

Tea & Toast: A dive into the Cynefin Framework

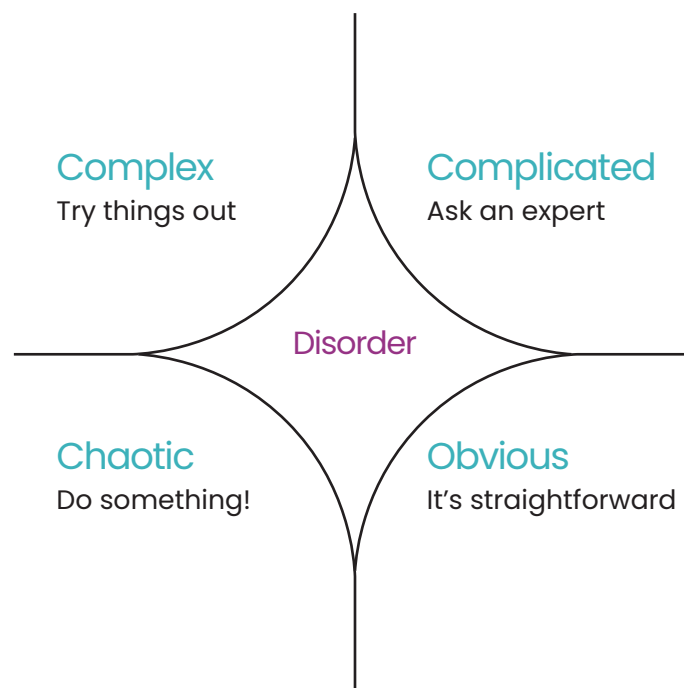
Presented by: Hilary Bryan

Why it's valuable

1. It's a framework that helps you make sense of the world and then guides you to act in line with the sense you've made. It helps answer the question: *How can we make sense of the world so we can act in it?*
2. You can understand and use it at a variety of levels.
3. You can draw it on the back of an envelope and it makes sense.
4. You can apply it to a wide variety of circumstances.
5. It's evolved and keeps on evolving.
6. You don't need any specific accreditation to use it.

The back-of-an-envelope version

At its simplest, here's the framework. And it is a framework, rather than a model. A model gives a set of logical steps to follow; a framework is an abstraction of purposefully arranged concepts. Think of a framework as a platform, rather than a set of rules. This is a version of the original Framework with my simple take on it:



A closer look and adding more depth

Dave Snowden, the Cynefin brainchild, and naturalising sense-making

Snowden was originally a knowledge management practitioner, with a background in science, humanities and philosophy. He defines Cynefin as a framework in naturalising sense-making. Let's understand what that means. Snowden developed Cynefin based on complexity science that has its origins in chemistry and biology. Within this there are three types of systems:

1. Ordered

The system constrains how everything acts within the system. Relationships between cause and effect are understandable and repeatable. That means we can predict the future behaviour of the system or change it to some sort of future state we want to move it towards. (In Cynefin, this is divided into two domains.)

2. Chaotic

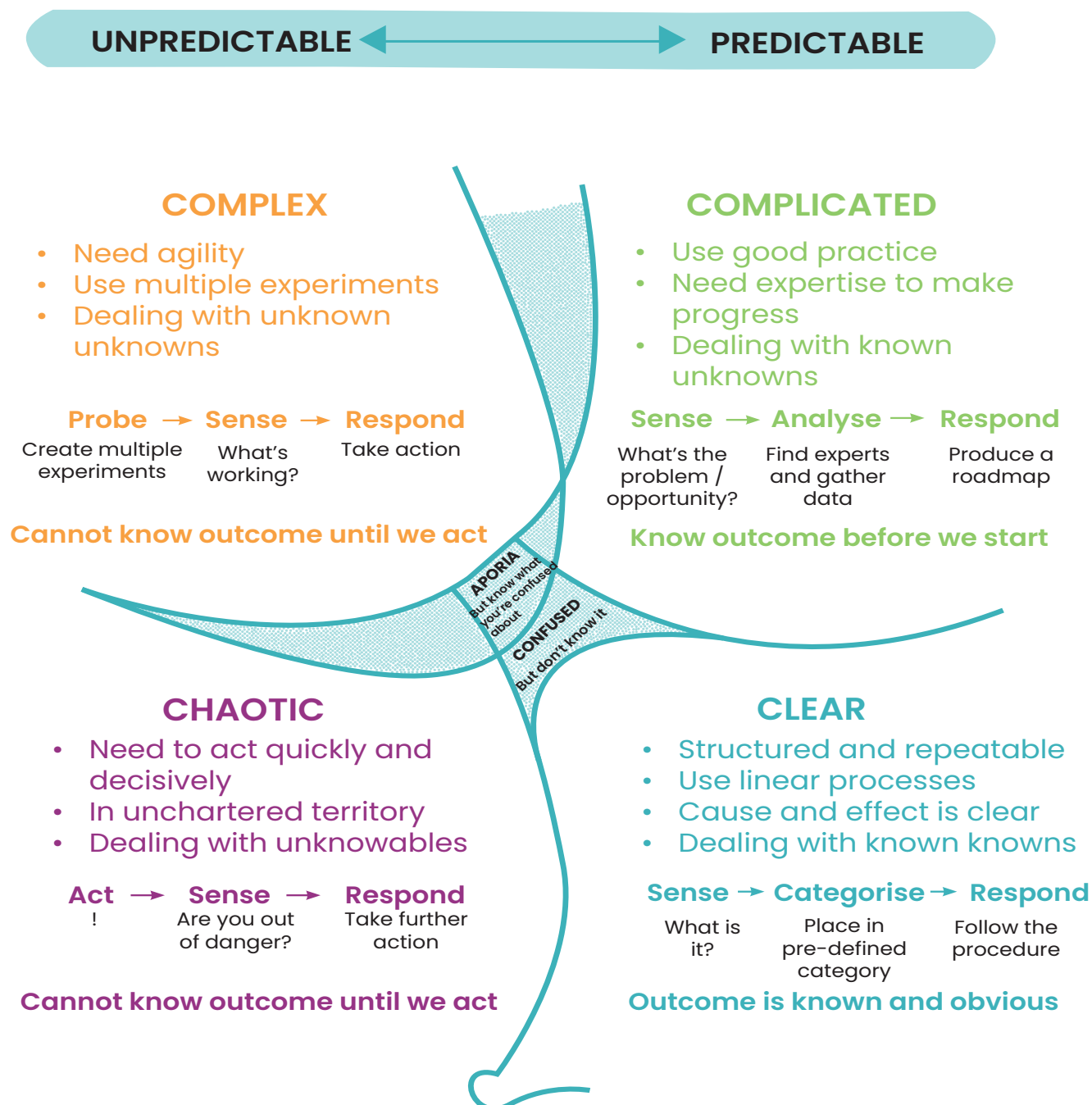
Here, a large number of elements are unconstrained.

3. Complex adaptive systems

The system is changing all the time and you don't know how it will react until you try something.

How this translates into Cynefin

Here's a more detailed diagram:



The clear domain...

In this domain the relationships between cause and effect are known and clear. Actions are repeatable and predictable.



You know the boundaries (constraints) of the system. At its best, things work really well here and you develop best practice. We're dealing with known knowns.

...and its dangers

The neuroscientists tell us our brains like to predict what will happen in the future and they crave certainty and predictability. Repeating the same process over and over again uses less energy and our brains are designed to preserve energy. The Age of Reason - the Enlightenment - gave us the scientific method and a way of thinking that's a key part of Western thinking and education. We're often very comfortable in this clear domain and want to reinforce its boundaries - how things work predictably - when they start to look shaky.

But if you carry on trying to enforce a rigid system in a complex environment, you're likely to move into chaos. Nothing stays the same: remember the second law of thermodynamics. This states that ordered systems move towards a state of chaos, unless you take action to stop this happening. You can't just clean your kitchen once and it then stays clean. You have to do it continuously to maintain your cleanliness standards.

Computer systems, management concepts and Manchester United's winning streak don't last forever. And we all get old.

We also often like to argue a clear cause and effect relationship in our organisations. A new structure, methodology, software programme will solve the problems we have. A new manager for Manchester United will be its saviour. It's convenient and makes us feel comfortable. We may want to cling to things that worked well in the past, but have passed their sell buy date. Organisations can also impose systems and processes that assume a simple cause and effect relationship. Leaders may impose them and they lead to chaos or people who are supposed to use them ignore, bypass or get around them.

The complicated domain...



We're still in the ordered and predictable domain here. We've developed some good practice and we're dealing with known unknowns.

Bring in experts to help us. The same practice repeated over again will likely produce the same results. A trained mechanic can poke around in a car engine, find what's wrong and get it started.

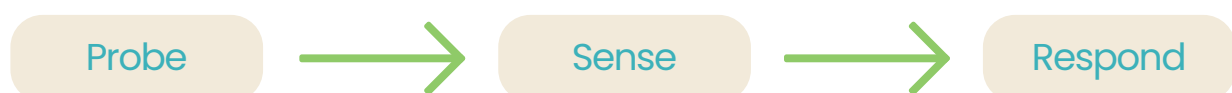
They can then build on this expertise time and again. I'd prefer an expert civil engineer to build the bridges I drive across.

...and its dangers

Do all experts agree? Doctors will produce different diagnoses from the same symptoms. Engineers will give different earthquake ratings for the same buildings. Scientists and social scientists quite rightly have a system of peer review for their research findings.

Also, we have to trust the experts we're turning to. I trust my GP, who I've known for over 25 years, but am not so sure about economists and their predictions about the future state of our economy. I think we can see the rise in populist leaders through this lens. When enough people don't trust their leader, they turn to people or ideas who give them comfort. Think Trump and Brexit.

The complex domain



Now we're in the unpredictable domain and dealing with unknown unknowns. We won't know what will happen until we probe – try multiple safe-to-fail experiments – and see the results. Snowden refers to abductive thinking here. That means making a plausible connection between un-connected things. And your abductive thinking may well be different from others.

In our complex world, interconnections are rife. So, a small change somewhere may well have huge effects elsewhere. But we'll only see it in retrospect. But we'll probe simultaneously and the situation may improve or at least you learn something. Patterns begin to emerge.

"In all of complexity intervention you are probing in parallel then monitoring for the weak signals of emergent patterns. That monitoring is ideally through a diverse network of sensors both human and non-human in nature. As patterns emerge you either provide more energy or take it away depending on if things are generally going in the right direction, or at least not a wrong direction (they are not the same thing)" (Snowden, 2022).

We're often facing complexity but try to impose order. Organisations have change management plans, but people are experiencing personal transition. Politicians are asked to solve complex problems with one a = b policy initiative. Here's a headline from an opinion piece in last Saturday's Dominion Post: "Robertson must come up with a plan to tame inflation." Good luck to anyone who thinks a simple, cause and effect model will work.

In the complex domain we need innovation and different perspectives. We're faced with wicked problems such as climate change; equity in housing, education, health care; and responding to COVID.

Even day-to-day issues we face such as engaging people at work and home/office working arrangements are complex. Context matters overwhelmingly. What works in one organisation won't work in another. What worked in the past won't work in the future. And working in the complex domain all takes energy and lots of it.

The development of the Pfizer vaccine

Vaccines usually take up to 10 years to develop. Pfizer started to develop the COVID 19 vaccine in March 2020 and the first dose was given to Margaret Keenan on 8 December 2020. Pfizer collaborated with other companies and started off with 20 possible vaccines. This was narrowed down to four, then two and then one. A great example of multiple probes at the same time.

Complexity needs innovation

Snowden maintains to probe in the complex domain and innovate we need three things:

1. An understanding that what we're doing isn't working.
2. Time pressure.
3. Perspective shifts.

Here's an example that includes all three:

Defeating the German U-boats in WW2

By 1940, the Luftwaffe and the German U-boats hunting in packs were successful in destroying a significant amount of Allied shipping, bringing vital war supplies across the Atlantic to Britain. In that year, 992 ships were sunk: a quarter of British merchant shipping. In 1942 the figure was 1,662. To turn this tide, a large number of innovations were made. Not one on its own would have worked. Here's a summary:

- The Americans used specialist naval groups along the American coast to attack U-boats. It was ineffective.
- Convoys, blackouts and radio silence were introduced.
- Code breakers at Bletchley Park managed to break German navy codes to steer convoys away from the U-boats.
- Air cover was extended from Iceland, Ireland and Canada to cover more of the Atlantic but still left a large gap.
- The Allies invested in far more precise intelligence about the whereabouts of the U-boats, even though it was hard. The British Navy's Submarine Tracking Room used a variety of intelligence sources and it was staffed by academics, economists and lawyers, not sailors. They brought a different perspective and started to be able to warn shipping where U-boats were.

- The Americans set a similar Room in Washington.
- Escort vessel commanders were given far better training. Before this, they were very much on their own. After a while patterns of how to beat the U-boats emerged.
- Better targeted bombs, known as hedgehogs, were developed that only exploded when they hit U-boats.
- Things actually then got worse before they got better.
- A new commander, Admiral Sir Max Horton, was brought in to take charge and changed tack. He ensured all aircraft were fitted with very effective Leigh lights, so they could see the U-boats in the dark. These were developed by a junior RAF officer, Sir Humphrey de Vere Leigh, who defied orders to develop them.
- Horton also went hunting for the U-boats, rather than hiding from them. Much improved radar helped, fitted to the ships and aircraft.
- An Allied offensive battle in May/June 1943 sent the U-boats packing.
- In October 1943, Portugal allowed Allied aircraft to operate from the Azores and the last U-boat hiding place was erased.
- In 1944, Allied shipping losses were 3%.

"It is tempting to assume that some special factor, lately introduced into the battle explained its abrupt conclusion. The explanation is far more routine than this: victory was the product of all those elements of organisation and invention mobilised in months of patient, painstaking labour." Richard Overy, *Why the Allies Won*.

Hindsight tells us what was effective, but that was far from clear at the time. With complexity we learn as we go. And it's not repeatable. The same circumstances will never emerge again. So avoid the fiction of prediction.

Lastly, Snowden argues that small actions can have huge knock-on effects. But you won't know what they are until you probe and respond.

The chaos domain...



This is also in the unpredictable area, with unknown unknowns and incoherence

You don't have time to probe here, you have to act to temporarily stabilise the situation and create what order you can. Think Christchurch earthquake and our response to COVID. Novel practices may emerge that may be useful in the future, as long as you can get out of the chaos. One novel practice that's emerged from COVID is hybrid working.

In chaos we need to make decisions fast and encourage people to think differently about the problem. Bureaucratic processes that may have worked in 'peace time' won't work here.

One approach is to set up two teams to work through chaos: one to deal with the chaos and the other to stand on the balcony and work out what approaches and novel practices to keep for the future and which past practices to junk.

The NZ Government's Wage Subsidy Scheme

Between March and December 2020, the Government paid businesses more than \$13 billion through the Wage Subsidy Scheme as part of its response to Covid-19. That amount is about the same as the Government's total annual spending on education, and nearly three times its total annual spending on law and order. It indirectly supported 1.8 million employees.

It was set up on 17 March and run by MSD. Its staff paid the subsidies within five days, based on a high trust model. This was an example of taking action and fast.

and its dangers...

Leaders may feel invigorated by the speed of their decision-making and want to keep it going!

The two confused states in the middle

These are two relatively new additions to the framework. Aporia is a state of confusion that you're aware of. You're at a loss to know which domain you're in; you don't understand the situation. But you know you need to think differently and need to canvass others' opinions.

The other state is where you are confused, but you don't know it!

Final word from Dave Snowden

"At its simplest the Framework distinguishes order from complexity from chaos... I've seen multiple YouTube recordings and slide sets in which ordinary, and extraordinary, people can use the Framework without expert coaching or, God preserve us, certification. The primary definition of Cynefin, is at its heart, about a flow of engagement over time with things known, unknown and unknowable... which entangle our lives and create meaning."

References

Bowla, A. (2021). How we did it. Harvard Business Review, May/June. (For Pfizer development story.)

Controller and Auditor-General (2021). Report: Management of the Wage Subsidy Scheme

Overy, R. (2006). Why the allies won. London, Random. House.

Snowden, D. (2021 & 2022). Cynefin, St David's. Downloaded from thecynefin.co/cynefin-st-davids-day.

Snowden, D & friends. (2021). Cynefin: weaving sense-making into the fabric of our world. Singapore: Cognitive Edge Pte Ltd.

Thanks for coming!

From The Training Practice team – Hilary, Dinah, Kristen, James and Ethan

Check out our website, with our latest thinking and events: trainingpractice.co.nz

Follow us on [LinkedIn](#)

Get in touch: 027 222 1498 | office@trainingpractice.co.nz

[RSVP to our May Tea & Toast:](#)

Tea & Toast: Employee engagement for new ways of working

Friday 27 May 2022, 8:30am – 9:30am