Institute
and Faculty
of Actuaries

Actuaries and Risk Management today

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Businesses today are exploring new ways to improve their risk management due to increased competition in a global market, increased regulation and increased access to ‘big data’. Actuaries can play a key role in developing a risk management framework within any business which has to manage uncertainty affecting the delivery of business goals.

The need for enterprise risk management across organisations has never been greater. The integration of the global economy has magnified the traditional operational risks that a business faces and introduced new ones. To thrive in this environment, businesses need to take an active approach to identifying and managing their key risks.

This need has been increasingly recognised by a range of stakeholders including regulators. Risk management practices that have been commonplace in insurance and banking are being extended to wider industries. The latest UK Corporate Governance Code contains new requirements around risk assessment.

Businesses also have unprecedented access to data, both within their organisation and externally. Successful businesses are exploring this opportunity to inform their future direction.

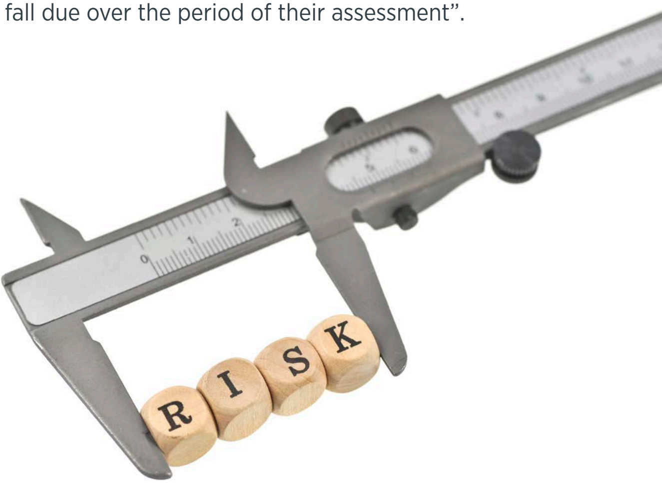
Actuaries are well placed to help a company make the most of these opportunities, since the profession has been a leader in risk management and data-driven risk modelling for more than 100 years.

What are the new requirements?

Listed companies are required under the Financial Conduct Authority Listing Rules either to comply with the provisions of the UK Corporate Governance Code or explain to investors in their next annual report why they have not done so.

The new code states that the board is responsible for determining the nature and extent of the principal risks it is willing to take. The directors should confirm in the annual report that they have carried out a robust assessment of the principal risks facing the company, including those that would threaten its business model, future performance, solvency or liquidity.

Taking account of the company's current position and principal risks, the directors should explain in the annual report "how they have assessed the prospects of the company… [and] whether they have a reasonable expectation that the company will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment".



What do actuaries do?

Actuaries put a financial value on risk – for instance, the chances of a hurricane destroying a home or the long-term liabilities of a pension system. Actuaries help clients understand their risks and future cash flows, and how they can better manage those risks in the future.

Actuaries use data to estimate the likelihood of future events and model the impact of these events on the financial results of the company. The profession has a proven history of building risk management frameworks in insurance and financial services, of modelling risks using statistical techniques and of addressing regulatory concerns.

What can an actuary bring to your business?

The new FRC guidelines encourage business leaders to be active risk managers. An actuary can advise a company on developing a suitable risk modelling framework, identifying the risks most relevant to the business and building an overall company risk model. With senior management input, we would help determine what your risk tolerance is and how it compares to your current outlook.

Actuaries can help you interpret the data your organisation is producing and its link to risk management. We are uniquely qualified to play this role due to our experience in relating data to financial impact, along with our high professional standards.

What is a risk model?

Risk modelling is a comprehensive approach to identify and quantify the key risks to a company. We estimate the likelihood of risks occurring and use computer modelling to generate a wide range of possible outcomes depending on the actions that the company takes.

A risk model shows the effect on the company of specific extreme events occurring as well as many more likely outcomes. We estimate the likelihood of these events using the past history of similar companies in the industry.

We can show what the financial impact of a particular scenario would be, where that scenario fits into the overall picture of what is likely to happen, and where the data indicates that a business is exposed to risk.

In most cases, the factors affecting the risk to the company are interdependent. For example, increases in energy prices may affect the wider economy. If the relationships between these risks are not modelled, the true risk to the company may be underestimated.

Modelling the risks of the company as a whole allows better decisions to be made about:

- What the risk tolerance of the company is
- What preventive action can be taken
- What crisis actions plans to put in place

Actuaries are experts in risk modelling and communicating the impact on financial statements to company leadership.

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