

MY BRAIN MADE ME DO IT

Psychological
drivers of
employee
behavior



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93% RIF
IMPROVEMENT

6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00

6.22

5.01

3.94

3.07

2.20

1.66

1.17

1.18

1.03

1.02

0.78

0.71

0.59

0.50

0.49

0.53

0.43

0.42

2003

2004

2005

2006

2007

2008

2009

2010

2011

2012

2013

2014

2015

2016

2017


2018

2019

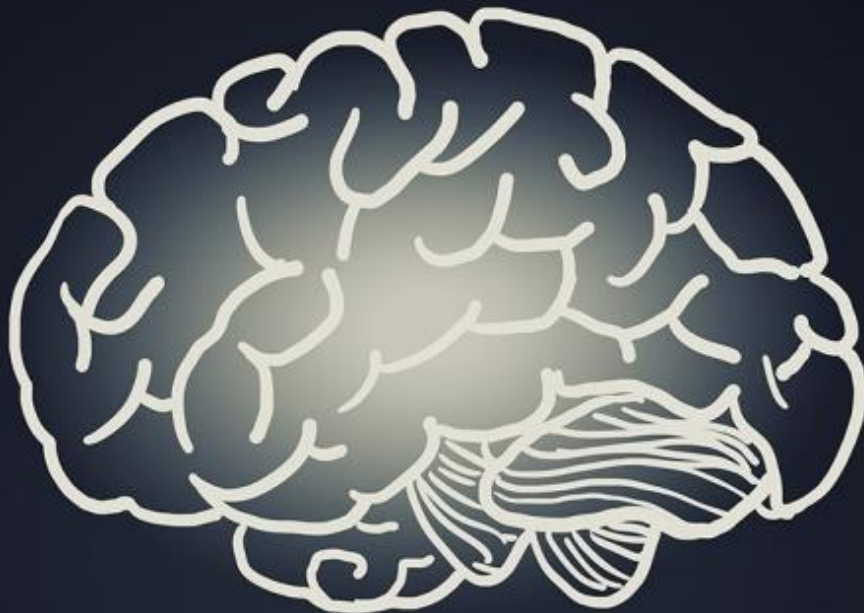
2020

RECORDABLE INJURY FREQUENCY

OUR SAFETY JOURNEY 2003-2020



HOW DOES PSYCHOLOGY IMPACT SAFETY CULTURE?



ASSUMPTIONS ABOUT HOW OUR BRAINS WORK...



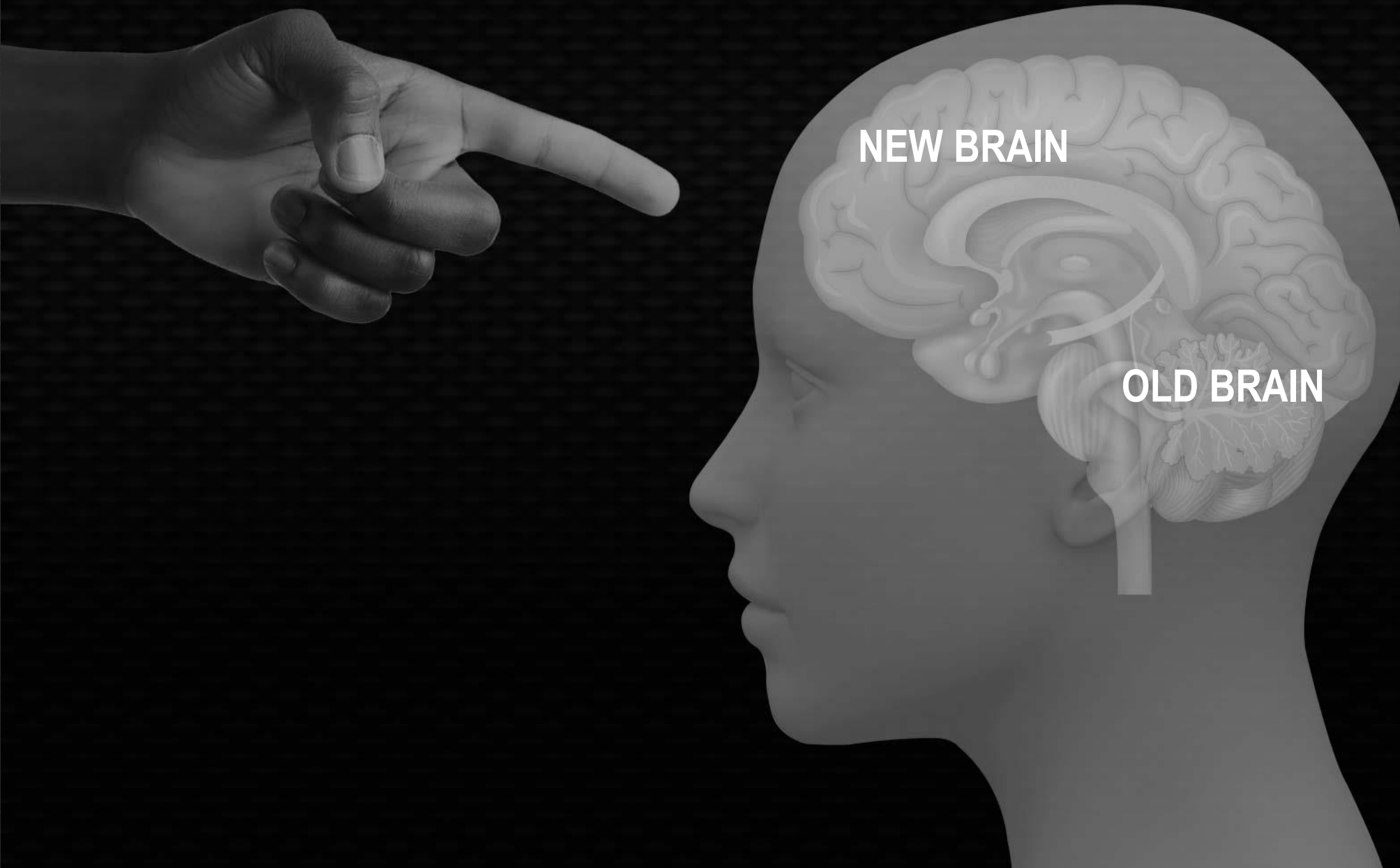


**RATIONAL
CONSCIOUS
OBJECTIVE
REASONABLE**

**ALL
OF THE TIME**

HAS THIS EVER HAPPENED TO YOU?



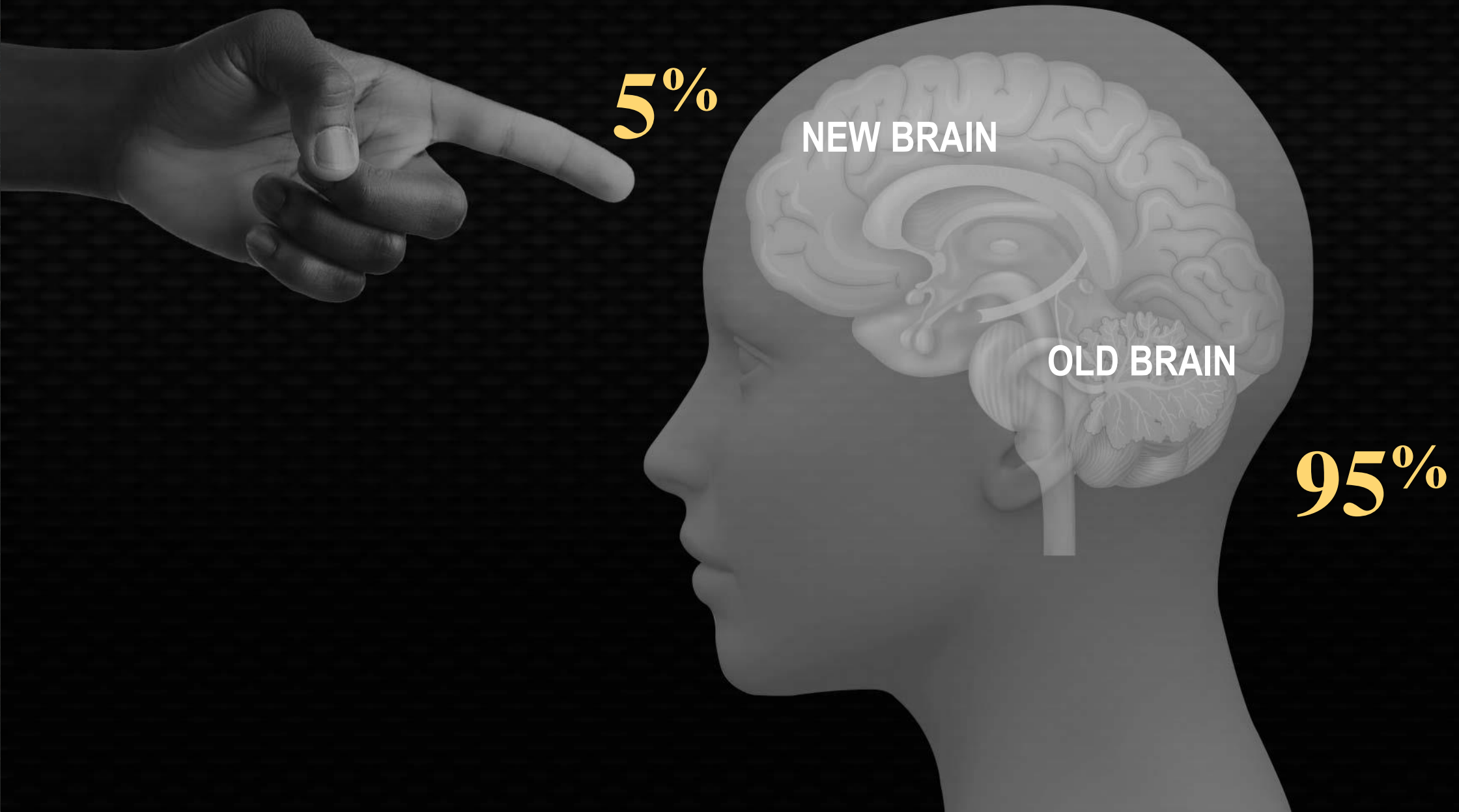


A black and white photograph of three cyclists in aerodynamic gear racing on a track. The cyclist in the center is in the foreground, leaning forward in a racing position. Two other cyclists are visible behind them, also in motion. The background is blurred to convey speed. On the right side of the image, there is a semi-transparent dark grey rectangular area containing the text 'OLD BRAIN = FAST BRAIN'.

**OLD BRAIN
= FAST BRAIN**

NEW BRAIN
= SLOW BRAIN





THE ECONOMICAL BRAIN



OUR BRAIN IS HUNGRY!

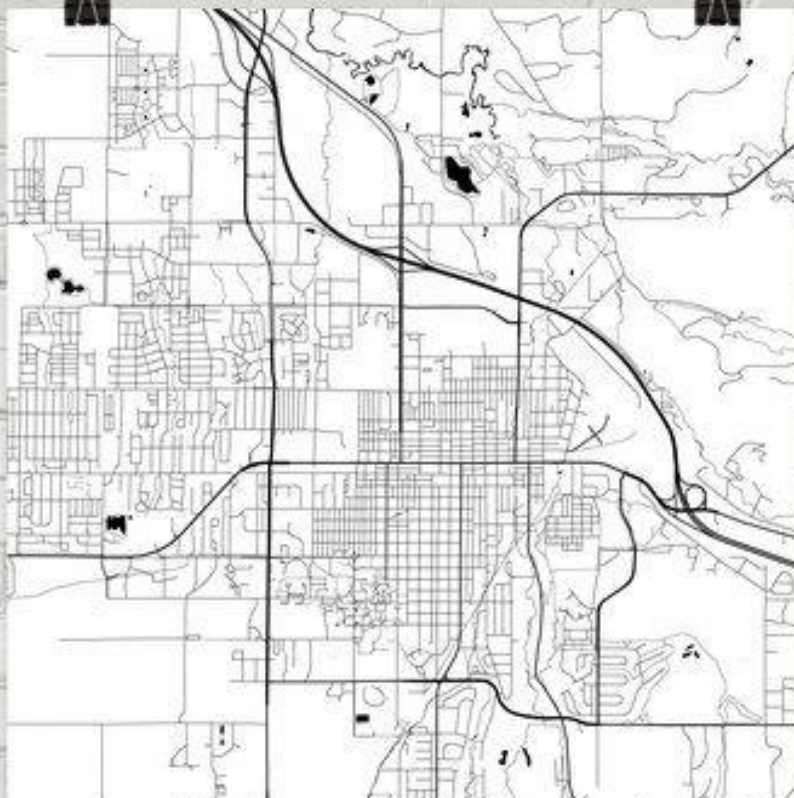


ABOUT 20% GOES TO FEEDING YOUR BRAIN





FOR EXAMPLE...



BOZEMAN

...OR THIS



QUESTION:
**WHAT ARE SOME “FAST BRAIN” ASPECTS OF THE
JOB THAT COULD BECOME SAFETY ISSUES?**

HOW DID THEY NOT SEE THAT?!







THE BIASED BRAIN



**EVERY SECOND OF EVERYDAY OUR BRAIN
IS FLOODED WITH INFORMATION**

WE HAVE A
SWITCH THAT
STOPS US
LOSING OUR
MINDS



R.A.S.
Reticular Activating System



REDUCES THIS TO A **MANAGEABLE CHUNK**

FROM:

> 13,000 BITS OF DATA

TO:

7 +/- 2 BITS OF CONSCIOUS DATA

WE ARE LEFT WITH WHAT IS...

DANGEROUS



IMPORTANT



PLEASURABLE



INTERESTING



WHY WE HEAR OUR NAME IN A CROWD



NOTICE THAT CAR YOU'VE CHOSEN TO BUY



...THE GAS STATION WHEN WE'RE RUNNING LOW



DOES IT APPLY TO ME?



YOU \neq ME

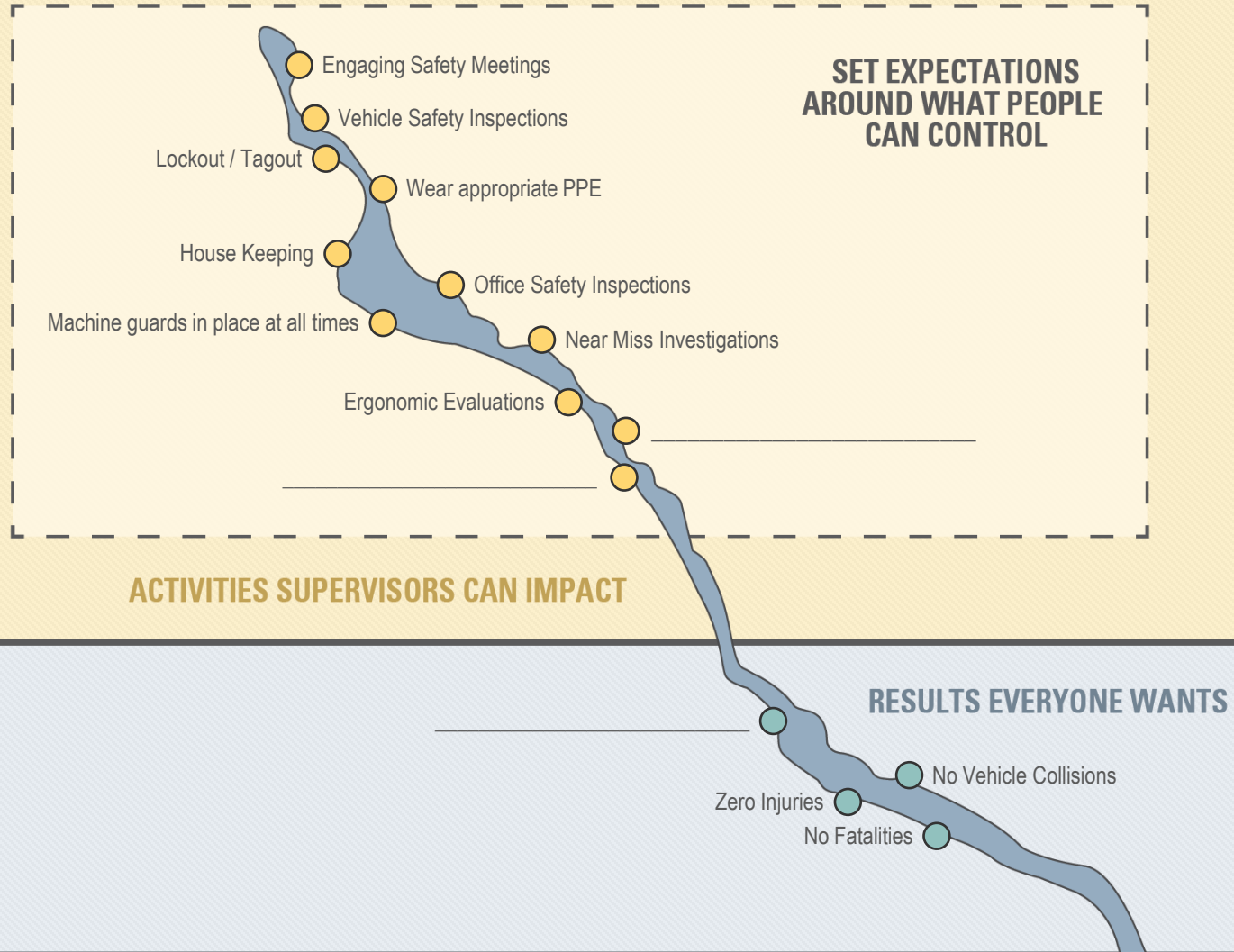




What is D.I.P.I. to your people?

- Be curious – study your team like a scientist
- Watch what they say and do
- Ask questions
- Listen and suspend judgement
- Connect with them in ways that are personal

The Safety River



The Pre-Shift Safety Meeting

Employee

Discuss work that is being done in the near-term with specific hazards to mitigate.

Middle Manager

Attend meetings occasionally, providing positive feedback for actions taken by employees and frontline leaders.



Frontline Leader

Facilitate the meeting, calling people by name to contribute relevant content.

Top Leaders

Visit each crew once per quarter reinforcing the importance of their safety and their contributions to improvement efforts.

Make them DIPI!



**WHAT HAZARDOUS TASKS IN OUR WORK
HAVE A RISK OF BECOMING “FAST BRAIN”
ACTIVITIES?**

**HOW CAN WE MAKE THESE TASKS MORE
DIPI TO EMPLOYEES?**

The background of the slide is a high-contrast, close-up photograph of heavy machinery tracks, likely from a Caterpillar vehicle, pressing through dark, loose soil in a desert environment. The tracks are arranged in a repeating pattern, creating a strong sense of depth and texture. The lighting is dramatic, with deep shadows and bright highlights on the ridges of the tracks.

OUR RESPONSE = THEIR REACTION

HOW DO YOU FEEL?

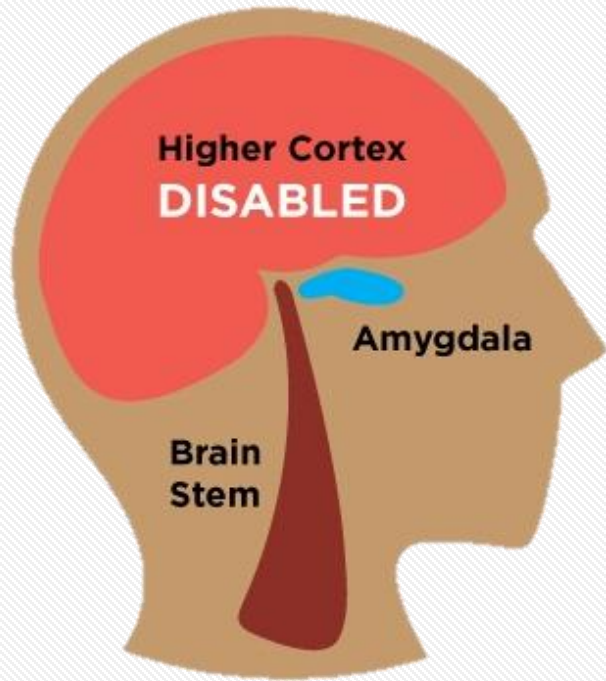




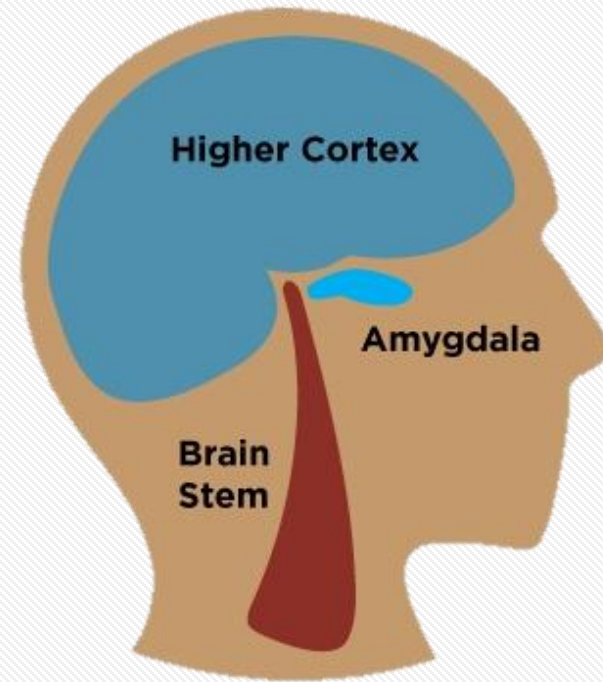
UNDERSTANDING YOUR REACTION



AMYGDALA HIJACKING



HIGH Emotion
(Anger, Fear, Excitement, Love,
Hate, Disgust, Frustration)



LOW Emotion
(Calm, Relaxed)

Source: TTI Success Insights



STATUS
CCERTAINTY
AAUTONOMY
RRELATIONSHIP
FFAIRNESS

DR. DAVID ROCK

STATUS

What are some potential threats to employee status that safety situations or incidents could impact?

- ✓ Show you care more about the person than the incident or impact to the business.
- ✓ Remove your stripes and talk human-to-human.
- ✓ Treat them as an expert to help find solutions to the issue together.



CERTAINTY

What happens when we don't clearly communicate our expectations or what the future holds?

- ✓ Set clear expectations, then notice and respond when they are completed.
- ✓ Communicate early and often with multiple channels when change or uncertainty is involved.
- ✓ Explain what will stay the same in the midst of change.



AUTONOMY

What are some safety implications of employees not feeling in control of their own work or destiny?

- ✓ Involve employees in creating the safety activities that govern how they work.
- ✓ Allow flexibility in how/when/where safety activities are completed.
- ✓ Let employees know that they are allowed to try new things and fail safely.



RELATIONSHIP

How can safety threaten relationships on the job?

- ✓ Focus on facts, not on faults in investigations.
- ✓ Put more emphasis on recognizing people for creating solutions, rather than disciplining people for mistakes.
- ✓ Teach your people how to address each other from a position of care instead of enforcing rules.



FAIRNESS

How can safety be “unfair”?

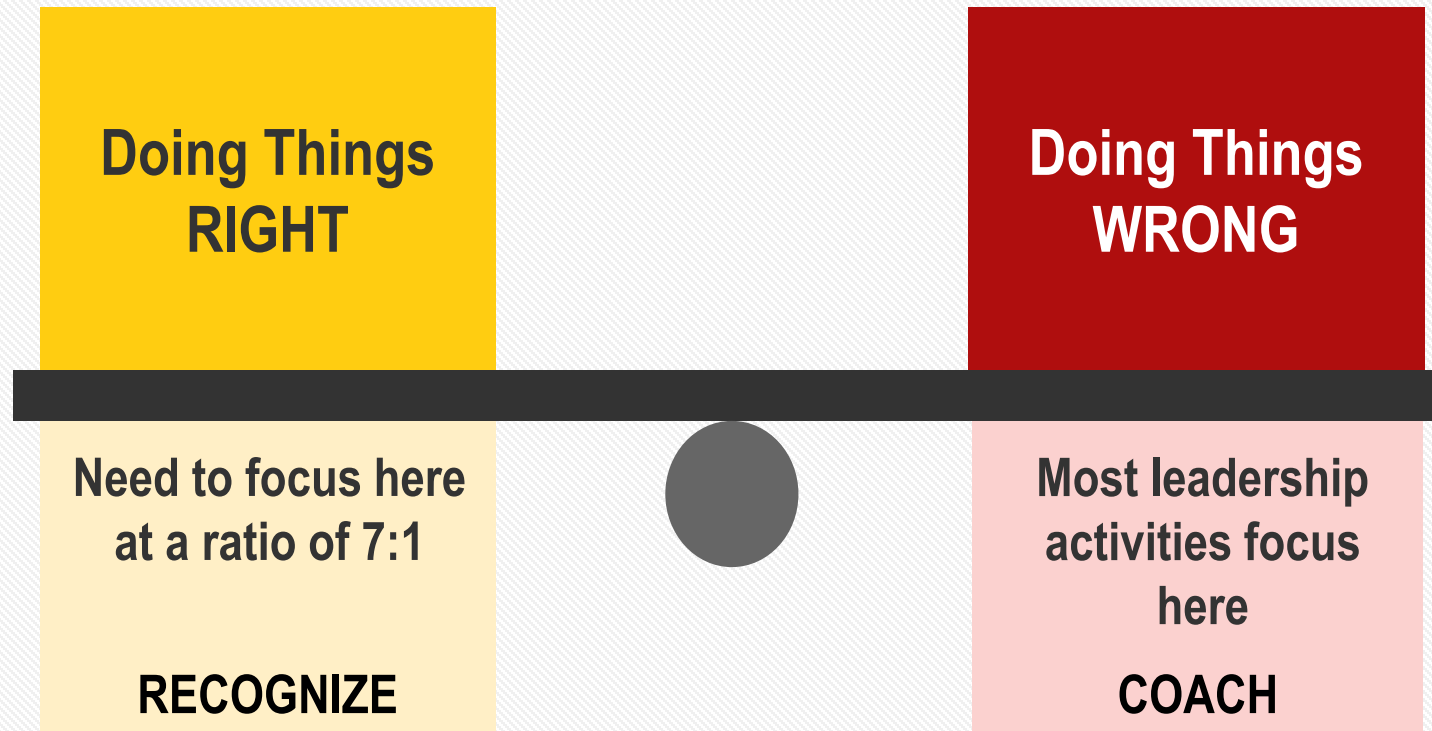
- ✓ Set clear expectations for how the job should be done and consistently notice and recognize when it's done by everyone.
- ✓ Apply discipline sparingly, but where deserved.
- ✓ Share why decisions have been made, even when it's difficult.



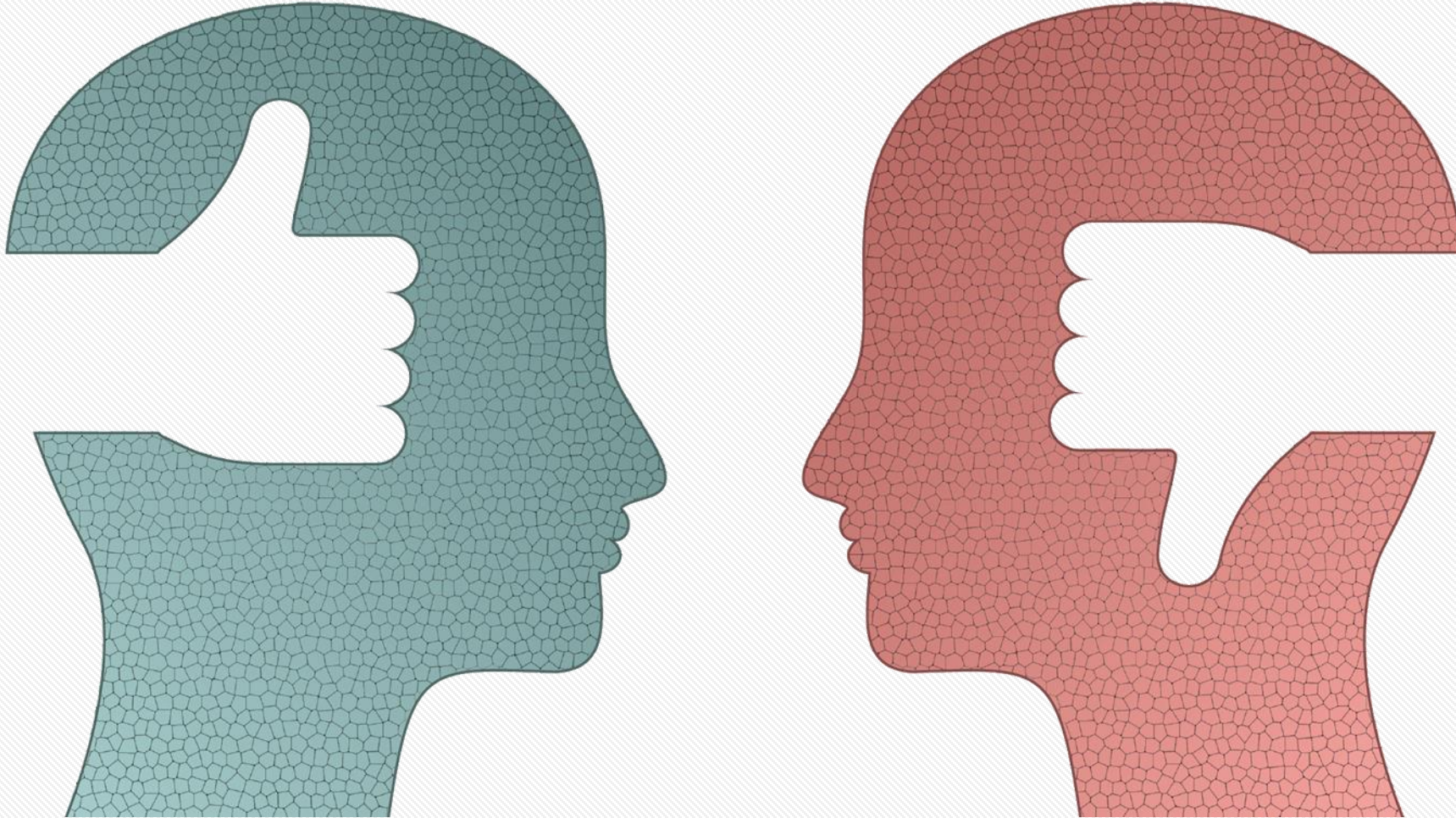
RECOGNITION > DISCIPLINE



As a percentage, do employees do more things right or wrong?



WORDS CHANGE YOUR BRAIN



Negative Words

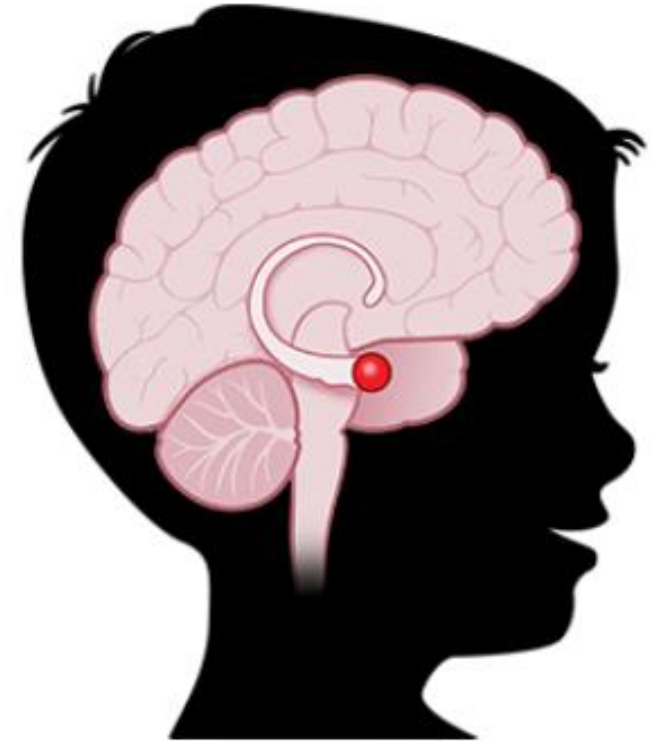
Activate fear center
(amygdala)



Releases hormone that
shuts down logic / reasoning



Results in “fight or flight”
reaction



Positive Words

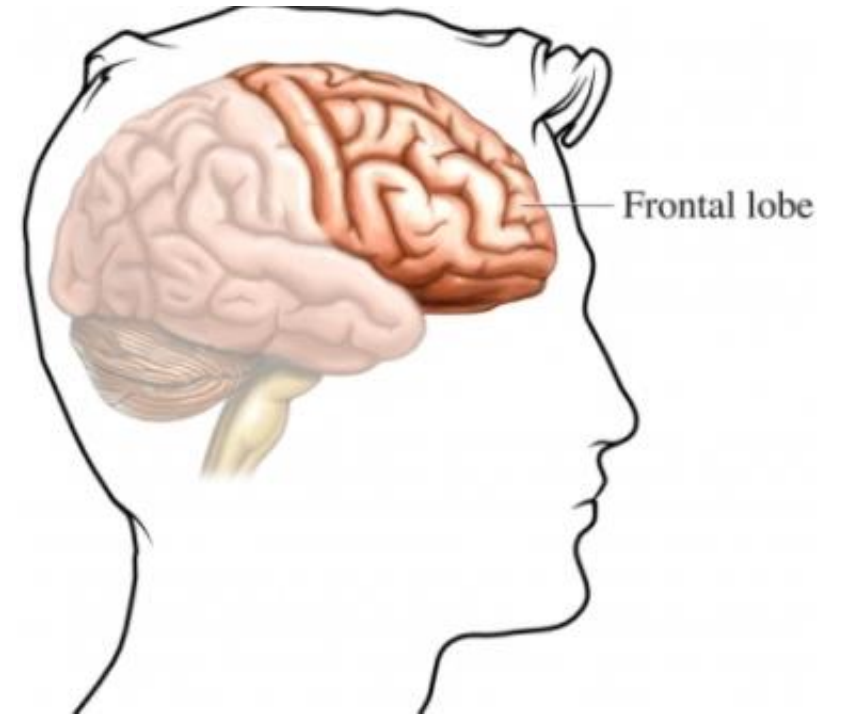
Release a “feel-good”
hormone (dopamine)



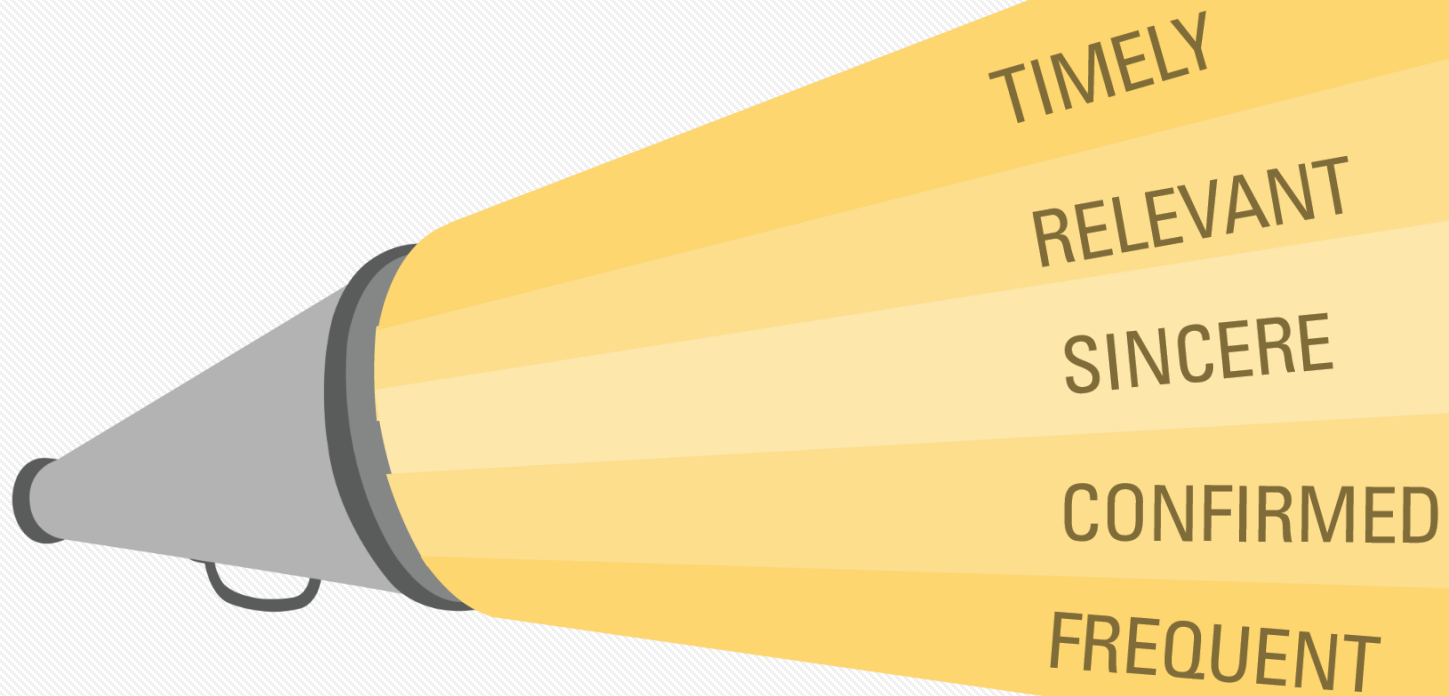
Activate the rational brain
(frontal lobe)



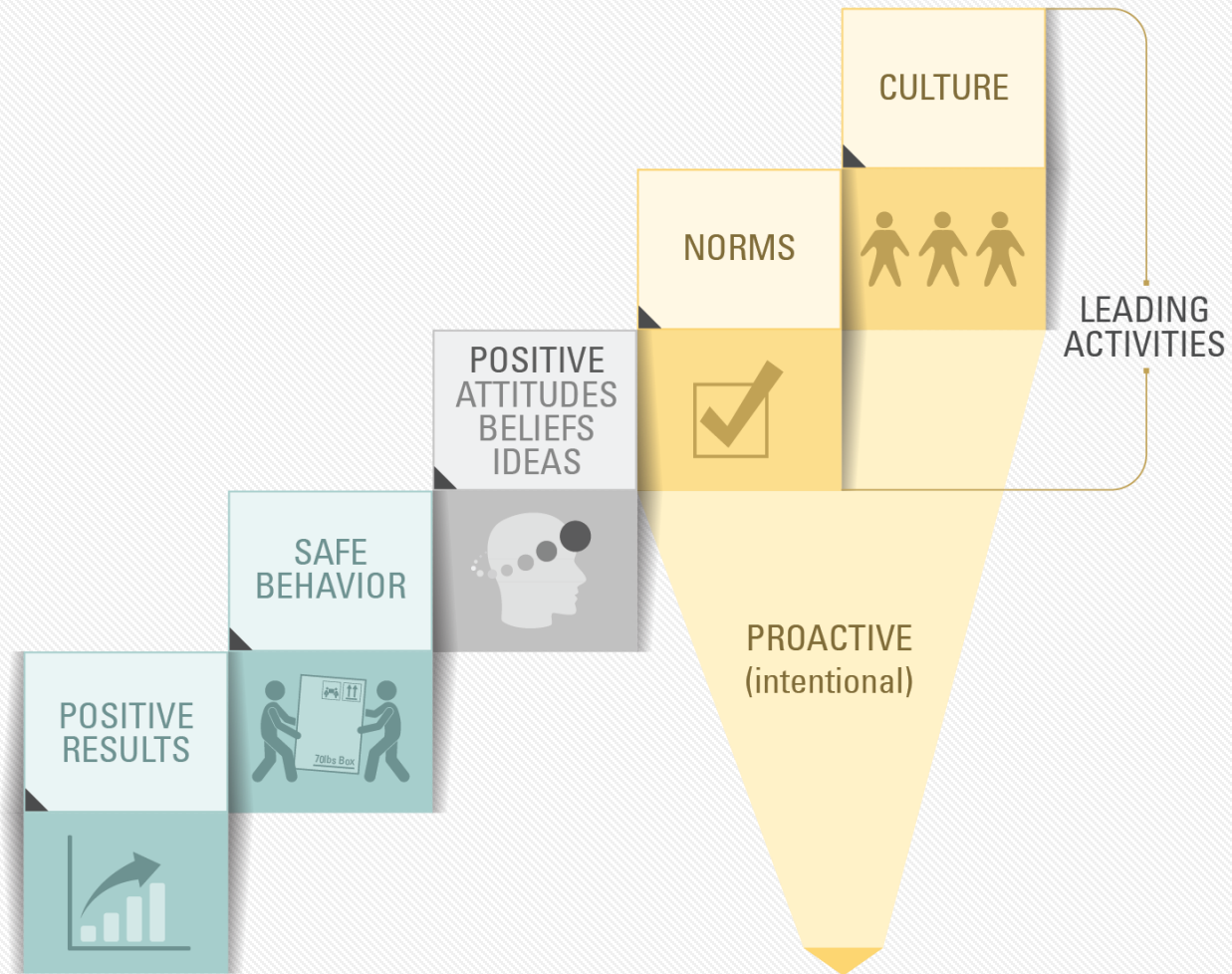
Motivates action, creative
thinking and resiliency



But we must do it with quality...

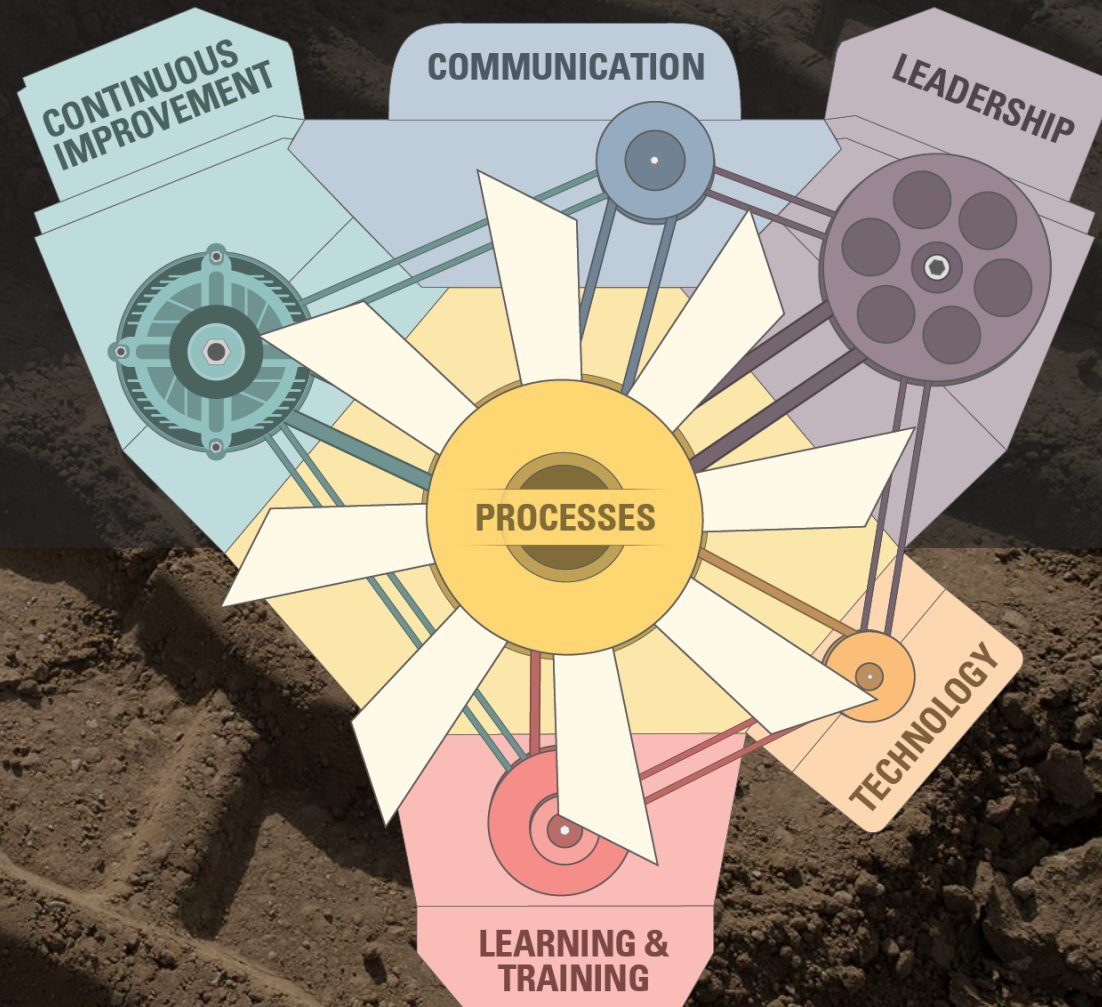


How Proactive Culture Works



SAFETY AS A SYSTEM

Your full service safety culture
& leadership solution





**FOR MORE INFORMATION, VISIT
WWW.CAT.COM/SAFETY**

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| PHONE: 309.675.1280



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