

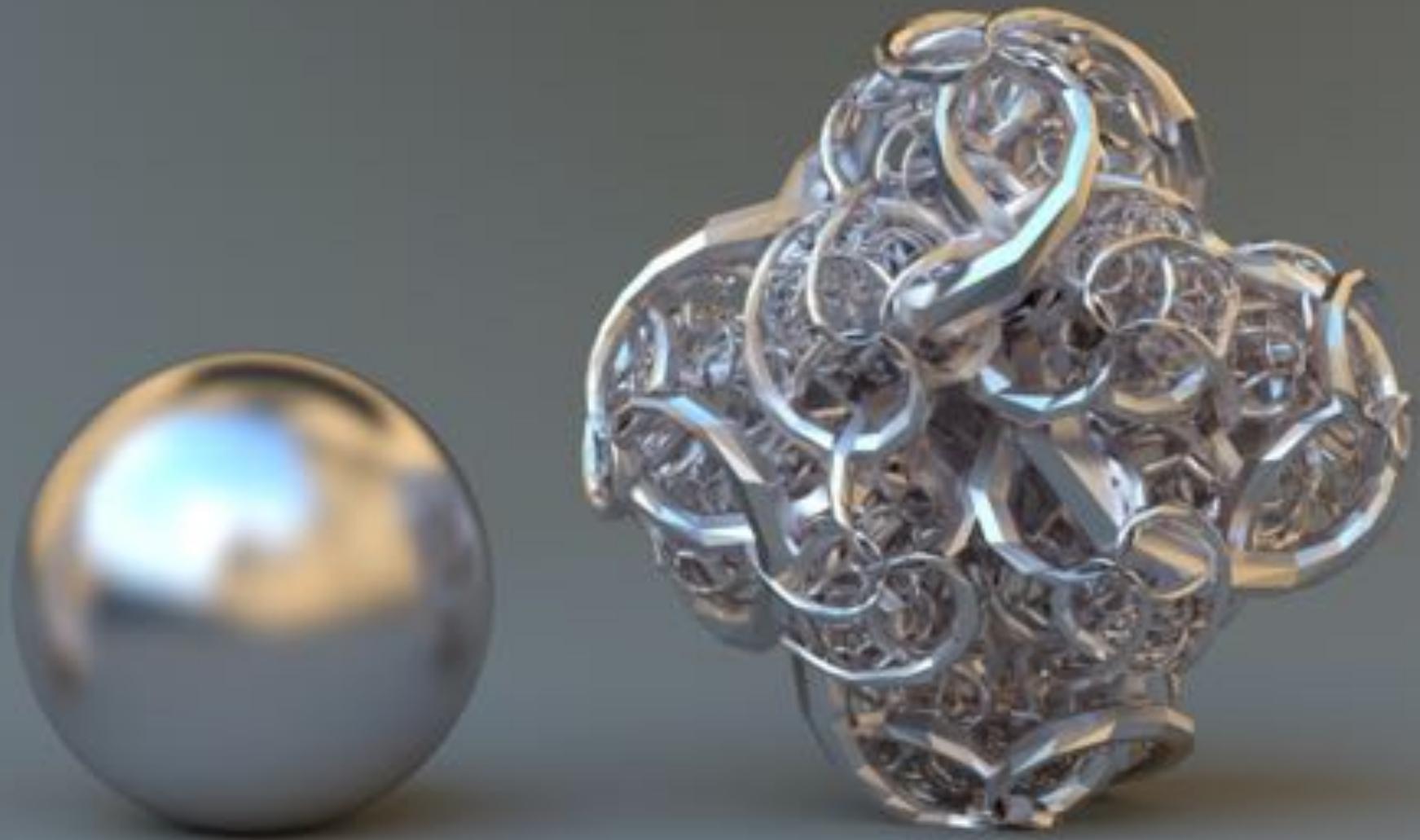
HOP

*Human and
Organizational
Performance*

HOP Foundations Class

BOB EDWARDS – THE HOP COACH

ANDREA BAKER – THE HOP MENTOR



Complex Systems

A Sense Making Model for Systems (The Cynefin Framework)

Complex



Complicated



Ordered Systems

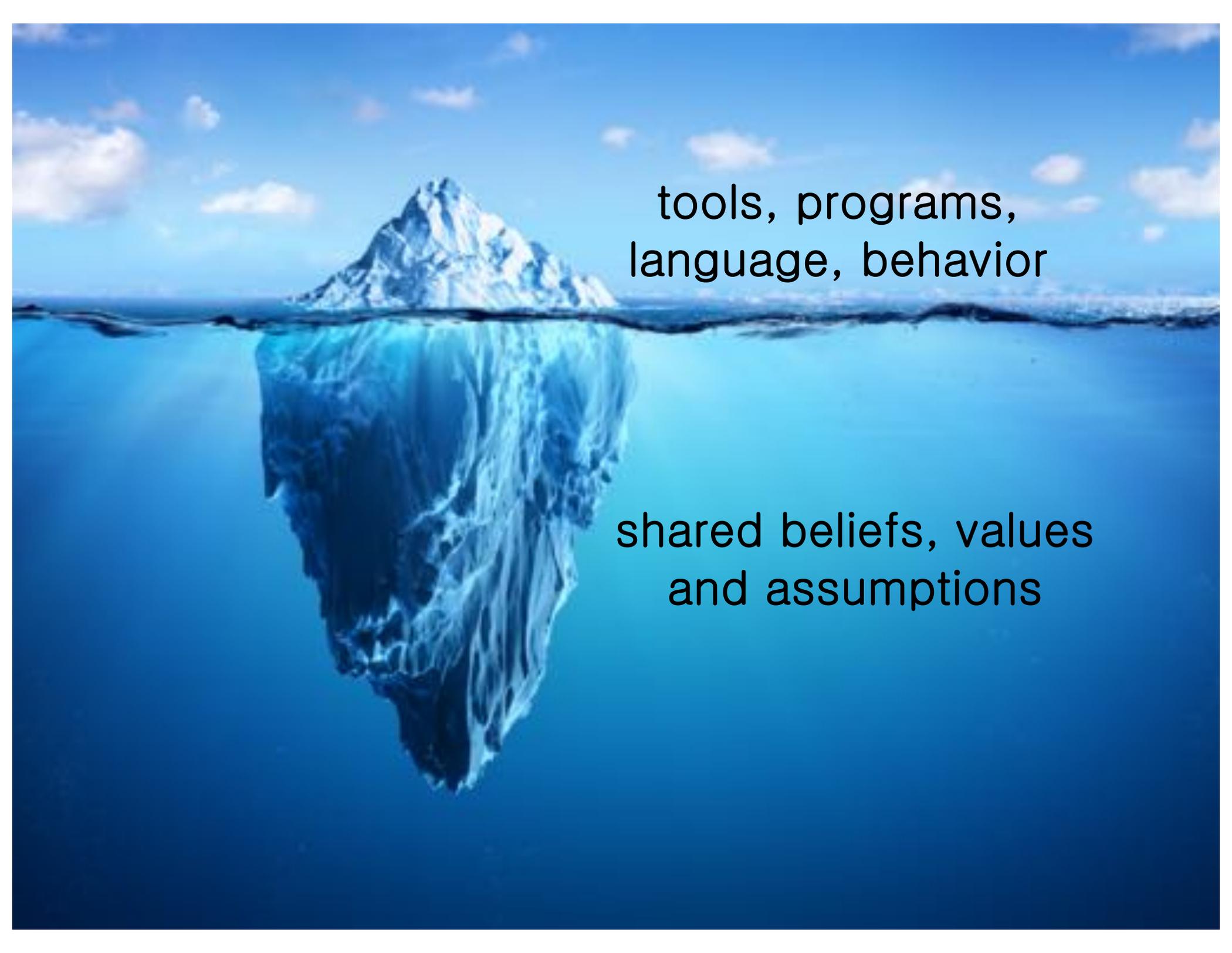
Chaotic



Simple



(David Snowden)

A photograph of an iceberg floating in the ocean. The tip of the iceberg is visible above the water surface, while the much larger, jagged base is submerged below. The sky is blue with scattered white clouds. The water is a deep blue, and the overall scene is serene and clear.

tools, programs,
language, behavior

shared beliefs, values
and assumptions

programs, practices,
rituals



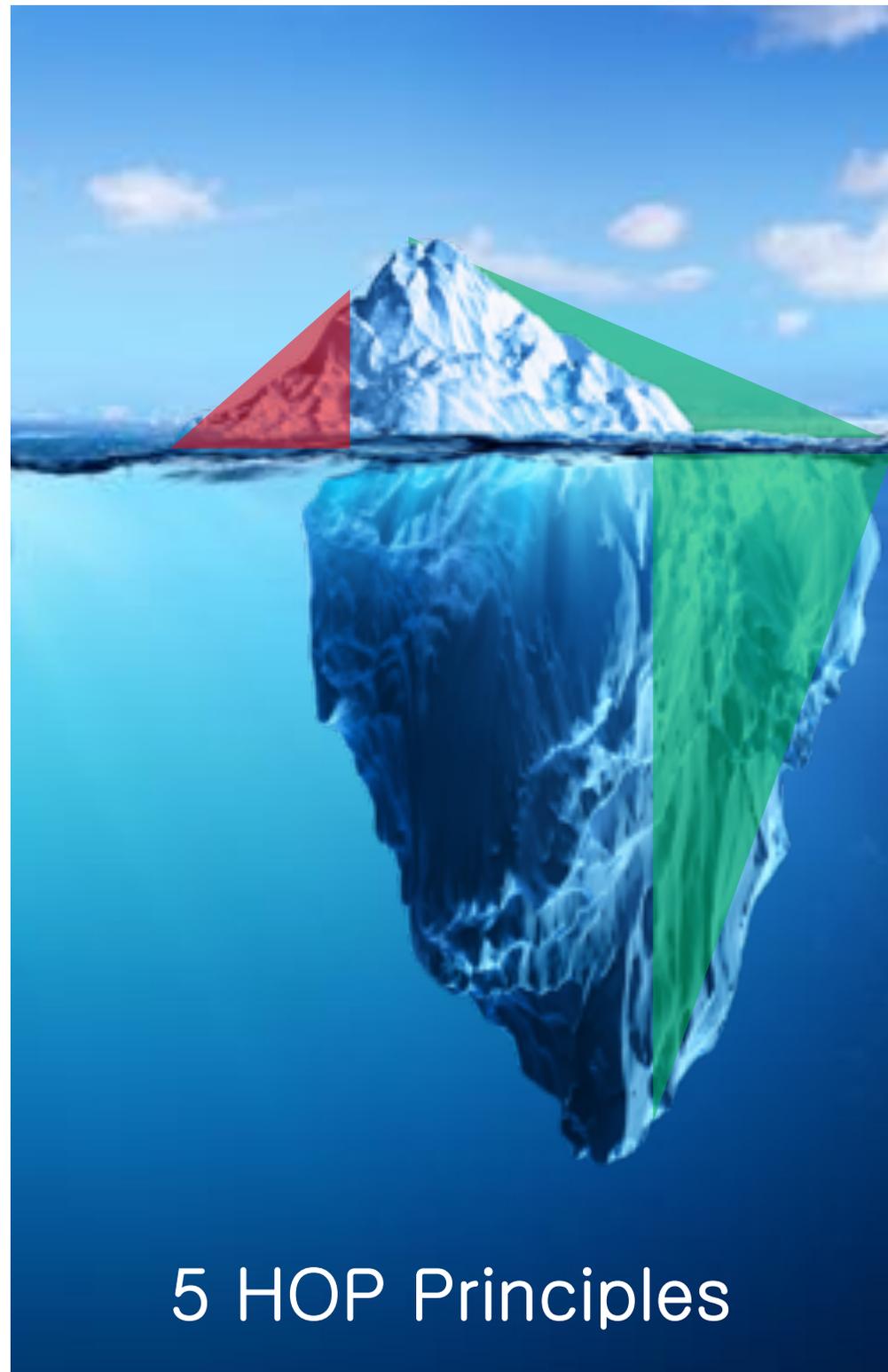
shared beliefs, values
and assumptions



programs, practices,
rituals



shared beliefs, values
and assumptions



5 HOP Principles

HOP Basic Principles



People Make Mistakes



Blame Fixes Nothing



Context Drives Behavior

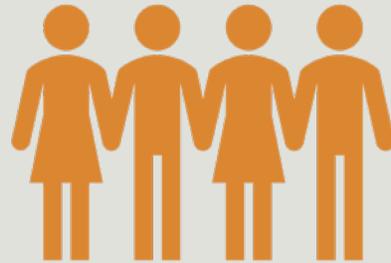


Learning & Improving is Vital

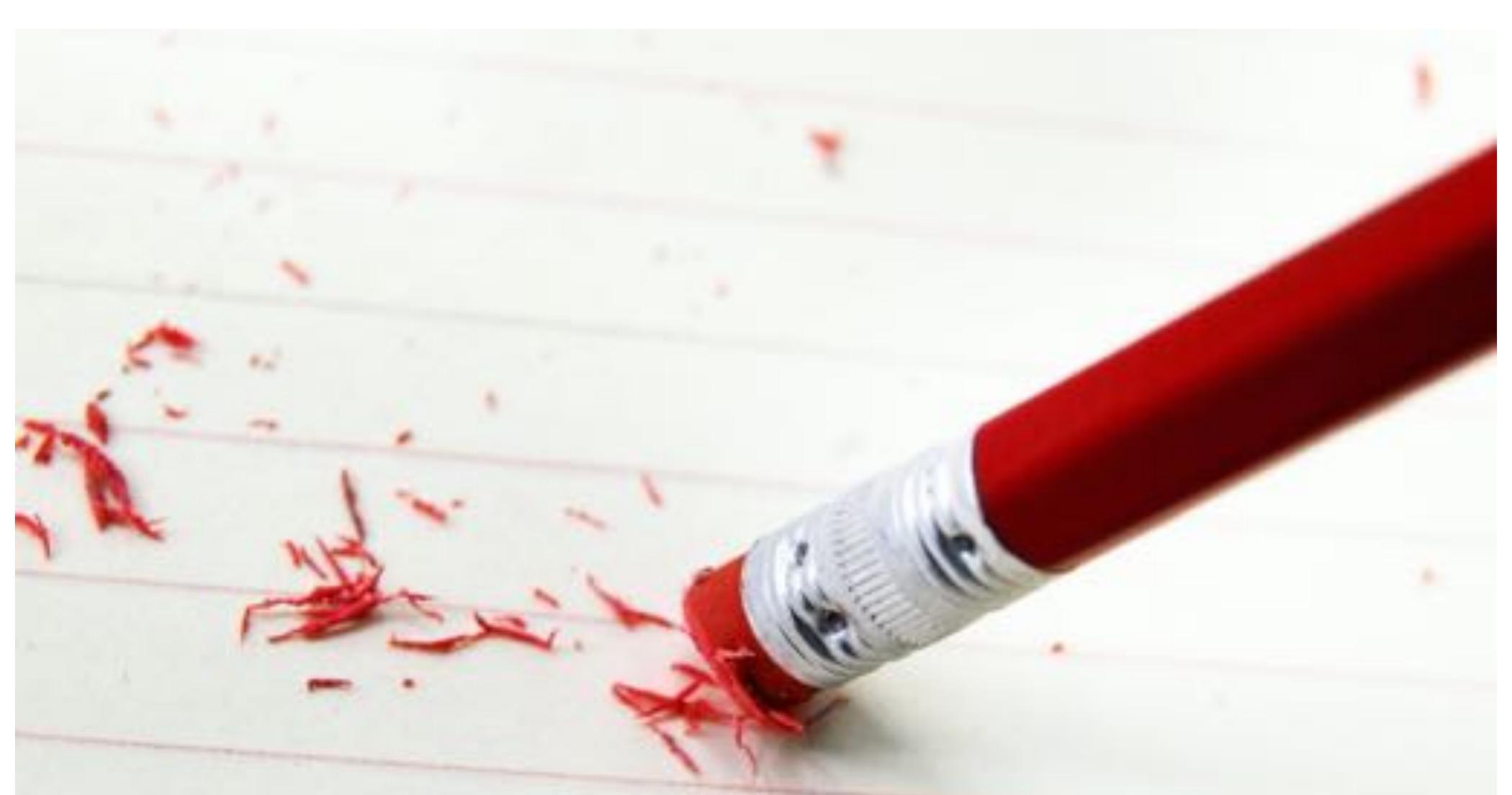


Leader's Response Matters

HOP Principle



People Make Mistakes

A close-up photograph of a red pencil with a silver eraser, lying on a white sheet of lined paper. The pencil is positioned diagonally from the bottom right towards the center. The eraser is partially broken, and a large pile of red shavings is scattered on the paper to the left of the pencil. The background is a plain white surface with faint horizontal lines.

Assumption: errors are choices – if you try hard enough you won't make them

Is error a choice?

How many times does the letter “f” appear in the following sentence?

How many
did you find?

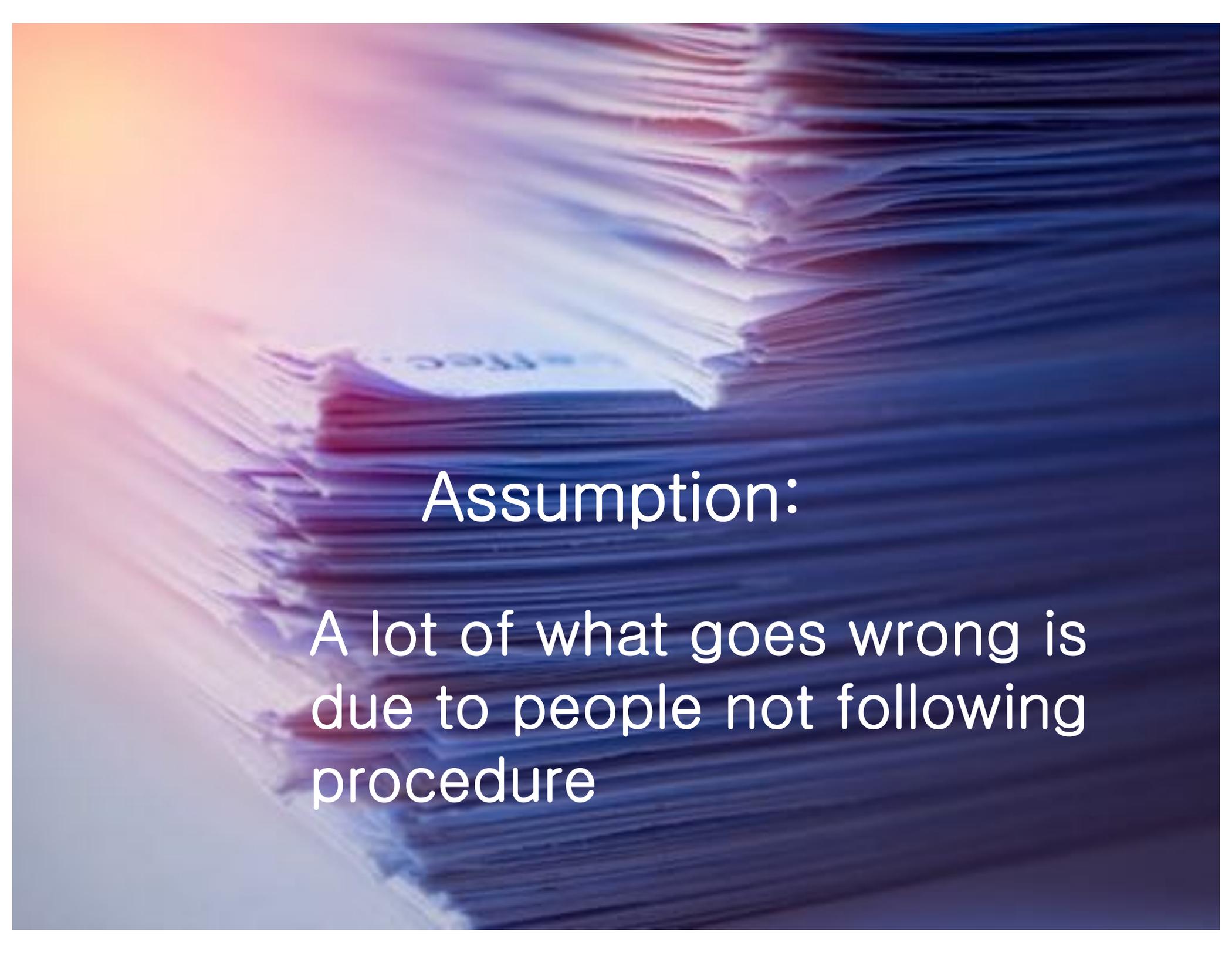
Finished files are
the result of years
of scientific study
combined with the
experience of
many years

Assumption: The goal is to keep people from making errors



Great performance is not
the absence of errors...

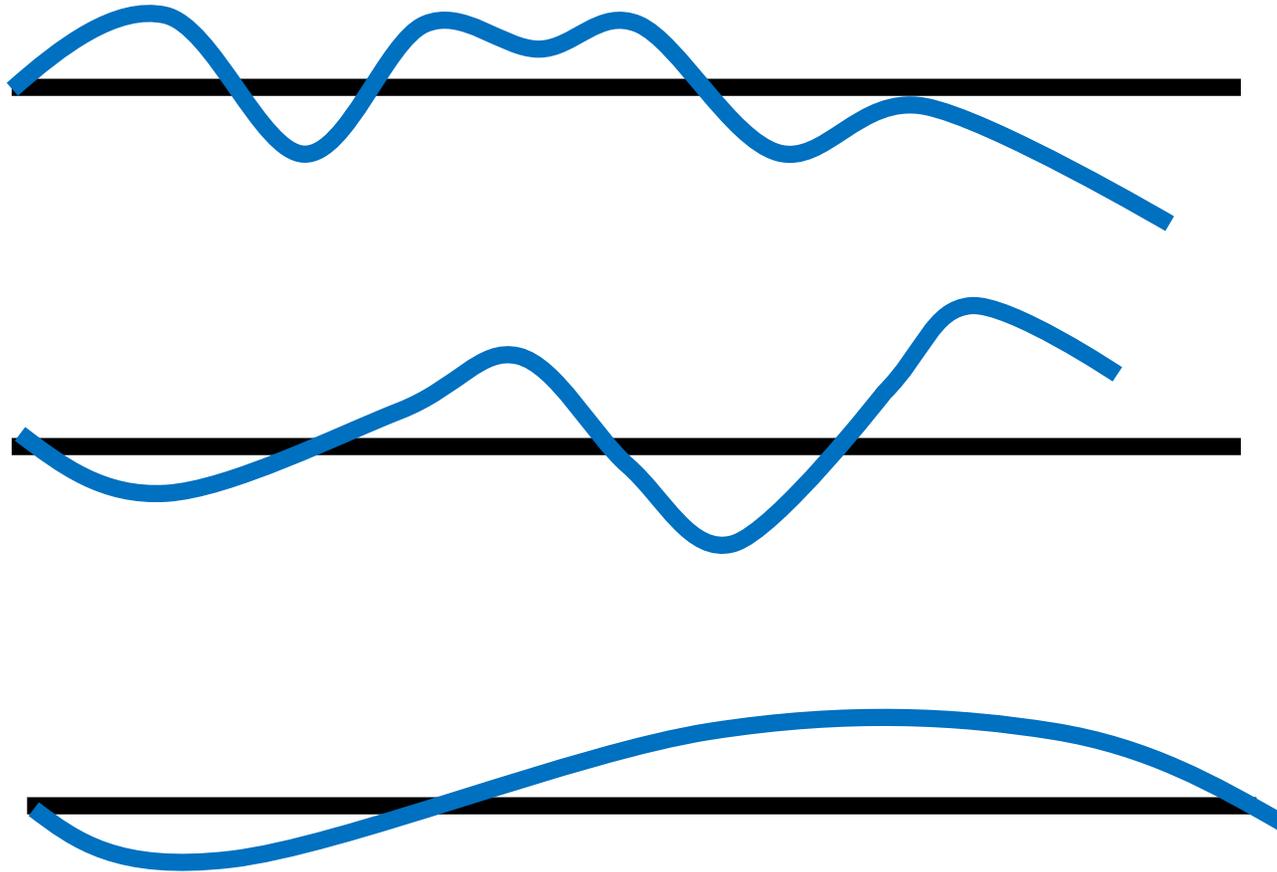
... it's the presence of
capacity

A stack of papers is shown in the background, slightly out of focus. The papers are white with some faint text visible. The background has a gradient from light blue on the left to dark purple on the right.

Assumption:

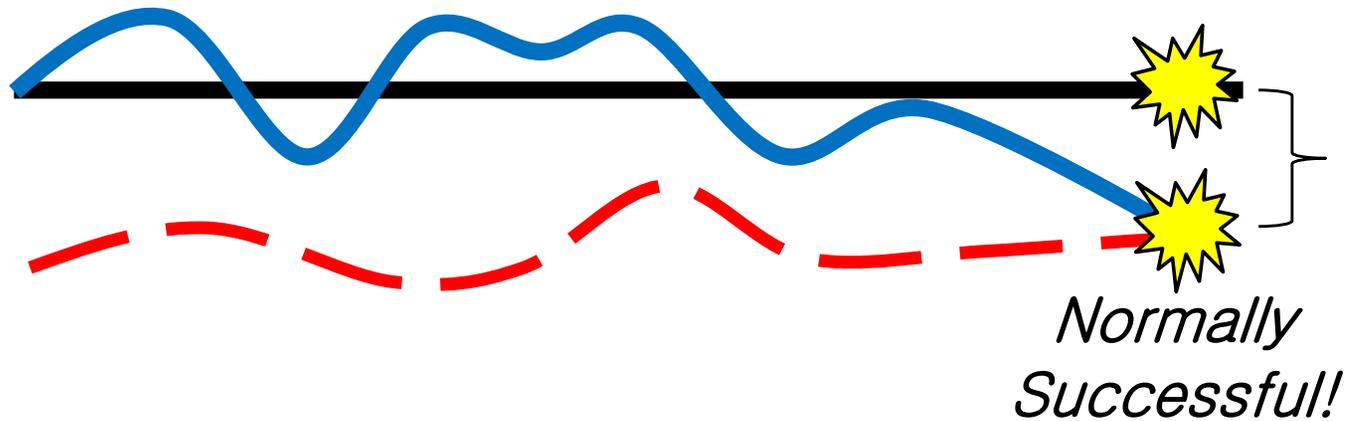
A lot of what goes wrong is
due to people not following
procedure

Work as imagined vs Work in practice



(Conklin / Edwards / Baker)

Work as imagined vs Work in practice



(Conklin / Edwards)

Error?
Adaptation?
Drift?
Deviation?
Violation?

Hard in practice...

Great controls don't care
if you've made an error
or deviated from a
process...

...it acts the same.

(Baker)

Belief: People Make Mistakes

People do not intend to injure themselves

Errors and poor judgment are part of the human condition

One miscalculation should not cost a person his/her life or job



Designing to fail safely, defense testing, listening faster

Emerging Behavior:

BowTie, defense testing audits, operational learning tools

Tools Embraced:

HOP Principle



Blame Fixes Nothing

Assumption: the worker is the problem



It is easy to label
people unfairly...



Assumption:

We need to
hold people
accountable

Accountability?
Discipline?
Blame?

Hard in practice...

Emerging Behavior:

discussion on reactive accountability
decreases, discussion on system
improvements and forward accountability
discussion increases

A neon sign spelling the word "BLAME" in a bright yellow-green color. The sign is mounted on a dark brick wall. The letters are outlined and filled with a glowing neon light. The background is a dark, textured brick wall.

Changes Embraced:

Removal of zero tolerance policies, rewriting HR policies, bias training

Belief: Blame fixes nothing

Blame is common because it is easier to blame than improve

Some of our biases make blame our first reaction

Blaming an individual will not change the probability of a similar event

HOP Principle



Context Drives Behavior
(and performance)

Assumption: What we measure we improve



Emerging Behavior:

- Seeking to understand local rationale, deviation prone rules, and normalized deviations
- Listening faster
- Context added to traditional investigation reports
- Change in metrics, performance evaluations, report-out structures

Tools Embraced:

Learning Teams, blackline/blueline reviews, new employee listening sessions

Teaming structure

Belief: Context Drives Behavior

If one person makes an error or breaks a rule there is high probability others will do the same

Those closest to the work understand their context the best

HOP Principle



Learning & Improving is Vital



We want to be **less surprised** by human error and failure...

...and become a lot **more interested in learning**

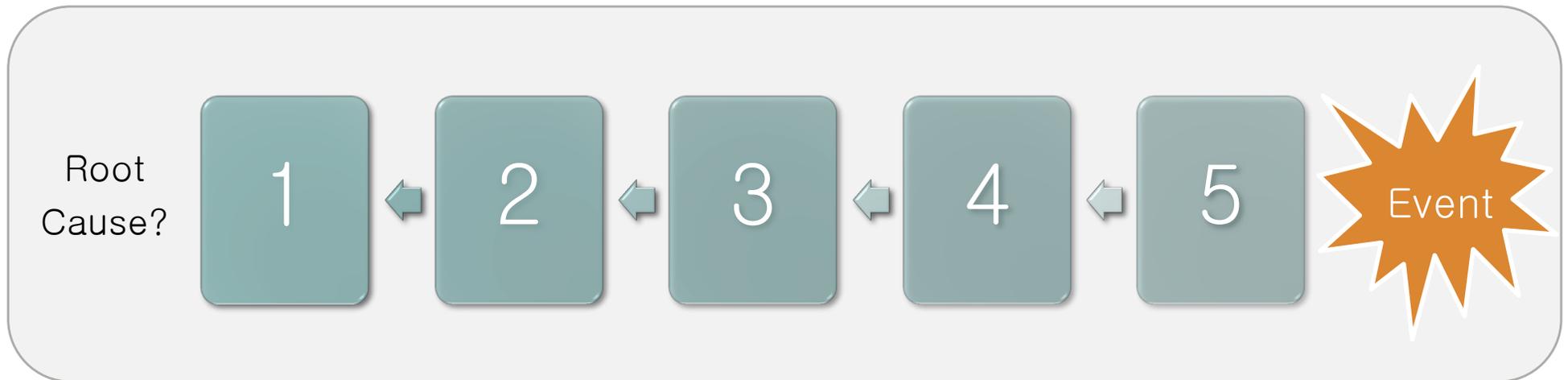
(Edwards)

Assumption:
There is a root cause



Some tools lead us to a linear understanding of an event...

...which may be enough

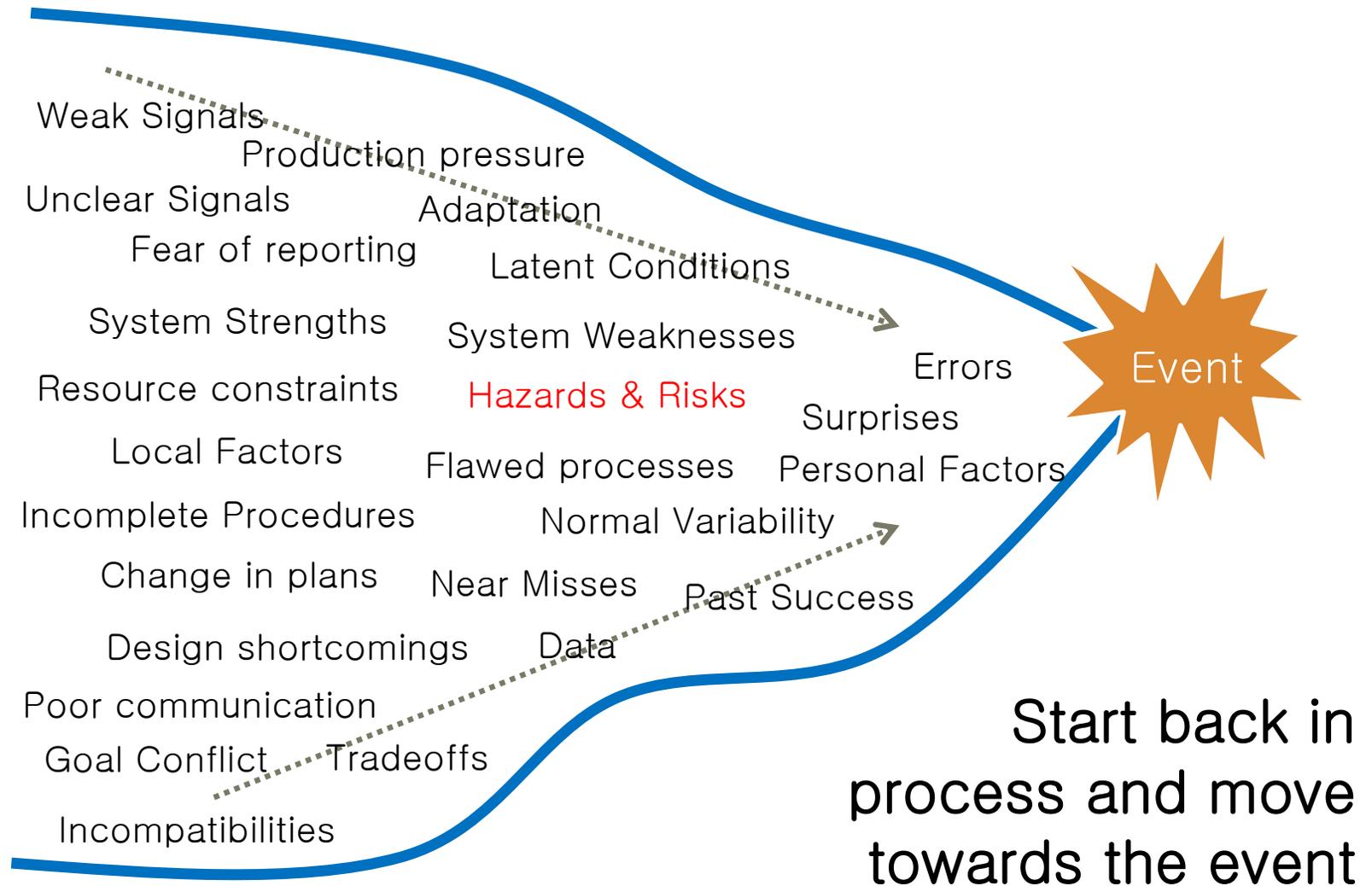


The problem is, the failure was **not linear**...

...and there is **never** one root cause.

(Contributions from Ryan Ward and Tanya Lughermo)

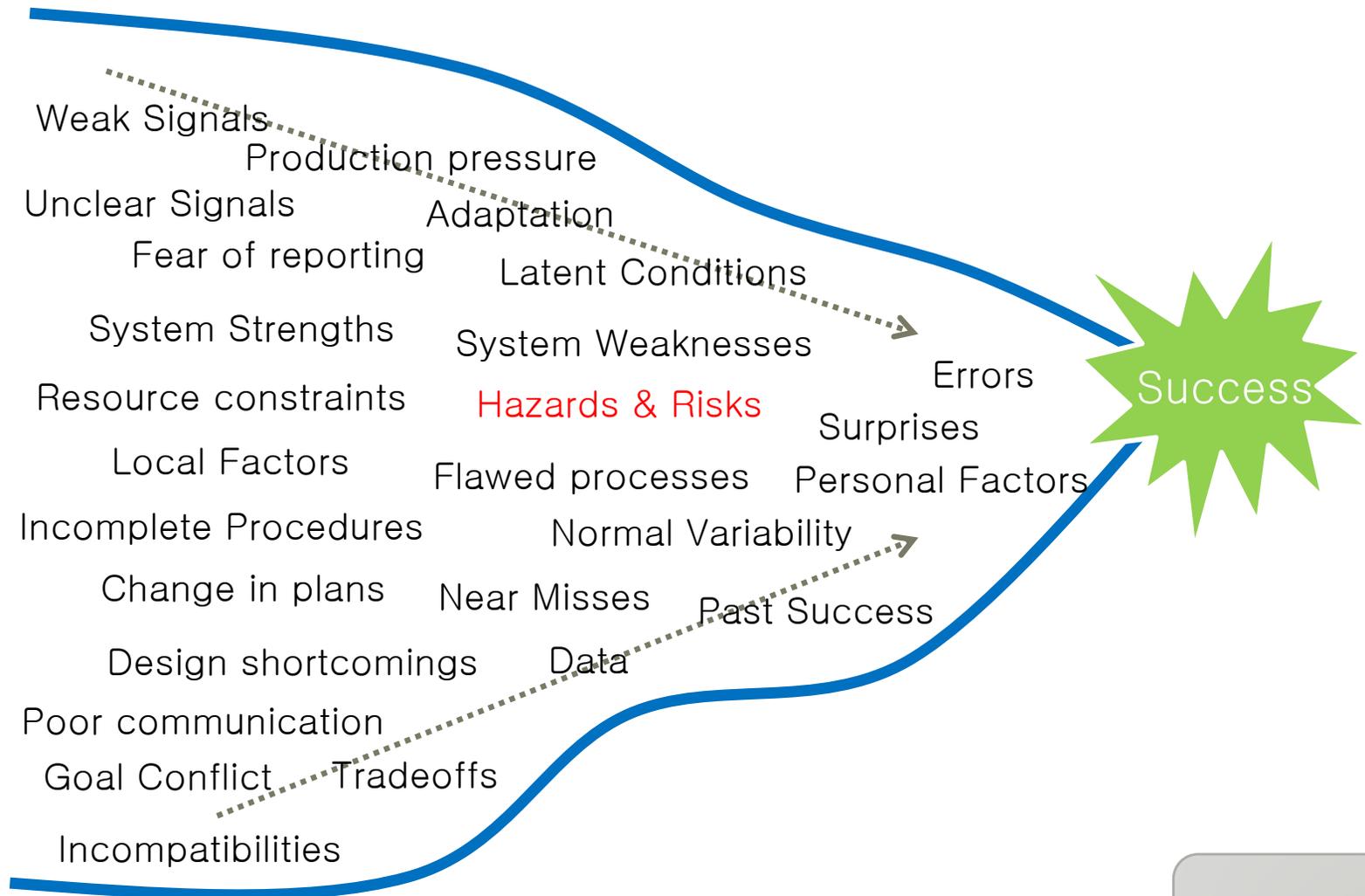
Failure looks more like...



(Conklin/Edwards/Baker/Howe)

Difference
between
Failure and
Success?

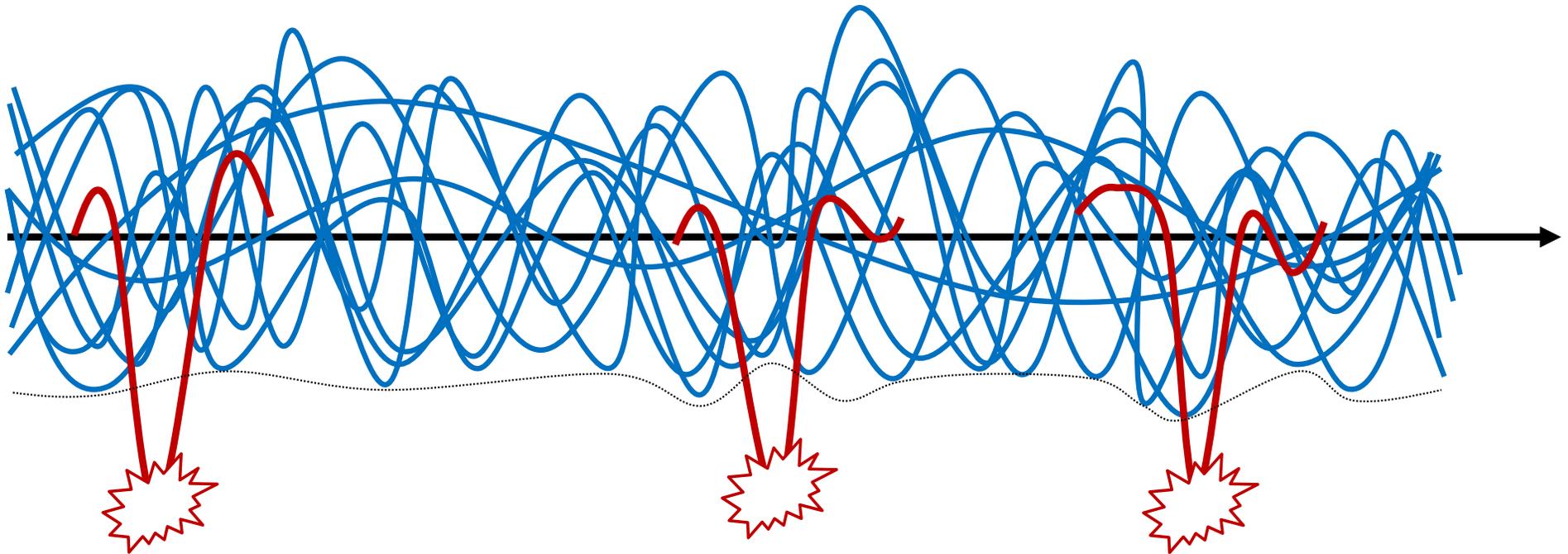
Success is similar



(Conklin/Edwards/Baker/Howe)

How we ask questions

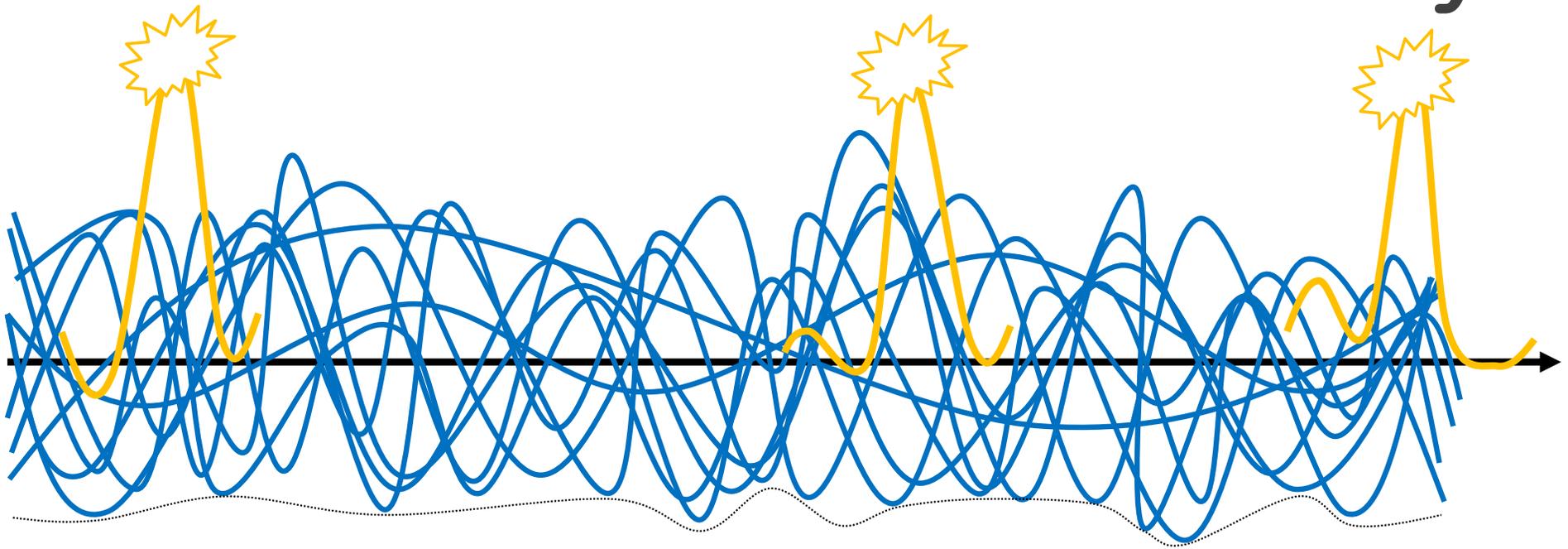
Failure is a combination of normal variability



(Hollnagel, 2018)

Success

~~Failure~~ is a combination
of normal variability



(Hollnagel, 2018)

A Sense Making Model for Systems (The Cynefin Framework)

Complex



Complicated



Ordered Systems

Chaotic

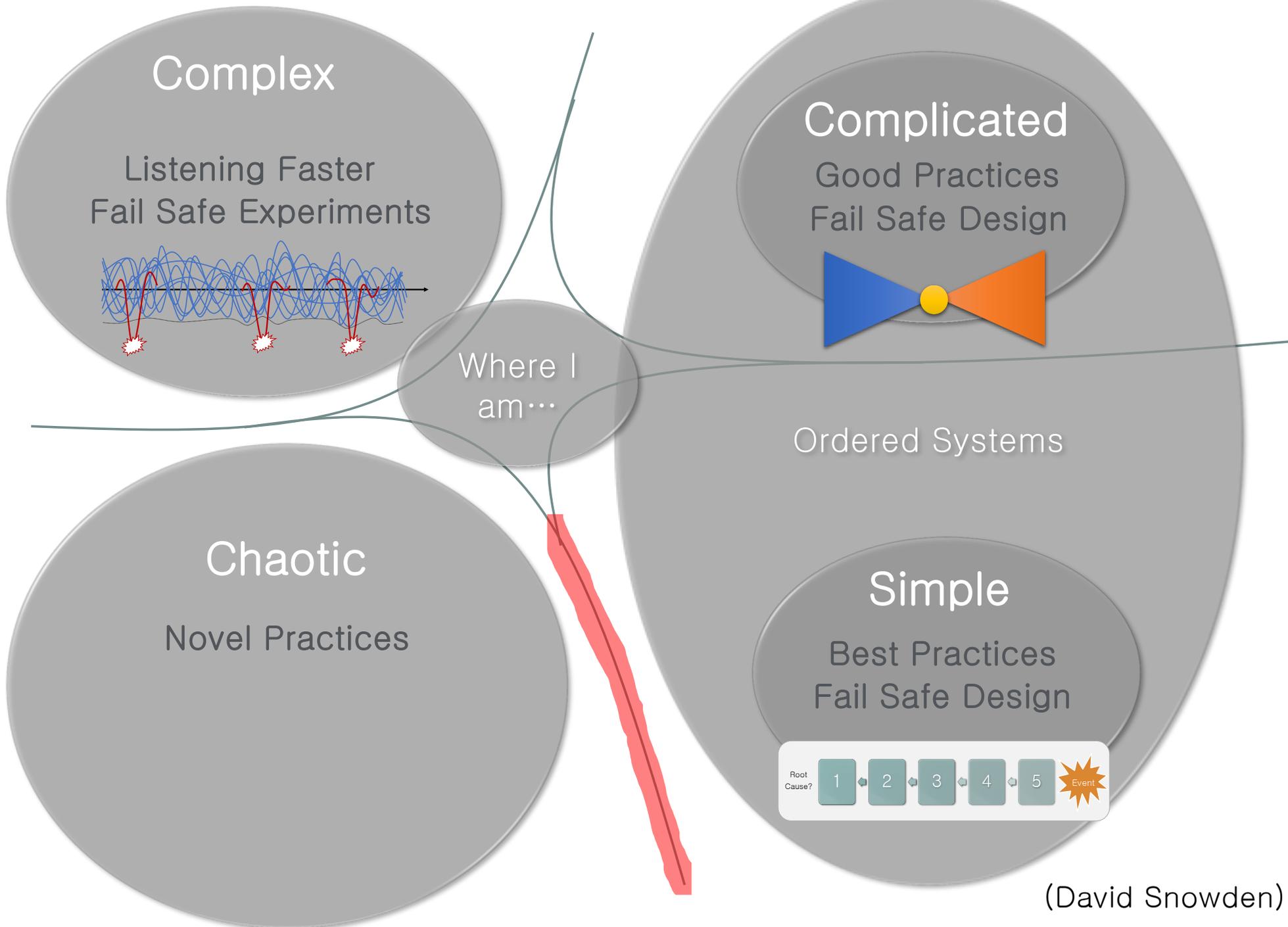


Simple



(David Snowden)

A Sense Making Model for Systems (The Cynefin Framework)

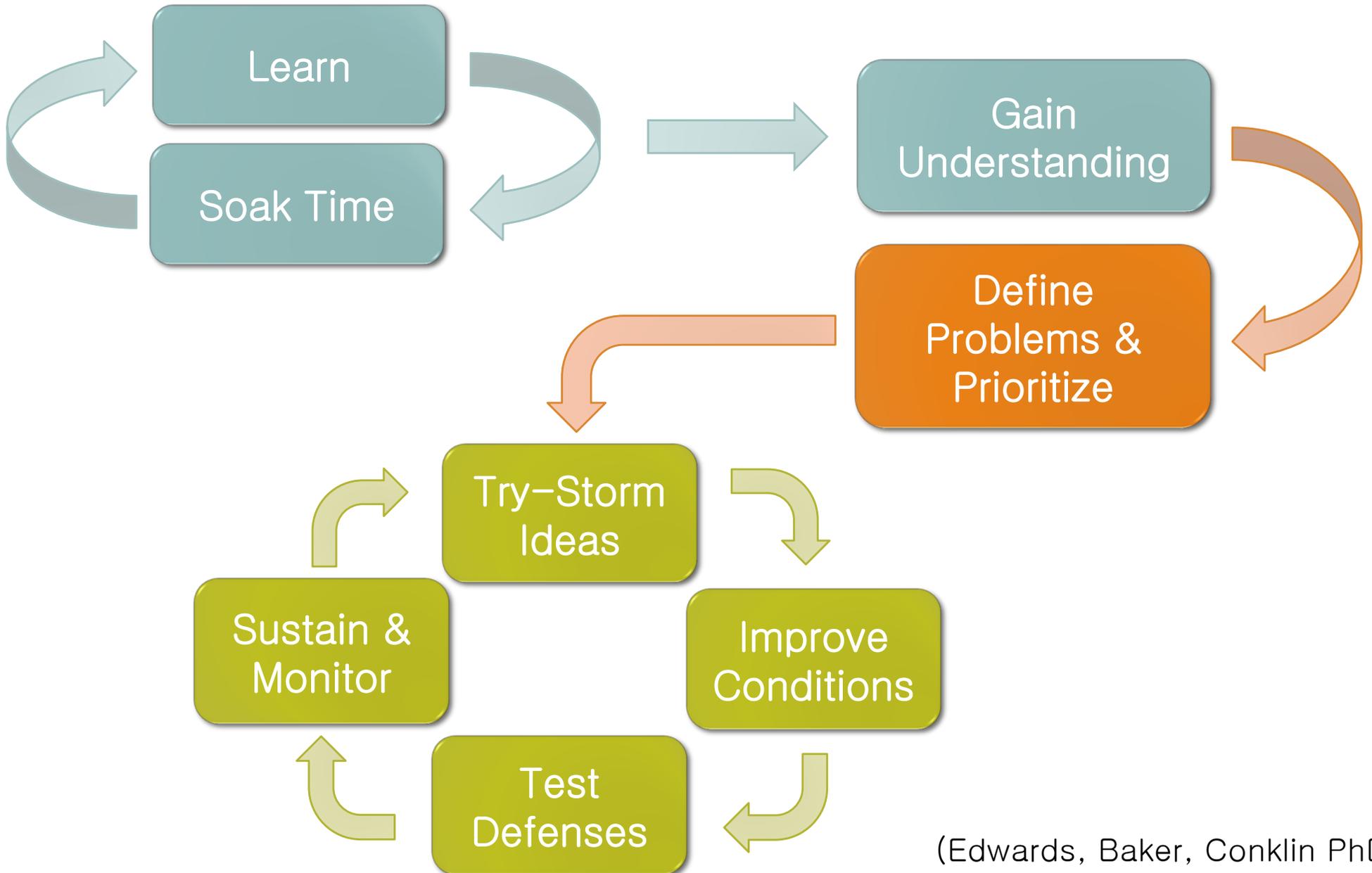


(David Snowden)

Investigations?
Operational Learning?
Learning Teams?

The HOP Learning Team Cycle

Determine Need & Establish Team



(Edwards, Baker, Conklin PhD)

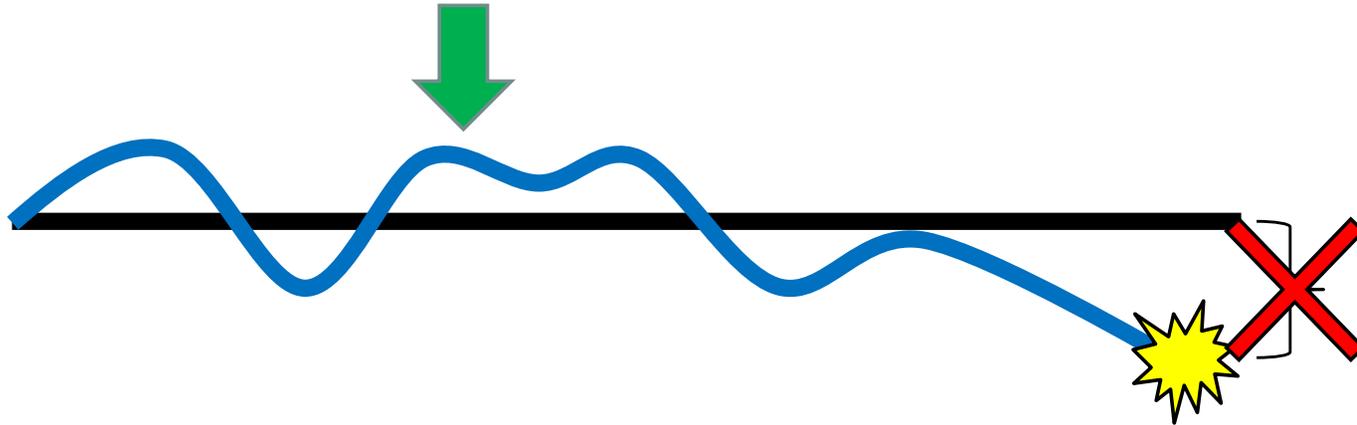
Question Difference

Investigation

Questions are designed to test a **theory**, check a **cause**, or hunt for an **explanation**

Learning

Questions are designed to **encourage** people to **teach us** the **good, bad and ugly** of their work world

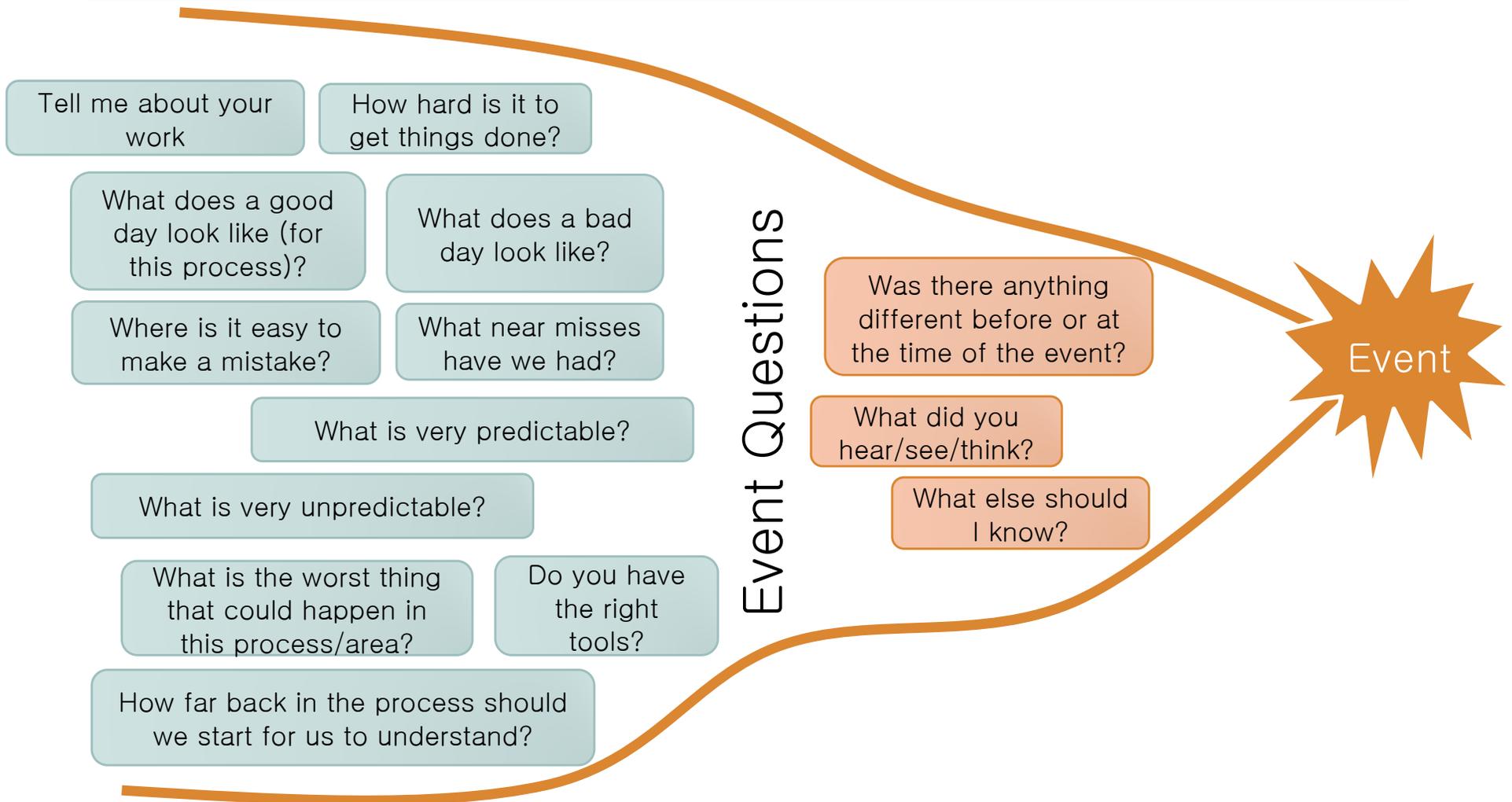


Focusing on the gap between the black and blue lines is too narrow a view point; it is normal to have this gap, even when no event occurs

It is much more beneficial to focus on learning about the blue line: how normal work is done.

(Conklin / Edwards / Baker)

Operational Learning Questions



Industrial Empathy

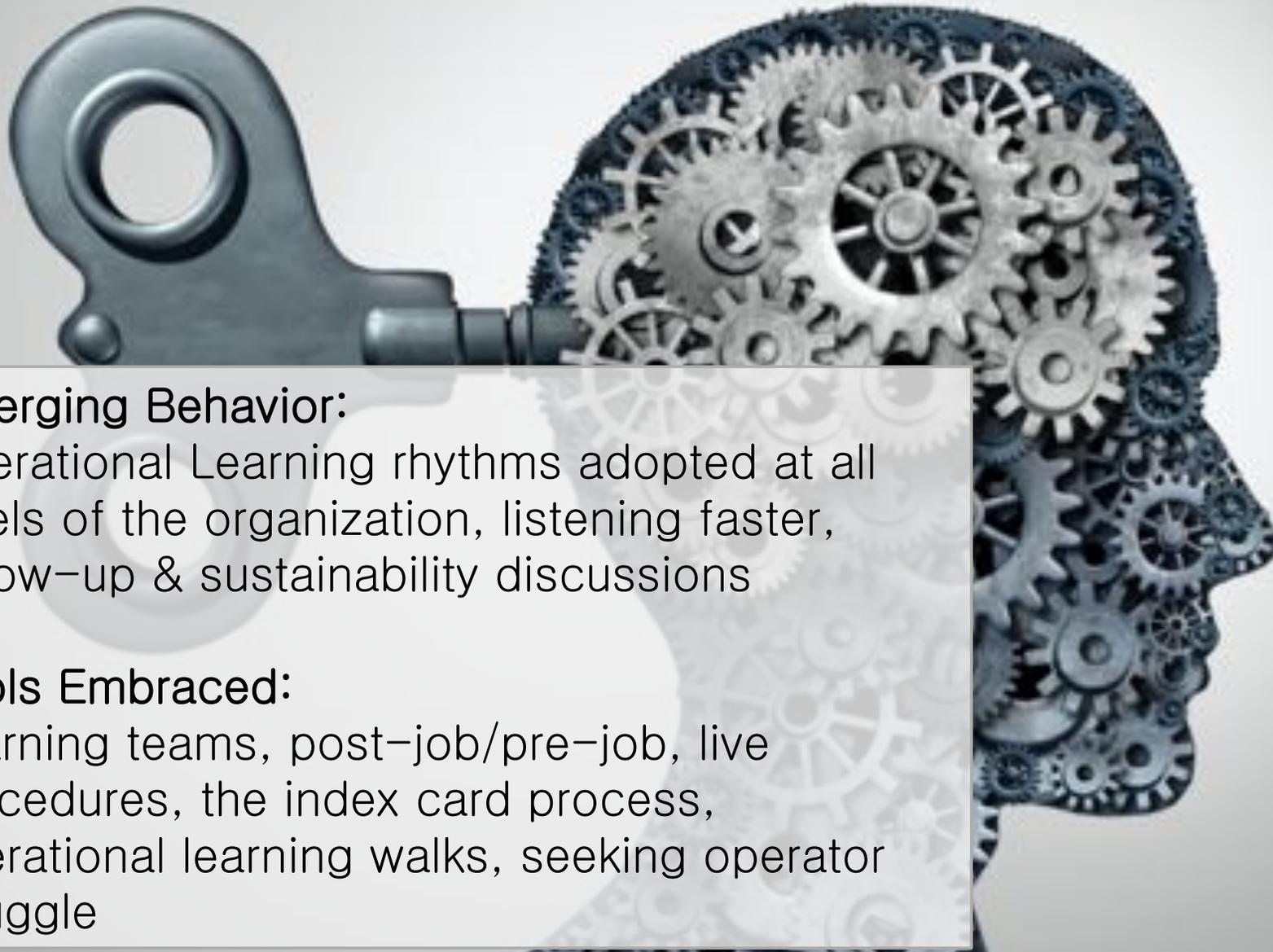
Our goal is to learn enough that we can understand the perspectives of those we are learning from, given the conditions they faced, the information they had, the tools and equipment they were using and the pressure they were under.

(Baker/Edwards)

Gain
Understanding

Belief: Learning and Improving is Vital

A complex system cannot be designed perfectly from the beginning
Resilience is not an end state of design, it is a state of continuous learning and improving



Emerging Behavior:

Operational Learning rhythms adopted at all levels of the organization, listening faster, follow-up & sustainability discussions

Tools Embraced:

Learning teams, post-job/pre-job, live procedures, the index card process, operational learning walks, seeking operator struggle

HOP Principle



Leader's Response Matters

Assumption: Great leaders take action



Reaction?
Response?

Belief: How We React Matters

The leaders' response to failure builds or breaks a learning and improving culture

Emerging Behavior:

Solutions sets not overridden by managers, try-storming embraced, policy changes built with those closest to the work, practicing industrial empathy, seeking feedback mechanisms post communication

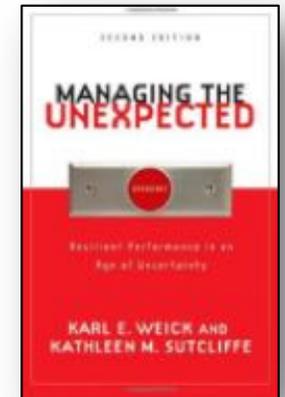
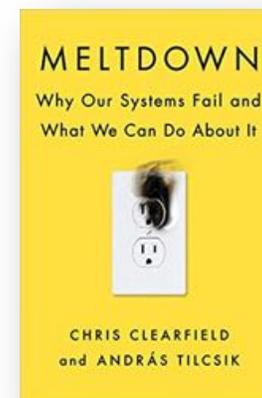
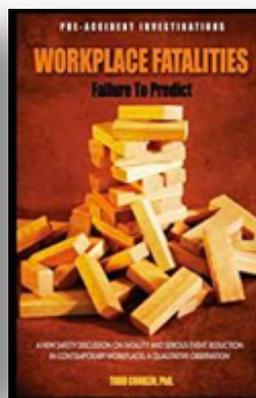
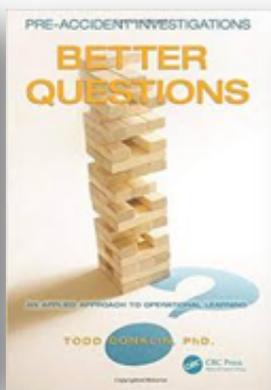
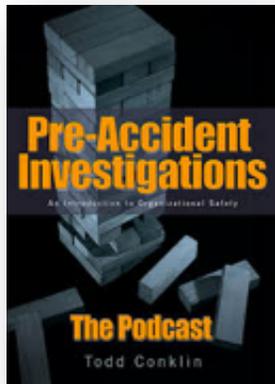
Tools Embraced:

Advisory boards, communication reviews, soft skills training



Resources

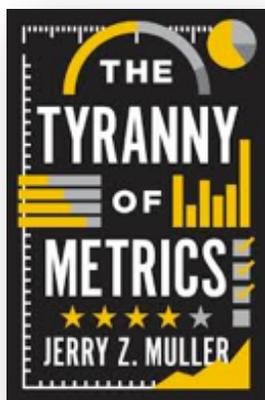
www.hophub.org



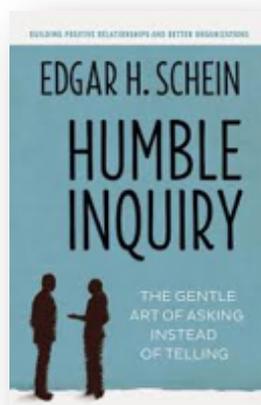
Todd Conklin, PhD

Chris Clearfield
Andras Tilcsik

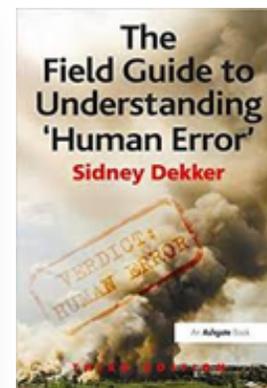
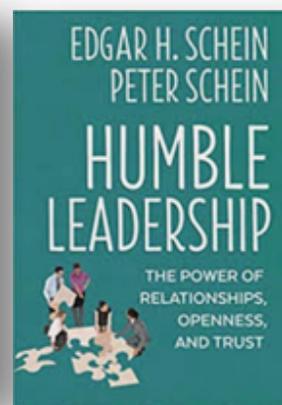
Weick & Sutcliffe



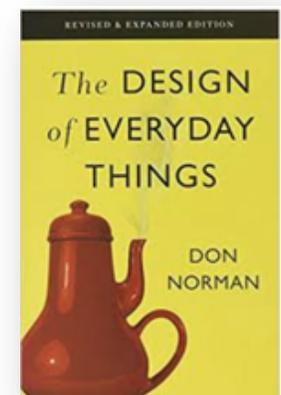
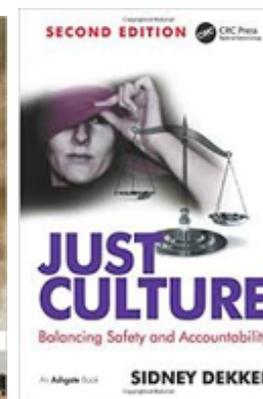
Jerry Muller



Edgar Schein, PhD



Sidney Dekker, PhD



Don Norman