



SYNERGIA

**Using systems thinking
tools to inform the
design, implementation,
and evaluation of
services**

9 March 2023

**Whakataka te hau ki te uru
Whakataka te hau ki te tonga
Kia mākinakina ki uta
Kia mātaratara ki tai
E hī ake ana te atākura
He tio, he huka, he hauhū
Tihei mauri ora!**

**Get ready for the westerly
and be prepared for the
southerly.
It will be icy cold inland,
and icy cold on the shore.
May the dawn rise red-tipped
on ice,
on snow, on frost**



Purpose – adding to our kete

To learn how systems thinking concepts and tools can be used to design, implement and evaluate programs and initiatives.



Plan our time together

1. Opening
2. What is a system?
3. Reference modes
4. Cognitive mapping
5. Group exercise
6. Sharing
7. Wrap up and closing

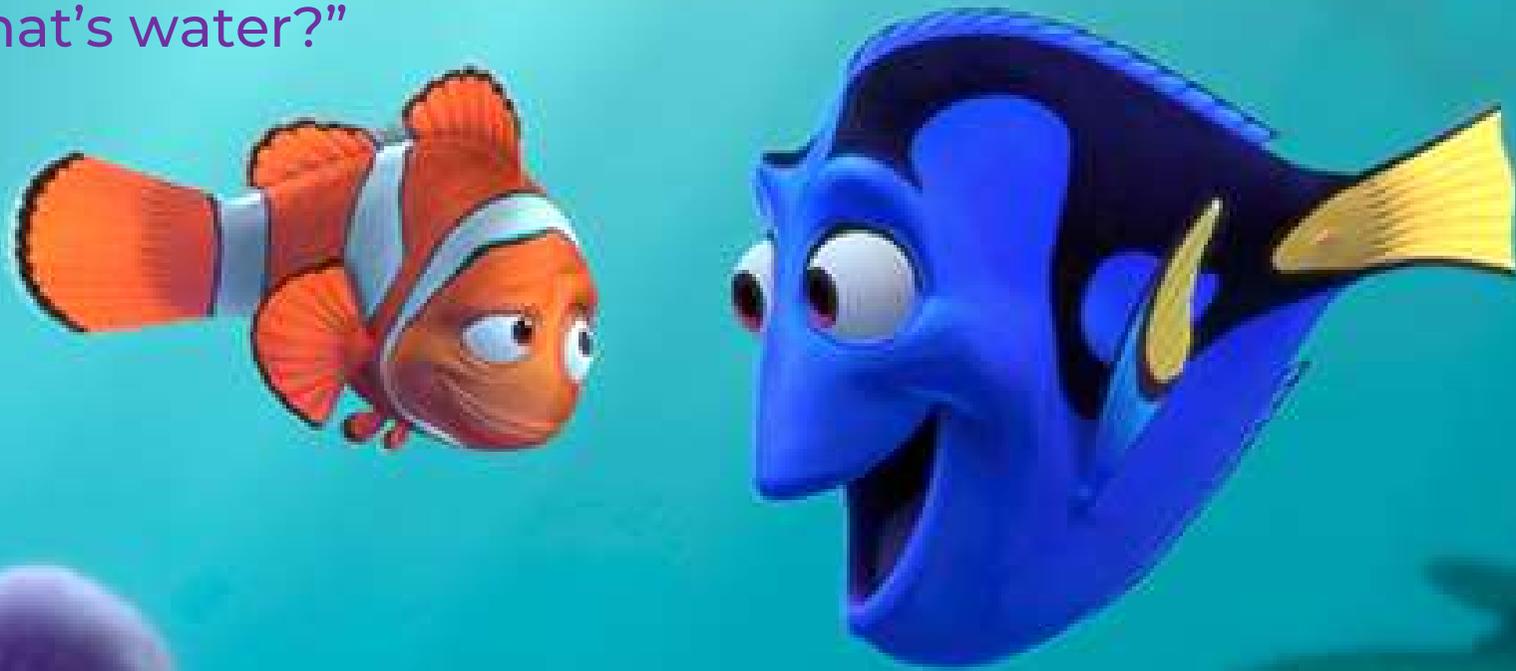


What is a *system*?



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A fish is swimming along one day when another fish comes up and says “Hey, how’s the water?” The first fish stares back blankly at the second fish and then says “What’s water?”



Systems drive behaviour

“A system is a set of things—people, cells, molecules, or whatever—interconnected in such a way that they produce their own pattern of behaviour over time. The system may be buffeted, constricted, triggered, or driven by outside forces. But the system’s response to these forces is characteristic of itself, and that response is seldom simple in the real world.”

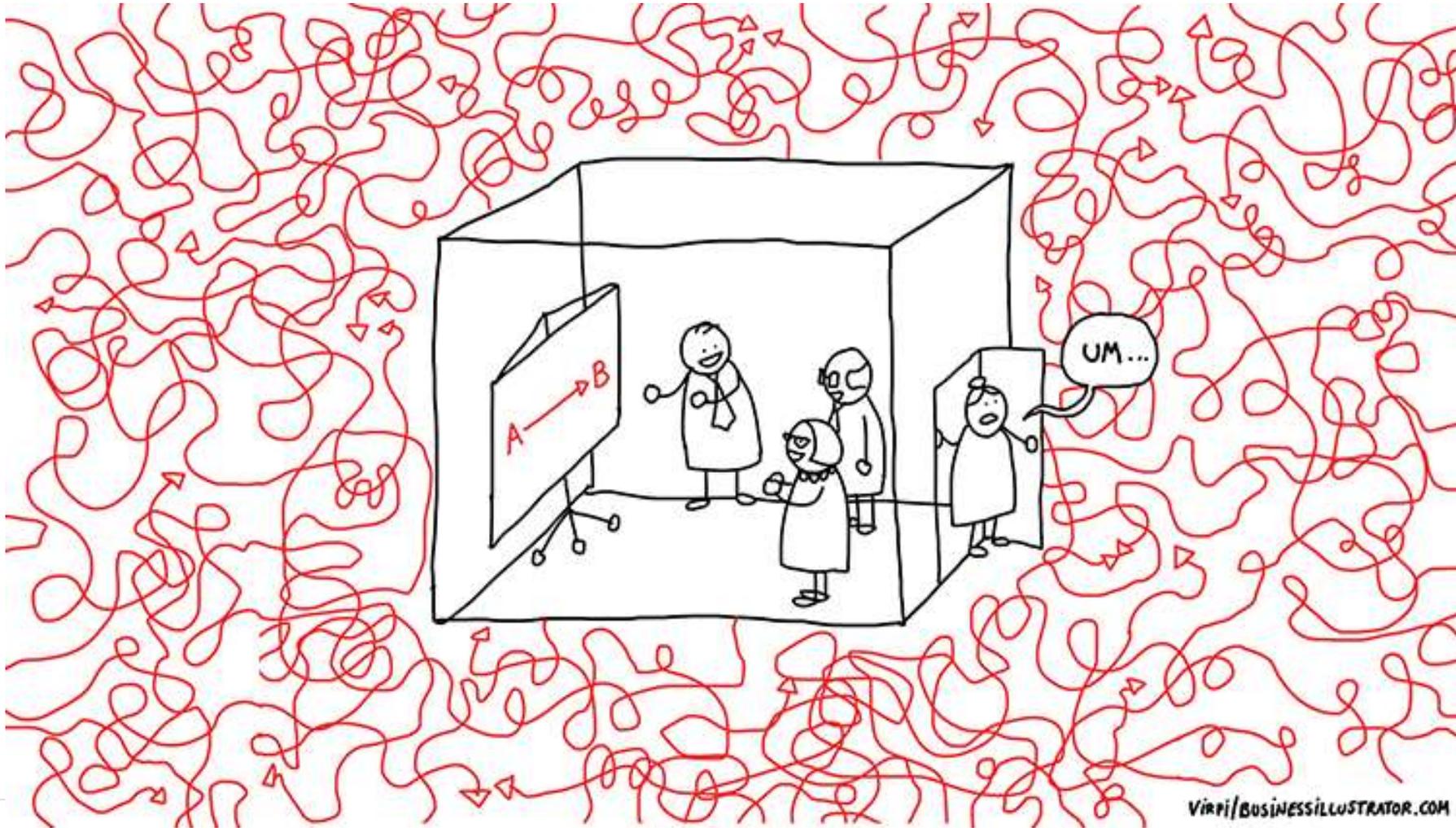
Meadows, D. (2008). Thinking in Systems: A Primer. Vermont: Chelsea Green Publishing.

What is a system?

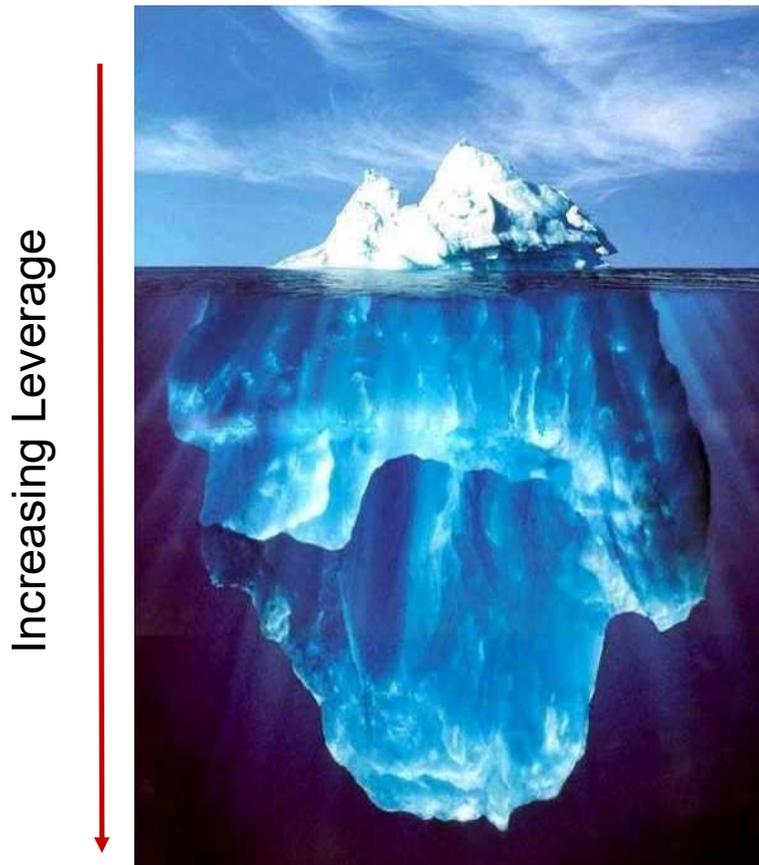
“A system is an interconnected set of elements that is coherently organized in a way that achieves something.”- Meadows, D (2008)



Systems thinking can be helpful when trying to make sense of complex issues



System Structure: Getting beyond the superficial



EVENTS

React

PATTERNS

Prepare

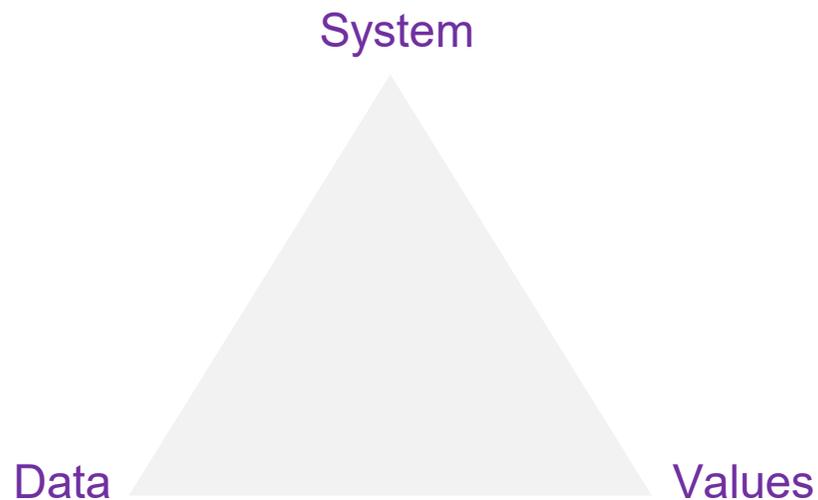
STRUCTURE

MENTAL MODELS

VALUES

Design

Defining your system

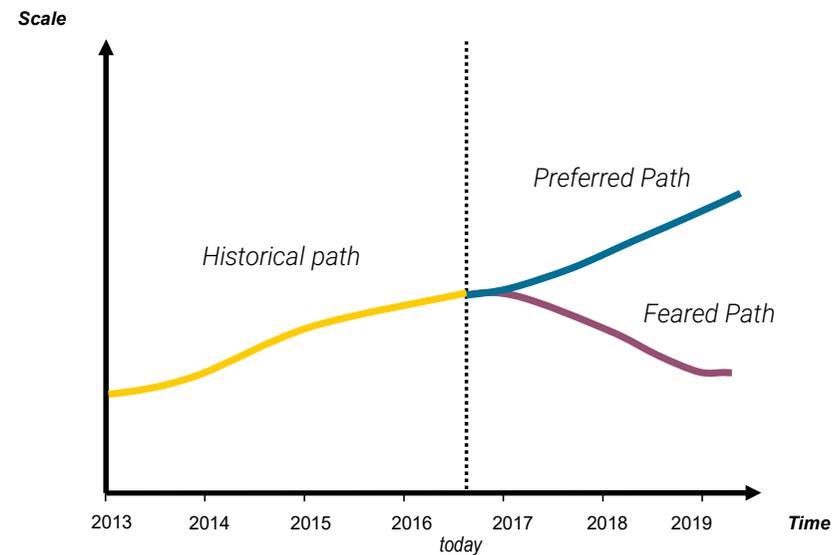
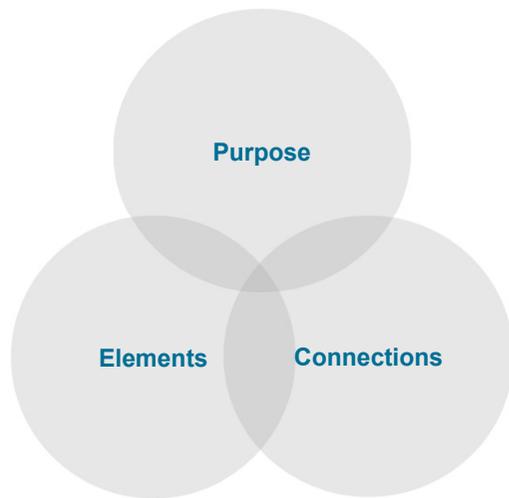


Establishing The Boundaries

- What are the key **elements**, that everyone can agree on, need to be a part of this strategy?
- What '**value**' do these elements reflect i.e., what is important to you and how does the choice of these key elements reflect what you **consider to be important** i.e., why have you chosen them?
- What **data/information** exists to shed light on the current state of those key elements?
- Who or what maybe **marginalised by your choice** of what's in and what's out – i.e., your choice of system boundary?
- Where is the contention, elements that some want inside the boundary, others do not?
- Try and understand each others perspective

Understanding the system purpose to drive change

- What do you want to achieve, and how will you know if you've achieved it?
- What is the system structure?
- What are your goals and what indicators will you use to assess the achievement, or otherwise of those goals?

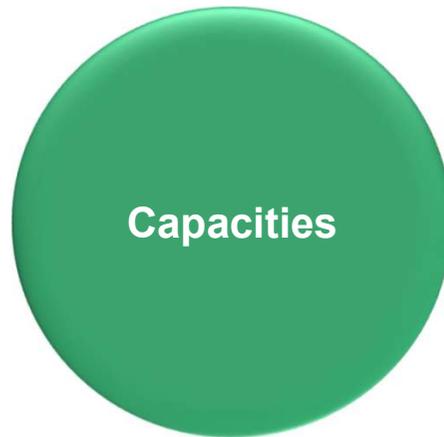


Creating a climate for implementation



Readiness

To what extent does the client see the change/evaluation as necessary, feasible, desirable?



Capacities

Does the client have the skills and knowledge to respond to the demands of any change or evaluation recommendations?



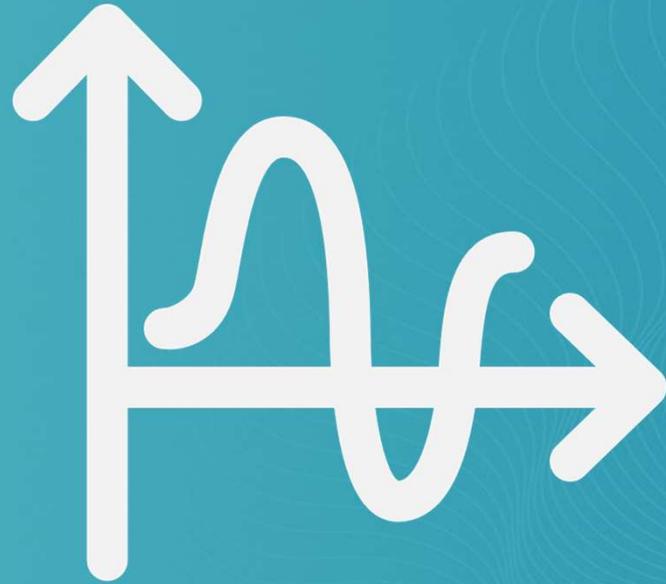
Diffusion

How will you support the adoption, use and diffusion of whatever it is you propose is desirable?



Sustainability

What policies and practices will be needed to sustain the change?



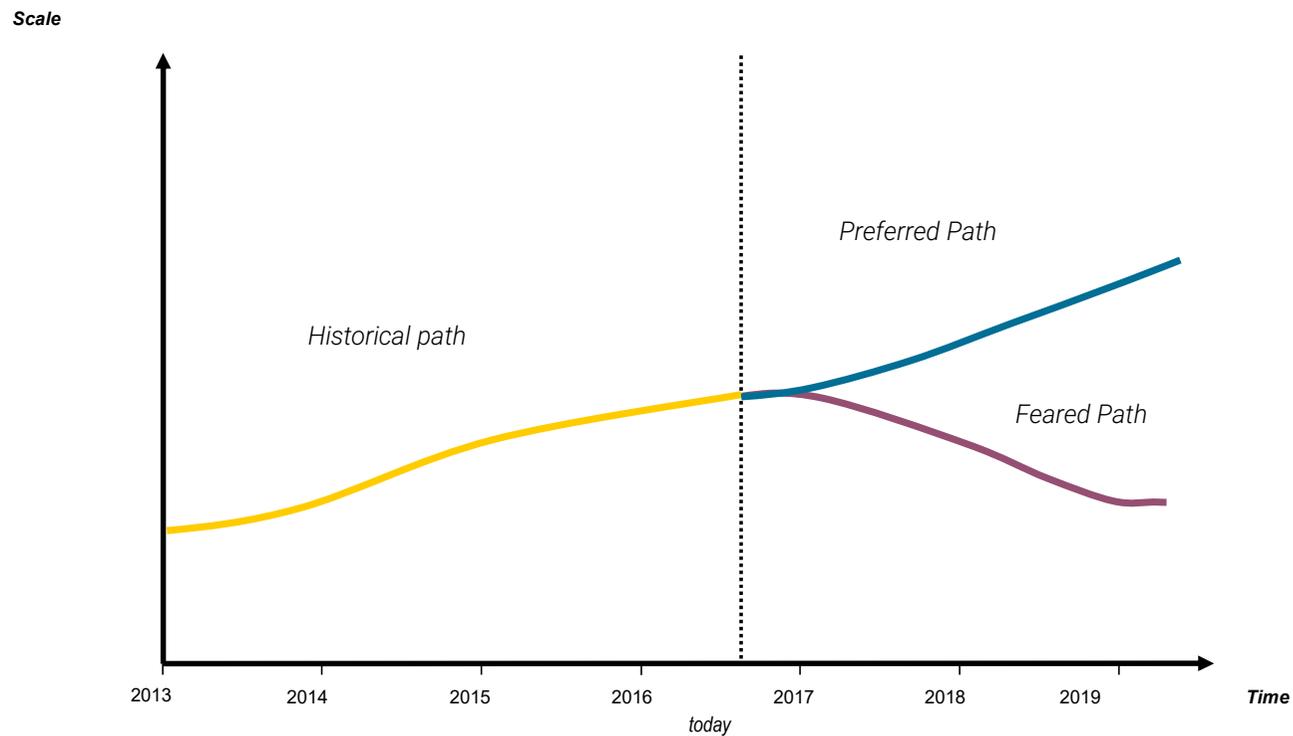
Reference modes



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Reference modes

Reference modes bring in the concept of time, shifting people from seeing the world as a 'snapshot' to seeing it as a 'movie', changing and evolving over time.

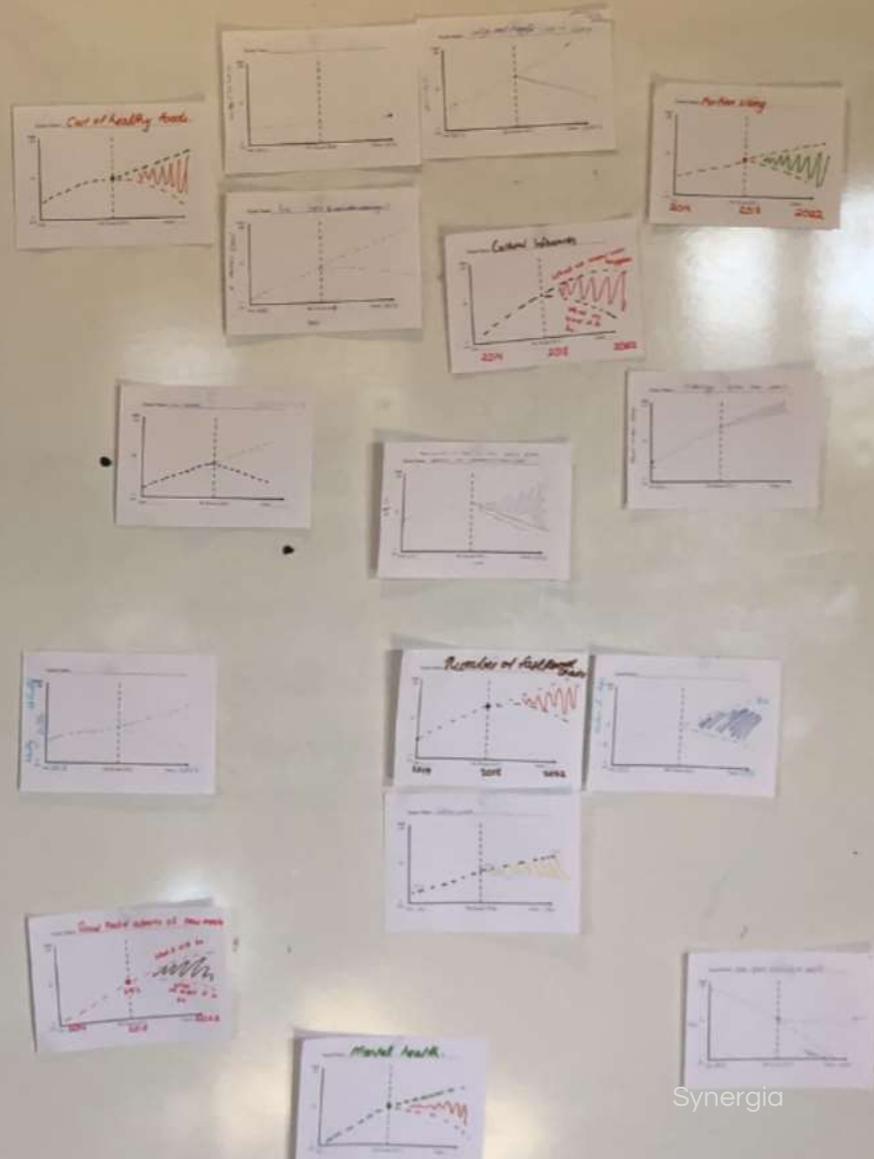


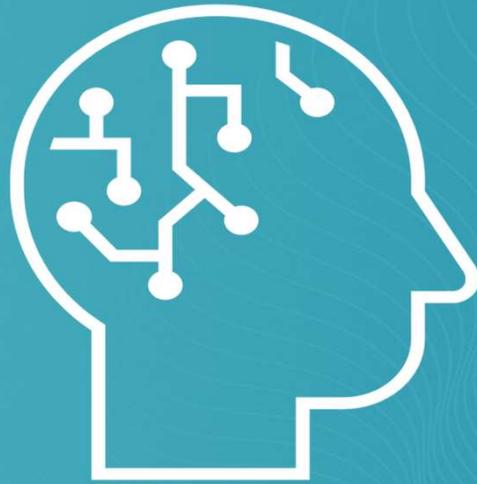


causes →

5 graphs of ~~factors~~ ^{consequences of} causing obesity

- estimate value now 2018
- draw past + future trends





Cognitive Mapping

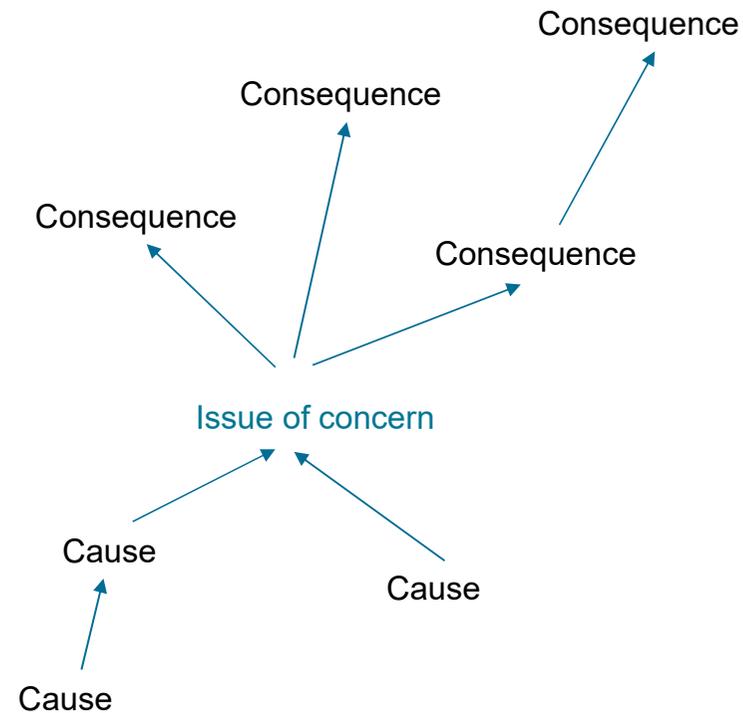


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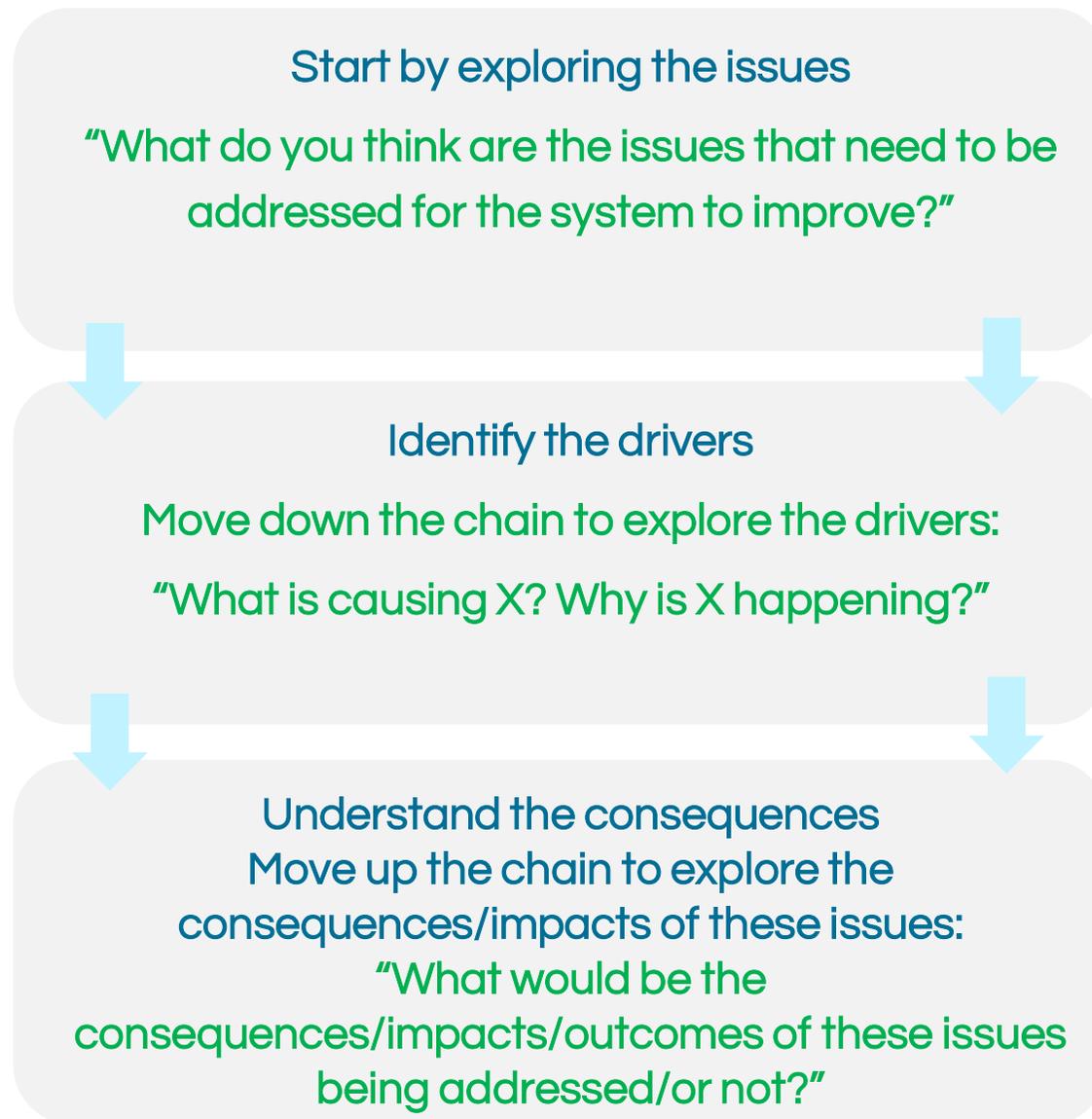
What is cognitive mapping?

Cognitive maps are tools for increasing understanding of how people think about a particular issue, what is causing it and what the likely consequences are if it is addressed successfully or not.



Why use cognitive maps?

- Help the group develop understanding and agreement about the issues to be addressed
- Highlight the groups values and what they believe is most important
- Reveal individual's mental models or beliefs about what is happening and what they want to happen
- Lead the group away from single causes to thinking systemically about the issue
- Begin to link discussion of issues and goals directly to potential actions



Slide 22

JA0

Deb what do you think about condensing the following slides into one slide like this? I've put animation on it so the questions will appear in order.

Jessica Adams, 2023-03-08T01:37:27.683

Start by exploring the issues

“What do you think are the issues that need to be addressed for the system to improve?”

Identify the drivers

Move down the chain to explore the drivers:

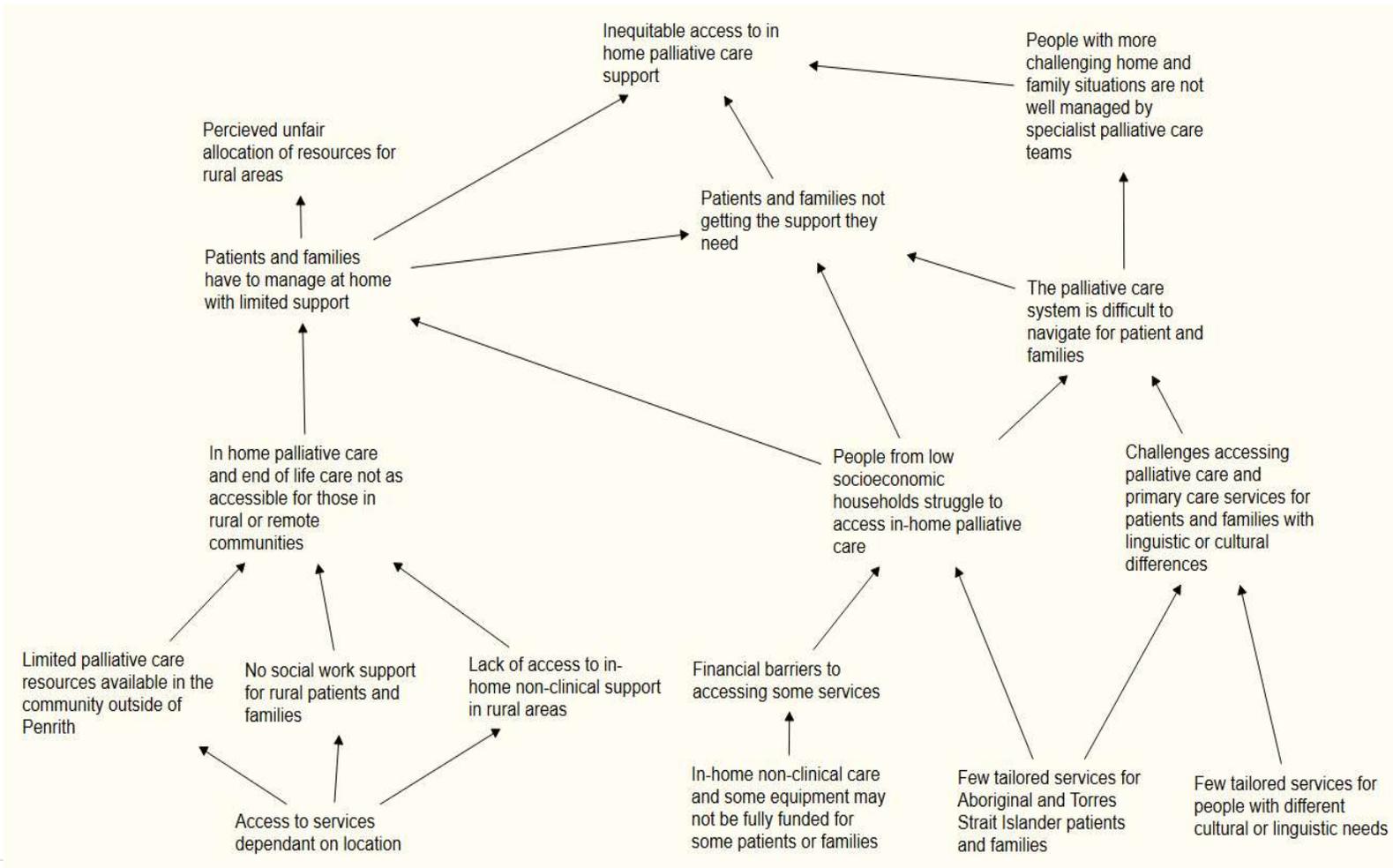
“What is causing X? Why is X happening?”

Understand the consequences

Move up the chain to explore the consequences/impacts of these issues:

“What would be the consequences/impacts/outcomes of these issues being addressed/or not?”

Inequities in in-home Palliative Care



Let's have a go

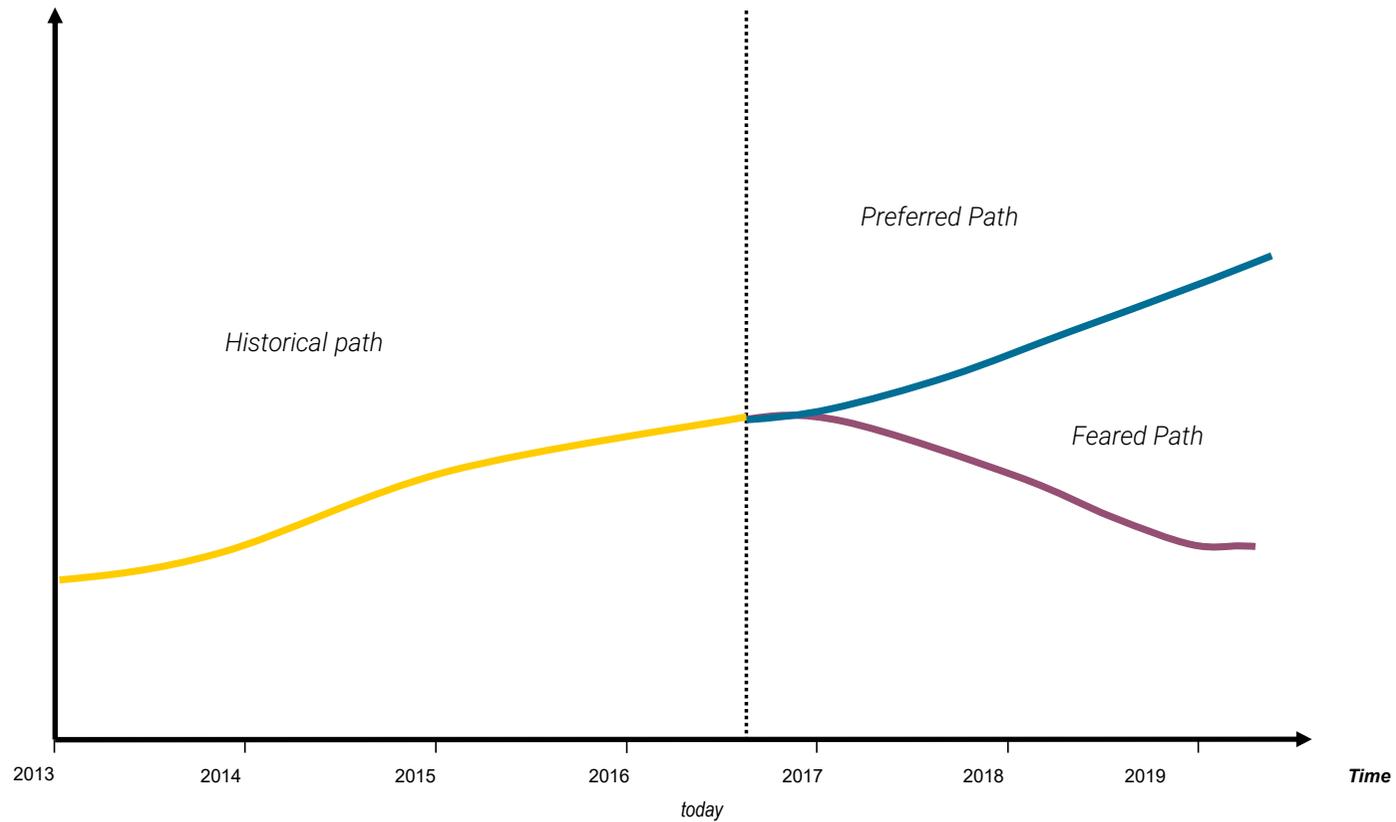
Working example



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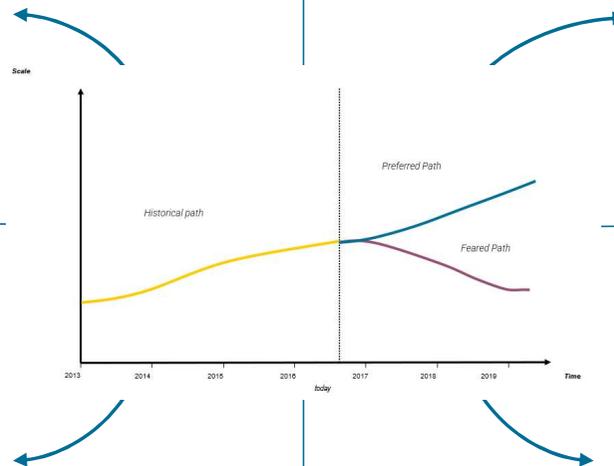
Obesity is increasing in our Rangatahi and Tamariki

Scale



Consequences: What are the consequences if the issue is addressed well

Consequences: What are the consequences if the issue is not addressed or not addressed well?



Causes: What's driving/causing the issue, or what needs to be in place to support it

Causes: What would you put in place to address the issue?

Hints & Tips

AVOID:

- Simple brainstormed lists
- Rejecting items because they are beyond the groups influence

AIM FOR:

- Full participation from the whole group
- As full a picture as possible

For Larger Groups:

- Consider asking individuals to create their own maps, then share in pairs, then share in the whole group

Kōrero

What is one thing you learnt from doing the cognitive mapping activity?

What is a key takeaway from this session for you to take back to your practice?



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In summary

Systems thinking tools are a great addition to your design and evaluation kete!

Tools like cognitive mapping can help us:

- think holistically about the drivers of issues and the possible solutions we could design
- unpack hidden mental models driving behaviour or patterns
- Identify values and what is most important to the people you are designing and evaluating services for
- Build a collective understanding of the system you want to influence



Kia hora te marino
Kia whakapapa pounamu te
moana
Hei huarahi mā aroha mai
Tātou i a tatou katoa
Hui e! Tāiki e!

May the peace be widespread
May the sea be like
greenstone
A pathway for us all this day
Let us show respect for each
other
For one another
Bind us all together



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