

# *Risk Management* TOOLS



REDUCTION OF THE TOTAL

COST OF RISK

*Risk managers need to take measures to reduce the Total Cost of Risk, acting on the components thereof and using tools from outside the firm to support and help them in this work. This creates value for the company and brings out the full value of this function within the organisational structure.*

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**A** risk management culture is now quickly catching on among major companies, driven on by the competitiveness of today's economy. This growth began as a theoretical approach, often to ensure compliance with legislation for listed firms, but has by now become a practical application in the companies' day-to-day activity.

This concept works from the premise that all organisations set themselves targets and then enshrine them in a strategic plan; these targets might then be threatened by a series of risks associated with their particular activities. This is the essence of the business activity; without risk there would be no opportunities. Risk Management must therefore be part and parcel of business management, ensuring that the strategic plan is not jeopardised by the materialisation of those risks.

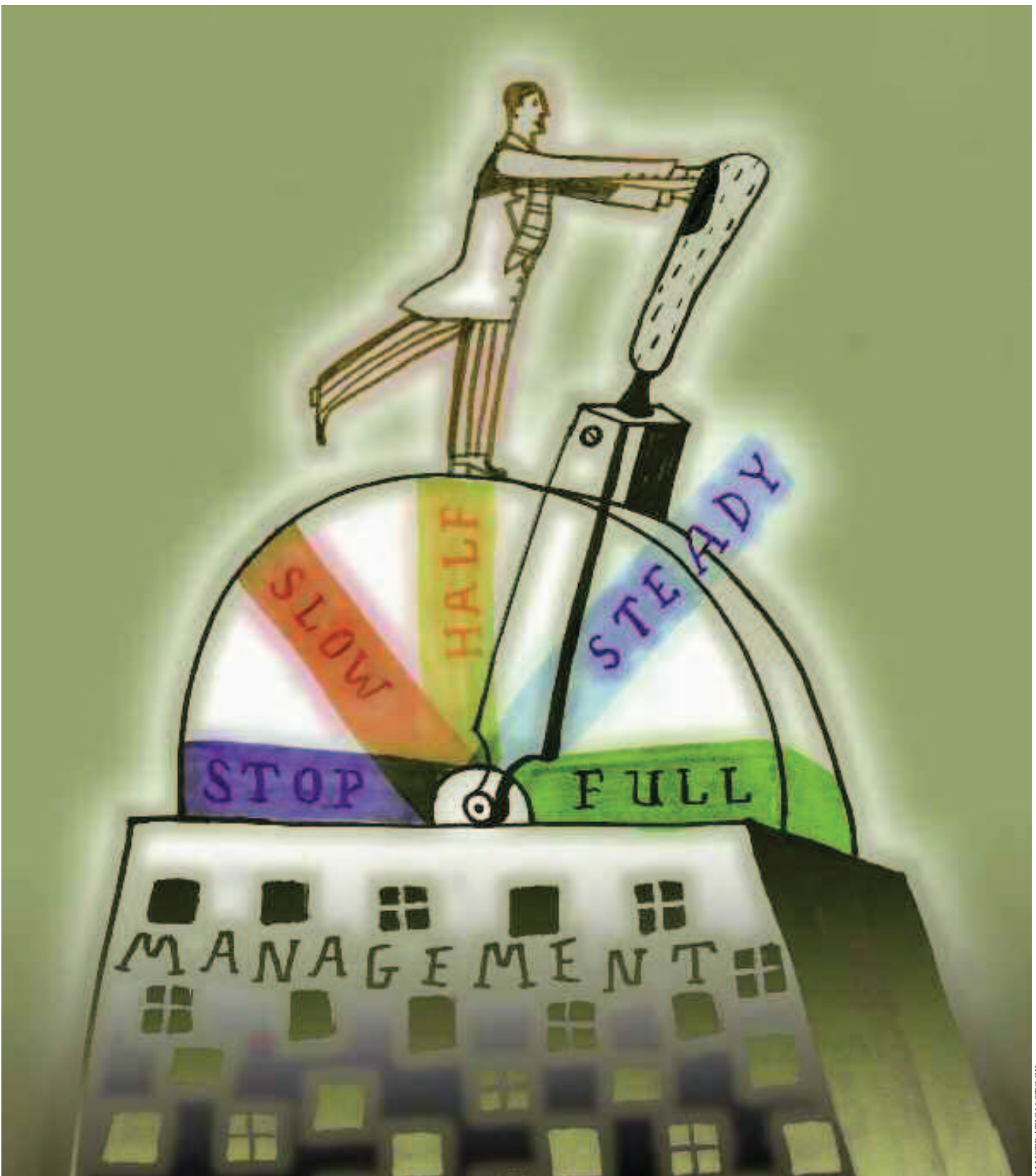


ILLUSTRATION STOCK

Risk Management has traditionally been seen as another cost for the firm; this view could not be more mistaken. It should be considered rather as an investment, since it heads off risks, losses, fraud, payment defaults, inefficiency, regulatory penalties, loss of image, etc. In short, it guarantees the firm's continuity.

Nonetheless, despite all the above arguments and a whole quiverful of other arrows that could be fired off in its defence, especially in such moments of crisis as we are currently living through, Risk Management is still considered as a cost centre. This is mainly due to its responsibility for taking out insurance policies. Any aid, therefore, that might help Risk Managers to assess, reduce and/or control their risks will be very highly appreciated.

Risk Managers are faced with the stiff task of changing this mentality. Until such time as this cultural change occurs, however, an important step is to steer this approach towards a «TOTAL COST OF RISK» concept, conceived as something intrinsic to the business activity that Risk Management does not generate. It involves, first and foremost, analysing and assessing the total cost of risk before then concentrating on optimising and reducing it, within an ongoing process of review and updating. This is not a new concept. Any activity incurs risks, which have an economic valuation called Total Cost of Risk; this is the sum of the loss caused by risk occurrence plus the costs of heading them off or reducing them, plus financing and management costs. The components of Total Cost of Risk are:

■ **RISK TRANSFER COSTS:** These refer mainly to the costs associated with taking out an insurance policy (premiums and additional costs such as commissions or fees).

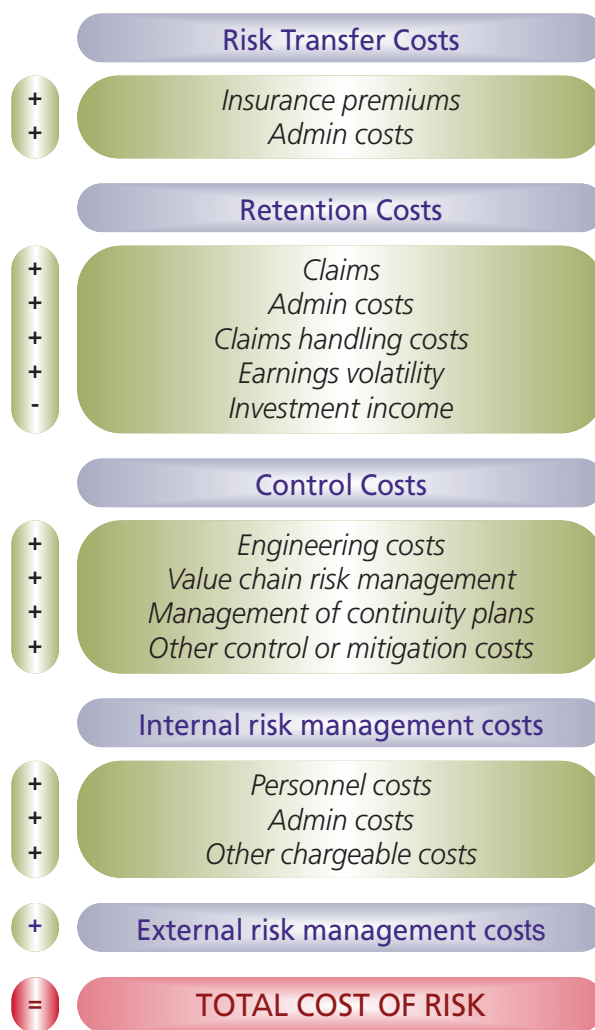
■ **RETENTION COSTS:** These are the costs associated with any form of self-insurance, from the calculation of the deductibles, claims excluded, to the use of a captive insurance company.

■ **CONTROL COSTS:** These are mainly the costs related to the prevention and reduction of the risks.

■ **INTERNAL RISK MANAGEMENT COSTS:** These are administration costs, with a continual effort being made to streamline them.

■ **EXTERNAL RISK MANAGEMENT COSTS:** This is the average weighted cost, its fiscal effects and opportunity cost.

Figure 1. Components of Total Cost of Risk.



Graph of the Aon Client Promise Methodology – Aon Total Cost of Risk Assessment.

The Total Cost of Risk will have an optimum point, which we can see in the following graph; this shows the curve representing the marginal cost of risk retention and the curve representing the marginal cost of risk transfer. The sum of the two represents the Total Cost of Risk and where the two curves cross marks the lowest point of the Total Cost of Risk. (Fig. 2)

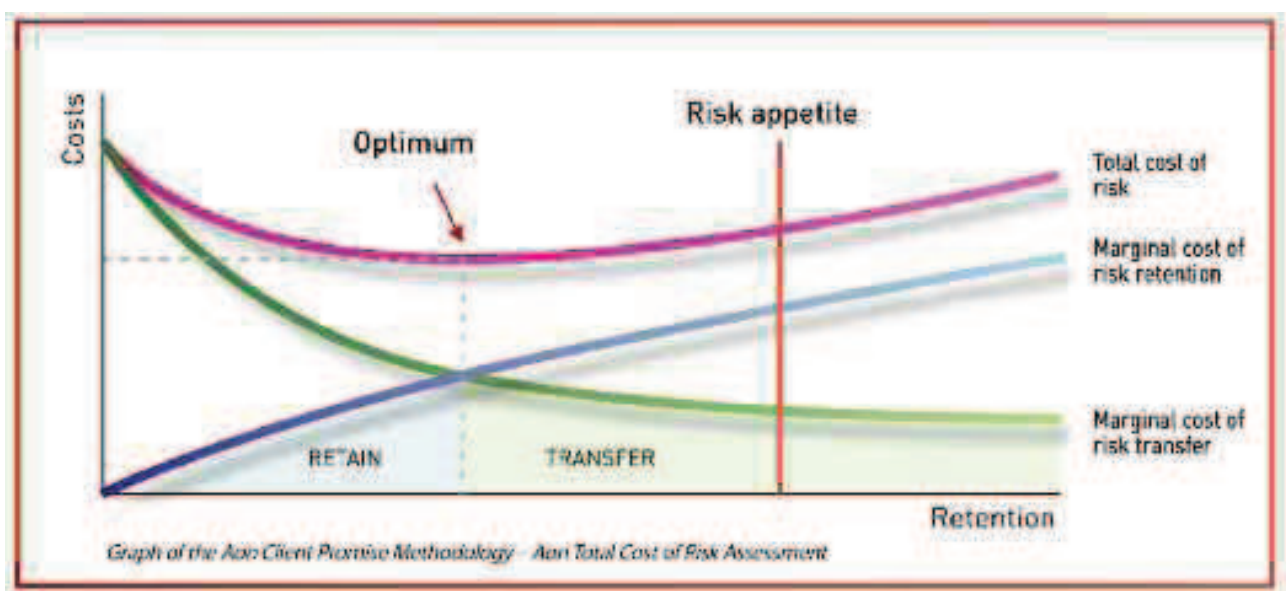


Figure 2. Graph of the Total Cost of Risk.

The Total Cost of Risk will be the result of the decisions taken by the firm in setting its risk-transfer and -retention levels in terms of its particular risk appetite (retaining more and transferring fewer risks pushes us to the right on the graph).

If our objective is to reduce the Total Cost of Risk, we will have to act on each of its components; the result of this is shown in the following graph. (Fig. 3)



**RISK MANAGEMENT HAS TRADITIONALLY BEEN SEEN AS ANOTHER COST FOR THE FIRM, BUT IT SHOULD BE CONSIDERED RATHER AS AN INVESTMENT, SINCE IT GUARANTEES THE FIRM'S CONTINUITY**

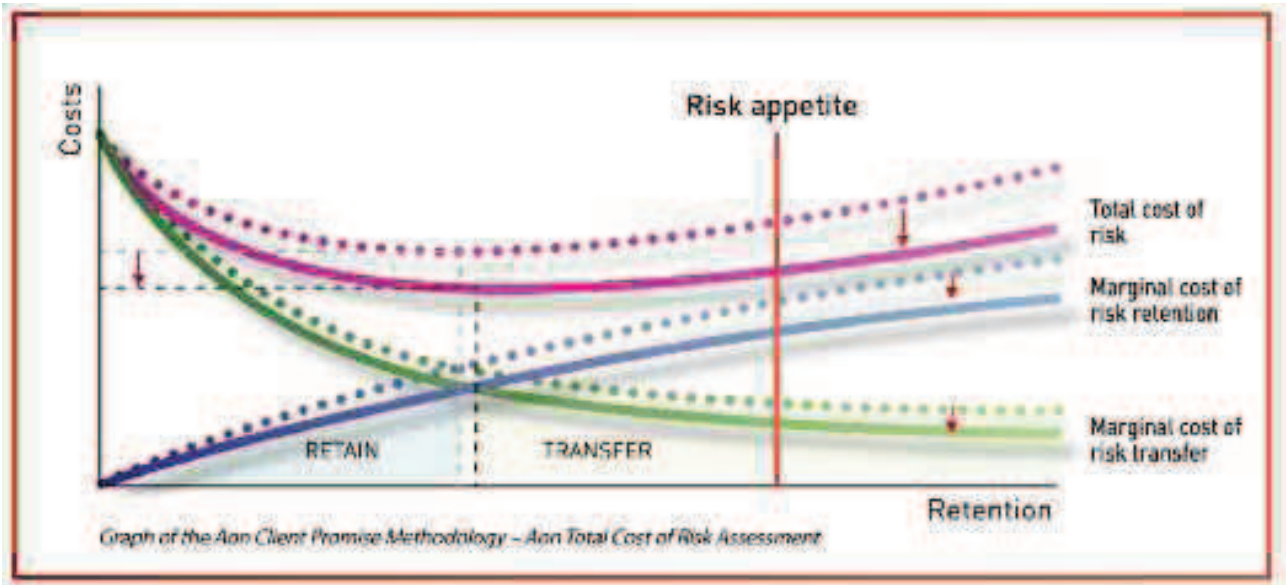


Figure 3. Optimised Total Cost of Risk.

To act on each component of the Total Cost of Risk, Risk Managers will have to carry out a series of actions to optimise and reduce it. They can do this with their own resources but in most cases will need specialist external help, taking a direct role in business management and generating value for shareholders and the public at large.

A series of measures are then taken on each of the components of the Total Cost of Risk, to control and reduce it. In the practical application of each particular case this will bring us closer to the optimum point of balance.

### ACTIONS ON RISK TRANSFER COSTS

We start out from the assumption that all managers and placers of insurance programmes for Risk Managers follow the pertinent code of good professional practice. Additionally, however, they can take further measures, mainly of external origin, to reduce these risk-transfer costs, such as:



**UNTIL THE ARCAIC VIEW OF RISK MANAGEMENT CHANGES, AN IMPORTANT STEP IS TO STEER UP THIS APPROACH TOWARDS A 'TOTAL COST OF RISK' CONCEPT, CONCEIVED AS SOMETHING INTRINSIC TO THE BUSINESS ACTIVITY**

### ● Audit and Review of Insurance Programmes

A useful tool in company merger and purchase processes, calling for an external and independent opinion on the companies' situation in this arena. The auditing of insurance programmes by an independent expert could also be well worthwhile as reinforcement and as good corporate practice; this audit would take into account not only the cost and suitability of the premiums but also the necessary limits and coverage for proper protection of the company's assets.

### ● Benchmarking of the insurance programme

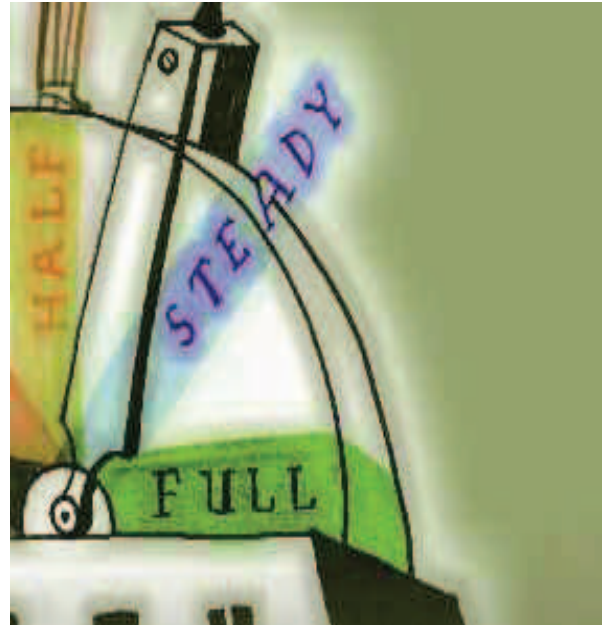
The gleaning of information on what limits and deductibles are being taken out by similar firms of our sector, as well as their average premiums, will give us useful insights for taking decisions about our own programme or about any new expansion project for a new activity or country. It might be equally enlightening to know which insurers have more or less appetite for given risks, and even the ideal moment for moving into the insurance market. All this information will help us trim risk-transfer costs.

### ● Premium Allocation Models

In complex business groups running international programmes, even sometimes with captive insurance companies, the amount spent on premiums may be considerably trimmed by means of a correct allocation thereof to suit the risk involved, the claim rate in each activity area and the taxes chargeable on the premiums in different countries, without breaching any legislation.

### ● Asset Inventory and Valuation

A precise and exact knowledge of asset values is a *sine qua non* of correct decision taking. It will also be useful for other objectives such as asset management and control, transfers of ownership, financing arrangements,



administrative, fiscal and accounting purposes, etc. This step is fundamental for establishing values in insurance policies, not only to avoid the consequences of underinsurance but also to set suitable compensation limits and avoid premium overpayments.

### ACTIONS ON RETENTION COSTS

Determination of suitable retention levels is more of an art than a science. Many factors come into play here, ranging from the organisation's financial resources, to risk appetite, sophistication of the internal risk management arrangements to the market situation.

The following services might facilitate this management

### ● Optimisation of deductibles /retentions of the insurance programme

Optimisation of the retentions and deductibles in the case of complex programmes involving many risk situations calls for a study using actuarial tools, showing the sensitivity to premium reduction of each one of the

deductible alternatives and the added claims cost this implies.

The different calculation methods will give us a projection of the situation on the basis of historical data and the confidence level we input into the system.

#### ● Captive Reinsurance Companies

The setting up of a captive insurance company, either as a direct insurer or reinsurer, is a valuable risk management tool; it is also one of the best ways of optimising retention and our self-insurance fund. Prior analysis, the setting up of the company and subsequent running thereof all call for the help of a specialist, inputting its knowledge and resources. This work will be topped up with financial and actuarial consultancy tasks to ensure compliance with the requisites laid down by Solvency II and the QIS 4 and 5 tests.

#### ● Claims Management and Adjustment

The sheer complexity of claims means that Risk Managers stand in need of specialist help to ensure correct management thereof, offering the following advantages:

- Swift and effective settlement of claims.
- Less interruption of productive and income-generating activities, with support for the involved company departments.
- Limitation of legal action to specific cases and technical assistance in taking this action.

The same collaboration will be needed for adjustment and management of self-insurance

claims, obtaining savings by harnessing economies of scale and the specialisation of the manager. This will allow us to tap into their experience, freeing up resources and improving the image projected to the outside world. Unification of this management will help us take corrective action based on trustworthy, centralised information.

#### ACTIONS ON REDUCTION AND CONTROL COSTS

One of the classic Risk Management functions, after pinpointing and analysing the risks, is their elimination, if possible, or at least their reduction, doing so by taking suitable measures to prevent the risk occurring or reducing its consequences if it does happen. Measures along different lines need to be taken to this end.

#### ● Risk Engineering

This service, carried out by specialists, can take in different areas, such as:

- Fire- and theft-prevention service.
- Prevention of occupational risks.
- Environmental risks.

On the basis of the reports and recommendations issued, suitable safety and prevention measures will be taken to avoid occurrence of the undesired events.

This service will back up Risk Management, improving the firm's social and business recognition and ensuring abidance by current legislation and compliance also with the standards laid down by insurers. It will also of course reduce costs.

#### ● Business Continuity Plan

Readiness to deal with any crisis will give us a competitive edge and ensure we can



**TO ACT ON EACH COMPONENT OF THE TOTAL COST OF RISK, RISK MANAGERS WILL HAVE TO CARRY OUT UP TO FIVE ACTIONS TO OPTIMISE AND REDUCE IT, USING THEIR OWN RESOURCES OR MOSTLY WITH SPECIALIST EXTERNAL HELP**



successfully come through any crisis that does befall us.

The business continuity plan is a key element in building up an enterprise Risk Management strategy, rather than dealing with these situations in a seat-of-the-pants manner.

As well as boosting the company's survival chances, active continuity planning has other notable advantages. These include reduction of costs associated with business interruption such as higher expenses, loss of income or loss of clients. If the company acts as a supplier of products and services, any shutdown of its activity may also trigger contractual penalties and forfeits.

**The Business Continuity Plan (BCP) is a key element in building up an enterprise risk management strategy**

**CRISIS SCENARIO**

**BUSINESS CONTINUITY PLAN**

**Establishes actions for reducing the response time to a crisis scenario**

**Lays down the guidelines for returning to a situation of normality and restoring business activity in the shortest time possible**

**Structure of a Business Continuity Plan**

**BUSINESS CONTINUITY PLAN**

- Crisis management plan
- Communication plan
- Personnel management plan
- Infrastructure recovery plan
- Business recovery plan
- System recovery plan
- Maintenance plan

**Results of a Business Continuity Plan**

- Pinpoint the various events that could impinge on continuity of the operations
- Establish the recovery times for restoring the pre-disaster situation
- Prevent or minimise losses in the event of disaster
- Prioritise assets to be protected or recovered in the event of disaster
- Ensure suitable management of resources in the event of any incident
- Improve the image and safeguard confidence in the firm by all stakeholders by demonstrating that resources are in place to guarantee continuity of the operations.



## INFORMATION TECHNOLOGY GOVERNANCE

There is an ever-increasing need to ascertain whether or not a company's IT area is suitably managing the risks and falls in line with the company's targets. The current dependence of IT systems means that the management of ensuing risks is strategic and also somewhat bewildering, calling for highly specialised advice in such areas as:

- Analysis of strategic risks and business process risks deriving from the information systems.
- IT audit of critical systems supporting the business processes.

- Security hardening of networks, systems and applications. Ethical hacking.
- Adaptation to the Spanish Data Protection Act (LOPD in Spanish initials) and audits of the Security Measures Regulation provided for by the Act.
- Auditing of outsourcing contracts.
- Bringing internal control of information systems into line with SOX404 and COBIT legislation.
- Design, implementation, auditing and testing of business continuity plans.
- Training and awareness raising.

### Strategic planning in the development, management and supervision of Information Systems

Analysis of strategic risks and process risks of the business deriving from the use of information systems

IT audit and audit of critical systems to backup business processes

Security hardening of networks, systems and applications

Ethical hacking

Audit of outsourcing contracts, considering legal aspects and compliance of service levels; SAS 70 Audit

Corporate Governance in the IT area

Adaptation to the Spanish Data Protection Act (LOPD) and conducting compliance audits as laid down in the Act

Bringing internal control of information systems into line with SOX404 legislation and COBIT

Design, implementation, audit and testing of Business Continuity Plans

Training and awareness raising. Logical security. Social engineering programmes, LOPD compliance



#### **ACTION ON INTERNAL RISK MANAGEMENT COSTS**

As Risk Management builds up to a significant level within the firm it will need management instruments and aids, especially in view of the fact that resources, especially human resources, are usually fairly thin on the ground in most businesses. There will therefore be a need for outside help to ensure management at the lowest cost possible, without increasing, or even reducing if possible, the internal Risk Management costs.

##### **● Risk Management IT Tools**

Risk Managers usually have to perform their tasks with precious few resources to hand. There is hence a growing need for an IT programme that integrates all risk management functions, especially policy and claims control but also including all the other needs, like risk inventory, controls, etc. In the case of business groups facing a diversity of situations and activities running international

programmes, tools of this sort could be regarded as essential.

##### **● Legislation Compliance**

The role of Legislation Compliance in any firm is to organise, coordinate and structure proper compliance by the firm with legal requirements in all the areas it trades in. This is usually monitored by means of a scattered patchwork of controls at different levels of the organisation. Its mission should be clear, explicit and geared towards protecting the interests of its firm from any damage that might ensue from a breach of established legislation (legal risk, legislation risk and reputation risk), thus contributing towards a more efficient management of its risks.

Insofar as compliance risk is considered to be just one risk more, falling under the remit of the Risk Manager, the diagnosis, analysis of possible faults and action plans represent a complex task calling for specialist help. A particular case is compliance in Spain with the Spanish Data



**THE BUSINESS CONTINUITY PLAN IS A KEY ELEMENT IN BUILDING UP AN ENTERPRISE RISK MANAGEMENT STRATEGY, RATHER THAN DEALING WITH THESE SITUATIONS IN A SEAT-OF-THE-PATH MANNER**



Protection Act (Ley Orgánica de Protección de Datos: LOPD).

● **Outsourced Risk Management**

Companies that, due to their size or structural limitations, have not set up their own risk management department, can outsource this service to specialist firms, achieving the same results as with their own inhouse department.

This same need may arise in major firms to bid them over temporary difficulties while the post is covered, either because the CRO has left or when new firms are being grafted into the group or similar situations calling for an immediate, albeit provisional, solution.

● **Enterprise Risk Management (ERM)**

The setting up of an Enterprise Risk Management (ERM) system entails a significant organisational and administrative effort. This burden can be lightened with the help of specialist consultants, giving rise to the development of Risk

Management processes and methodologies. Their involvement will be crucial in the initial definition and start-up phase, their role thereafter being limited to maintenance and updating of the procedures.

The service will extend to all fields of application, even in complex settings: strategic risks, geopolitical risks, reputation risks, operational risks, environmental risks, technology risks and financial risks.

This outside aid will also be necessary if we wish to manage risks with due compliance of the parameters of COSO II or the recent standard ISO 31000. **I**

## CONCLUSION

The conclusion we can draw from all the above is that, for Risk Management to be effected with the scope required for each particular firm, there are tools and processes that we can obtain from specialist consultants. These allow us to act on the various components of the Total Cost of Risk, to reduce it to the lowest level possible.

This gives firms a better understanding of the risks they face and the way these risks are intertwined. It gives them a strategic advantage by consolidating their activity and ensuring their long-term sustainability, helping to increase the value for the shareholder and imbue the risk culture throughout the company's whole decision-making structure. This brings out the true value of this function, which does not always get the credit it deserves within the firm's organisational structure.



**THE SETTING UP OF AN ENTERPRISE RISK MANAGEMENT SYSTEM CAN BE LIGHTENED WITH THE HELP OF SPECIALIST CONSULTANTS, GIVING RISE TO THE DEVELOPMENT OF RISK MANAGEMENT PROCESSES AND METHODOLOGIES**