherence to our risk framework and control objectives," he says. "Both of us put first the interests of the board and, ultimately, the shareholder, in this regard, ahead of the line business manager."

At BP plc (formerly British Petroleum), an energy company, internal audit reviews risk management, providing a third line of defense after that provided by line managers and the central planning function. "My audit role is to examine the health of our firm, including the presence of adequate governance, risk management and control processes," says Ian Rushby, Group Vice-President and General Auditor at the company." I report to board committees concerning the examination and testing of controls processes. My activity includes examining and certifying ethical conduct, brand management, pricing and many other activities which are themselves responses to risks."

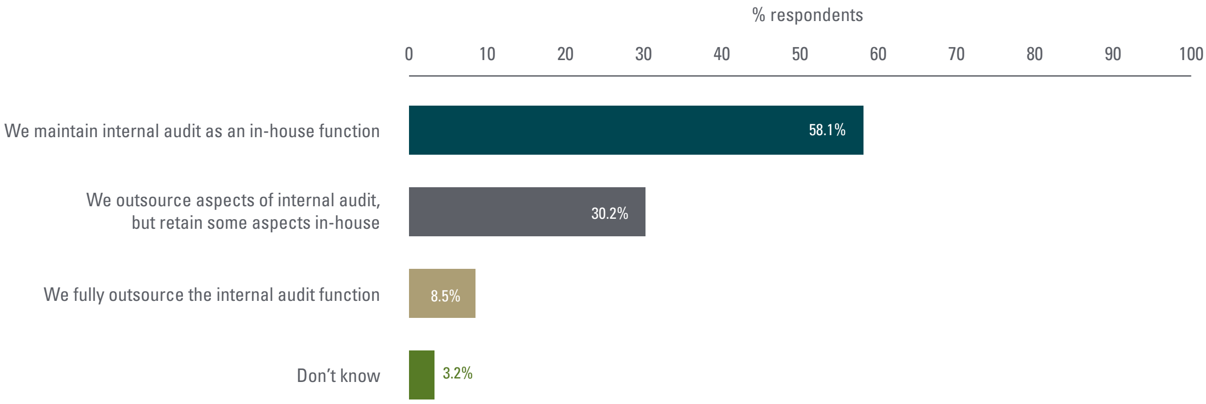
Outsourcing and the resources challenge

The expanding scope of activities being conducted by risk and controls is naturally fueling demand for people with the requisite skills. In many companies, these skills are in short supply – either because insufficient resources are allocated to the functions, or because there is a lack of suitable candidates for recruitment. The survey suggests that the former is the more likely problem, with a shortage of resources seen as the second most significant barrier to effective risk and controls management, after a limited awareness and culture of risk. Shortage of available talent comes much further down the list in seventh place.

Companies are responding to the resources challenge with campaigns to recruit risk and audit professionals, particularly those skilled in using technology to support risk and controls, and those with experience in coordinating various sources of assurance. Some companies are also opting to outsource or cosource parts of these functions, in order to tap into specialized skills that are not available in-house.

Among the survey respondents, 39 percent outsource at least some aspects of internal audit. Those that do adopt this approach tend to be the smaller companies in the sample. This is likely to be because they lack the resources of their larger competitors and do not have the required skills in-house. Financial services firms are less likely than the overall sample to outsource internal audit. This could be because risk is so deeply embedded in the nature of the product that internal audit is seen as a core competency.

Outsourcing and cosourcing of internal audit



Source: Economist Intelligence Unit 2007

This is a view that resonates with Dr. Carawan, who says that, in Barclays at least, internal audit will not be a candidate for wholesale outsourcing. He adds, however, that cosourcing might be appropriate under some circumstances. "If I only need particular skills for two weeks a year and do not believe I could utilize efficiently the highest competence available in the market all year round," he explains, "then I am inclined to look at a cosourcing arrangement with a specialist consulting, auditing or actuarial firm."

Mr. Brewer at Office Depot has taken a similar approach. Although his company does not outsource its internal audit, he says that it may from time to time seek an external service provider to help with very specific skills. This was the case recently, when Mr. Brewer brought in a team to help with an audit in China, principally to deal with language issues.

Benefits and drawbacks of outsourcing

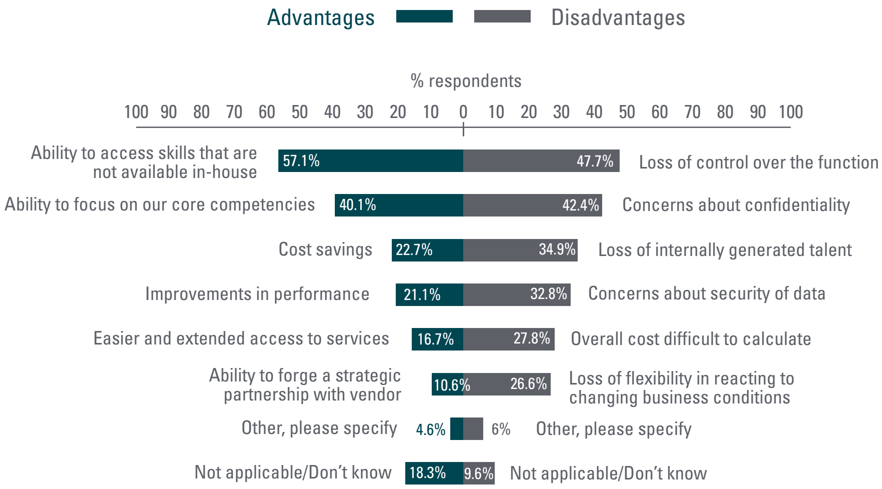
The ability to access skills that are not available in-house is also seen as the main benefit of outsourcing among survey respondents, followed by the ability to focus on core competencies (presumably selected by those respondents who do not see internal audit as a core competency).

In some cases, cost factors will also be a consideration for outsourcing or cosourcing – indeed, this is the third most widely cited benefit among respondents. As the market for outsourcing and cosourcing of internal audit matures, providers will be able to offer greater economies of scale and this is likely to make the approach more attractive to potential customers, especially given the rising costs that many are facing.

The drawbacks to outsourcing, however, are also clear. The main concerns among respondents are that it could diminish control over the function and raise confidentiality concerns. Moreover, internal audit is increasingly seen as a training ground for future senior executives, so there are talent development issues to consider.

Which of the following would you consider to be the main advantages and disadvantages of outsourcing your internal audit function?

Multiple responses allowed



Source: Economist Intelligence Unit 2007

KPMG comment

Talent without frontiers: leadership and collaboration

If organizations are to achieve optimum performance then a key objective must be the creation of a combined risk and assurance approach covering finance, operations and strategy. This can help to ensure collaboration in establishing sound risk and controls frameworks, specifically in embedding a risk culture across the organization. That means integrating risk management activities with the various assurance functions that constitute the three lines of defense: the first line – operational management; the second line – oversight functions such as health and safety; and the third line – independent assurance providers such as internal audit.

It is imperative that this combined assurance strategy is properly resourced to ensure that the essential skill-sets and competences are in place. If collaboration is to work effectively then assurance skills must be at the strategic and not just process level. In fact, skills development is crucial, as the step-change from value preservation to value creation is often impeded by a lack of core skills in the risk arena.

In terms of culture there has to be buy-in and knowledge at the top otherwise coordination will not succeed further down the organization. The most successful corporations will excel at 'soft' communications and collaboration skills as well as the hard process-driven and technical specialities.

Since organizations tend to be structured according to function or geography and not risk, the highest risks may in fact, be no-one's responsibility. Indeed, strategic risk is often not identified, and thus can be the source of nasty surprises. If CEOs are to achieve progress towards the ultimate goal of so-called silent-running in risk and controls management, then they need to embed processes that are sufficiently sophisticated, robust and adaptable to meet a new generation of threats and challenges. Typically this will involve greater coordination and integration across the enterprise, to avoid duplication and ensure that no strategic risks are left exposed.

Working towards a single enterprise-wide view of risk is paramount. Properly implemented, such an enterprise-wide strategy can act as the much needed "glue" that delivers performance-based risk management and thus, a reward for the risk management investment.

Internal audit should also play an important role in the combined risk and assurance framework but again this role demands an appropriate level of skills and expertise. Gaps in the skill-set can be overcome through cosourcing, with trusted independent advisers able to develop the necessary routines, processes, data extraction protocols and risk mapping required by the organization. Cosourcing's great advantage lies in helping to ensure that the right balance of skills is available in the right place at the right time to support the successful implementation of the combined assurance and risk strategy. A range of specialist skills, is made available immediately to the organization at the critical point without the need for permanent, potentially costly in–house capabilities. It also provides corporations with the opportunity to access these resources in the geographical locations where need is identified.

In other words, cosourcing can accelerate the pace at which the efficiencies of a combined risk and assurance strategy start to contribute to the organization. Working together in this way provides access to training of in-house teams and knowledge sharing as well as the opportunity to benefit from specific outside experience in key areas where it is lacking internally.

Barriers and challenges

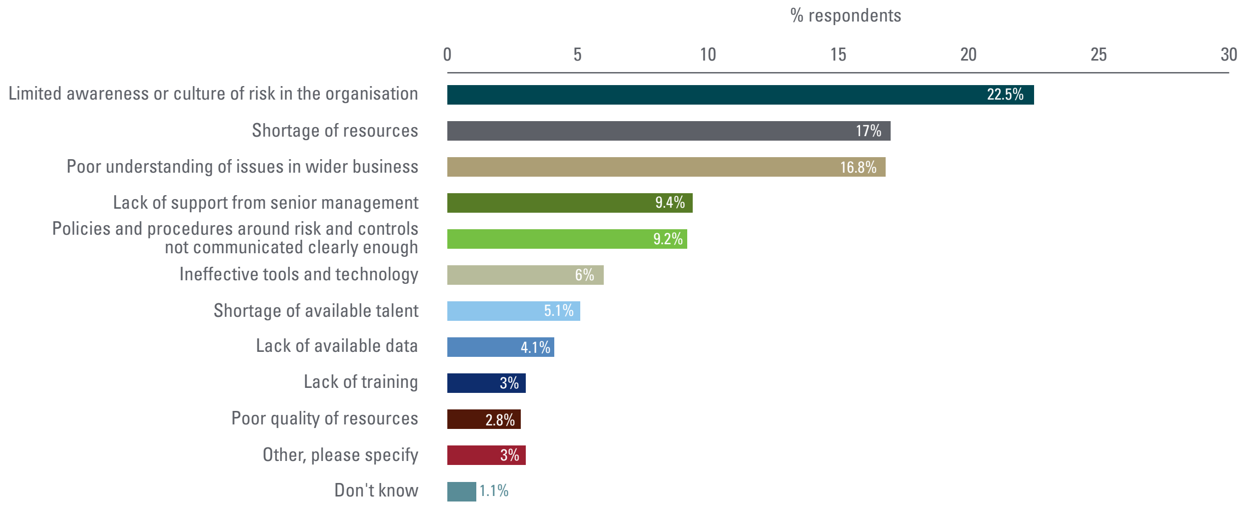
There is a growing realization that, in order to contribute more effectively to a company's strategy development, risk and controls management needs to be more deeply embedded in corporate culture. The survey suggests, however, that there is still some way to go before this objective will be achieved. According to respondents, the biggest barrier to effective risk and controls management is a limited awareness of risk. In addition, the third biggest barrier is a poor understanding of risk issues in the wider business.

"Only if risk and assurance becomes part of the everyday language of business management, can it act as the catalyst for corporate transformation and optimum performance."

KPMG

Barriers to effective risk and controls

Multiple responses allowed



Source: Economist Intelligence Unit 2007

Promotion of risk awareness and "culture"

In order to overcome these barriers, the step that respondents are most likely to take is to raise the profile of risk management in their business. Mr. Grunbichler of Zurich Financial Services considers this activity to be an ongoing communications process. "Internally, we appreciate that it is not enough to send out announcements of the latest changes in risk limits," he explains. "We have to create awareness, train people in the business units and show them how they are affected in their area by different risk types."

He adds that this role of promoting risk awareness also extends to communication with external stakeholders. "We advise our commercial customers on enterprise risk management, how various risks might impact profit and loss, and what hedging strategies should be considered."

Many of the interviewees questioned for this report stress the need for a risk "culture" to permeate the organization. Although difficult to define and measure, the implication seems to be that a consideration of risk needs to be part of every business decision, and that managers in business units should think proactively in risk terms rather than relying on a central risk function to impose restrictions as a defensive measure. Efforts to coordinate risk activities, as described in the previous section, should accelerate this process by helping to break down the silo-based approach to risk and controls.

The dangers of an over-sensitivity to risk

While there is widespread recognition of the need to increase awareness of risk, companies must also take care to prevent an internal atmosphere of excessive caution. "There is a danger of making people so sensitive to risk that they are afraid to take any decisions, including reasonable ones," says Mr. Rushby. "A focus on risk management can bring with it more and more surveillance and intrusion, and that is not always productive."

A further danger is that central risk management may set one-size-fits-all standards for operating units with very different risk profiles. The challenge, therefore, is for companies to balance the need for company-wide standards with the requirement for risk management to be tailored to each business.

Lessons from financial and non-financial companies

Here, there are notable differences between financial services companies and those in other sectors. In the former, because risk is embedded in the product itself, a top-down approach to risk with company-wide standards is more likely. In the latter, greater responsibility for risk tends to be devolved to business units, often because those units face very specific challenges or threats.

The approach taken by Zurich Financial Services illustrates this greater emphasis on maintaining a consistent approach to measuring and controlling risk in financial institutions. "We try for consistency across the group in measuring risk," says Mr. Grunbichler. "Insurers are now looking at ways to manage the total risk exposure of the organization, for example by introducing consistency and rigor in the way we evaluate and invest reserves."

Meanwhile at Qantas, the responsibility for risk is largely decentralized to the business units but a group risk management function maintains oversight. "Our role at the corporate center is to help set group policy and monitor how well they are managing their risks," says Mr. Kella. "We look at their processes and report on the outcomes. But otherwise, we want the segments to own their own risks and be accountable for them. Segment executives are measured on various financial and non-financial results, and how well they manage risk is effectively incorporated within those measures."

BP adopts a similar approach, with group standards determined for areas such as financial reporting and ethical standards, and an overall risk tolerance set for the company and communicated to each business unit. The heads of business units then operate within these boundaries, but have some latitude to develop their own responses to risks that are specific to the nature of their operation.

"Part of my job is to balance the differentiated risk management strategies of business units against the indivisibility of reputation risks to BP as a whole," says Mr. Rushby. "We try to use a combination of principles and rules to achieve overall risk management, allowing variation in risk approaches among the different divisions where appropriate."

KPMG comment

Cultural revolutionaries: corporate regime change and the new risk mindset

Business must recognize that all the sophisticated processes and tools in the world will not achieve the objectives of value protection and enhancement unless there is a genuine enterprise-wide risk management culture. Only if risk and assurance becomes part of the everyday language of business management, can it act as the catalyst for corporate transformation and optimum performance. Failure to set and embed the risk appetite can lead to the organization becoming overly risk-averse or too keen to intervene and minimize risk.

Leading edge practitioners are embracing fundamental changes to culture and behaviors across the entire corporation. Culturally, the need for a common language and a shared understanding of the philosophy regarding risk is paramount. This directly addresses the all too common ‘silo’ issue, which can lead to conflicting agendas, duplication of effort and undermining of accountability.

To be effective there is a need to get the fundamentals right, embedding risk and controls culture in the business and improving processes, before moving up the value chain to more sophisticated risk and controls applications. Replacing the silo mentality with a single view of risk that is understood across the organization is fundamental to getting risk appetite and tolerance right.

Paradoxically many corporations today suffer from too much risk management. International companies are faced with a plethora of processes from those required by Basel II, Sarbanes-Oxley and Turnbull to AS/NZ 4360, ‘J-SOX’ and the new EU 8th Company Law Directive. This proliferation of different frameworks can lead to duplication of controls and assurance activities and reduced clarity on risk appetite and tolerance on an enterprise-wide basis.

Moving towards an integrated single view would help to clear one of the primary barriers to effective implementation. There is a danger of developing bolt-on risk management processes that are disconnected, or indeed incompatible, with existing oversight functions. However this can be addressed by putting in place a proper structure. Appropriate allocation of accountability – who owns the risks, how effectively they are currently being managed, and whether the risks are being monitored – is vital to the successful deployment of processes and frameworks.

Risk tolerance is very much a journey rather than an event. It can change constantly and must be reviewed regularly to ensure that appetite keeps pace with shifting trends in the business environment. But in order to achieve value from enterprise risk management, the board must consider whether the investment is balanced. The danger is to invest in known risks and ignore less well-known risks which have not been identified.

The challenges can be categorized as step changes in a number of approaches. The organization must progress from a project-oriented view of risk and controls to a holistic view, with the process becoming dynamic and integrated rather than isolated.

The link between risk appetite and decision-making is becoming increasingly important to attain sufficient, sustainable, and predictable growth at the corporate as well as business unit levels. Risk appetite establishes the baseline of what is “too much” or “too little” risk for the organization to assume and the acceptable and non-acceptable sources of that volatility. It can generally be defined as the level of variability in results that an organization is prepared to accept in support of stated objectives. As such, deep and enterprise-wide risk assessment is one of the keys to achieving the transformation of risk and controls management from a defensive technique for preserving value to a strategic foundation for creating value.

Boards are slowly becoming conscious of the connection between good risk management, better financial performance and stronger corporate reputation. The next step is for them to focus more closely on the wider benefits of fully integrating risk management into corporate decision-making, and on the tools available to facilitate this process.

Innovation in risk and controls

The greater demands being placed on risk and controls mean that many companies are allocating greater resources and expenditure to these functions. While this is prudent given the complexity and severity of risks they face, more forward-looking companies are now seeking innovative ways of increasing the efficiency of their risk and controls management to rein in costs and ensure that they get more "bang for their buck".

> "In their perennial quest for competitive advantage, organizations are actively seeking out innovative approaches"
>
> KPMG

Innovation is the key to efficiency

When asked about the steps they are taking to overcome barriers to effective risk and controls management, the second most popular response, behind a higher profile for risk and controls, is the use of a more innovative approach to the functions. This is closely followed in third place by the need for greater reliance on technology. Among the methods gaining popularity are continuous monitoring and auditing, controls transformation, enterprise risk management and the use of executive dashboards (see box).

Innovations in risk and controls management: definitions

Continuous monitoring and auditing: The ability to review and report on business information in real-time or near real-time. This eliminates the traditional gap between the completion of fieldwork and the issue of an audit report and, implemented correctly, greatly enhances the decision-making ability of management.

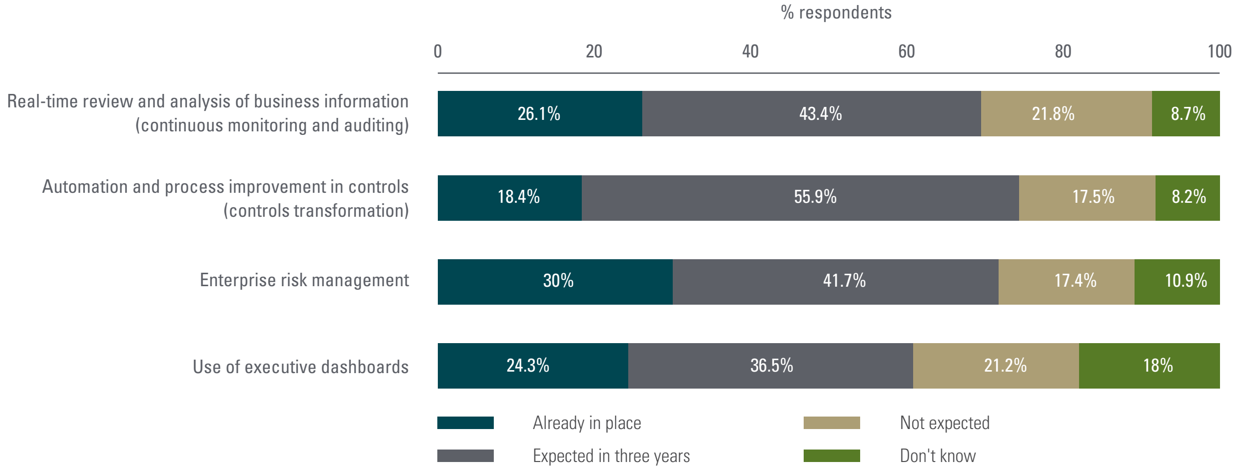
Controls transformation: A program of process and performance improvement of controls to help the function to become more closely aligned with the needs of the business.

Enterprise risk management: An organization-wide framework for risk management that aligns risk and business strategy, and helps to identify and manage enterprise-wide risks.

Executive dashboards: A business intelligence technology that provides managers with up-to-date information and alerts on a range of key indicators. These dashboards are sometimes updated as often as three or four times a day and are intended to help managers spot emerging opportunities as well as risks.

There is clearly a strong appetite among the survey respondents for these innovations. In the case of all four, the majority of respondents have either implemented them already or plan to do so in the next three years. The most established is enterprise risk management, which is already up and running in 30 percent of companies surveyed, while controls transformation is seen as the “must-have” innovation, with 56 percent intending to implement it over the next three years.

Innovations in risk and controls: implemented and planned



Source: Economist Intelligence Unit 2007

The benefits of enterprise risk management

At Office Depot, a key objective of implementing ERM was to encourage managers to consider risk in a more methodical way. "The program brought a disciplined approach to evaluating risk," explains Mr. Brewer. "We wanted to make sure that, when people within the company deal with risk, those issues are not just background matters, but rather are approached in a systematic fashion."

Managers at the company initially resisted the data gathering and reporting requirements of enterprise risk management but eventually saw the benefits of the approach. "There was some pushback," he explains, "but later we got positive feedback. People told us the ERM process caused them to consider risks that they hadn't thought about before."

Survey respondents who have implemented ERM programs report greater success rates in risk and controls activities than the sample as a whole. For example, they consider themselves more successful at coordinating various sources of assurance, reporting internally, reporting externally, and using technology to support risk and controls. They also report greater confidence that risk management can improve business performance.

Innovation in risk measurement

Beyond these four innovations, companies are also looking at improving the way in which they measure and aggregate risks. Financial companies have taken the lead in this area – prompted in part by regulatory changes such as Basel II for banks and Solvency II for European insurers, but propelled mainly by the nature of the products that they sell.

"Without good risk management, a financial services company is unlikely to last very long," says Mr. Wilson of ING. "It would be like a car company trying to build cars without having a factory floor."

Financial services institutions have developed sophisticated metrics, including measures of risk capital and economic capital, to provide greater transparency around the risks they take. Allianz, for example, looks at the level of capital at risk within each business unit. "Together with our actuarial division, we put together minimum standards for product profitability," says Raj Singh, Chief Risk Officer at the company. "The result is that we have transparency on products and how profitable they are before they are introduced in the market. Although it's not something that Allianz generally does, a business might decide to issue a product at a loss to build market share. That's fine, but at least they are aware they are offering it at a loss."

At Qantas, an important priority for Mr. Kella is re-engineering core risk and assurance processes and strengthening the data collection and aggregation of risk information to provide an enhanced picture of the overall risks the company faces. "We are automating a lot of our data collection," he explains. "The purpose is to create a platform that tracks various results, including performance against certain key performance and risk indicators. We are developing key risk indicators that function in the same way as performance indicators. These are intended to provide an early warning signal in case something is out of the ordinary."

KPMG comment

Corporate alchemy: transformation through innovation

In their perennial quest for competitive advantage, organizations are actively seeking out innovative approaches, and CEOs and their boards have substantially bought into the business case for enhanced risk and controls. Keen to focus on practical applications, they are confronted with a range of tools and processes.

Currently two of the most powerful innovation tools are controls transformation and continuous auditing/monitoring, both of which are value creating rather than merely value-preserving.

The guiding principle behind controls transformation is to focus on controls less as a compliance issue and more as a valuable process improvement and cost reduction strategy. With organizations being compelled to ask more from the business around improved risk and controls management, the focus is no longer on just on whether controls are being performed effectively but whether the right level control is being performed cost effectively and efficiently. Companies can move their controls from merely effective to efficient and even optimum.

This includes rationalizing the number of controls to avoid duplication and eliminate unnecessary effort; simplifying controls in conjunction with process improvement; taking a portfolio view of automated versus manual controls; and achieving the right balance between preventive and detective controls. Effective manual controls are dependent upon the allocation of adequate resources and a consistent focus. As a result, they carry a greater risk of non-performance as well as a tendency to drive costs upward. In contrast, innovation in the area of automated controls, can help reduce costs, better manage risks, and provide more predictive business insights. Essentially, the shift needs to be from manual detective controls to automated preventative controls.

Continuous auditing and monitoring are mechanisms for providing cost effective, ongoing assurance over control effectiveness. The topic of continuous auditing and monitoring has been discussed for many years – however, two recent developments have significantly accelerated the implementation of continuous auditing and monitoring. The first is the advancements in technology – many software vendors have released tools that can analyze significant amounts of data in a real time, or close to real time basis. The second is the increasing demands of the regulatory environment. Companies are constantly searching for ways to increase the cost effectiveness and efficiency of their controls monitoring.

Continuous monitoring provides an efficient and effective process which drives an overall enhanced control environment, a potential reduction in controls and monitoring costs, and, over time, process improvements and enhanced business intelligence. Specific benefits derived from a continuous monitoring program include automating fraud risk analysis and management, automating the monitoring of key controls, identifying and correcting errors much earlier in the process, and reducing the re-work associated with errors.

Continuous auditing is being used by organizations to improve efficiency around control testing. Properly applied it can provide greater coverage for the same or reduced level of input, can identify control breakdowns as they occur (allowing actions to be taken immediately to address them), and raise the overall profile of internal audit within the organization. Internal audit is often the "champion" within an organization for the implementation of continuous auditing and monitoring, but once the analytics are established and the exception reports developed within a particular area, management quickly recognizes the value and, as a result, they begin to embed the continuous control monitoring directly into their operations.

On-going innovation is needed if corporations are to maintain the rate of progress made in value protection and enhancement. Continuous auditing/monitoring and controls transformation are emerging as the most popular and effective solutions, but they only work if the right combination of skills and resources are available to make it happen. Cosourcing can be a high value proposition for organizations. They can benefit from leveraging their partner's experience of tools and implementation as well as their data analysis capabilities. The result is valuable, actionable information that can make the goal of value protection and enhancement a reality.

Vision for the future

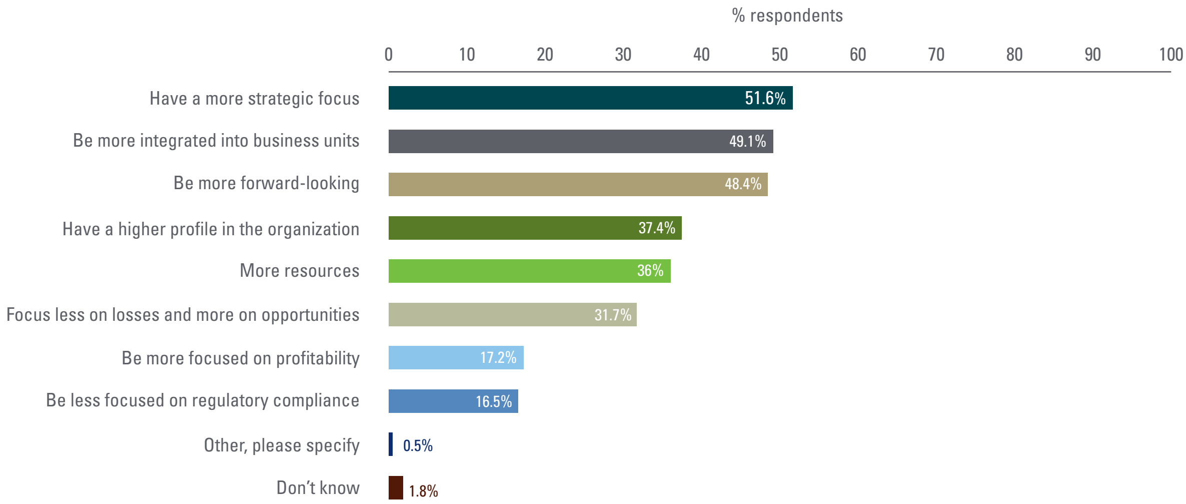
As companies look to the future for their risk and controls management, there is widespread recognition that the functions need to be more strategic and forward-looking in order to achieve their goals. Respondents also note that one of the most important objectives for them over the next three years will be to apply their risk and controls to improve business performance.

“The watchwords going forward are communication, coordination and collaboration.”

KPMG

Changes required for risk and controls to function more effectively

Multiple responses allowed



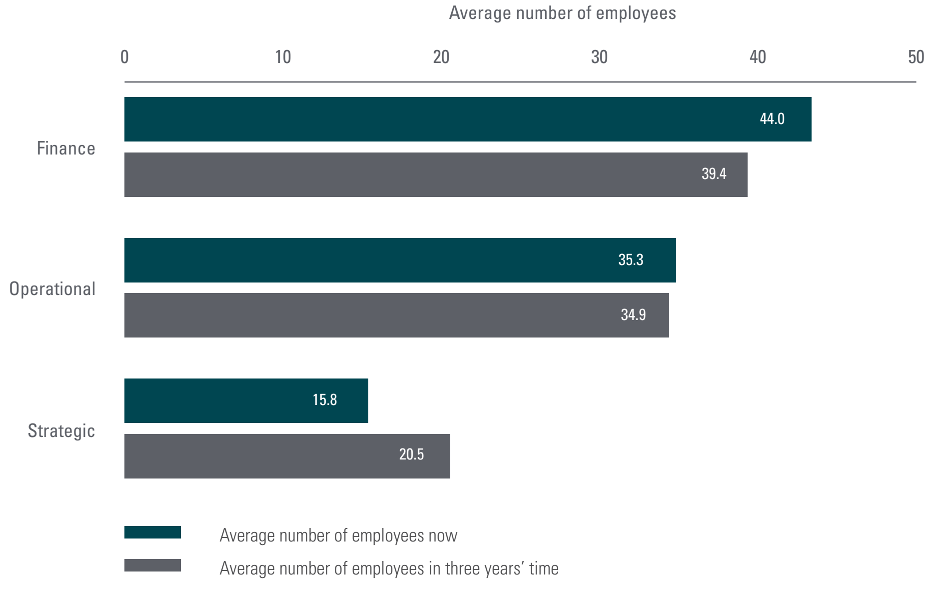
Source: Economist Intelligence Unit 2007

From "keeping score" to value creation

These findings reflect a trend in progressive organizations, whereby risk and controls are no longer confined to keeping score, complying with regulations and limiting losses. Increasingly, risk and controls professionals are also required to take a proactive approach, applying their experience to add value to the business.

Accordingly, risk and controls executives are shifting their emphasis from traditional activities to strategic, value-creating roles, and expect this change to continue in future. In the survey, the average number of risk and controls professionals whose main focus is strategic development was seen as rising over the next three years, while those with a primary focus on finance was seen as likely to decrease.

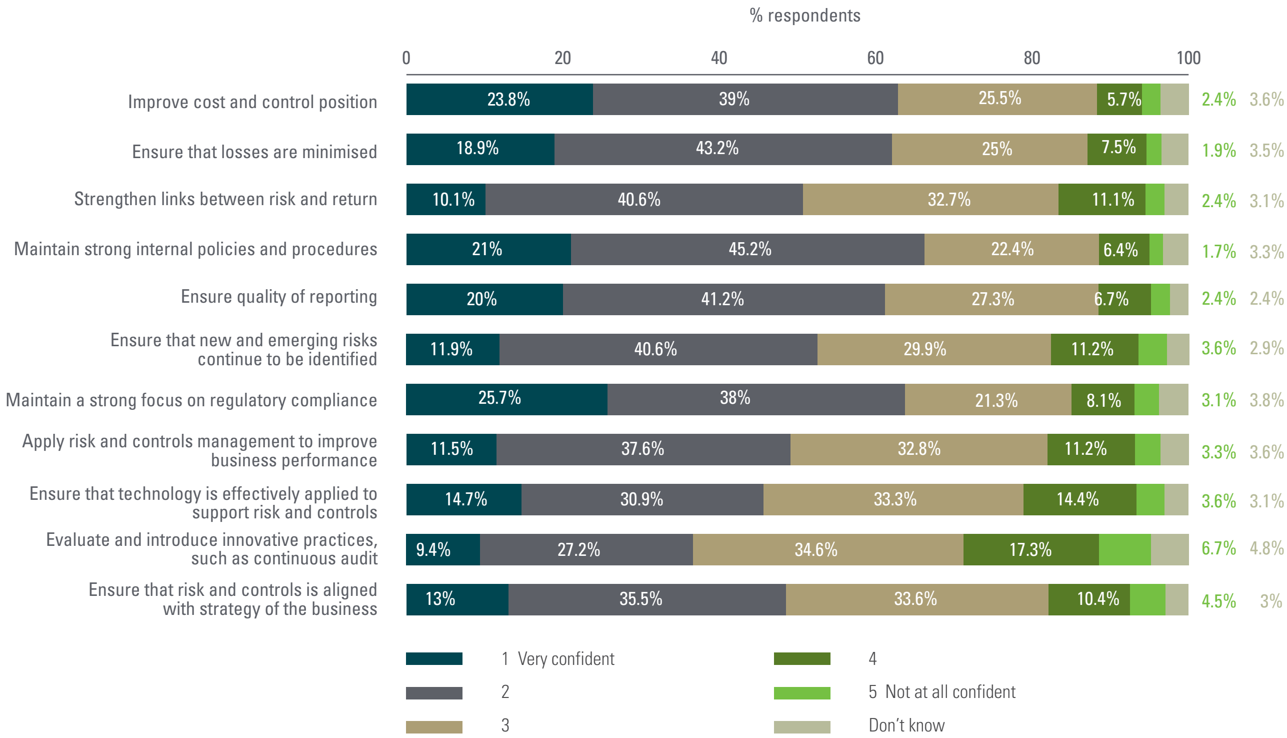
Number of employees with primary responsibility in the following areas



Source: Economist Intelligence Unit 2007

At present, the process of risk and controls assuming a more strategic role is at a fairly early stage, and respondents are divided as to whether this objective will be achieved any time soon. Just 49 percent are confident that they can achieve the goal of applying risk and controls to improve business performance over the next three years and only 48 percent are confident that their risk and controls management can be aligned with the strategy of the business. They are much more confident in their ability to achieve the more traditional roles of risk and controls, such as regulatory compliance and maintaining strong policies and internal controls.

Confidence levels that the organization can achieve its goals



Source: Economist Intelligence Unit 2007

To rise to the challenge of this more strategic role, the risk and controls functions are changing the way they work. Among other things, they are developing tools to make risk management a more effective participant in strategic planning and value creation. "Controlling risk is where it starts," says Mr. Grunbichler, "but going forward, risk management will also have a strong link into the decision-making process and create new business opportunities."

Mr. Wilson of ING cites the example of communication with external stakeholders as an area in which risk management can add value. "Risk management can articulate a picture to stakeholders, such as equity analysts and rating agencies, so that they understand clearly why people should buy our products, or hold our shares or debt instruments."

Mr. Kella points to an example where risk management has contributed to the evaluation of risk for new investments at Qantas. When the company launched a low-cost airline in Asia and invested in another carrier in the region, risk management personnel were closely involved in the consideration of the strategic, operational and financial risks associated with these investments.

For Mr. Grunbichler, collaboration between risk management and individual product teams is seen as a fruitful area. "I have tried to get risk management team members involved with business units," he explains. "Their role is to assess products in terms of their risk impact, but also to add ideas for product features. I would say risk management has twin peaks: the risk-control function and the value-creation function."

In search of an overall picture of risk

Beyond the vision of risk and controls as value-creating activities, there is broad agreement among interviewees and survey respondents that there is a need for deeper integration of risk into business units. When asked what would need to change for their risk and controls to be more effective, the second most popular response, cited by 49 percent of respondents, is that they need to be more integrated into business units.

"The challenge for us is to integrate our risk assessments at the business unit level into a more powerful risk picture for the group," says Mr. Rushby at BP. "Right now, it is more like an impressionistic set of dots of paint, rather than an overall picture. Our challenge is to draw a picture from the various dots we have at the business unit level."

Mr. Brewer at Office Depot agrees, and suggests that risk and controls will become further embedded into operations. "Business units are now doing a good self-assessment of how well they manage and mitigate risk," he says. "This should further evolve to the point where the business units feel that they have total ownership of risk. At the moment, I think their view is that I have ownership."

These views echo the earlier point made in the report that, to be more effective, risk and controls need to be better coordinated. By presenting a united front, perhaps in the form of an "integrated assurance" model, it becomes easier for risk and controls to collaborate with the broader business and provide a holistic view of risk to support its objectives.

A focus on the "softer" side of risk and controls

Recent years have seen rapid development in the quantification of key risks, but our interviewees suggest that future developments may see a greater focus on the qualitative side of the picture. This could include an examination of risks associated with corporate decision-making processes. "The current focus is on the softer side of risk – for example, the risk that the decision-making process is not optimal," says Mr. Wilson of ING. "This is not about the hard facts presented to decision-makers, but rather about the whole set-up for making decisions, whether the right people are involved and whether the right questions are being asked."

Some companies are already tracking such risks. Allianz has a system in place to ensure that non-quantifiable risks are not ignored, says Mr. Singh "In addition to quantifiable risks, we track qualitative risks, such as whether the company is selling its products properly and whether it is facing legal or regulatory risks."

In articulating their vision of the future for risk and controls, it is clear that survey respondents and interviewees have a variety of objectives. The desire to improve the effectiveness of risk and controls, serve as a strategic partner to the business and more deeply embed a culture of risk – all in as cost-effective a way as possible – is certainly ambitious. But with better coordination between sources of assurance, a more innovative approach to risk and controls, and a stronger partnership with the business, it should be possible.


KPMG comment

The shape of things to come: Beyond the financial agenda

A new dynamism is evident in the risk appetite of global organizations. They are growing in confidence in their ability to align risk and controls management with strategy. Risk is no longer seen as reactive and defensive but is becoming proactive and creative.

The risk and controls relationship between the business unit and the corporate center is in flux both culturally and structurally. As this strategic shift gains momentum, the watchwords going forward are communication, coordination and collaboration – both internally and through cosourcing arrangements with trusted advisers and stakeholders.

No longer are organizations constrained by a mindset that dictates – if it can't be measured, it doesn't exist. No longer is risk and controls synonymous only with finance. As leading edge corporations move beyond Sarbanes-Oxley and other regulatory and compliance regimes, the outlook is more strategic, more performance related and more enterprise wide. Above all, the focus will become qualitative as the true impact of non-financial risk on areas such as reputation, brand equity and Corporate Social Responsibility (CSR) is understood.

Innovative organizations will see risk and controls become part of their corporate DNA. Business units will increasingly take ownership of their risk so that they have autonomy and exploit their keener understanding of their own specialist areas. A collaborative approach will exist between business units and the corporate center, sharing information and analysis but not constrained by the rigidity of an unwieldy, hierarchical command structure. Business units will be empowered to own their own risk while keeping open channels of communication vertically and horizontally across the business.

In future, the previous default setting of quantitative analysis and control will be superseded by a model that includes a qualitative side where informed value judgments, supported by robust data, are being made regarding issues such as quality of decision-making, human capital risk, quality of collaboration, impact of convergence and stakeholder engagement.

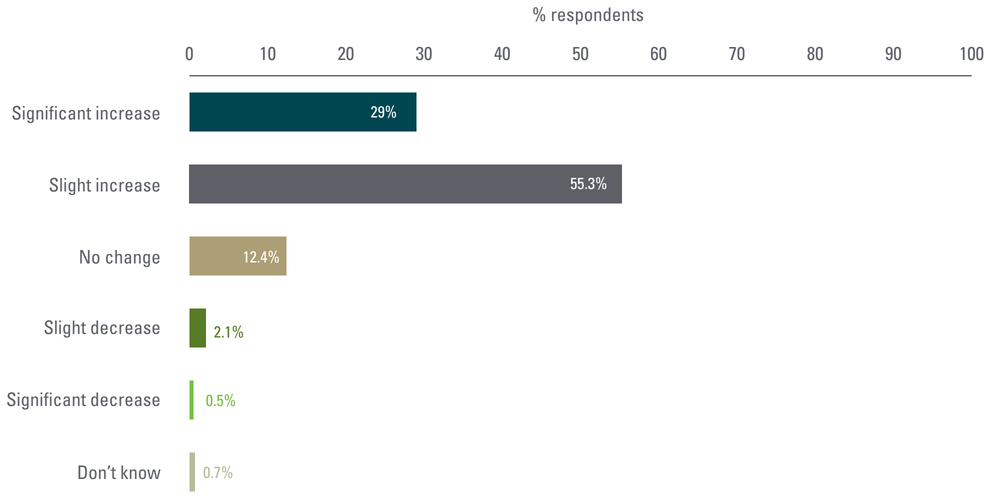
Looking forward, organizations are recognising that risk is not always on the downside. Lost opportunities through sub-optimal business development – upside risk – can constitute a significant portion of an organization's risk profile. Events unfold so quickly in the international, connected economy that knowledge transfer is crucial on a global basis. Organizations are investing in additional review and challenge activities to ensure that the processes for managing new generation qualitative and upside risk, are actually in place and can be relied upon with confidence.

Through the areas covered within this research - adopting a combined risk and assurance model, cosourcing, adoption of innovative tools, cultural change and strategic, enterprise focus, the 21st Century company can move closer to the goal of achieving both value preservation and value creation, from enterprise-wide risk and controls excellence.

Appendix

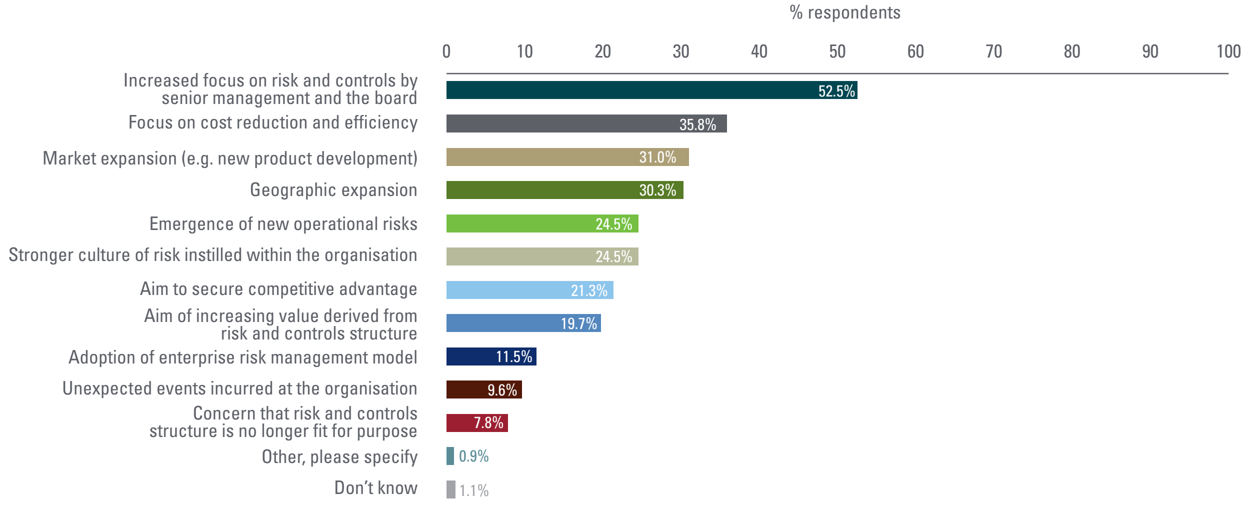
The Economist Intelligence Unit conducted a global survey of 435 senior executives, half of whom work for companies with more than US$1bn in annual revenue. The survey reached a very senior audience, including CEOs, CFOs, heads of internal audit and audit committee chairmen, as well as risk managers and compliance officers. Respondents were drawn from a cross-section of industries. What follows is a compilation of the survey results as well as detail about the respondents and their organizations.

1. Over the next three years, what degree of change do you expect to the levels of investment and resources devoted to risk and controls in your organization?



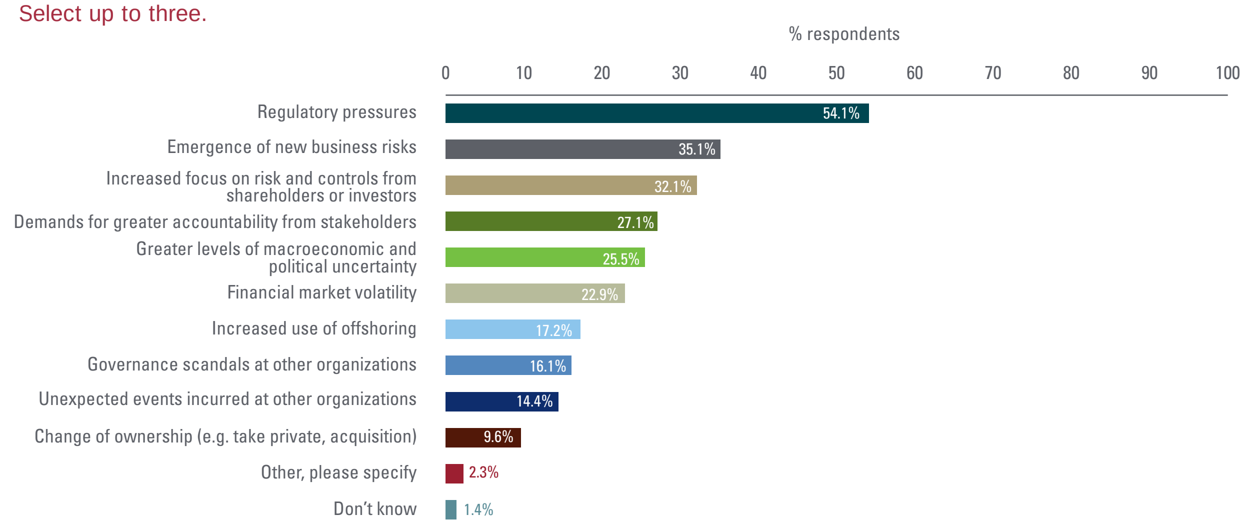
Source: Economist Intelligence Unit 2007

2. Over the next three years, which of the following internal factors do you expect will have most impact on the development of risk and controls management at your organization?
Select up to three.



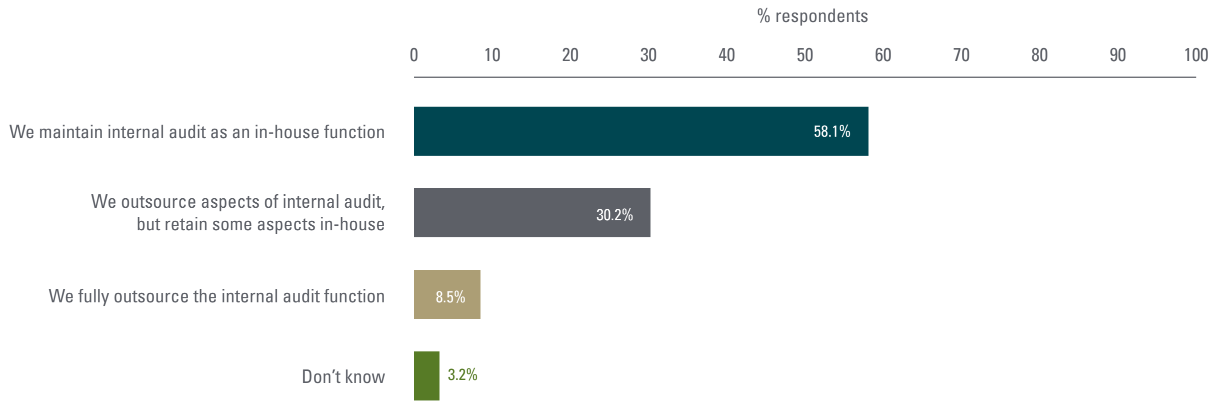
Source: Economist Intelligence Unit 2007

3. Over the next three years, which of the following external factors do you expect will have the greatest impact on risk and controls management at your organization?
Select up to three.



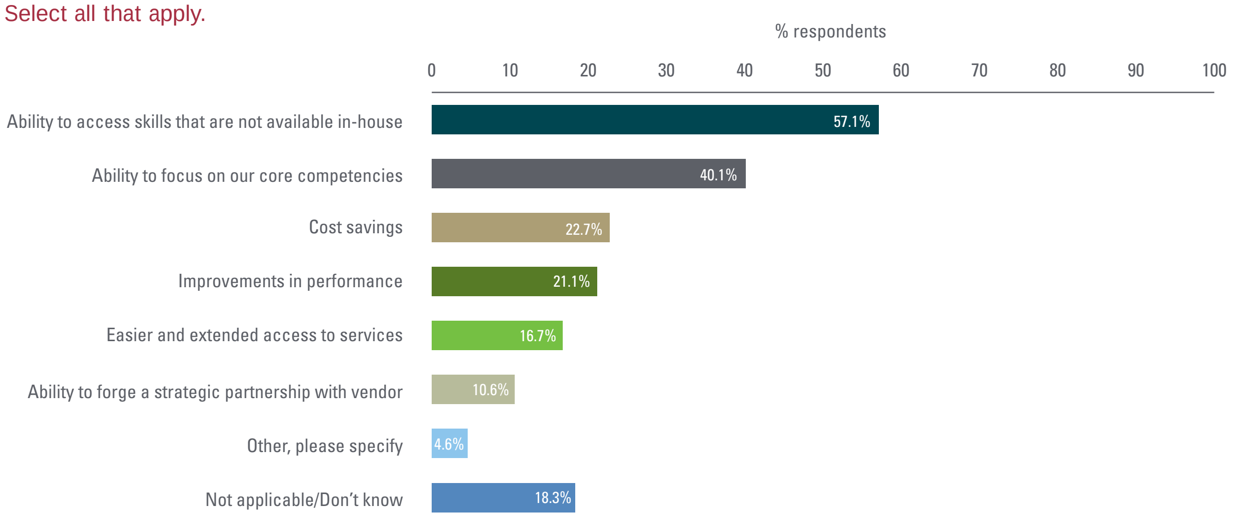
Source: Economist Intelligence Unit 2007

4. Which of the following statements best describes the structure of your internal audit function?



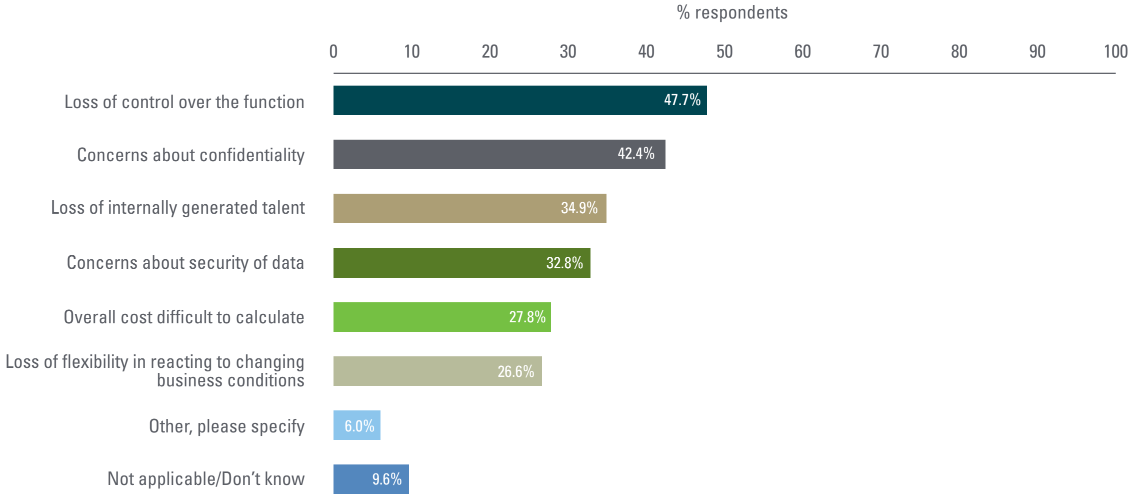
Source: Economist Intelligence Unit 2007

5. Which of the following would you consider to be the main advantages of outsourcing your internal audit function?
Select all that apply.



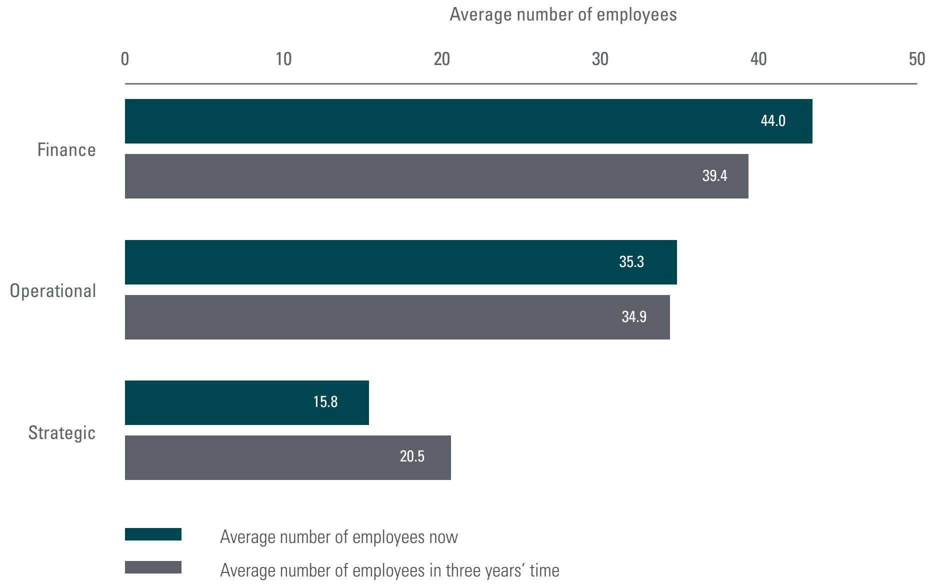
Source: Economist Intelligence Unit 2007

6. Which of the following would you consider to be the main disadvantages of outsourcing your internal audit function?
Select all that apply.



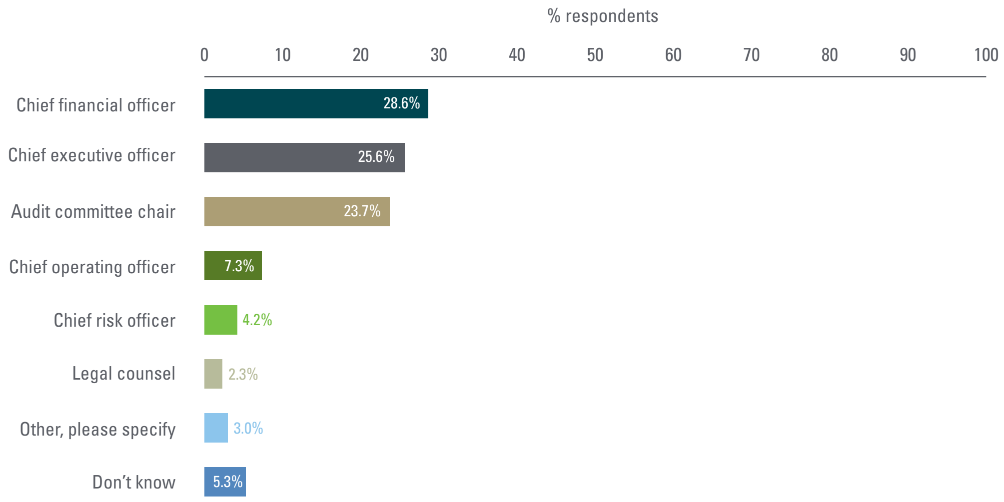
Source: Economist Intelligence Unit 2007

7. Approximately how many employees within your internal audit function have the following categories as their primary area of focus?
a. Now?
b. In three years' time?



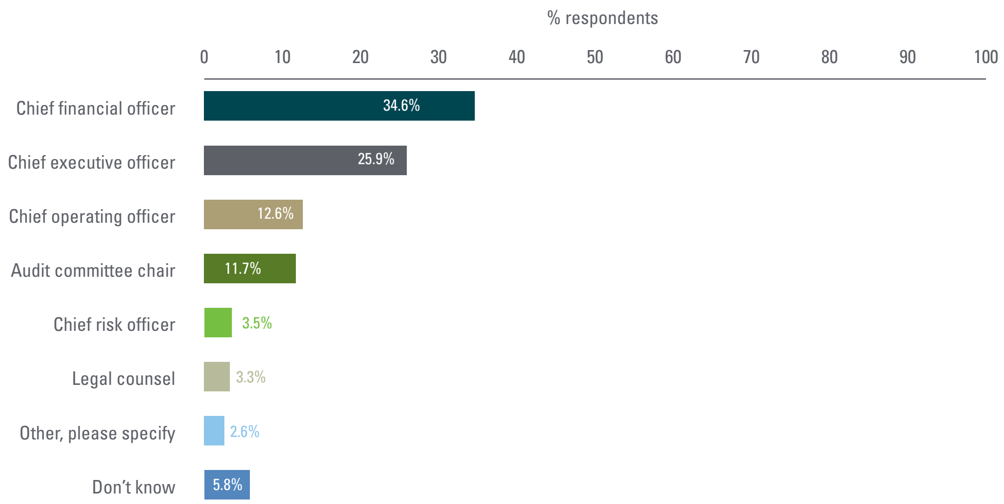
Source: Economist Intelligence Unit 2007

8a. To whom does the head of internal audit report to in your organization, functionally?



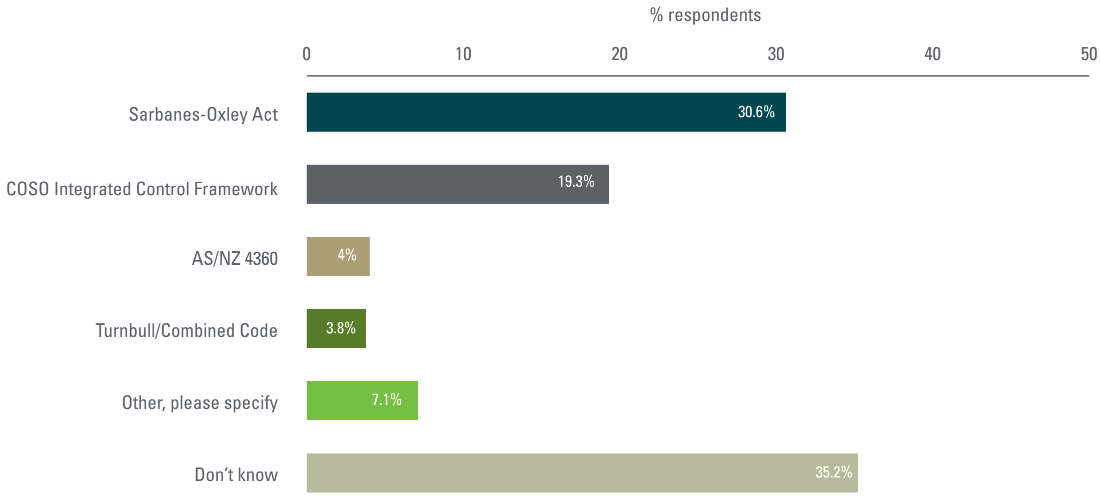
Source: Economist Intelligence Unit 2007

8b. To whom does the head of internal audit report to in your organization, administratively?



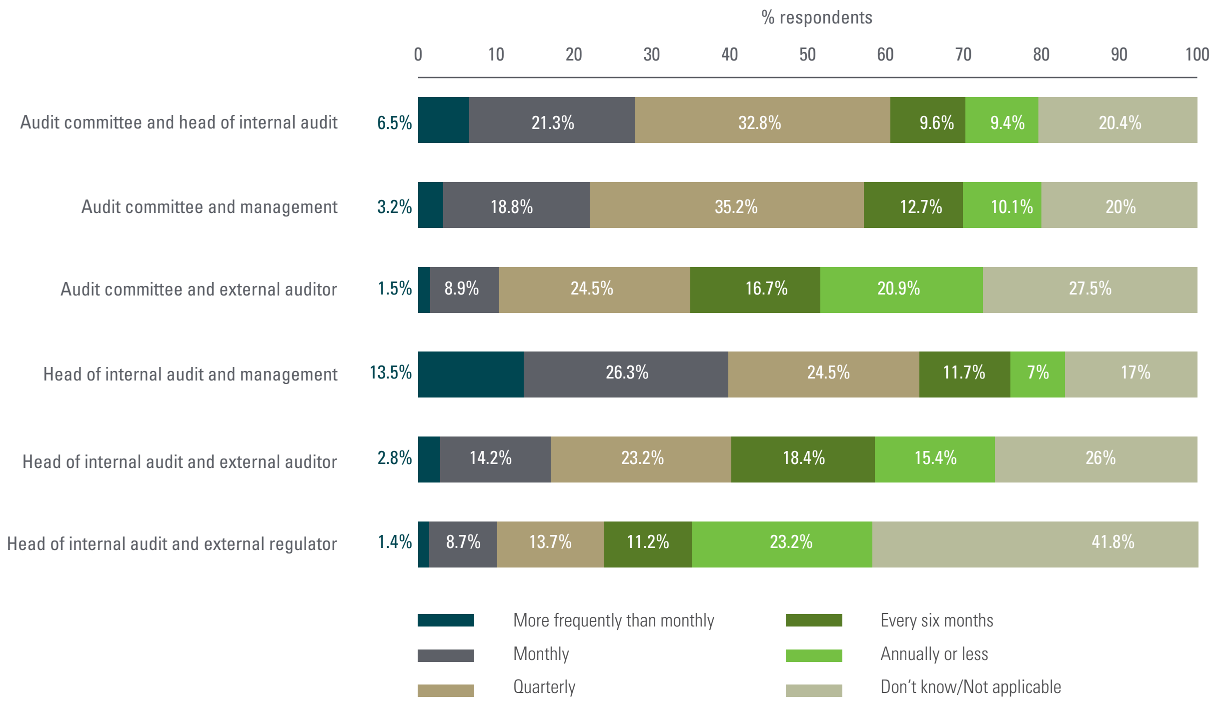
Source: Economist Intelligence Unit 2007

9. Which of the following models does your organization use as the basis of its risk management processes?



Source: Economist Intelligence Unit 2007

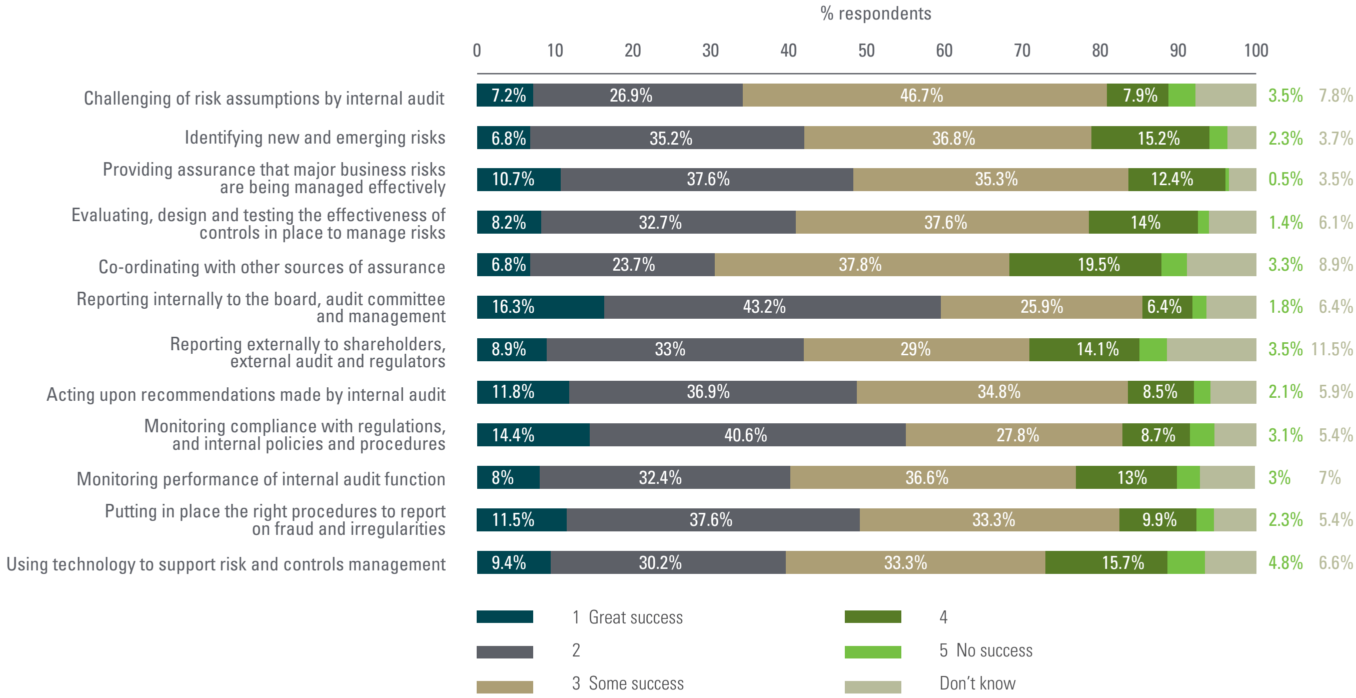
10. Approximately how often do the following entities meet formally in your organization?



Source: Economist Intelligence Unit 2007

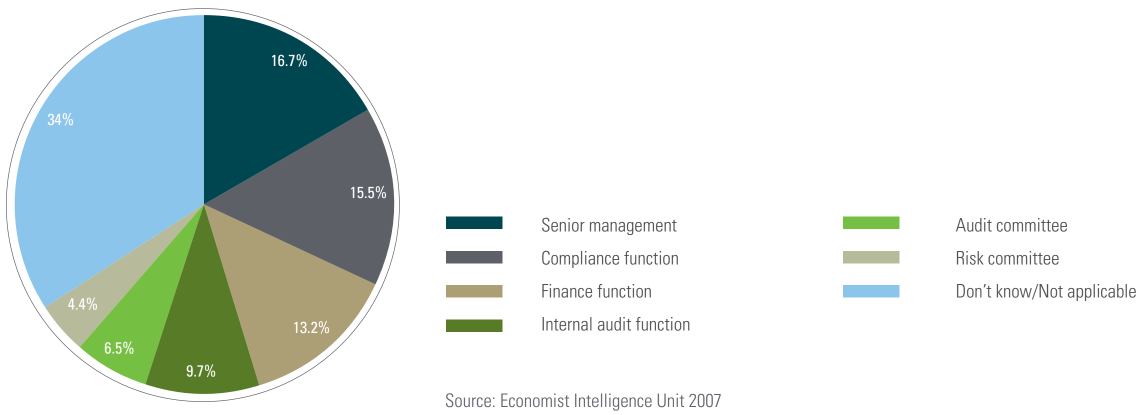
11. What degree of success do you think your organization displays in performing the following activities?

Rate on a scale of 1 to 5, where 1 = Very successful and 5 = Not at all successful.



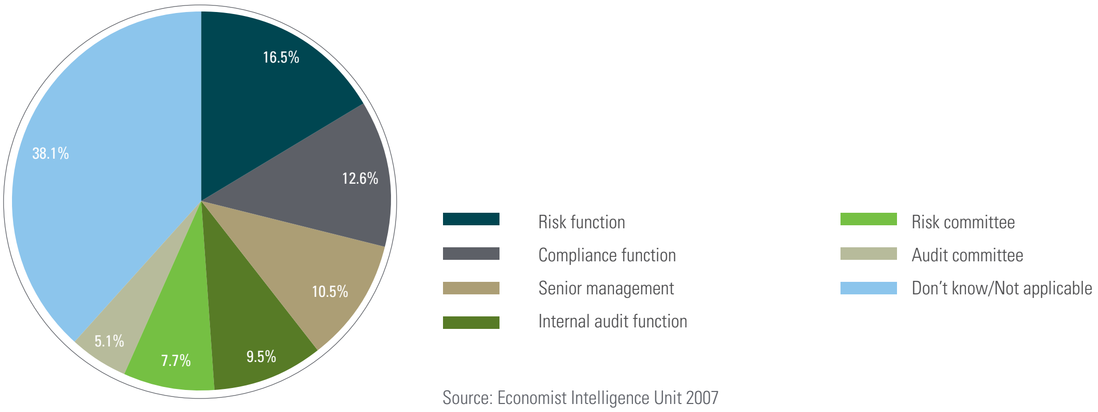
Source: Economist Intelligence Unit 2007

12a. Please indicate the relationships between the risk function and committees in your organization that you think are least effective.



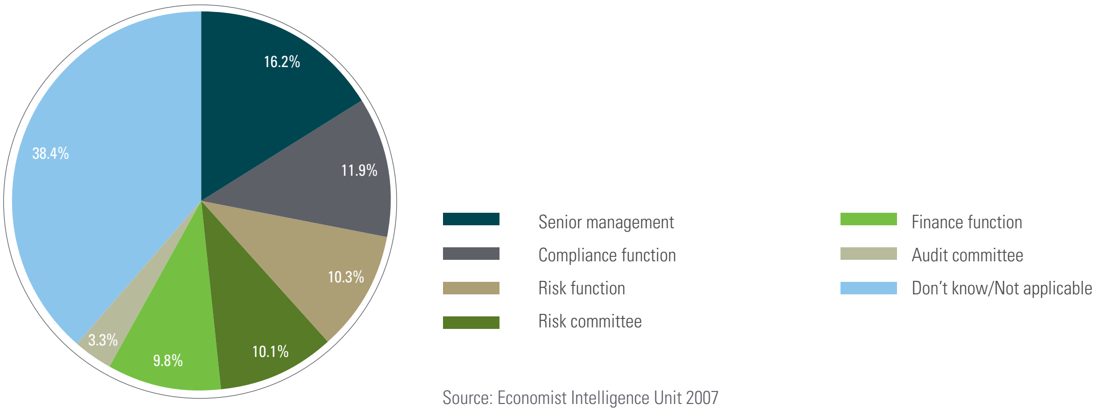
Source: Economist Intelligence Unit 2007

12b. Please indicate the relationships between the finance function and committees in your organization that you think are least effective.



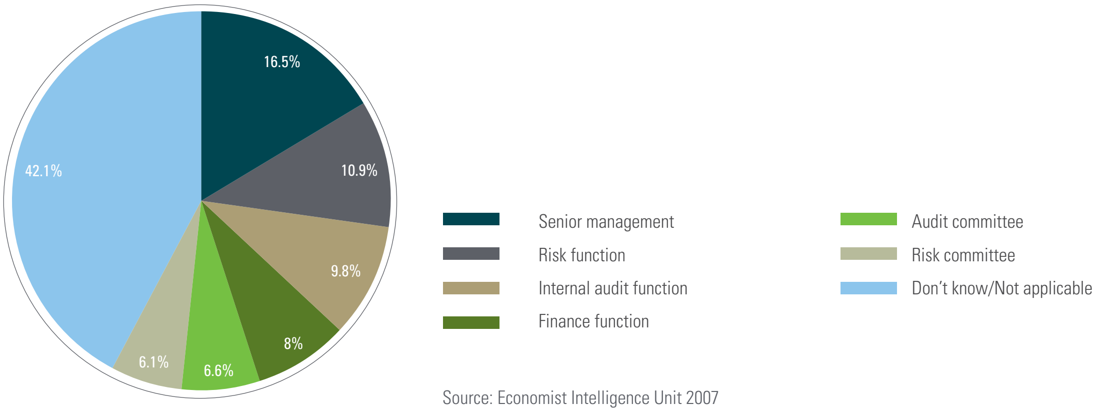
Source: Economist Intelligence Unit 2007

12c. Please indicate the relationships between the internal audit function and committees in your organization that you think are least effective.



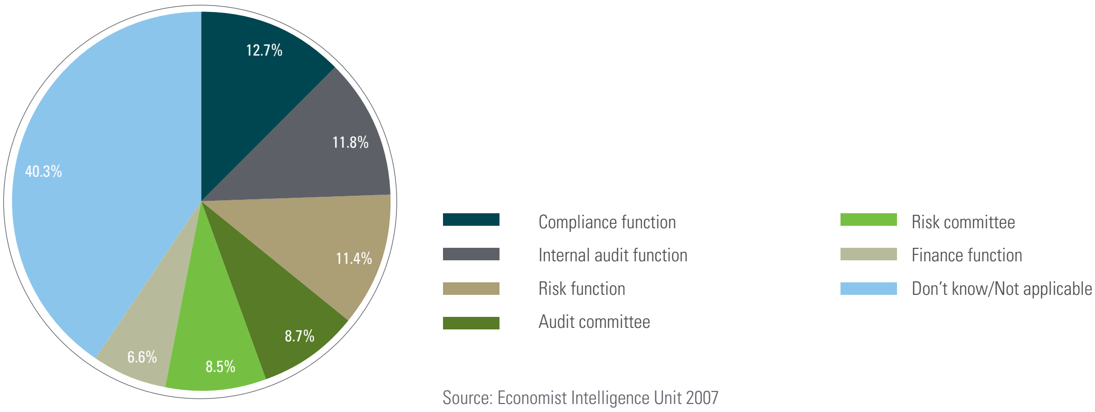
Source: Economist Intelligence Unit 2007

12d. Please indicate the relationships between the compliance function and committees in your organization that you think are least effective.



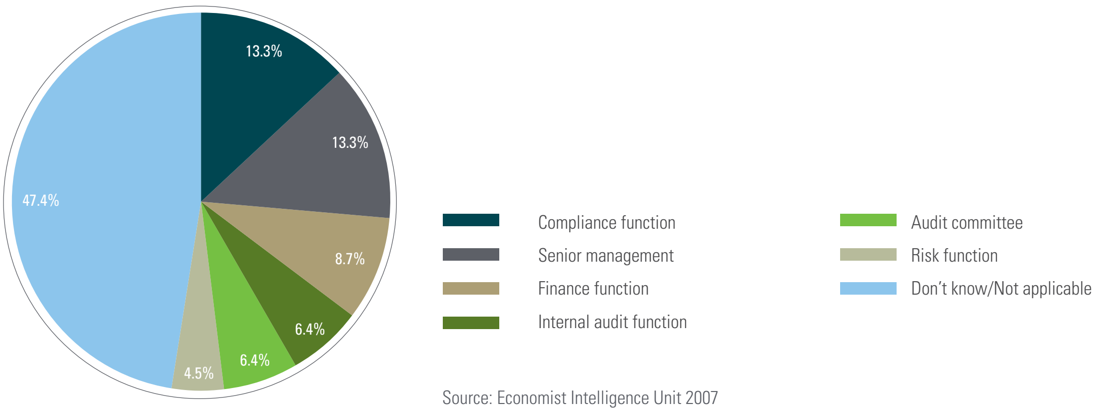
Source: Economist Intelligence Unit 2007

12e. Please indicate the relationships between senior management and committees in your organization that you think are least effective.



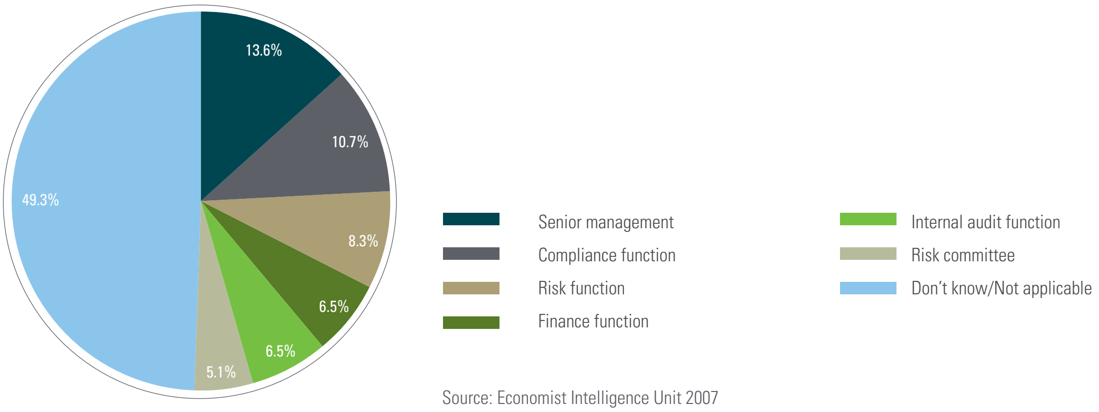
Source: Economist Intelligence Unit 2007

12f. Please indicate the relationships between the risk committee and other committees in your organization that you think are least effective.



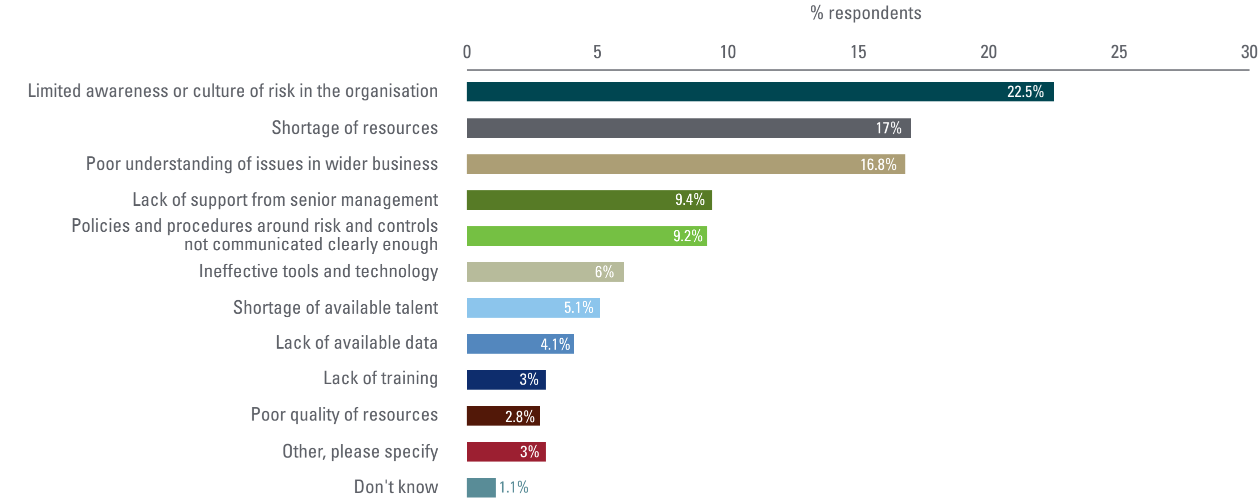
Source: Economist Intelligence Unit 2007

12g. Please indicate the relationships between the audit committee and other committees in your organization that you think are least effective.



Source: Economist Intelligence Unit 2007

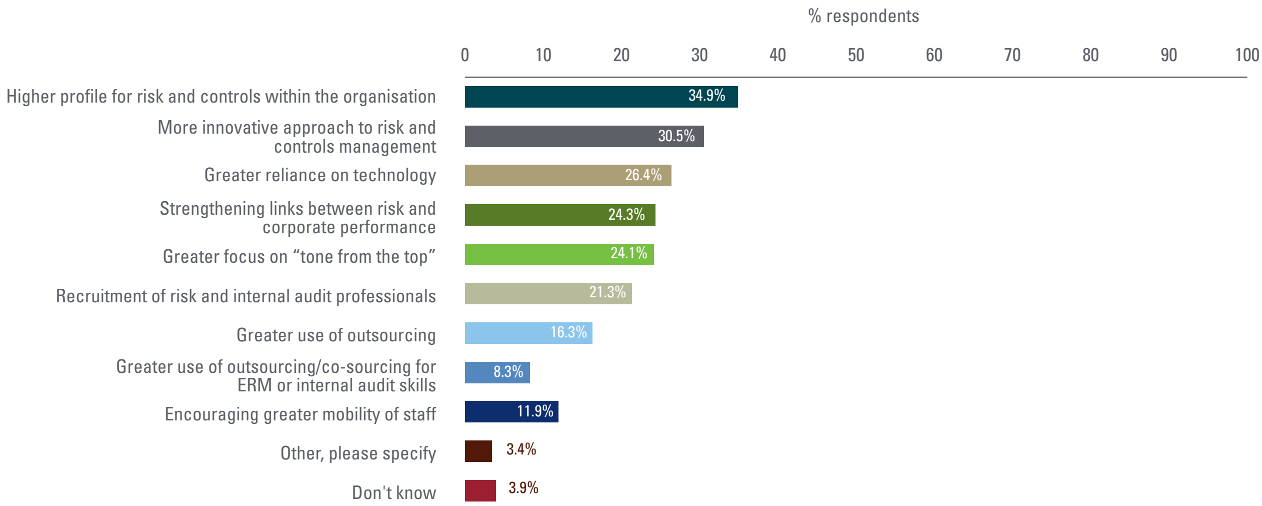
13. What do you consider to be the single most significant barrier to effective risk and controls management in your organization?



Source: Economist Intelligence Unit 2007

14. Which of the following steps is your organization taking to overcome this barrier?

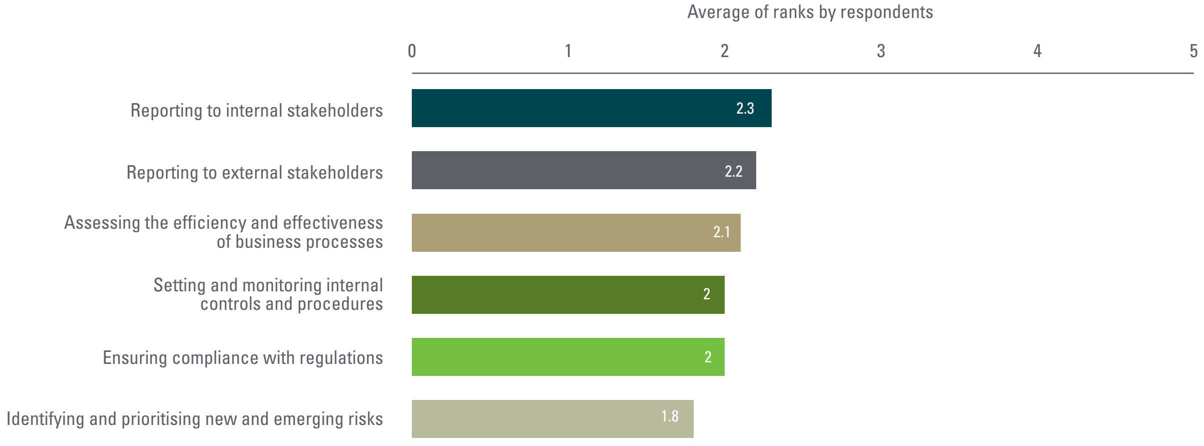
Select all that apply.



Source: Economist Intelligence Unit 2007

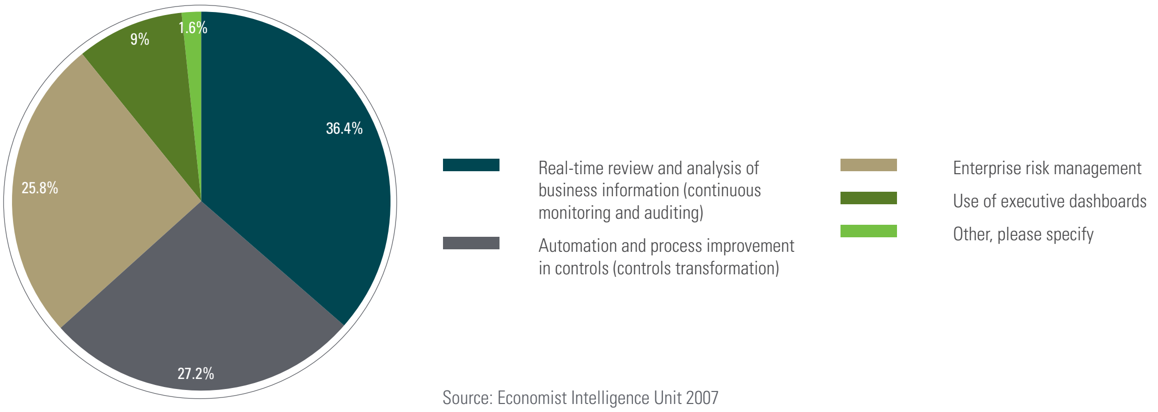
15. Which of the following activities consumes the most resources in your risk and controls management?

Rank the top three only in order, where 1 = the greatest amount of resources.



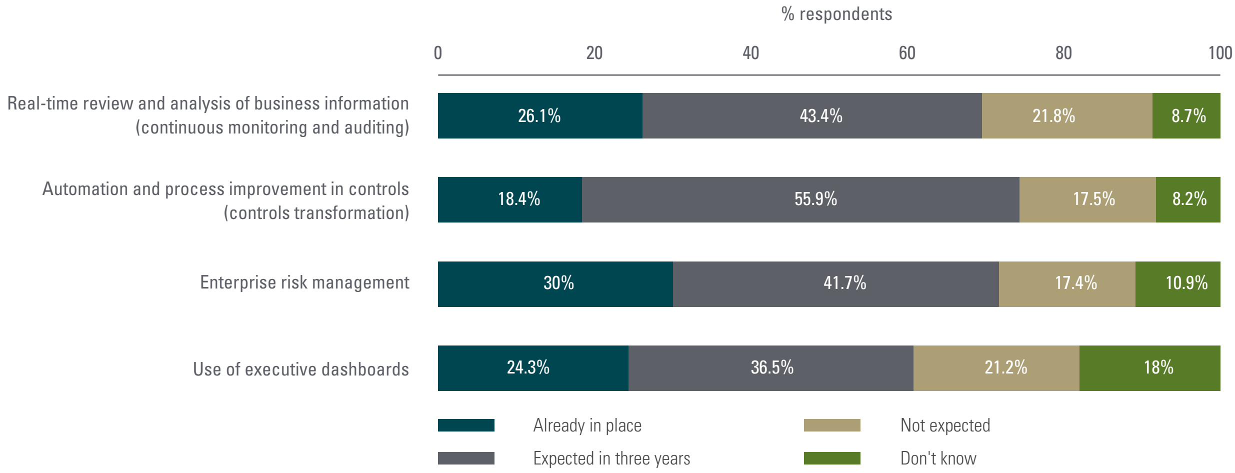
Source: Economist Intelligence Unit 2007

16. Which of the following innovations do you think would do most to improve the effectiveness of your organization's risk and controls management?



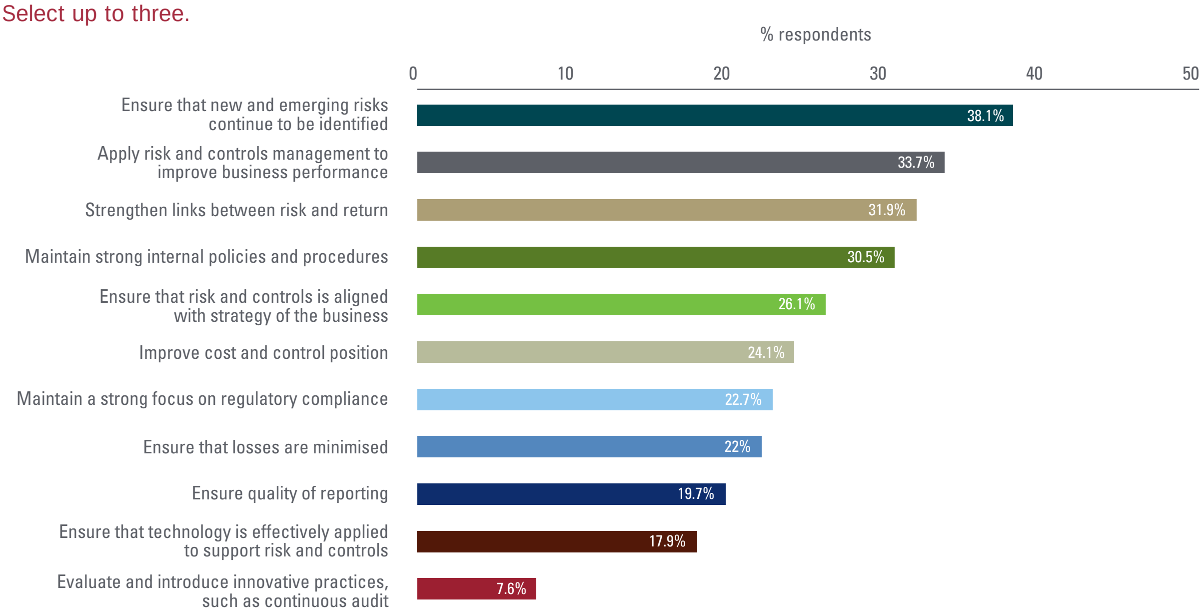
Source: Economist Intelligence Unit 2007

17. Which of the following innovations do you already have in place in your organization, or do you expect to have in place in three years' time?



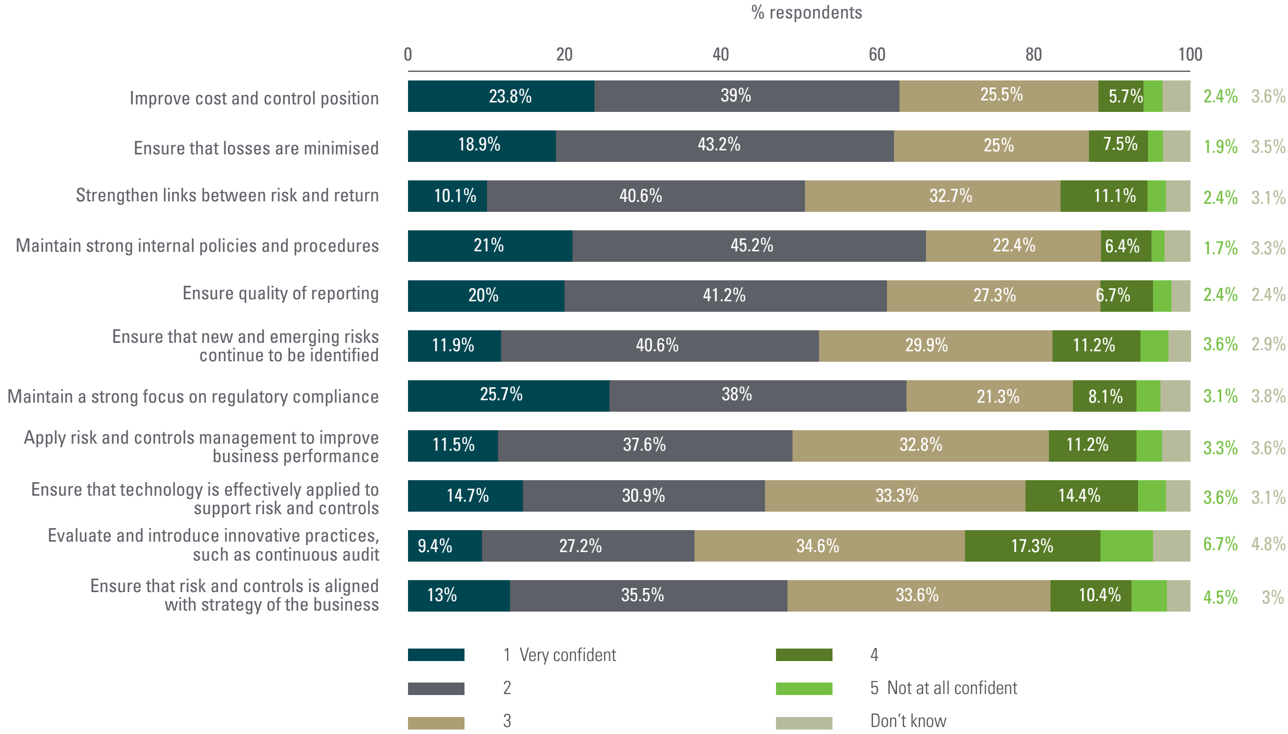
Source: Economist Intelligence Unit 2007

18. Looking ahead to the next three years, what do you consider to be the most important objectives for your risk and controls management?
Select up to three.



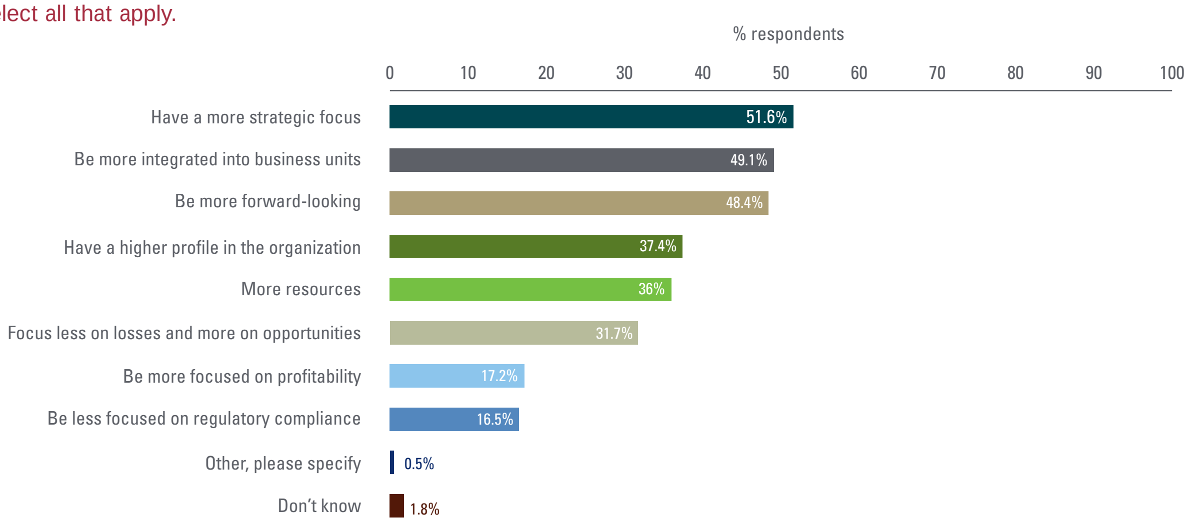
Source: Economist Intelligence Unit 2007

19. How confident are you that your organization will be able to achieve these goals over the next three years?
Rate on a scale of 1 to 5, where 1=Very confident and 5=Not at all confident.



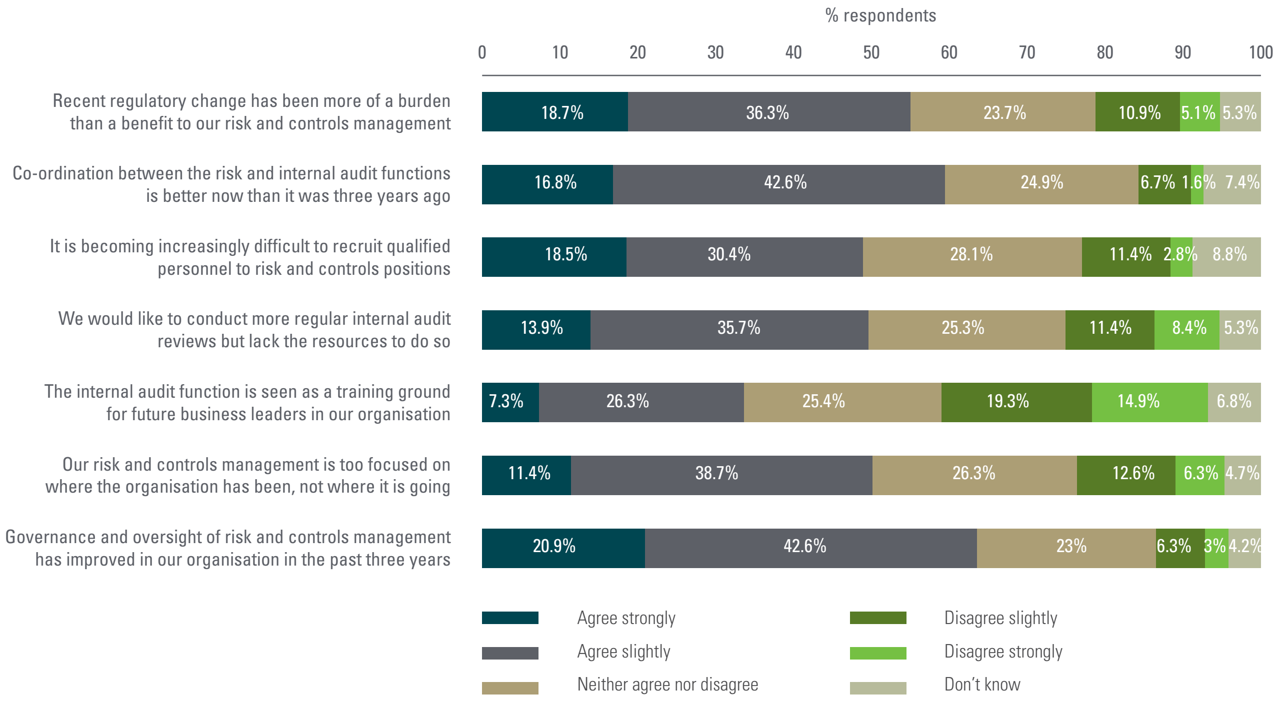
Source: Economist Intelligence Unit 2007

20. Which of the following would need to change in order for the risk and controls structure in your organization to meet its goals more effectively?
Select all that apply.



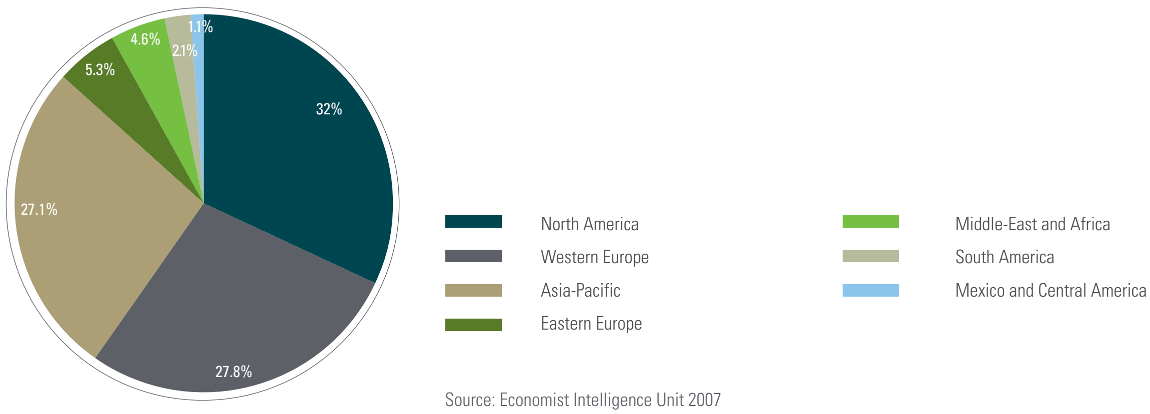
Source: Economist Intelligence Unit 2007

21. Please indicate how strongly you agree or disagree with the following statements.



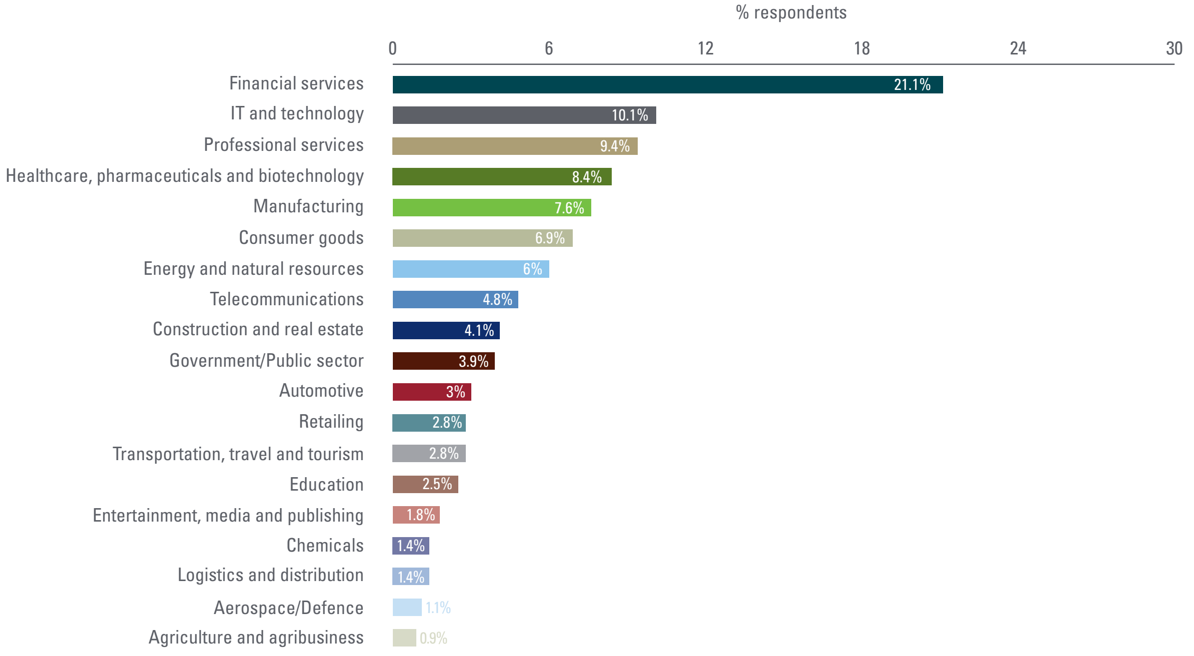
Source: Economist Intelligence Unit 2007

22. In which region are you personally located?



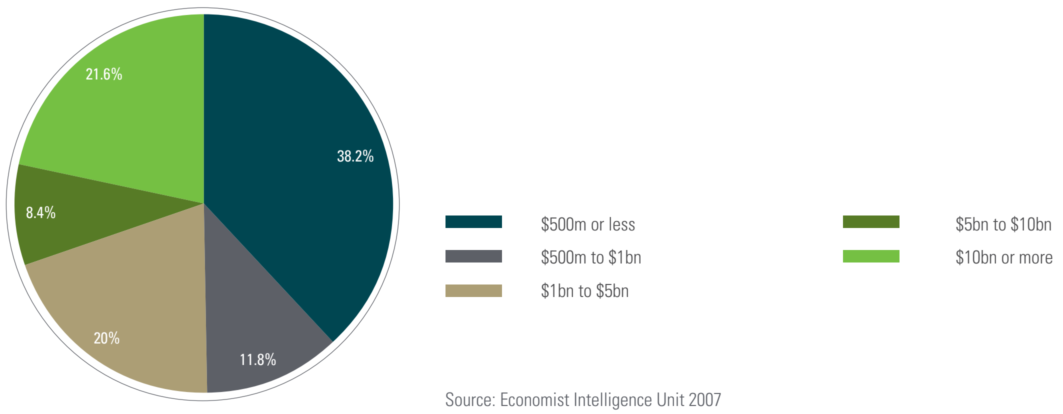
Source: Economist Intelligence Unit 2007

23. What is your primary industry?



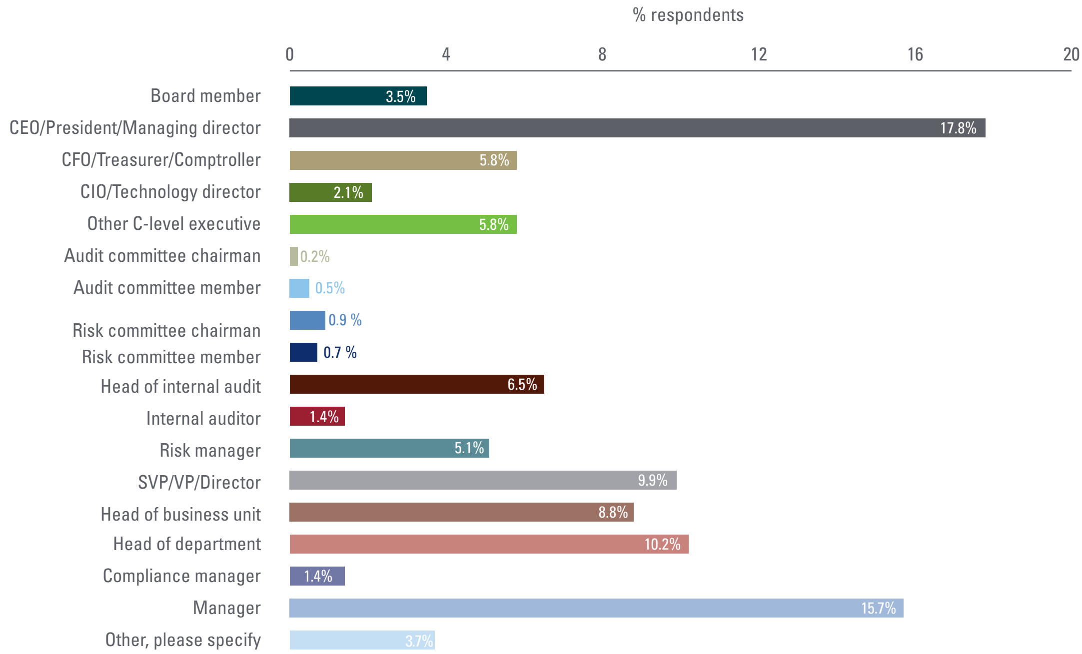
Source: Economist Intelligence Unit 2007

24. What are your organization's global revenues in US dollars?



Source: Economist Intelligence Unit 2007

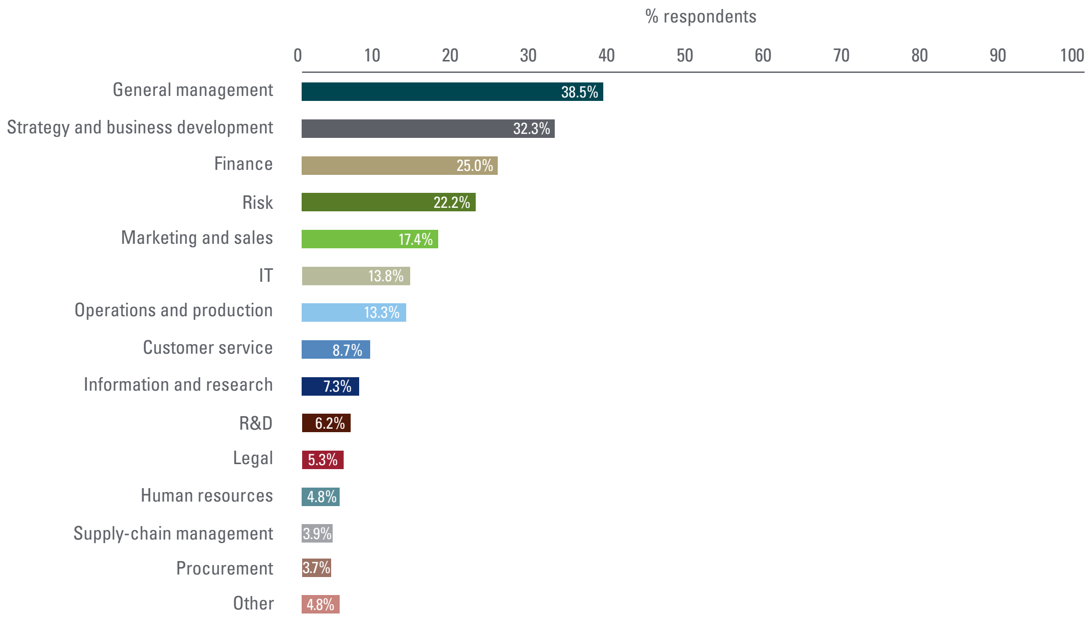
25. Which of the following best describes your title?



Source: Economist Intelligence Unit 2007

26. What are your main functional roles?

Multiple responses allowed



Source: Economist Intelligence Unit 2007

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John Abbott
Jeremy Bendall
David Defroand
Simon Evans
Jonquil Hinson
Eric Holt
Mike Nolan
Linda Olivier
Bob Spedding
Ken Welch

kpmg.com

For more information please contact:

Americas

Mike Nolan
Internal Audit Services
Tel. +1 713 319 2802
mjnolan@kpmg.com

John Farrell
Enterprise Risk Management
Tel: +1 212 872 3047
johnmichaelfarrell@kpmg.com

Europe

John Abbott
Internal Audit Services
Tel: +44 (0)20 7311 8149
john.abbott@kpmg.co.uk

Oliver Engels
Enterprise Risk Management
Tel: +49 69 9587 1777
oengels@kpmg.com

Asia-Pacific

Seiya Takahashi
Internal Audit Services
Tel: +81 (3) 3266 8063
seiya.takahashi@jp.kpmg.com

Jeremy Bendall
Enterprise Risk Management
Tel: +64 (9) 363 3672
jjbendall@kpmg.co.nz

Or your local KPMG advisor.

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