

Financial Services

# Embedding risk management

Solutions to suit your needs\*



\*connectedthinking

PRICEWATERHOUSECOOPERS 

The risk specialists at PricewaterhouseCoopers are equipped to cover every aspect of risk management – from top-of-house governance and strategic issues, to the specific modelling and compliance challenges that business lines and corporate functions face every day. To make things simpler, we have separated our core propositions into the five strands below:

01

**Business risk solutions:** using risk to make better decisions throughout the organisation.

02

**Risk and finance alignment:** helping two overlapping functions to complement – rather than contradict – each other.

03

**Risk function effectiveness:** making sure your risk framework does what it's supposed to.

04

**Technical risk solutions:** addressing the way models work – and the governance framework around them.

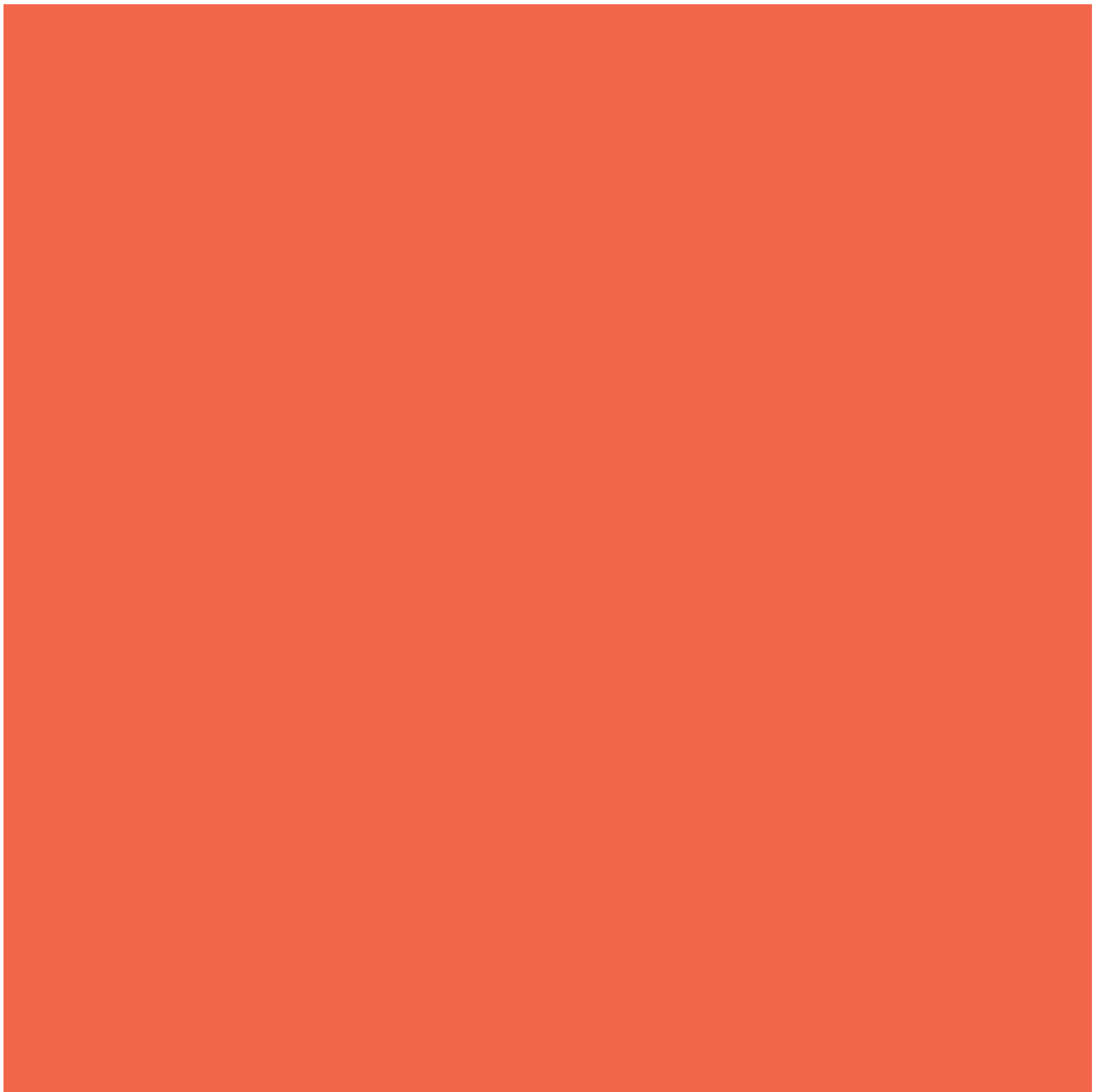
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**Regulatory assurance:** meeting the expectations of regulators, board committees and other stakeholders.

In places, some of the propositions overlap. Organisationally, so do we: PricewaterhouseCoopers specialists often find themselves working on projects which include a number of these elements, because the challenges financial institutions face do not always fit into neat boxes. Still, these five propositions describe themes which come up again and again, irrespective of industry segments or the size of institutions. We think it's a good way to lay out the risk management challenges facing financial services companies today.

If you want to discuss any of the subjects raised here, please speak with your usual PricewaterhouseCoopers contact, or use the list of contacts included in this folder.







# Business risk solutions

Tremendous advances have been made in risk analytics over the past decade, but there has been less progress in the way organisations use this information. Too often, it remains confined to a specialist risk function, isolated from both the boardroom and the business, manifesting itself only through systems of limits and often impenetrable risk reports.

In the form of the sub-prime crisis, the financial services industry has now reaped what it had sown.

Business risk solutions is about changing this picture and about bringing risk information and insight to bear on every decision an organisation takes, from acquisitions and divestments to new product launches and transaction pricing – indeed wherever decisions are taken in the face of uncertainty. It's about taking a functionally siloed discipline and ingraining it in the way an organisation thinks and the way it works.

To achieve this transformation, risk needs to be de-mystified and made accessible. People at all levels of the organisation need to know how to make business decisions in a way that takes full account of risk. That means identifying the risks arising from all sources, and analysing the impact of those risks, for better or worse, on the likely and potential outcomes of those decisions. It also means understanding the degree to which further risk management decisions and actions might shift the probability of those outcomes, and acting accordingly. Finally, it means ensuring that the risks, considered individually and collectively, are consistent with the organisation or business unit's stated risk appetite.

The idea is not to do away with the crucial analysis, reporting and control activities of independent risk functions, but rather to put simple and effective decision-making tools in the hands of those who originate and manage risks at the front end, from the CEO down. From a governance standpoint, this also enables risk functions to remain truly independent and not to be drawn in as advocates of business decisions. That said, the risk function can play a key role in supporting this change, for example by helping to develop the tools and by educating the front line in their use. But for the change to stick, the decision to embrace it has to come from the top of the organisation, be understood and supported on the ground and be seen to deliver clear commercial benefits. It must also be reinforced through management reward schemes. In terms of benefits and rewards, factoring risk into a company's decisions won't guarantee that every decision works out well. However, assuming that risks are assessed thoroughly at the outset, and are managed rigorously, it will pay off handsomely overall. And if the process is documented – clarifying why one course of action was chosen over others in risk terms – it will make it easier for an organisation to learn from its past mistakes and evaluate performance.

Success in this area requires front-line executives to be able to examine and evaluate the implications of a disparate array of risks – from tax and operations to markets and customers – using a common language and sound analytical and governance processes. PricewaterhouseCoopers has the breadth and depth of industry knowledge, technical expertise and management experience to help bring about this transformation.

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# Risk and finance alignment

During the credit crisis senior executives, board members and business line managers have found themselves inundated by fragmented or contradictory reports about their organisation’s performance and prospects. In one notable case, a bank’s chief financial officer commissioned separate reports on the organisation’s fixed income business from the finance, market risk and credit risk functions, and received three different sets of figures in return that disagreed even on elemental numbers such as profit and loss.

Risk and finance do see the world differently, of course, and conflicting views are unavoidable – but too often, contradictions arise as a result of organisational complexity. For example, the two functions may be using different source data.

When these contradictions arise, management often favours the numbers coming out of finance. That may not be wise. Although revenues, profits and balance sheet information are simple, widely understood metrics, they are not always the best basis on which to commit to a course of action. If organisations are to make better decisions, there needs to be more coherence in the support provided by finance and risk.

Some consulting firms are now arguing that the solution is to integrate the finance and risk departments. We disagree. Finance and risk have many shared interests, but are too distinct to be integrated into a single function. As the junior partner, there is a real danger that risk would be submerged at a time when it needs a clearer voice. Instead, the answer is to seek closer alignment of the two functions. In essence, finance needs to work with the

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business more effectively from a risk perspective; risk needs to do the same from a finance perspective.

In practice, this will mean taking concrete steps like altering the reporting lines of the two functions and eliminating instances where finance and risk are duplicating effort. It also means determining where the two teams should share a common data platform and what enhancements are needed to existing management information. Alignment also means bridging the divide which exists between the two functions in terms of culture, language and skill-set – something which can be tackled in part by encouraging the secondment of staff from finance to risk and vice versa.

The benefits are varied. Organisations can begin to apply risk disciplines to key business processes, such as strategy, planning and valuation, where finance practices currently dominate. Management should be challenged to consider ranges of earnings and return on capital outcomes to develop an understanding for the upside and downside risk the organisation can tolerate. Although initial investment may be needed, costs can be reduced by cutting out duplication and seeking opportunities for shared services and outsourcing. Staff retention can be improved by giving finance and risk personnel the chance to broaden their skill-sets and prospects as a result of the new competencies they will gain.

Ultimately, aligning finance and risk is about creating value through making better decisions, using resources more efficiently and speaking to investors and stakeholders with a clearer voice. It's a complex change which requires both technical expertise and an understanding of a range of broader issues, including IT, accounting and governance. PricewaterhouseCoopers has the breadth and depth of experience to work with you to deliver this change.

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# Risk function effectiveness

Recent market events have raised some fundamental questions about the effectiveness of risk management in the financial services sector. In the face of multi-billion losses on sub-prime exposures, further outbreaks of ‘rogue trading’ and multiple company failures arising from funding and liquidity crises, everyone from senior executives to boards of directors, regulators, government and the media is rightly asking ‘where was risk management?’

Some are looking for answers in the processes and models used by risk management functions to monitor, aggregate, report and regulate risks in their organisations. Are risk concentrations being captured and dealt with? Is sufficient attention being paid to stress tests? Is the framework of risk limits comprehensive and does it reflect risk appetite? Many are pointing to the absence of risk-adjusted reward schemes. What is the point of an elaborate framework of limits and controls when the incentive to circumvent or ignore them is so strong? Others are stepping back and asking whether there has been a fundamental failure of governance. Are roles and responsibilities for managing risk across the organisation, from the board to executive management, and from front office through risk control, finance and operations to audit, sensibly configured and clearly stated and understood? Whatever the answers to these questions, it is clear that changes within specialist risk functions are called for across the board.

There are other change drivers as well, including the desire of risk specialists to have greater and earlier involvement in strategy setting and, in these cost-conscious times, to be seen to deliver value for money in the execution of their function. But what exactly is their function?

The starting point for many is the 'three lines of defence' model (where the first line is the front office, the second line is the independent risk function and the third is internal audit) and a review and/or reaffirmation of the boundaries between them. This in turn helps to clarify the core responsibilities of the risk function itself. But even with these principles established, the devil is in the detail. Unless there is clarity at a detailed process level about how functions should interact, there will always be scope for overlaps, errors and omissions. At best this results in redundancy and waste; at worst, major losses or lost opportunities.

Risk function effectiveness is about ensuring that these lessons are learned. It is about the risk function delivering on three key dimensions: first, providing leadership in the execution of an effective end-to-end risk management process across all three lines of defence; second, executing its own part of this – including risk monitoring, aggregation, reporting and control – in a way that restores the confidence of senior executives, the board, regulators and the wider market; and third, doing this in a way that is streamlined and efficient from a process and cost point of view.

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PricewaterhouseCoopers has a long and proven track record of helping clients meet these challenges, built on extensive research and thought leadership, an excellent understanding of industry practice in the risk management space, and strong change management and implementation capabilities.

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# Technical risk solutions

The ability to build, implement and use models effectively is one of the core competencies expected of any financial institution. Following the events of the last 18 months, that competency is in doubt. Many banks and insurers failed to recognise or anticipate the myriad risks lurking in credit markets and the fact that liquidity can disappear overnight.

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In some cases, the problem was quantitative in nature – the worst-case scenarios predicted by the models were exceeded many times over by actual market movements and realised losses. In other cases, the problem was qualitative. Many models did provide warning signs, but those signs failed to prompt action by the institution – the model outputs were not connected to the decision-making process at a high enough level. In some cases, institutions became too accepting of model outputs and failed to subject them to stress tests.

Technical risk solutions is about addressing these quantitative and qualitative shortcomings. We can help institutions get more out of their models by identifying improvements in terms of data, calibration or underlying assumptions. We can also help institutions use their models more effectively: often, that means recognising the limitations that models have and then improving the governance around them, designing stress-testing programmes or creating reserves to offset modelling weaknesses.

For banks, specifically, the technical agenda is being shaped by the credit crisis, with many banks now launching large-scale remediation projects in which models are pulled apart and rebuilt, while simultaneously making sure that the surrounding framework of reporting, governance and auditing works as intended.

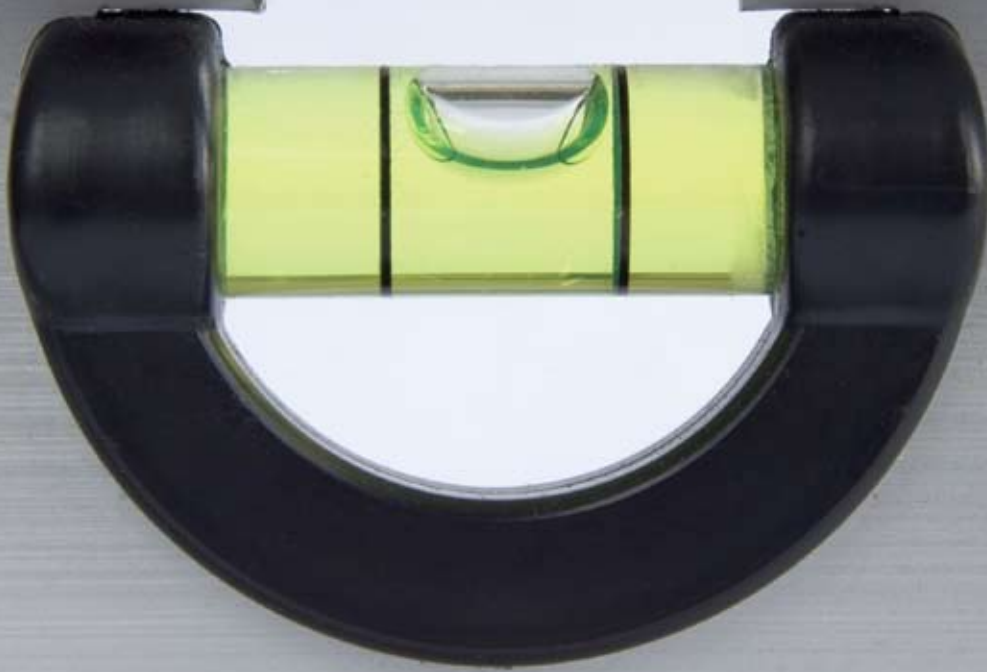
For insurers – who have generally suffered less due to the credit crunch – the agenda is different. The insurance industry has only relatively recently embraced risk-based quantification as a management and regulatory tool. As a result, many insurers are still getting to grips with how best to maximise the benefit of the developments to date and where to focus future investments.

Whatever the project – whether it's something self-contained, like the validation of a pricing model, or something grand, like the implementation of a firm-wide capital modelling system – it's common for both banks and insurers to turn to consultants for additional resources and a fresh perspective. There are a number of extra benefits we can bring. Benchmarking is one – modelling is a source of competitive advantage and organisations don't want to be left behind. We can help clients assess where they stand relative to their peers. Experience is another – PricewaterhouseCoopers has helped institutions of all shapes and sizes with a variety of technical projects over the years.

But we also pride ourselves on delivering solutions that genuinely work. Often, in the technical consulting space, firms can find themselves mired in overly sophisticated modelling efforts which are difficult to integrate into the decision-making framework. Our priority is always to find a solution which will genuinely help the management of an organisation by providing them with the tools they need to better manage the trade-off between risk and reward, and to provide the implementation support that our clients need.

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# Regulatory assurance

Regulatory assurance is about helping clients get to grips with internal and external rules and expectations – but it goes far beyond what most people think of as compliance.

It is not just about satisfying regulators. Instead, the audience could be rating agencies, client senior management or board-level committees. As organisations, markets and businesses have become more complex, both internal and external stakeholders increasingly need to know that risk processes and frameworks are working as intended. Clients also need to know how well prepared they are to meet current and future regulatory requirements.

It is harder than ever to have that confidence. Today, risk and capital regulation touches almost every area of a bank or insurer, and risk management frameworks have become correspondingly harder to implement. Expectations have grown, and institutions may lack the expertise or the resources to conduct the necessary reviews themselves.

It is not enough to simply tick off the required components of a risk management system: the so-called 'use test' in both Basel II and Solvency II requires those components to be part of the day-to-day life of a business. Assurance, therefore, means more than just, for example, validating the model associated with a particular product or business line – it also means ensuring that it is part of the fabric of the organisation and that it is embedded in the decision-making process.

In this environment, it is vital to have a detailed understanding of exactly what regulators, rating agencies and other external stakeholders expect of an institution's risk management capabilities – the standards to which they will be held. PricewaterhouseCoopers can provide that understanding, and the added credibility that goes with independent expert assessment and insight.

Providing assurance has always been core to our business at PricewaterhouseCoopers and is an area in which we have renowned expertise. This assurance can only be delivered when we combine the skills of our risk specialists, actuaries, quantitative modellers, change managers, and business and strategic planners. It is the ambition and breadth of modern risk management which makes it difficult to do well and which makes PricewaterhouseCoopers the right partner.

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