The risk function in the
age of uncertainty
RIMS Australasia
Conference 2019
Today: A brief overview of...

What’s keeping CEO’s awake at night?

Global risk trends from PwC’s 22nd Global CEO Survey, 2019

Risk function of the future

Thoughts on pillars of success
What’s keeping CEO’s awake at night?
CEOs’ curbed confidence spells caution
While many CEOs expect global economic growth to ‘improve’ there is sharp rise in those saying growth will ‘decline’
Confidence in organisations’ revenue growth prospects has fallen sharply as well...

Do you believe global economic growth will improve, stay the same, or decline over the next 12 months? *(showing only ‘improve’)*

How confident are you about your organisation’s prospects for revenue growth over the next 12 months/next 3 years? *(showing only ‘very confident’)*

![Graph showing trends in confidence and economic growth](chart.png)

- Global economic growth (% improve)
- Confidence next 3 years (very confident)
- Confidence next 12 months (very confident)
The impact and uncertainty of populist and protectionist government policies help explain this drop in confidence.

How concerned are you, if at all, about each of these potential economic, policy, social, environmental, and business threats to your organisation’s growth prospects (showing only ‘extremely concerned’):

2018 top ten threats

1. Over-regulation | 42%
2. Terrorism | 41%
3. Geopolitical uncertainty | 40%
4. Cyber threats | 40%
5. Availability of key skills | 38%
6. Speed of technological change | 38%
7. Increasing tax burden | 36%
8. Populism | 35%
9. Climate change and environmental damage | 31%
10. Exchange rate volatility | 29%

2019 top ten threats

1. Over-regulation | 35%
2. Policy uncertainty | 35%
3. Availability of key skills | 34%
4. Trade conflicts | 31%
5. Cyber threats | 30%
6. Geopolitical uncertainty | 30%
7. Protectionism | 30%
8. Populism | 28%
9. Speed of technological change | 28%
10. Exchange rate volatility | 26%
13. Climate change and environmental damage (19%)
23. Terrorism (13%)
CEOs face issues with their own capabilities, mostly in terms of data adequacy, with a huge gap that remains ten years on.
Talent is another pain point, with CEOs struggling to hire workers and suffering from skills gaps.

In general, has it become more difficult or less difficult to hire workers in your industry, or is it unchanged?

<table>
<thead>
<tr>
<th>Year</th>
<th>Less Difficult</th>
<th>Unchanged</th>
<th>More Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12%</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>2019</td>
<td>7%</td>
<td>31%</td>
<td>62%</td>
</tr>
</tbody>
</table>

+19% increase from 2012 to 2019.

What impact is ‘availability of key skills’ having on your organisation’s growth prospects? (asked of those ‘extremely concerned’ about availability of key skills)

- 55% - We are not able to innovate effectively
- 52% - Our people costs are rising more than expected
- 47% - Our quality standards and/or customer experience are impacted
- 44% - We are unable to pursue a market opportunity
- 44% - We are missing our growth targets
- 22% - We cancelled or delayed a key strategic initiative
- 4% - There is no impact on my organisation’s growth and profitability
02
Risk function of the future
Common challenges of the risk function

1. **Data is often lacking** in quality or availability. Sometimes it is available, but not until it is too late.

2. Risk appetite metrics are often **reported some weeks after a period end**. In some instances, by the time the Risk Committee looks at the risk profile and risk appetite, so much time has elapsed that any actions taken are likely to be ineffective.

3. Investment in risk systems fail to keep pace with other technology investments. **Reporting is commonly produced manually** and relies on the risk analyst aggregating data supplied by the business. There is little time for checking and challenge.

4. The activities in risk tend to be **dominated by regulatory compliance and reporting** tasks. There is little in the way of deep analytical skills.

5. The skills in risk are typically **geared to operational risks** and typically have little in the way of strategic challenge.
The nature and velocity of risks will continue to evolve rapidly because of the 4th industrial revolution.

85% of the world’s trades that are made on the global stock markets are made using unsupervised algorithmic processing already.

Outside of the obvious reliance on technology and technology resilience risk that we often talk about today, these shifts introduce a new set of risks to a company. For example:

- How does a firm attest to its compliance if transactions and interactions are based on deeply integrated systems with machine learning and artificial intelligence continually changing the way it makes decisions in a ‘black box’?

- Removing the technology silos creates both a huge reliance on third party technology providers and blurs the lines between what is yours and what belongs to the ‘collective cloud’ (e.g. who ‘owns’ the data)?

- As the focus to value-add services shifts and new entrants come into the market, how does Risk Function balance its regulatory obligations with the social and reputational risk of collaborating with new entrants to new markets and customer channels (e.g. ‘Uber Insurance’)?

As technology advances within the business, the Risk Function will need to keep pace, both in terms of its understanding, but also in the way that technology is used to assess, monitor, evaluate and report on the business.

Most of the technology that is needed to enhance the Risk Function already exists. The important question for the CRO is how much it costs to acquire and then embed within the business.

Technology to monitor risk appetites and tolerances across a wide-range of measures should become commonplace. Movements against appetite, including ‘notification type’ messages through control and “governance” processes will create efficiencies. The ability to specifically track exposures on such an accurate and timely basis could also be highly beneficial in the design of reinsurance products and their pricing.
Pillar 2: Data and enhanced analytics

Real-time and predictive analytics, drawing on ever increasing sources of internal and external data, will become the norm.

Analytics will be automated, with predictive insights that are continually learning and evolving (driven by AI) to identify emerging issues and trends.

Risk functions will increasingly need knowledge and tools that can allow them to digest large volumes of data and produce actionable insights.
Pillar 3: Culture and behaviour

Understanding how culture and cognitive biases impact on decision making will become more important with the need for quicker decision making in the face of more uncertainty.

Risk functions helping to find the balance between the need for both:

- System 1 thinking: Fast, automatic, frequent, emotional, stereotypic, unconscious.
- System 2 thinking: Slow, effortful, infrequent, logical, calculating, conscious.
We’re all getting whiplash from the speed and unpredictability of the ‘unknown unknowns’.

To remain relevant risk functions will need to shift more outside the comfort zone of compliance and control monitoring and be the master of techniques needed to understand and respond to uncertainty.

### Pillar 3: Methods and expertise

<table>
<thead>
<tr>
<th>Category</th>
<th>Measurability</th>
<th>Risk mitigation objective</th>
<th>Risk management methods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational Risks</td>
<td>High</td>
<td>Can measure probability and impact</td>
<td>Drive incidence of occurrence to zero</td>
</tr>
<tr>
<td>“Known knowns”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategic Risks</td>
<td>Medium</td>
<td>Can estimate probability and impact</td>
<td>Reduce likelihood and impact in a cost-efficient way</td>
</tr>
<tr>
<td>“Known unknowns”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Category 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External Risks</td>
<td>Low</td>
<td>Cannot measure or estimate likelihood</td>
<td>Reduce impact should risk occur</td>
</tr>
<tr>
<td>“Unknown unknowns”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you