

Cynefin Sense-Making Model

Cynefin: 'habitat' or 'place' - from Old Welsh, means a "place of multiple belongings; cultural, religious, geographic, tribal etc. We can only ever be partially aware of all these multiple belongings, but never all of them simultaneously.

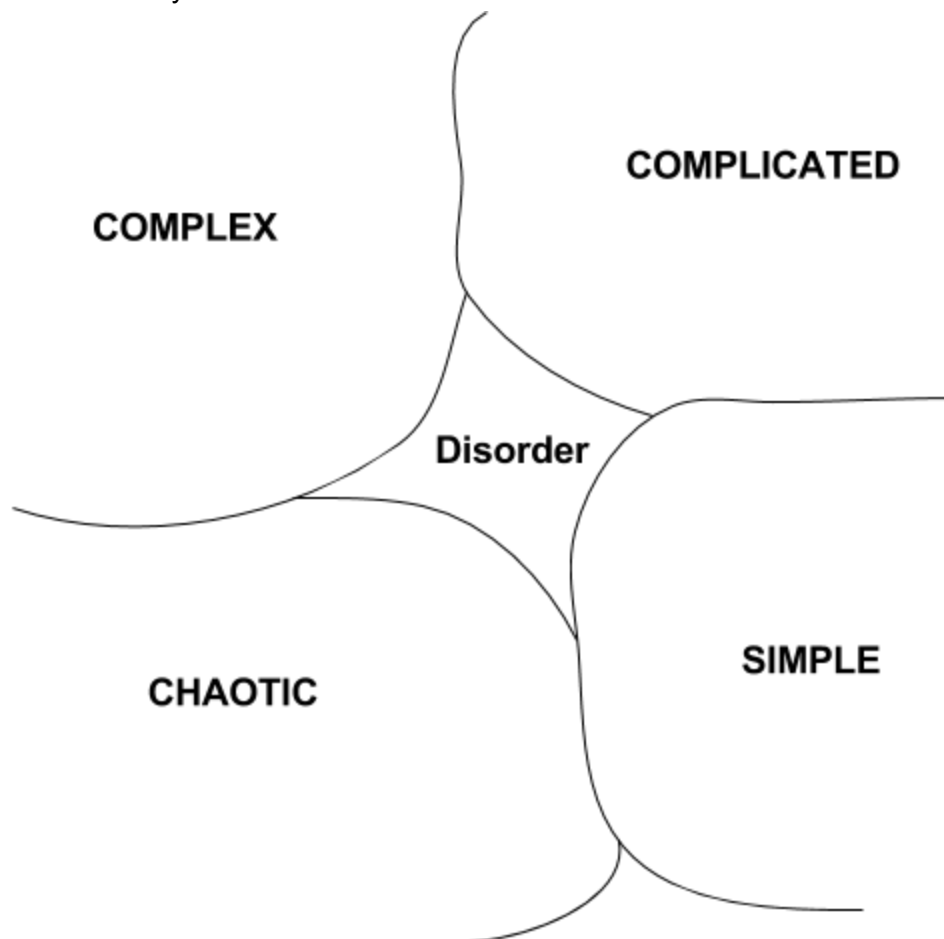
The goal of Cynefin is to aid us in recognizing causal differences that exist between system types and propose new approaches to decision-making in complex social environments.

Cynefin is a sense-making model as opposed to a categorization model.

- **Categorization Models:** the framework precedes the data.
- **Sense-Making Models:** the data precedes the framework - i.e. the data gives rise to the

The foundation of Cynefin acknowledges the existence of 3 basic system types; Ordered, Complex and Chaotic. We further divide Ordered systems into those that are Simple and those that are Complicated.

- Ordered Systems
 - Can be Simple or Complicated
- Complex Systems
- Chaotic Systems



Simple - “Known Knowns”

- Cause and effect relationships exist, are predictable and repeatable.
- **Decision Model:** Sense - Categorize - Respond
- This is where we apply **Best Practices**.

Complicated - “Known Unknowns”

- Cause and effect relationships exist but are not self-evident and therefore require expertise.
- **Decision Model:** Sense - Analyze - Respond
- Here we apply **Good Practice**
 - There are multiple ways to proceed, provided you have the right expertise.
 - Good Practice cannot be forced on people, but must emerge organically from analysis of the data. If forced people will oppose it and not employ good practice to the detriment of the situation.

Complex - “Unknown Unknowns”

- Cause and effect is only visible in *hindsight*, the outcomes are emergent and unpredictable.
- **Decision Model:** Probe - Sense - Respond
 - Conduct ‘safe fail’ experiments instead of doing ‘fail safe’ design.
 - If the experiment succeeds, then amplify it.
 - If the experiment fails, then dampen it.
 - No experiment should be conducted until strategies for amplification and dampening are in place.
- From these situations we get Emergent Order that is unique to our current knowledge and/or experience. From this we can develop and apply **Emergent Practice**.

Chaotic - “Unknowable Unknowns”

- No cause and effect relationship can be determined.
- Chaotic environments can be entered deliberately through innovation or accidentally through poor management - the latter requires immediate stabilization.
- Chaotic environments are transient - they will always resolve themselves, but not always in your favor. This is the zone of accident and emergency - we HAVE to act and it’s not safe to fail. We must also get ourselves out of chaos prior to being of any help to anyone else.
- **Decision Model:** Act - Sense - Respond
- Any practice here will be completely novel, and thus we get **Novel Practice**.

Disorder - The Central Space

- This is the situation we are in most of the time - *not knowing which situation we are in*. If disorder persists we will end up in chaos.
- The danger here lies in interpreting the situation through our personal preference for action. For example...
 - **SIMPLE Bias** - ‘The Bureaucrat’ - Any failure is a failure of process.
 - **COMPLICATED Bias** - ‘The Expert’ - Any problem is a failure to give enough time or resources to perform analysis.

- **COMPLEX Bias** - 'The Politician/Battlefield Commander' - When posed with a problem will get lots of people with different backgrounds and expertise in the same room and hope someone comes up with a solution.
- **CHAOTIC Bias** - 'The Tyrant' - Any problem is a failure to act - take control, everyone has to do what they are told.

The Boundary Between SIMPLE and CHAOTIC

- This boundary is a CLIFF!
- If you believe past success make you immune to future failure, that you can 'set it and forget it', the system will drift into a complacent zone which leads you to fall over the edge in the event of a crisis or disruption.
- When you fall off a cliff recovery is VERY expensive!



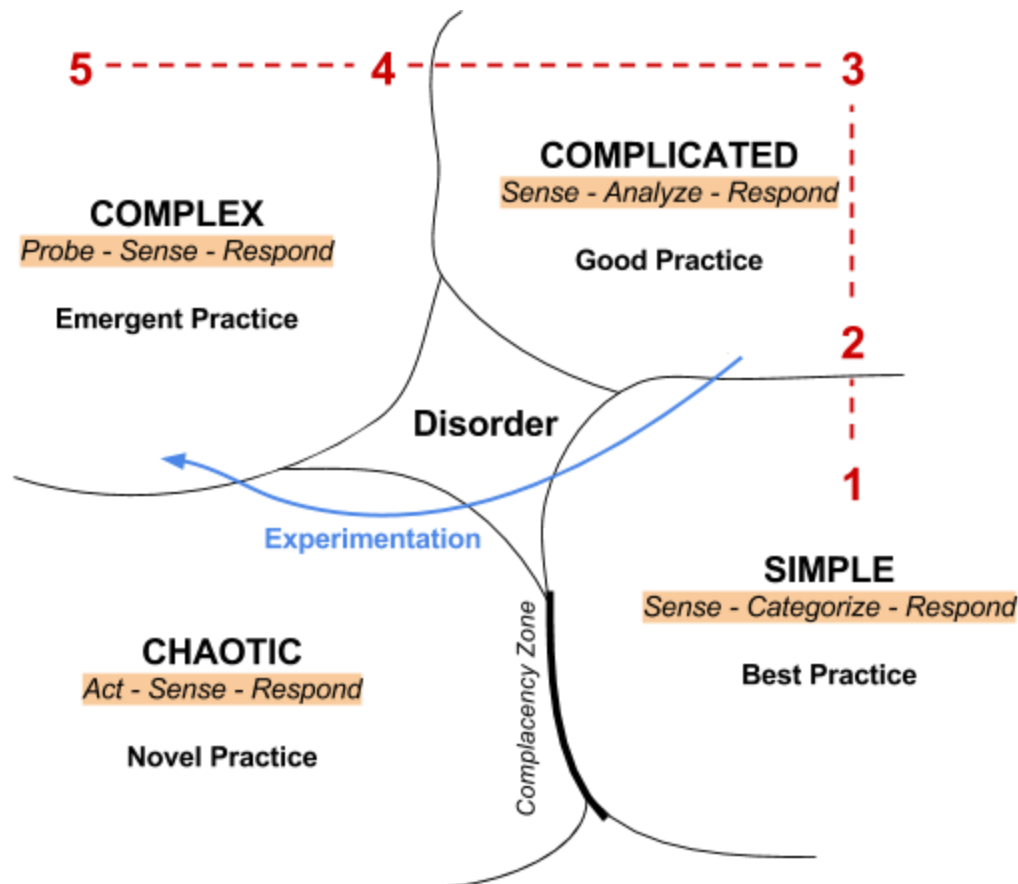
Management Takeaways

- We want to manage in the COMPLICATED and COMPLEX spheres, and move only a small, select number of things into SIMPLE and make sure they are always monitored. SIMPLE is efficient but fragile.

Method For Estimating Complexity

To help that nature of a specific situation we can reference the following.

1. We all know how to do it.
2. Someone in the team has done it before.
3. Someone in the organization has done it before.
4. Somebody outside the organization has done it - we know what they did, but don't know what they discovered.
5. Nobody has ever done this before.



Criteria For Experiment Design

A useful experiment is a “shallow dive into chaos”. Any experiment, also known in this context as a ‘safe to fail’ probe has...

- A way of knowing it is succeeding.
- A way of knowing it is failing.
- A way of amplifying it if successful.
- A way of dampening it if failing.
- Coherence: A reason for thinking that the experiment might have a positive impact. Pre-identified ways that the experiment can succeed and fail. ***Any good experiment does NOT have a way to avoid failure completely or else it wouldn't be an experiment.