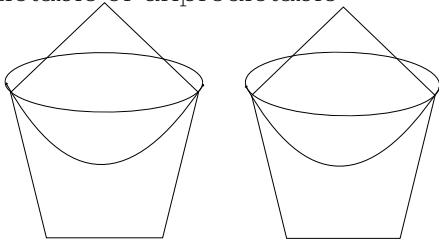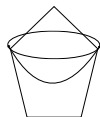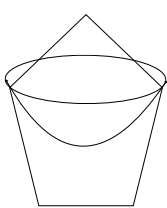## Complexity awareness

A key skill in an increasingly uncertain world
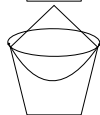

The world is either predictable or unpredictable

The predictable world is either clear or complicated

Complicated

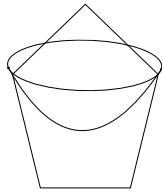Clear

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Making coffee is clear

Software   Car engine   Construction

... is complicated

Slide 1

The <u>unpredictable</u> world is either complex or chaotic

Complex

Chaotic

Slide 2

Complex or chaotic

Slide 3

Complex	Complicated
The relationship between cause and effect can only be perceived in retrospect	The relationship between cause and effect requires analysis or some other form of investigation and/or the application of expert knowledge

Unpredictable

Predictable

Disorder

Chaotic	Clear
There is no relationship between cause and effect at the systems level	The relationship between cause and effect is obvious to all

Cynefin model by Dave Snowden

Slide 4

Complex	Complicated
The relationship between cause and effect can only be perceived in retrospect	The relationship between cause and effect requires analysis or some other form of investigation and/or the application of expert knowledge
Probe - sense - respond	Sense - analyse - respond

Unpredictable

Predictable

Disorder

Chaotic	Clear
There is no relationship between cause and effect at the systems level	The relationship between cause and effect is obvious to all
Act - sense - respond	Sense - categorise - respond

Cynefin model by Dave Snowden

Slide 5

Complex	Complicated
The relationship between cause and effect can only be perceived in retrospect	The relationship between cause and effect requires analysis or some other form of investigation and/or the application of expert knowledge
Probe - sense - respond	Sense - analyse - respond
Emergent practice	Good practice

Unpredictable

Predictable

Disorder

Chaotic	Clear
There is no relationship between cause and effect at the systems level	The relationship between cause and effect is obvious to all
Act - sense - respond	Sense - categorise - respond
Novel practice	Best practice

Cynefin model by Dave Snowden

Relationships/Clients

|		
How we interact with each other	My motivation	My action	What we can do and achieve together
Complex	Our culture	Our system	Complicated/simple

How to navigate in complexity

Mechanical and organic systems

- Mechanical systems are, by definition, non-adaptive, stable and can be either simple or complicated but are predictable

- Organic systems are, by definition, complex, adaptive and unstable, and therefore unpredictable

Homo Sapiens

Stand in uncertainty
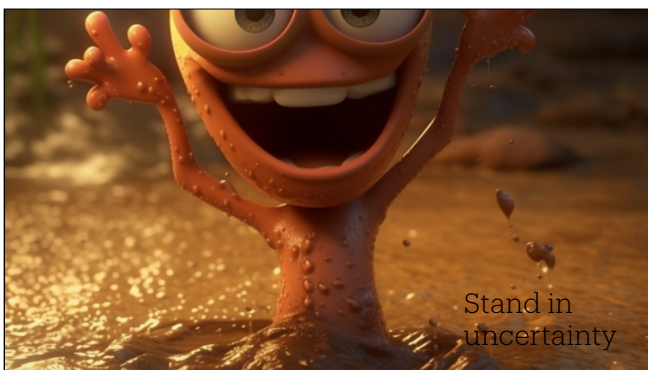
Probe

- Question
- Experiment (safe to fail)
- Poke

Influence instead of control

Attractors

Constraints

Sense-making

Unlocking complexity:
The power of sense-making

Adaptive action

Sense
What

Now What
Take action
– experiment

So What
Identify patterns
and directions
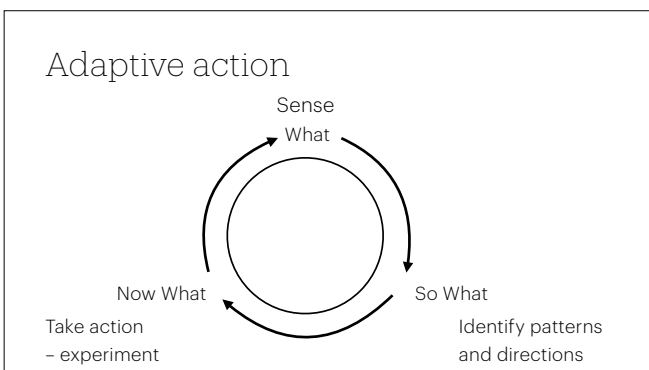
Navigating in complexity

- It's not about right and wrong – > options, with consequences
- Polarity thinking – not either/or but both/and
- Focus on the whole instead of the parts
- We are looking for patterns that set direction – not for answers
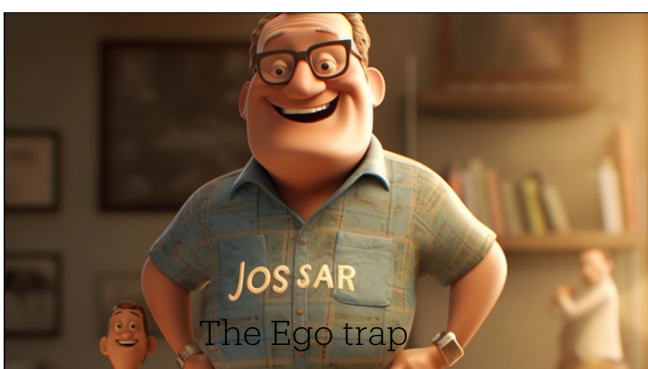- The biggest challenge is our mindset

UNLOCKING
HOW TO THRIVE
LEADERSHIP
IN COMPLEXITY
MINDTRAPS

Jennifer Garvey Berger

Stanford Press
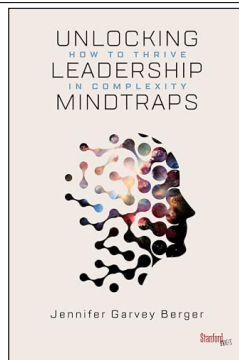
The need to be right

The need to be in control
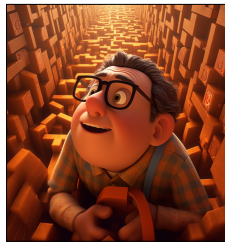

The Ego trap

The need for an agreement

Simple stories

The five mind traps – to avoid

1. The need to be right
2. The need to be in control
3. The Ego
4. The need for an agreement
5. The need for simple stories

A practical example

A child's birthday party

Possible approaches

- Chaotic
- Complicated
- Complex

"I would not give a fig for the simplicity on this side of complexity, but I would give my life for the simplicity on the other side of complexity"

– Oliver Wendell Holmes Jr.