

2021 WINNER SUBMISSION



Proactivity vs. Reactivity

In times of such uncertainty, how can the insurance industry ensure it is proactive to external threats and opportunities?

By Benjamin Briscoe

On a sunny afternoon in 1896 – likely a Tuesday – a man rides to work on his horse. He comes across a gentleman hammering metal sheets in his yard. Curious, he asks “what are you doing?”. The gentleman looks up and replies, “designing a car.”¹ The conversation ends with the man wondering when his horse will drag the car to market. Meanwhile, 150,000 horses relied upon for transportation in New York are sparking a health crisis due to excessive manure. Policymakers host an international conference only to abandon it midway unable to see a future without horses.² Thirty years later, cars replace horses driving once-thriving horse-related businesses into obscurity...

The future is uncertain until it happens, and then it's obvious. Sometimes the frenetic pace of change simply catches up with businesses not paying attention and devours them. Blockbuster turned down an offer to buy Netflix for \$50m³ and Kodak didn't adapt for digital cameras.⁴ These occasions demonstrated a failure to anticipate the development or application of technology. They also show decision-making based on incomplete or inaccurate pictures can spell disaster. AIG generated USD25B in losses in the GFC⁵ despite their ironically 'certain' models predicting they couldn't lose⁶.

Today, uncertainty is enjoying prominent time in the limelight. Covid, cyber and geopolitical risks all feature as high concerns for businesses⁷. How can the insurance industry ensure it proactively responds to external threats and opportunities? The answer lies in shifting from solely using past-based models to pre-empting future challenges instead.

¹ An unlikely possibility, Henry Ford assembled his experimental car in his backyard in 1896

² Doochin, D. (2016)

³ Randolph, M (2021)

⁴ Mui, C. (2012)

⁵ Gethard G., 2020

⁶ Carroll, P. & Mui, C. (2009)

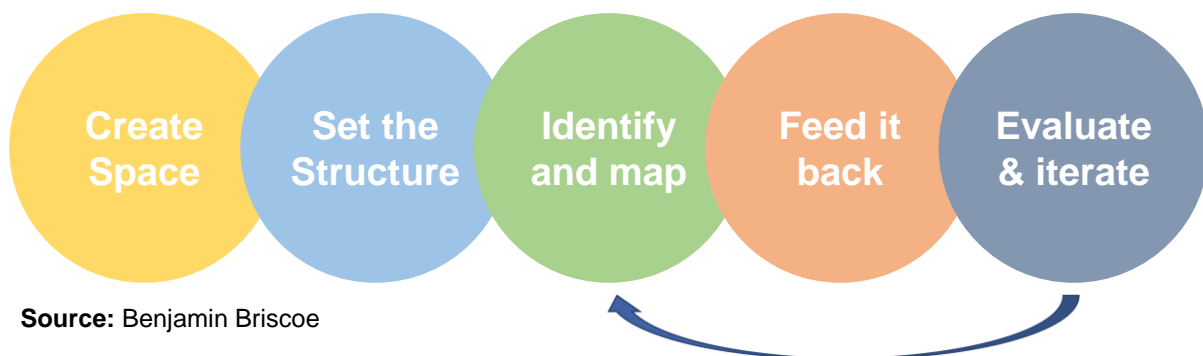
⁷ AGCS (2021)

Foresight can be informed by historical data, not led by it

Insurance helps customers manage the uncertainty of sudden events which, unpredictable in isolation, are predictable at scale. Insurers use historical data to model probabilities of these events, leveraging more sophisticated approaches to improve predictions' accuracy. This has been a long-time winning formula for insurers to manage uncertainty, but it also contributes to their reactive nature. In 9/11's wake insurance markets retreated from terrorism cover.⁸ The subsequent US Commission concluded 9/11 "was a shock but should not have come as a surprise" and that "the most important failure was one of imagination."⁹ Currently Covid, whilst an unprecedented shock, should not been a surprise either, history being our guide,¹⁰ with many prominent individuals warning a pandemic was only a matter of time.¹¹

The historical data insurers use to model the future cannot reveal the inner workings of Henry Ford's garage, geopolitical shifts leading to 9/11, or Covid's disruption. Preparedness for these events requires the insurance industry to consider and plan for the unknown, rather than wait for it to arrive. This paper illustrates why traditional approaches that extrapolate the past are dangerous, and how a targeted Committee – a Shock Events & Emerging Risks Committee ("SEER") – can safeguard an insurer against risk complacency.

Key ingredients of a Shock Events & Emerging Risks (SEER) Committee



Source: Benjamin Briscoe

Step 1 – Create Space

We have a natural predisposition to extrapolate the present as predictive which creates regular pitfalls. Fannie Mae and Freddie Mac posted USD5.5b losses in six months as house prices tumbled during the GFC. Their models assumed house prices would never fall.¹² The failure of Kodak stemmed from seeing the future as a variant of the present, and not identifying a radical change (digital cameras) with the potential to kill their market.¹³ It's no coincident that the seers of ancient mythology heroes consulted

⁸ United States General Accounting Office (2002)

⁹ https://govinfo.library.unt.edu/911/report/911Report_Exec.htm

¹⁰ There were three pandemics in the last 100 years before Covid

¹¹ Two of the most prominent were Bill Gates and Dr. Anthony Fauci

¹² Baily, Litan, Johnson (2008) p.23

¹³ Carroll, P. & Mui, C. (2009), p100

about their futures were often secluded (away from noise) and partially or fully blind.¹⁴ Both lend to removing distractions that the immediate can bring. While by no means endorsing blinding SEER members, there is a strong case for creating the right space.

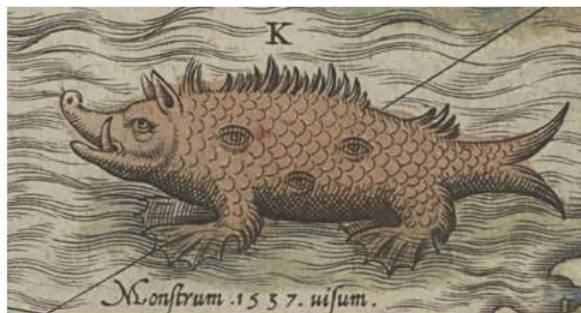


Tiresias, a blind seer in Greek mythology (Source: Britannica.com)

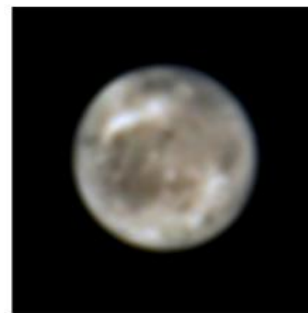
Creating space means legitimising the work of the Committee by protecting it from the demands of today; prioritising time for its work and making time to hear its recommendations. This will not be easy as many of us have a Present Bias; a cognitive bias where we give stronger weight to payoffs that are closer to the present time when considering trade-offs between two future moments.¹⁵ It's about creating the right space for the right people to develop organisational foresight.

Step 2 – Set the Structure

The future is unknown, and the unknown has an air of trepidation. One only needs to consider medieval maps to see monsters at the edge of the known world – dragons, sirens, and sea pigs – waiting to snare unwary sailors. By the 17th century though, sailors were peeling away the mysteries of the ocean and monsters were replaced with ships by cartographers¹⁶. In search of new frontiers to explore, mankind now charts the course into the stars...



1539 Carta Marina by Olaus Magnus (source: Public Domain)



1996 image of Gandymedes (source: Hubble Telescope)

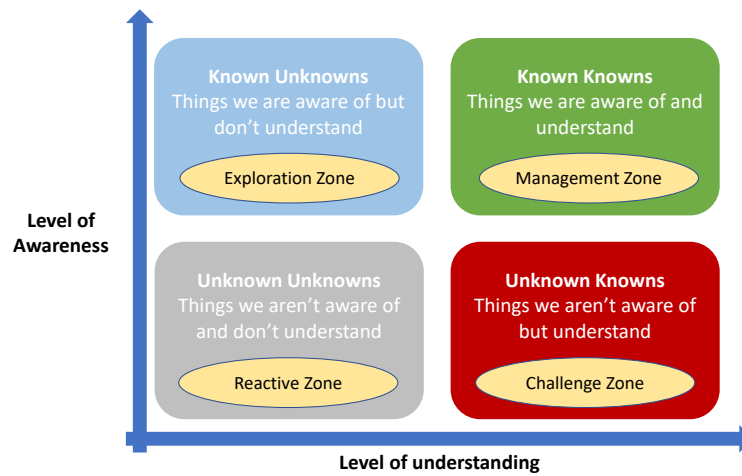
Exploring the unknown requires a different mindset, one of curiosity and imagination to convert the unknown into the known. SEER can challenge an insurers' awareness and understanding of the market

¹⁴ If you ever wondered why Odin has one eye in the Marvel movies, in Norse Mythology Odin gave up one eye after drinking at a magical spring to gain futuresight.

¹⁵ O'Donoghue, T., & Rabin, M. (1999)

¹⁶ Waters, H. (2013)

environment by using the ‘Rumsfeld Matrix’¹⁷ inspired by NASA’s methodology to push space’s frontiers.¹⁸ Grappling with the unknown, NASA constantly self-assess their understanding and awareness. It also drives their activities to convert the unknown into the known as they explore the galaxy and its many wonders like Jupiter’s moon, Ganymede.¹⁹



Source: Benjamin Briscoe (based on Rumsfeld Matrix)

SEER can use this model to help identify and assess opportunities and threats based on its understanding and awareness of different topics. The objective for SEER is clear: move things into the ‘Known Knowns’ category.

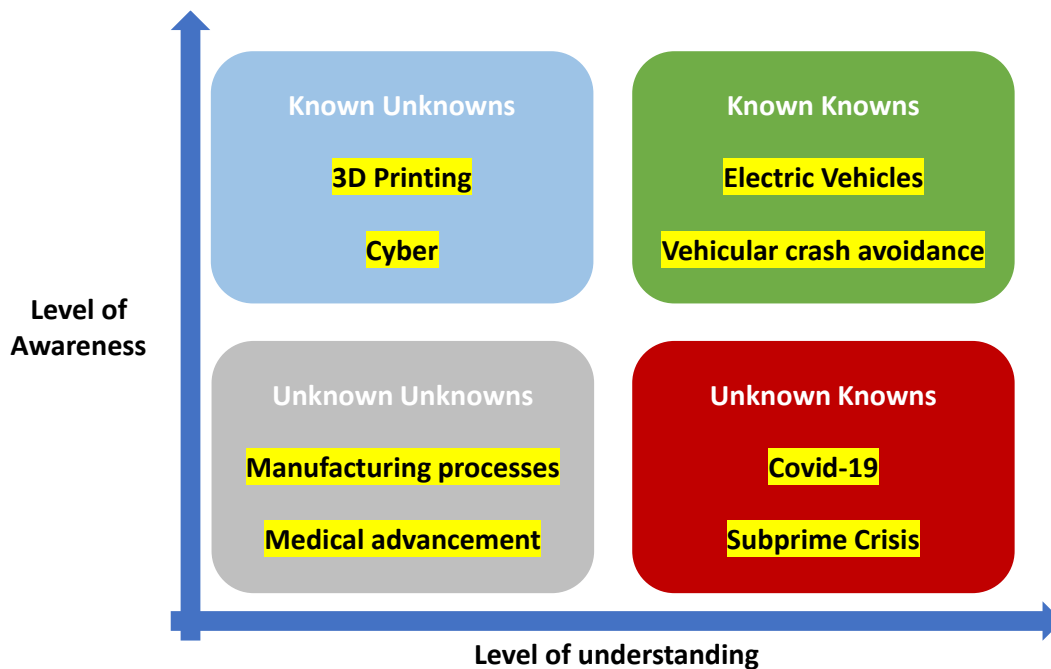
Step 3 – Identify and map Shock events & emerging risks

‘Unknown Unknowns’ are “the inevitable products of any technological revolution”²⁰. What advances could impact insurers? A well-documented development is Driverless Cars which, once perfected, is predicted to eliminate 90% of accidents attributable to human error²¹. Australian insurers generate 38% in automotive premiums²² which will be impacted by driverless cars. Failure to develop transitional strategies could be terminal for insurers, especially those reliant on motor lines.

While full embedment of Driverless Cars would be a technological revolution, it is not an “Unknown Unknown”; it is rather an “Unknown Known”. Automotive companies have been working on Driverless Cars for years making continued progress. One of the key enablers to Driverless Cars, 5G, is now rolling out²³. It would be a contrarian view to announce its imminent arrival on the industry’s doorstep, however it’s also folly to dismiss it as far away. Things have a habit of arriving quicker than expected; just ask Ken Olsen who (infamously) noted in 1977 “there is no reason anyone would want a computer in their home.”²⁴

¹⁷ Coined after Donald Rumsfeld, Secretary of Defense to George W. Bush, who made his speech that “there are Known Knowns”.
¹⁸ Rumsfeld credited NASA in his autobiography on where he first heard the concept
¹⁹ NASA (2021)
²⁰ Fulton, K. (1993)
²¹ US Department of Transportation (2008)
²² Apra (2021)
²³ Heinke, Menard, Sodengren, Wrulich (2019)
²⁴ Computing History

One way SEER can combat this is by approaching the mapping exercise using “Pre-mortem” techniques whereby you assume something has catastrophically failed in the business and then you hypothesise all the reasons why it may have ‘died’.²⁵ This approach provides enough steadiness to the process without creating an anchoring effect on any future scenario (thus missing others that may occur). Other approaches are scanning for any possible “weak signals” that can foreshadow changes, such as specialised journals and science-fiction²⁶, and having open dialogues with experts in areas of research and development such as Universities. One caveat: you need to foster relationships with experts to get information first. A common saying in investor circles, “if you’ve heard it from the news, you’re already too late.” Using these approaches, SEER should develop its own matrix.



Step 4 – Feed it back to the business

There is currently a global shortage of microchips impacting car manufacturers.²⁷ This has been driven by Covid²⁸ and compounded by a factory fire in Japan²⁹. The microchip shortage is creating inflationary pressures³⁰ and the insurance industry is not immune. Scarce replacement vehicles, higher rental car costs and rising vehicle market values are all inflating claims costs prompting a need for insurer action.

A key function of SEER is to recommend actions insurers can undertake to address threats and exploit opportunities. Using foresight, SEER in this scenario could recommend reducing intermediaries to reduce potential failure points in the supply chain. It could recommend buying cars from rental companies struggling due to the pandemic. However while SEER should endeavour to provide some high-level recommendations the decision-making should still sit with the business.

²⁵ Klein (2007)
²⁶ Hiltunen (2008)
²⁷ Dowling (2021)
²⁸ Wayland (2021)
²⁹ Kelion (2021)
³⁰ Rappeport & Kaplan (2021)

Category	Threats	Mitigants
Known Knowns	When it becomes a common Known Known competitors will act	Automation, Management attention
Known Unknowns	Can be unquantified or difficult to measure impacts	Seek insider perspectives, Experiment
Unknown Knowns	Can lead to potentially catastrophic effects due to not being given attention or being underestimated	Challenge organisational assumptions, Management attention
Unknown Unknowns	Escape the standard risk management approach of identification and quantification	Exploration, Perform "Pre-Mortems"

Source: Benjamin Briscoe

Step 5 – Evaluate and Iterate

In 1995, Motorola-backed Iridium set out to provide satellite phone with global reach based on an executive's inability to make a call from the Bahamas in 1985 and years of 'research'.³¹ Within four years it folded and costed Motorola billions due to a failure to anticipate cellular networks.³²

Constant change means what made sense yesterday may not make sense tomorrow. SEER needs to continually evolve and adapt its input and outputs to help drive success. This has become increasingly critical due to the pace of change. Personal Digital Assistants (PDAs) were common in the mid-nineties and replaced by Smart Phones a decade later.³³ This means constant scanning of the market environment and feeding it back into the maps and actions recommended to the business. It also means being prepared to recommend U-turns; Motorola could have avoided headaches if someone spoke up sooner. SEER must focus its effort for maximum impact; it will research and explore widely, however the output must be succinct and focused.

The mindset and skills needed in SEER

A cliché: the right people are the most important asset of an effective committee. Specifically, participants require four critical attributes to maximise success:

1. **Growth mindsets** – Curiosity, an open-minded learning approach, and ability to work with uncertainty (which are all hallmarks of a Growth Mindset).³⁴
2. **Structured and disciplined approach** – Without structure, there's a risk of not capturing and coherently communicating the work of SEER to inform business decision-making; an underestimated skill is the ability to produce quality minutes to capture discussion.
3. **Understanding of business functions (but not necessarily domain expertise)** – Understanding of business functional model helps SEER craft recommendations and deliver them to the relevant area or any cross-functional steering function an insurer may have. Domain expertise however is not always a good thing. It can result in "Single Perspective

³¹ Carroll, P. & Mui, C. (2009), ch.6

³² Carlson 2016

³³ Edwards (2018)

³⁴ Dweck, C. (2016)

Instinct”³⁵ (for an underwriter, every problem could become a question of risk selection) which can disrupt free thinking and limit SEER’s imagination.³⁶

4. **Foxes, not hedgehogs** – Inspired by Ancient Greek fables, hedgehogs have one big idea (a common “pundit” approach) whilst foxes, though more equivocal in their judgements, are more accurate.³⁷ The strength of foxes is they stay open to new inputs and therefore more likely to adapt their view and better assess trends.³⁸

Future imperative: why insurers should not wait to set up the Committee

The pace of change is accelerating. It took eons to reach the wheel, centuries to reach the gun, and decades to reach computers. The last twenty years has seen the development of new technologies continue at a dizzying pace with revolutions in biotech, healthcare, and multimedia.³⁹ It’s also expected to continue with potential for further, world-changing innovations by 2025.⁴⁰



From humble beginnings in a coffee shop 300+ years ago⁴¹ the insurance industry has gone along for the ride becoming a €5trillion industry.⁴² It has weathered storms, natural disasters, geopolitical events like WW2, and currently stands strong in the face of Covid.⁴³ Each time the industry has reacted to changes and adapted. But with changes striking with increasing frequency, insurers risk becoming myopic as they deal with “today” leaving them vulnerable to tomorrow. The need for a SEER is becoming ever more evident considering this.

³⁵ Rosling, H., Rosling, O., & Rönnlund, A. R. (2019), ch.8

³⁶ Gapminder (2021)

³⁷ Gardner (2012)

³⁸ Ibid

³⁹ Hillyer (2020)

⁴⁰ Yoon (2020)

⁴¹ Lloyds (2021)

⁴² Binder (2019)

⁴³ PWC (2020)

SEER will become a key line of an insurers' defence against the buffeting forces of relentless change. Establishing foresight within insurers can help chart a course to navigate the challenges of "Known Unknowns" insurers need to manage – like Driverless Cars – as well as provide early detection of "Unknown Unknowns" not yet conceived. Insurers deal with uncertainty everyday, however married to insights from the past could blind them to the future. SEER cannot predict everything, but its foresight provides better clarity on what may lie ahead. This includes both mitigating threats and finding new sources of potential growth. The alternative? Blink and miss the change that condemns insurers to joining Blockbuster, Kodak and Iridium in the history books...

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