Dismissing the plausible Is human behaviour the primary barrier to risk reduction?

Alex Cartwright 24 May 2023

Tonkin+Taylor





Your next 30 mins

Dismissing the plausible

Psychology and human bias

The scenario planning method

Wrap up the ramble

Questions

Dismissing the plausible

"Unprecedented"

"never seen before in my lifetime"

"too early to consider climate change"

The flood of change?

"property owners received warnings after their property had already flooded or not at all."

"flood risk management lacks coordination and structure"

"responses to local flood risk are piecemeal and not necessarily prioritised"

"it is not surprising that the public are confused and that they wonder who is accountable"

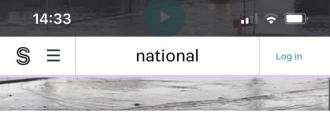
"Responders were surprised by the scale and duration of the emergencies and... found themselves reacting to unexpected events"



We need to change how to communicate hazards and risk...



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Heavy rain has hit Tasman and Marlborough, causing flooding and road closures.

Residents in rain-hit Nelson and Tasman are being asked to stay home as unpredictable bursts of rain cause flooding and slips on Saturday.

Nelson Tasman Civil Defence said at midday on Saturday that rivers in the region appeared to have peaked, including the Maitai River through Nelson which had broken its banks in places on Saturday morning.

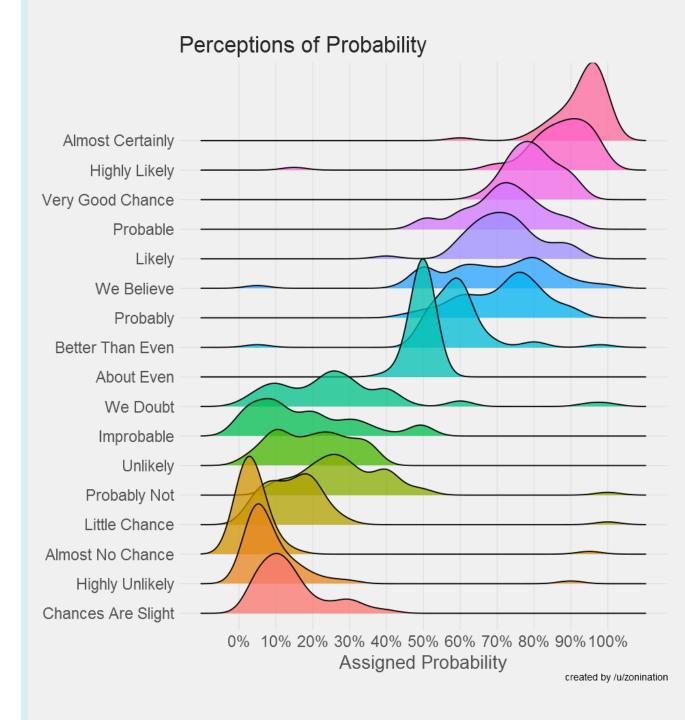
Some residents living near the river had self-evacuated, with memories still fresh of the rains last August that saw the Maitai flood a number of homes.

Nelson Tasman Civil Defence spokesman Chris Choat said a centre for Nelson residents leaving their homes or feeling unsafe had been set up at the Founders

Heritage park



Words can be confusing



Applying the psychological dimensions

The **cognitive dimension** relates to what people **know and understand** about the risk

The **emotional dimension** relates to **how they feel** about the risk information they have received

Uncertainty

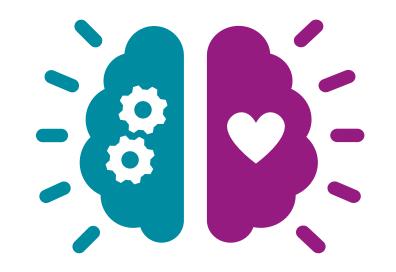
Education

Data

Instruction

Statistics

Annual Return Intervals



Connection to place

Fear

Familiarity

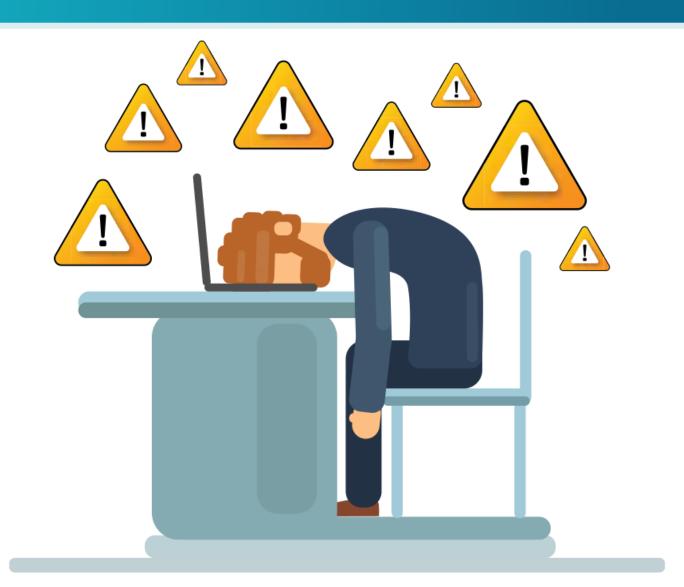
Past experience

Ability to respond

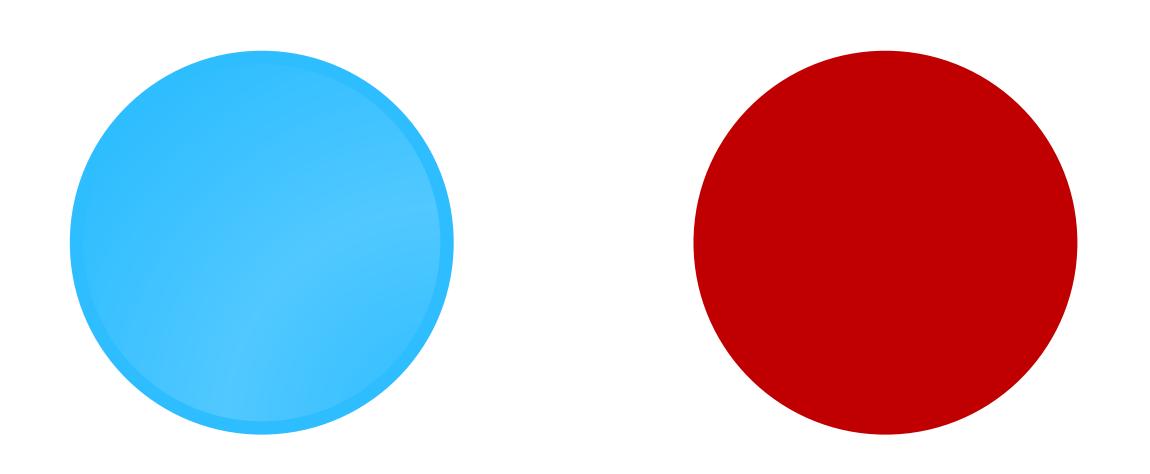
Dread

Annual Exceedance Probability

When we do focus on human behaviour

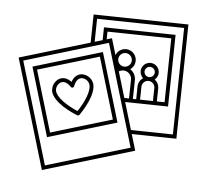


Question: Which circle is bigger?



Considering the human bias









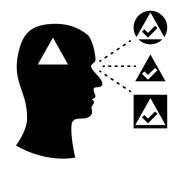
Optimism bias

Framing effect

Recency effect

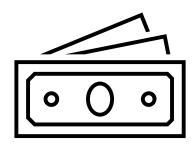
Groupthink

Considering the human bias









Confirmation bias

Cognitive lock-in

Task saturation

Sunk cost fallacy

Understanding the world we live in

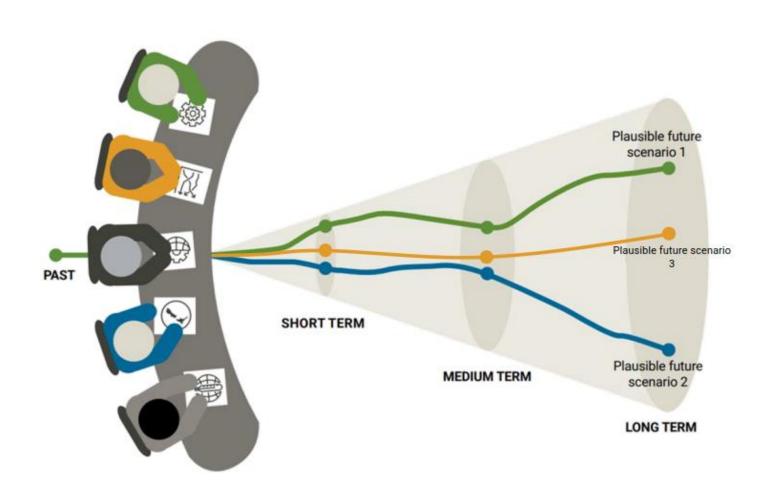


BRITTLE, ANXIOUS, NON-LINEAR, INCOMPREHENSIBLE

The scenario planning method



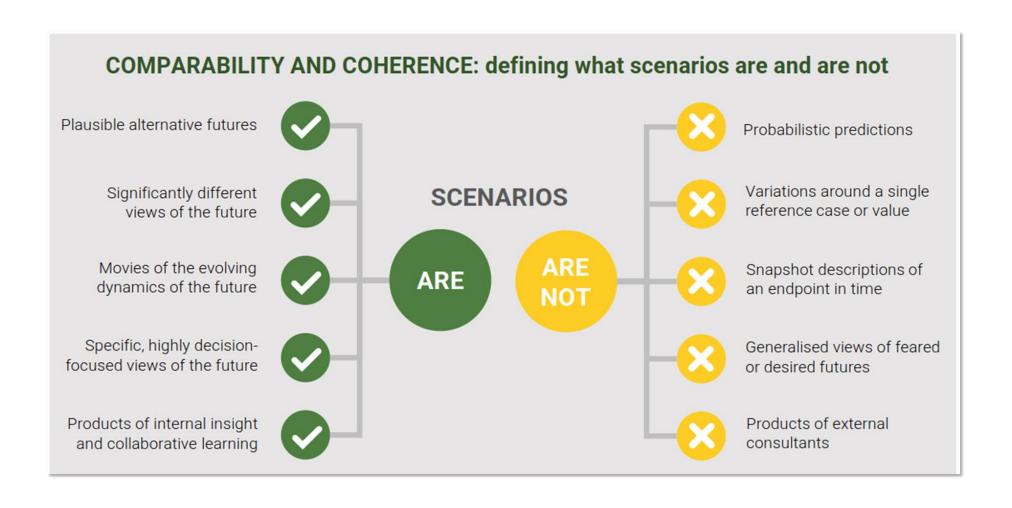
Scenarios: A tool to enhance strategic thinking



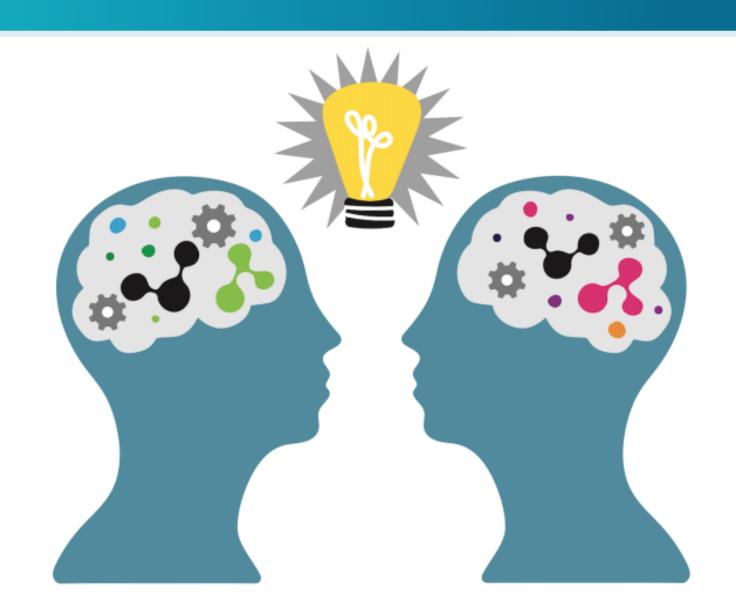
'We can't predict the future, but scenarios allow us to explore possible futures, the assumptions they depend upon, and the courses of action that could bring them about'

www.climatescenarios.org/primer-legacy/

What are scenarios?



Removing the barrier by considering human behaviour



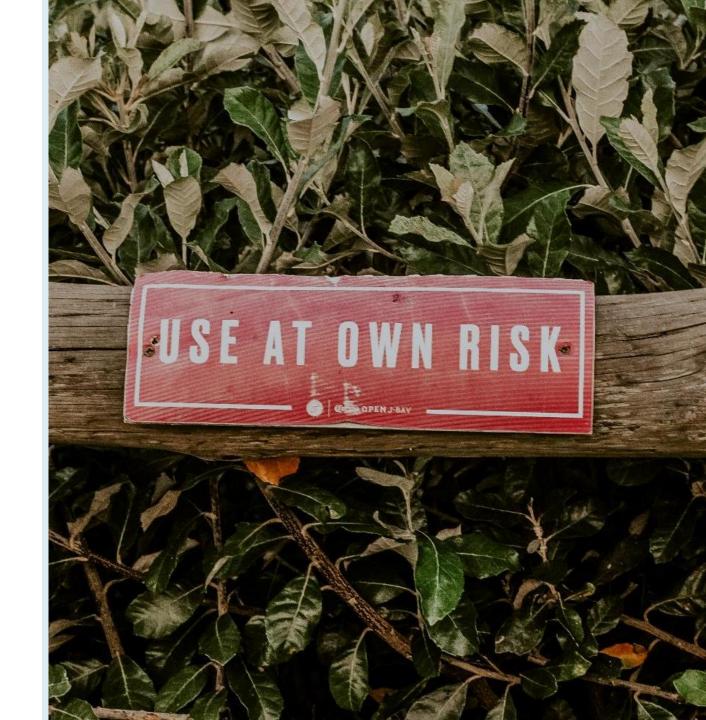
Key takeaways

Focus on the emotional dimension (consequences) first to better engage.

Ask "what are the plausible futures that we should be prepared to acknowledge?"

Advocate for better communication from your organisation, industry, and risk management agencies.

Remove the barrier by considering human behaviour (bias) in the work that you do.



Welcome your questions

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