

Rob Fisher
President and Director of Operations

SafeStart 2019

Introduction to Human & Organizational Performance (HOP) Principles



FISHER
IMPROVEMENT
TECHNOLOGIES



My E-Colors

Military Experience

Chemist / Operator
Periscope Photographer
Special Operations Liaison



SSBN644 - **USS Lewis & Clark**
SSN681 - **USS Batfish**



- **Over 25 yrs. of consulting experience in performance improvement**
- **FIT Cumulative over 150 yrs. of industrial experience**
- **Specialties in:**
 - Human & Organizational Performance Deployment & Integration
 - Learning from success & failure / Root Cause / Catastrophic Failure Analysis / Incidents and Near Misses
 - Procedure / Programs / Process Excellence
- **Conducted over 50 successful integration strategies in:**
 - Manufacturing / Heavy Industry / Chemical / Metals / Oil & Gas
 - Utilities / Generation / Transmission / Distribution
 - Construction / Mining / Refining / Engineering
 - Department of Energy / Research
- **Recognized contributor to reduction of fatalities and serious injuries in high-risk industries**

25

Years

40

Countries

>100

Super-Advocates

>260

Companies

>1,000

Certified Trainers

>11,000

Advocates (Practitioners)

>250,000

Trained Workforce Members)

>600,000

Personality Tendency Data Points

**Why am
I talking
to you
today?**

1975: **My Mother**

My mother passed due to a medical error at the age of 40. Since then I have been fascinated by mistakes and how and why they happen.



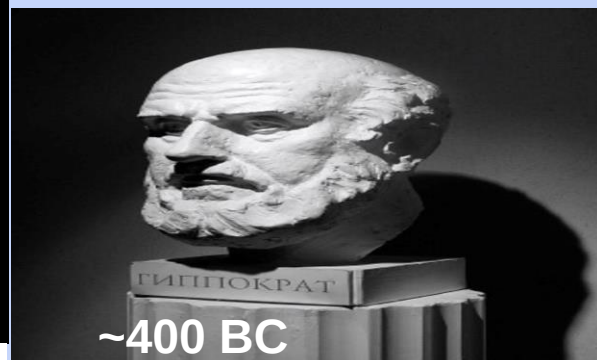
**Jeanne
Marie
Worthington
Fisher
1935-1975**



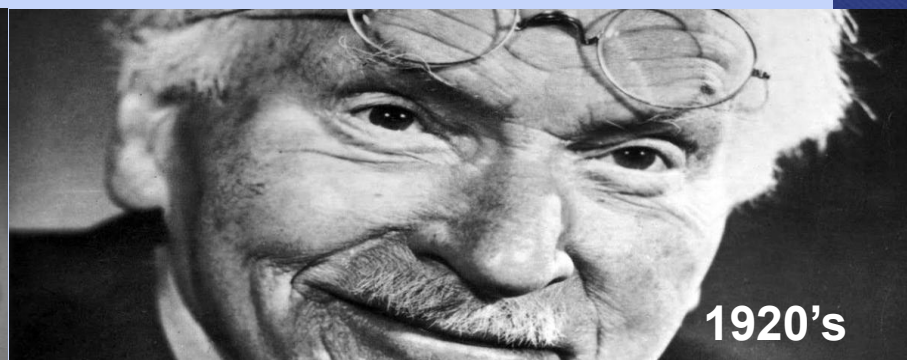
HISTORY



~2000 BC



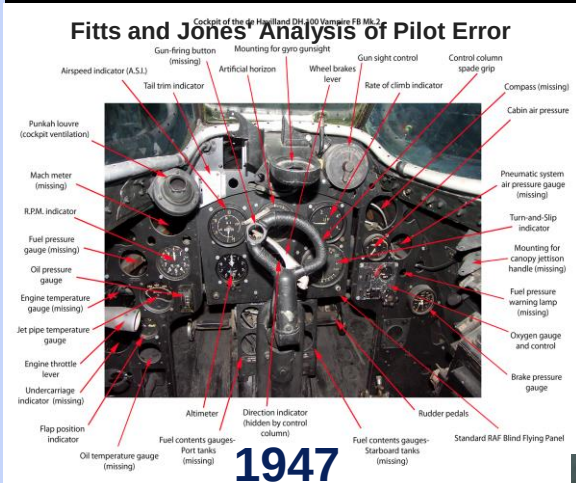
~400 BC



1920's



1940's



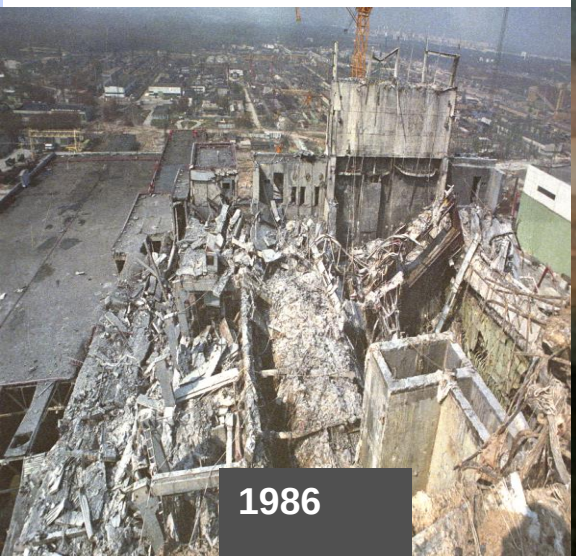
1947



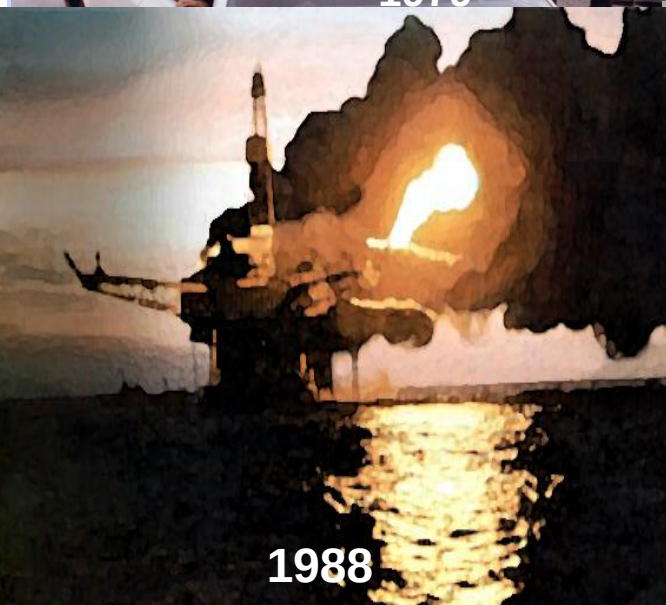
1979



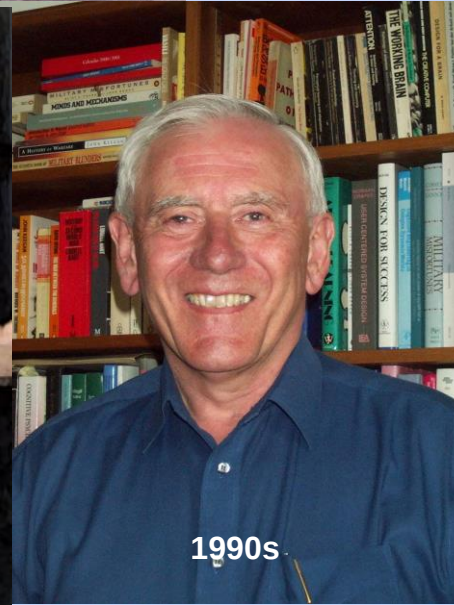
1979



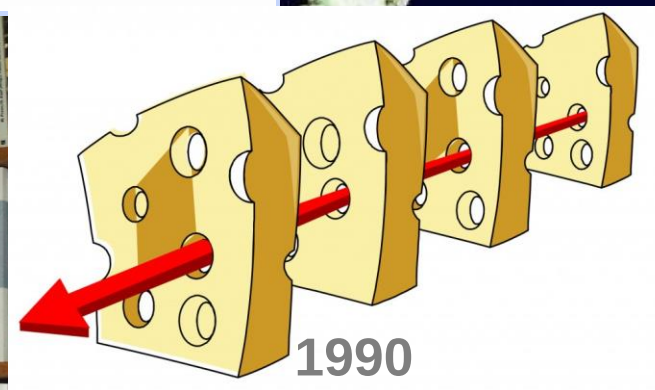
1986



1988



1990s



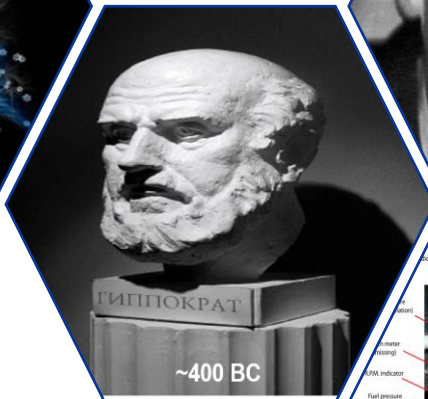
1990

~1991

The "HOP" Journey Begins...



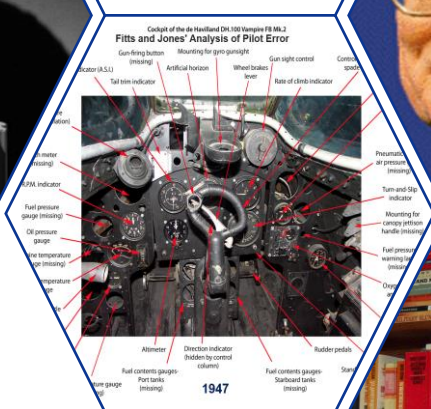
~2000 BC



~400 BC



1920's



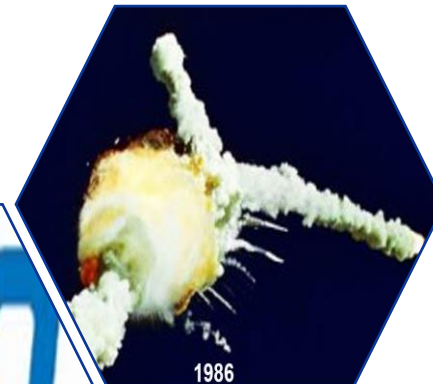
1947



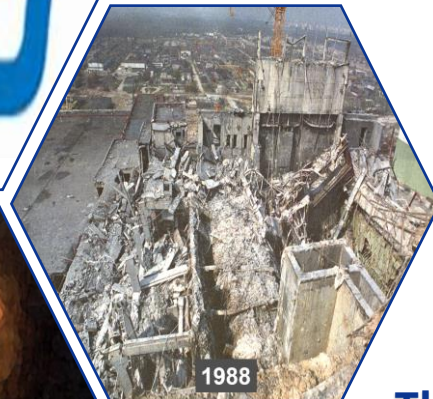
1940's



1979



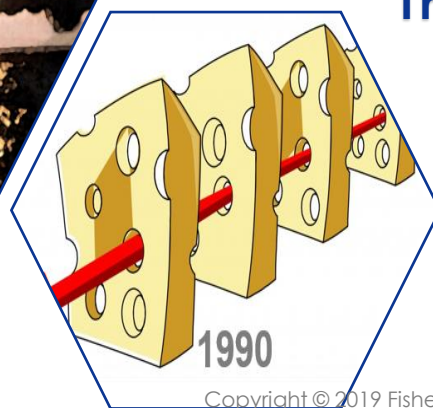
1986



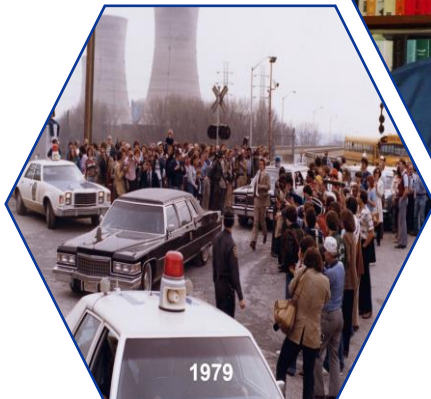
1988



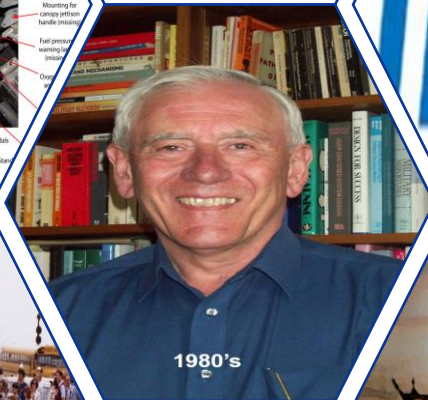
1988



1990



1979



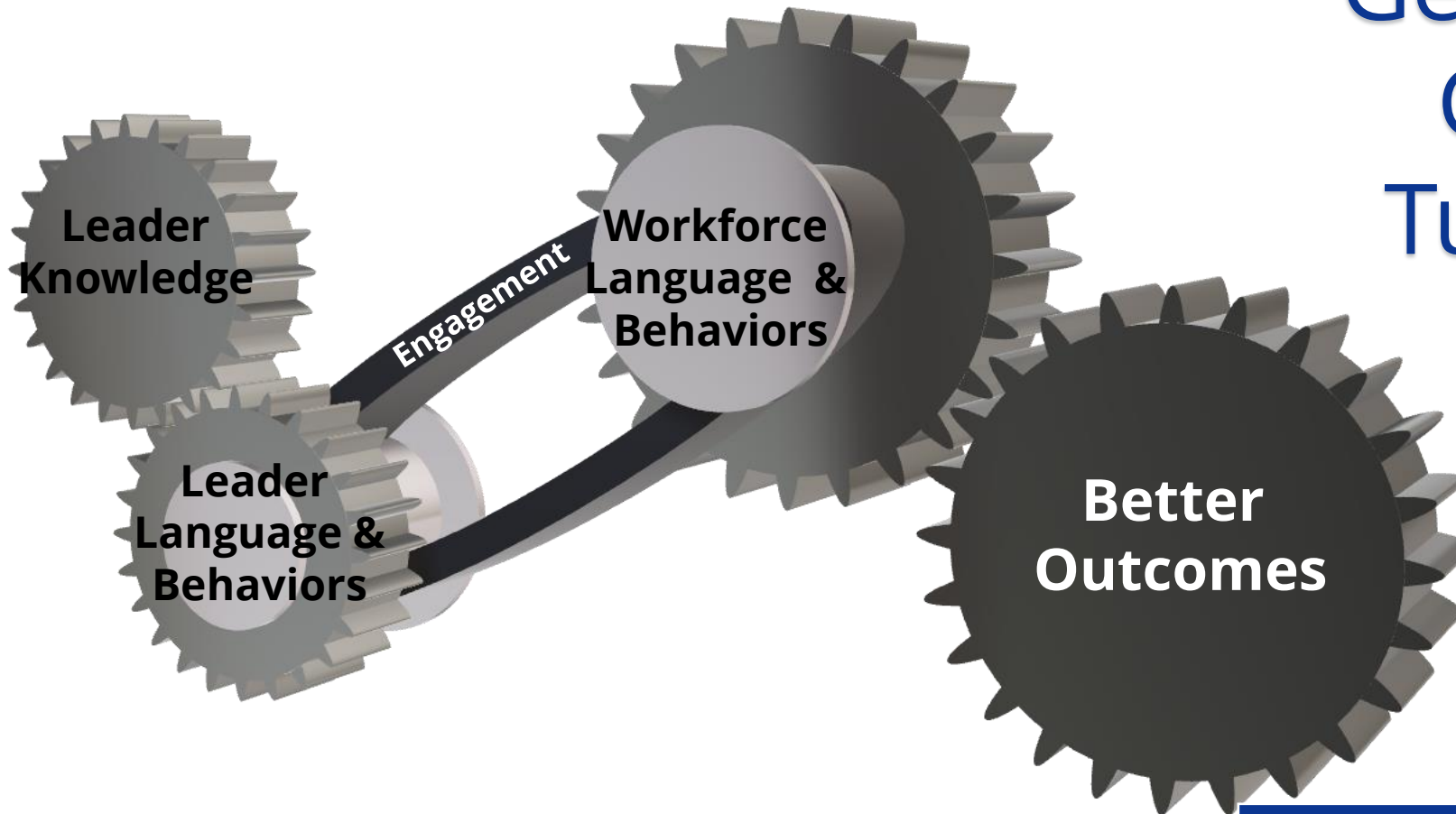
1980's

~1991
The "HOP" Journey Begins...

**YOU have
to make
the
connections
!**

Starting HOP

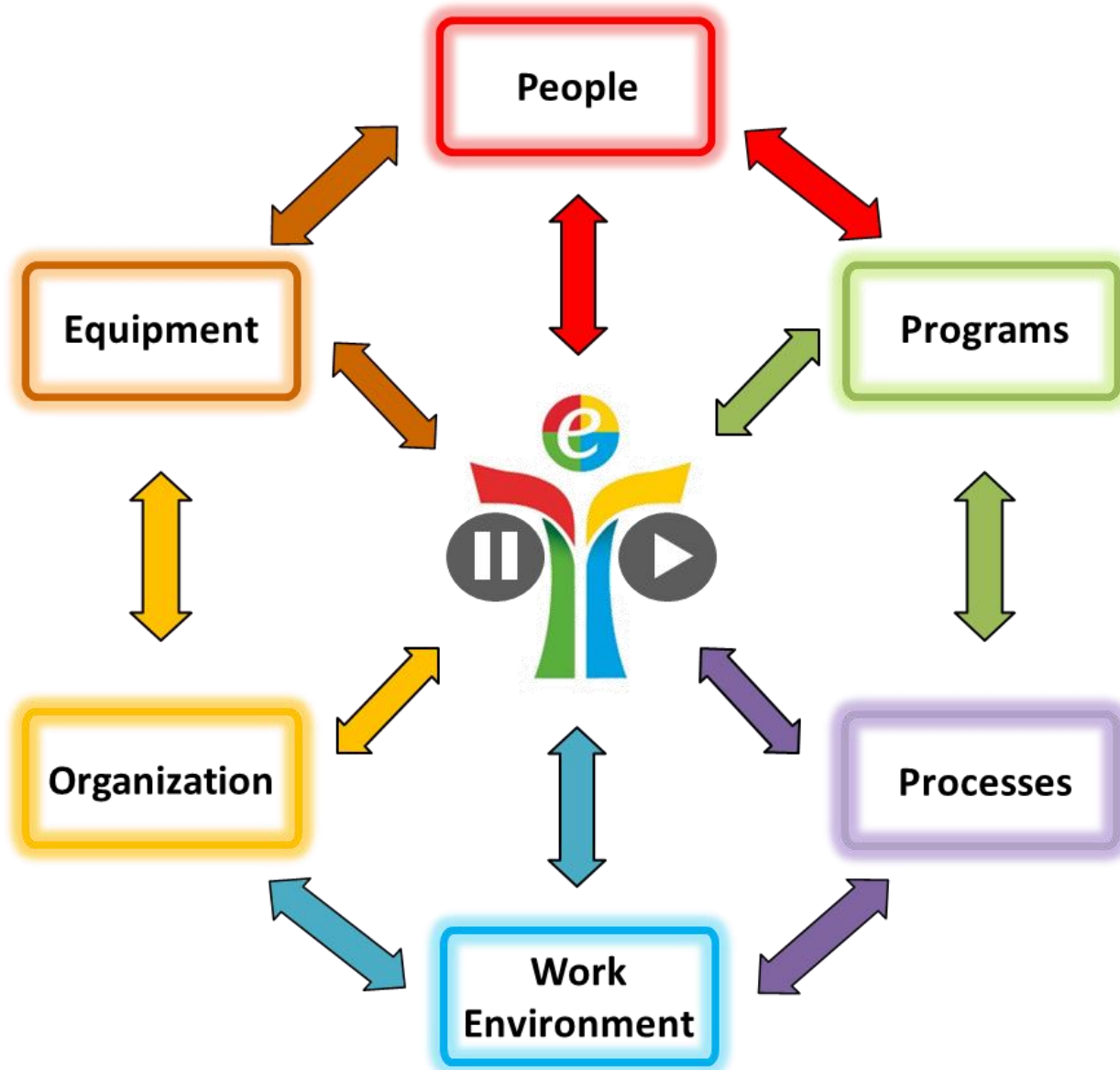
Get Those
Gears
Turning!



Culture

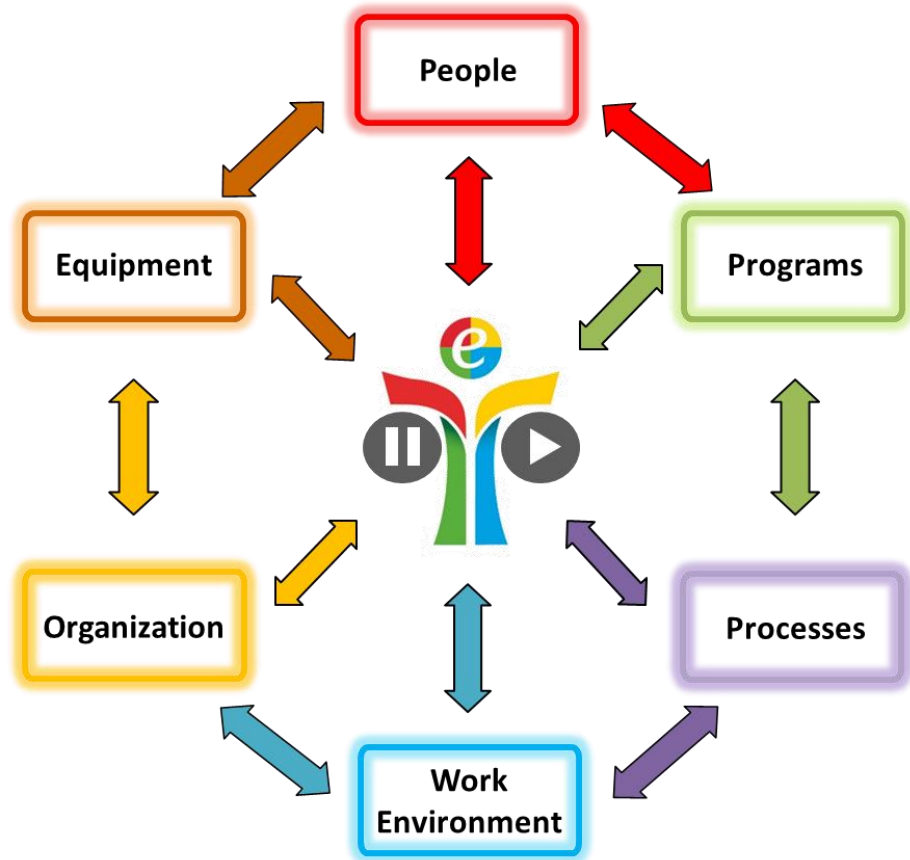
Values

Norms

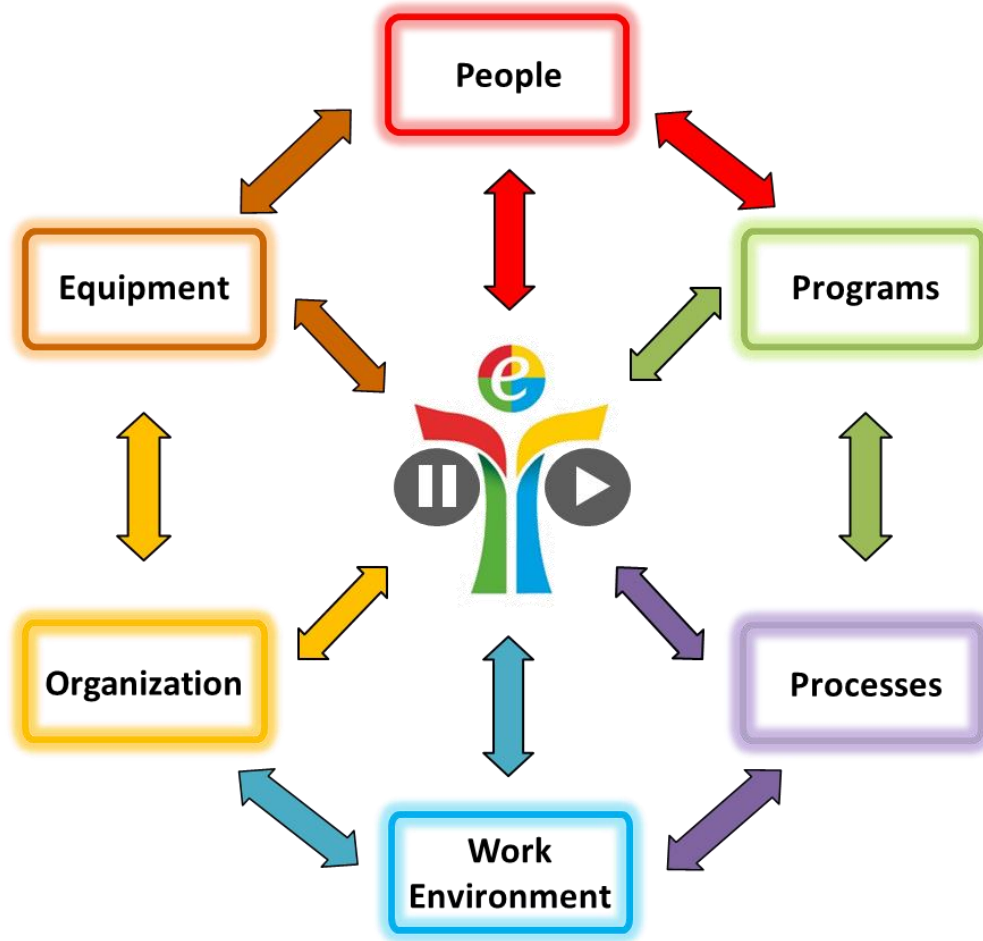


An interdependent system where individuals being aware of and managing their personality tendencies interact with people, programs, processes, work environment, organization and equipment

The System Doesn't Know Where It's At

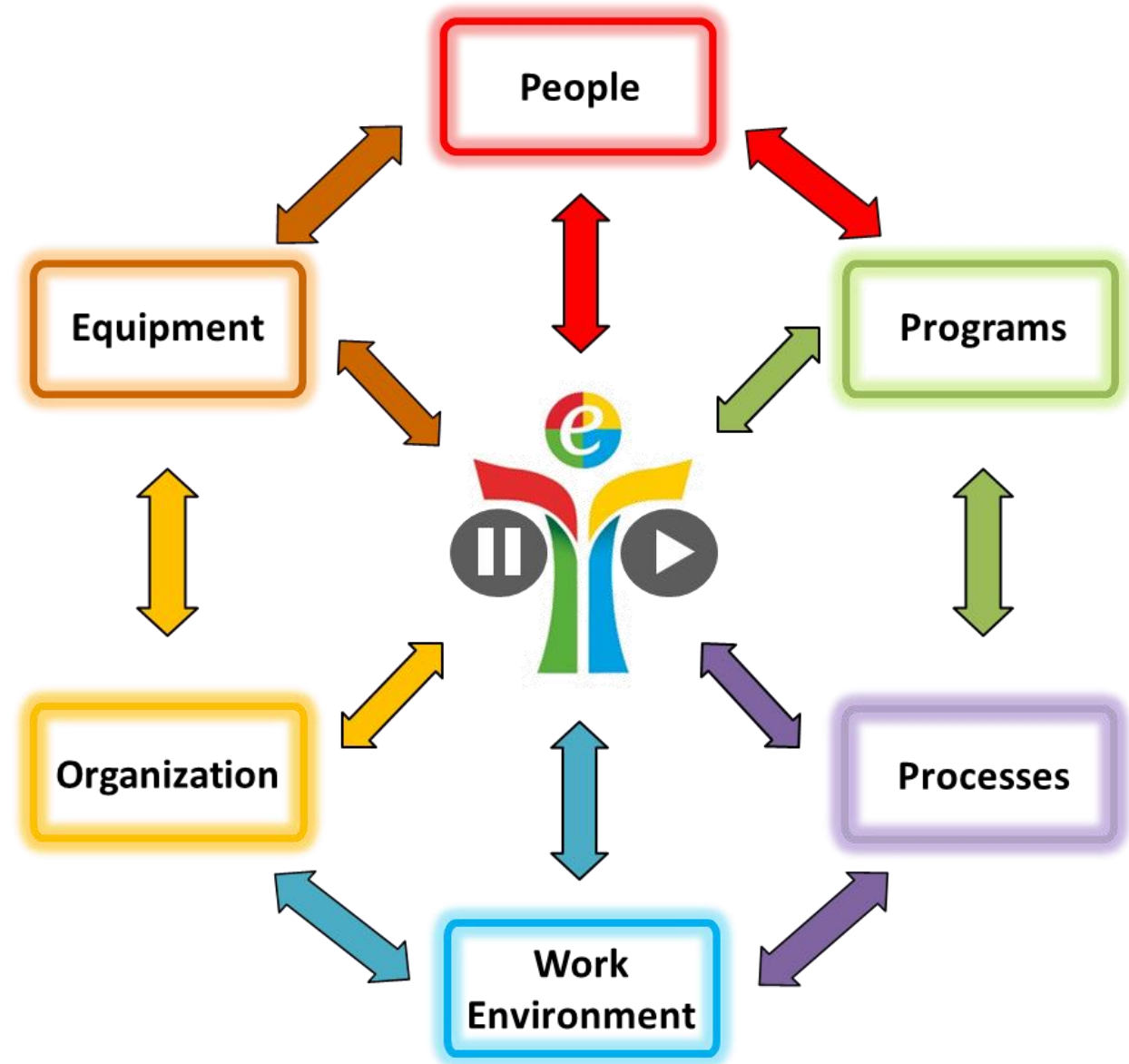


The System Doesn't Know What You Are Doing!



Systems Connections

*We see and
manage risk
based on our
personality
tendencies*



*How an
organization
controls and
manages the task-
based system*





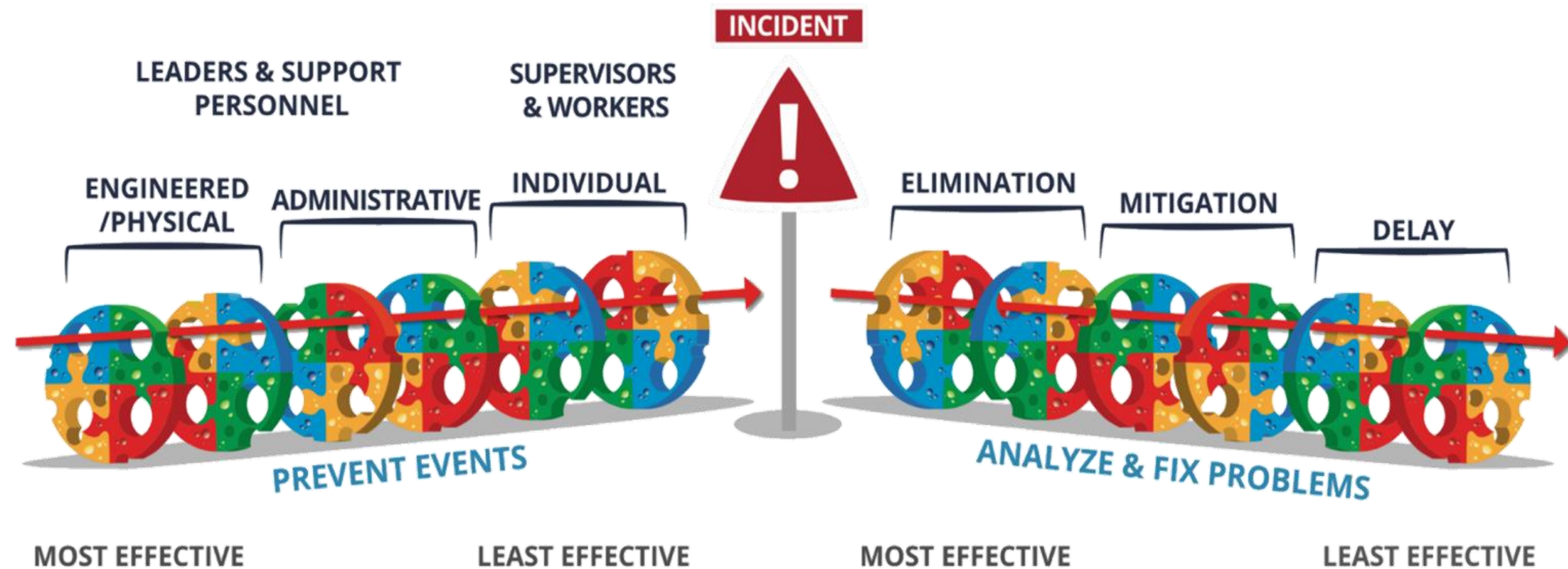
Do you know
SOMEONE
who is



Humans have known for
over 4000 years that
different people with
different but predictable
personality tendencies will
behave and see and
manage risk differently



HOP: Big Picture Swiss Cheese Model*



Each layer of protection has individuals that need to be aware of and manage their personality tendencies.

100

true
or
false ?

Most problems
in industry
are related to
Human Error...

Science Basis: **Definitions**

Error

An action or inaction that **unintentionally**
Results in an undesirable or unwanted condition OR
Leads a task or system out of limits OR
Deviates from a rule, standard, or expectation

Event (or incident)

The undesirable result of an error, a set of errors or a set of conditions

Deviation

Not strictly complying with a rule, standard or expectation

Violation

An action or inaction that intentionally deviates from a rule, standard, or expectation

Active Error

An action or inaction that results in immediate consequence

Latent Error

An action or inaction that results in consequences that are delayed or create latent conditions

We **MUST** learn
to separate the
ERRORS from the
EVENT

*If **LEADERS** and
ADVOCATES
don't know the
definition of
Error...*

ERRORS and **VIOLATIONS**
are **DIFFERENT THINGS**

*it is hard to get
the workforce
to believe you
want to help
them prevent
them.*

We **MUST** pay **ATTENTION**
to **ALL TYPES** of **ERRORS**

Science Basis: **Basic Understandings**

90% of events are caused by something **OTHER THAN JUST** the individual*

95% of people react very similarly (physiologically) to the same stimuli

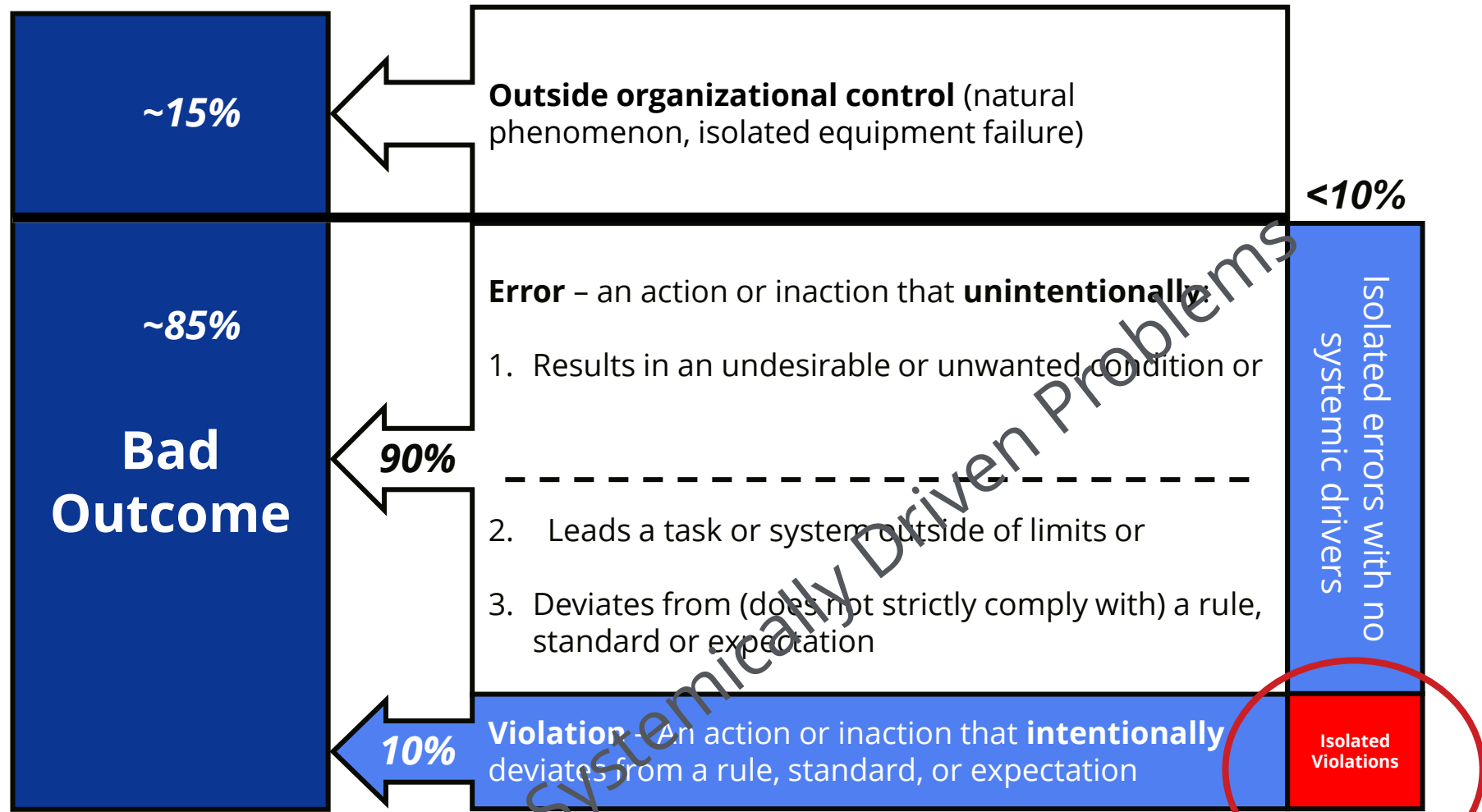
People do what they do, at the time that they do it, for reasons that make sense to them at the time**

HOP

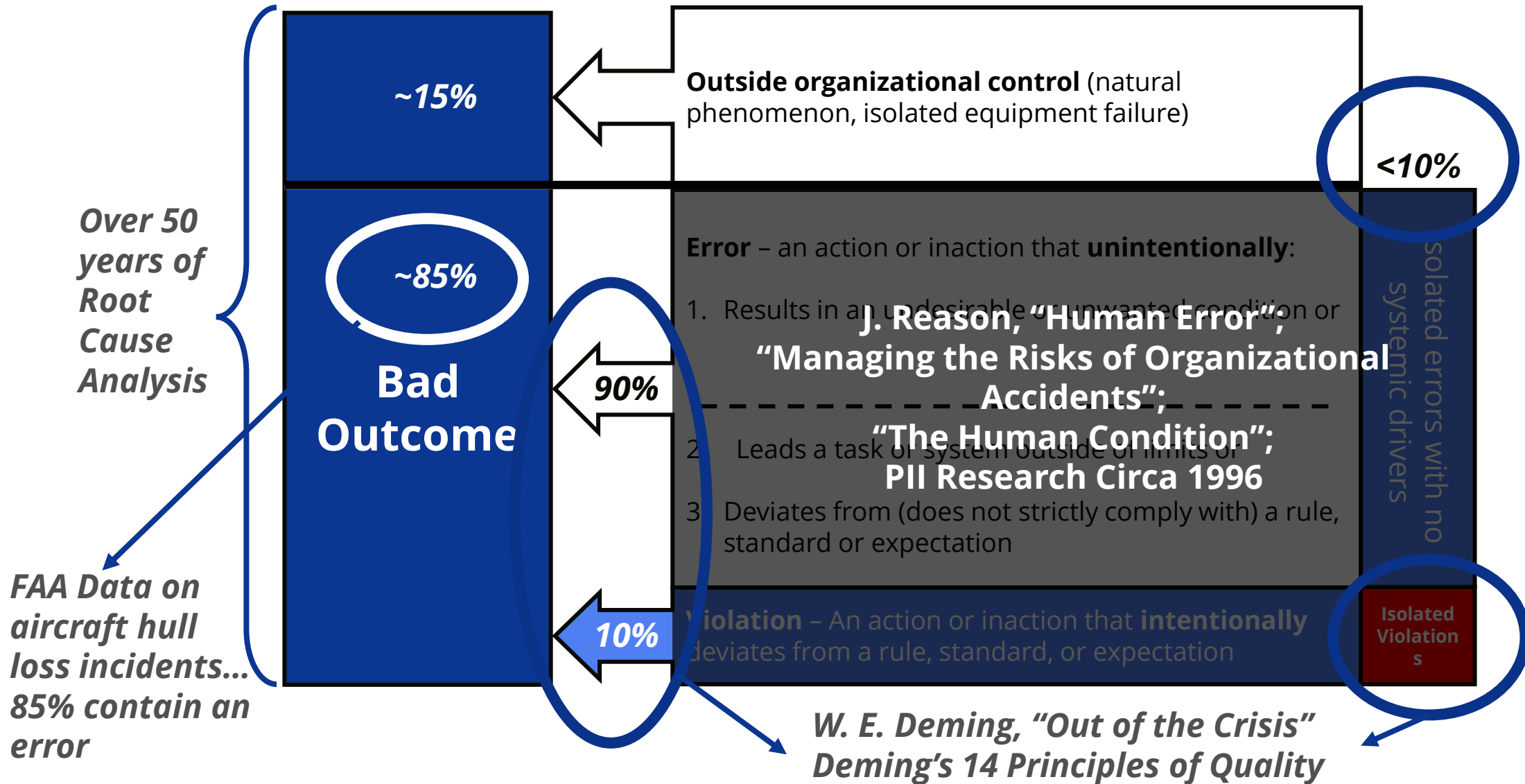
Is **NOT** common sense

* - Derived from "Out of the Crisis", W.E. Deming, 1996

** - Derived from "The Field Guide to Understanding Human Error", Sidney Dekker, 2013



Systems Thinking: How Bad Things Happen



Performance Modes



Performance Modes
Relate to...
This **PERSON** on
This **TASK** at
This **TIME**

AERO: Performance Modes

Performance Mode	Characteristics	Error Rate
Skill Based	Habitual tasks that need low to no conscious thought and you don't have to think... (>50 times and <7 steps)	HABITS 1:1000
Rule Based	There is a rule and the person knows the rule exists but does not have to KNOW the rule (we cannot know all the rules)...	PROCESS 1:100
<u>Lack of...</u> Knowledge Based	The person does not know what they don't know – they THINK they know but have some doubt... You cannot THINK your way out!	GAPS 1:2 - 1:10

Triggers

AERO: What are Triggers?

1.

Clues
Signals,
Indications,
Symptoms,
or Prompts

2.

Observable
actions or
reactions
and should
“trigger” a
response

3.

A recognized
thought or
individual
perception

4.

Personality
Tendency
driven
vulnerabilities
(Internal /
External)

5.

Utilizing the
5 senses
Smell
Touch
Taste
Sight
Hearing

6.

The “**6th
Sense**”- of
intuition or a
“**gut feeling**”
that
something
just isn’t right

Press Esc to exit full screen



Triggers...

Scratching Head or chin

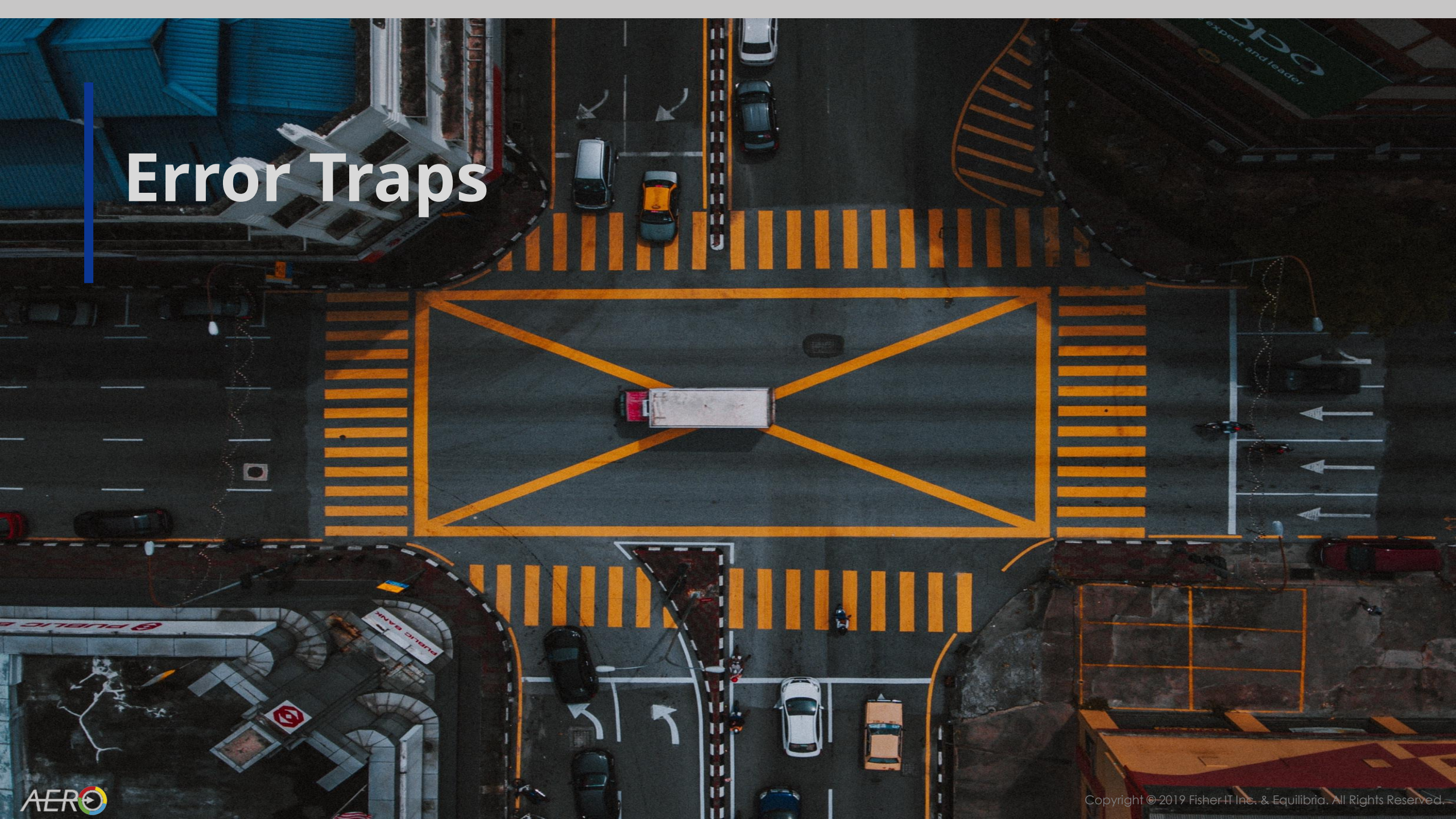
Using terms like...

“I Think”, “I Believe”, “I’m almost sure...”

**These Triggers
indicate as high as 50%
probability of an error!**



Error Traps



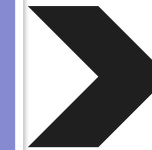
AERO: Top 10 Error Traps

- Stress
- Multi-tasking/High work load
- Time pressure



All Feel the Same

- Poor communications
- Vague/poor written guidance
- Overconfidence
- Infrequent or first time task



Put us in or keep us in Knowledge Based Mode

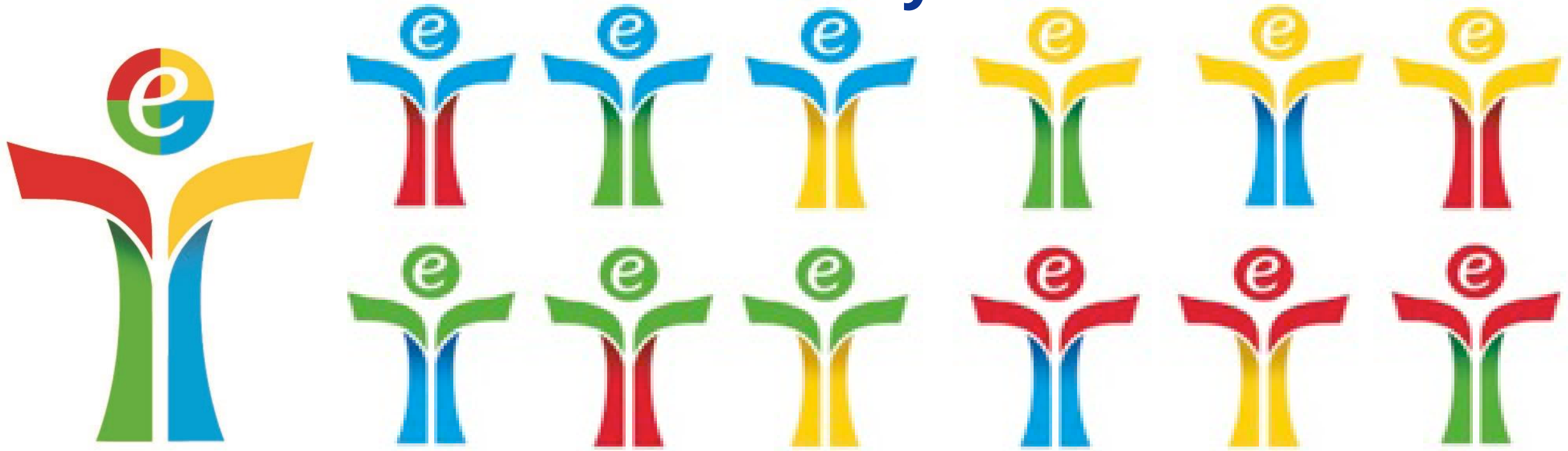
- Distractions
- First working day following time off > 4 days
- The end of work shift or extended hours



Interact With Other Traps

Is it reasonable to believe...

**Different people with different personality
tendencies see traps, feel traps and react to traps
differently?**



A collection of various tools including wrenches, screwdrivers, and pliers arranged on a blue textured background. The tools are organized in rows, with wrenches at the top and middle, and screwdrivers and pliers at the bottom. The background is a dark blue, textured surface.

Error Reduction Tools

**Tools help reduce
the probability
that
we will
make an error**



Verbalize, Point & Touch
Step-by-Step
Stop & Seek Out Help

} Individual

3-Part Communication
Pre-Task Brief & Workflow process

} Group

Show & Tell
Value & Method based observations

} Leader



* Using the right tool the right way in the right performance mode reduces your error rate by a factor of 10.
Derived from James Reasons creation of GEMS based on Rasmussen's research.

HOP Connections



HOP Big Picture

- It isn't just about the workers!
- Human (& Organizational) Performance is not a program, it is a new way of thinking, behaving, and integrating practically applied concepts that produce sustainable improvements in Safety, Quality, Effectiveness, Efficiency and Productivity
- Educate the workforce (senior leaders to the floor and contractors) on the connections
- Integrate risk awareness and error reduction and mitigation concepts into company practices and programs
- Make it “how we do business” to create sustainability



The difference between *Empoweri ng* and *Enabling*

Empowering – Telling
someone they can or should
do something, and
establishing the systems to
make that happen

Enabling – Ensuring they
have the individual
capabilities to match the
task demands and all of the
tools needed to be
successful

To change someone's paradigm, you have to give them a new one that makes more sense than the one you are asking them to leave!

S. Dekker



4 Things to Keep in Mind...

1. Know your **WHY** – When times get tough, that's all that matters
2. Learn **WHAT** to do then do it – What works and what doesn't; and what to do about it
3. Learn **HOW** to do it – If you keep changing the method people will eventually just stop doing it
4. Know **WHO** to go to – For advice and help; and in your organization for leadership

Thank You!

Rob Fisher

Linked 

Questions?

Additional content available at:

www.improvewithfit.com/insights



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