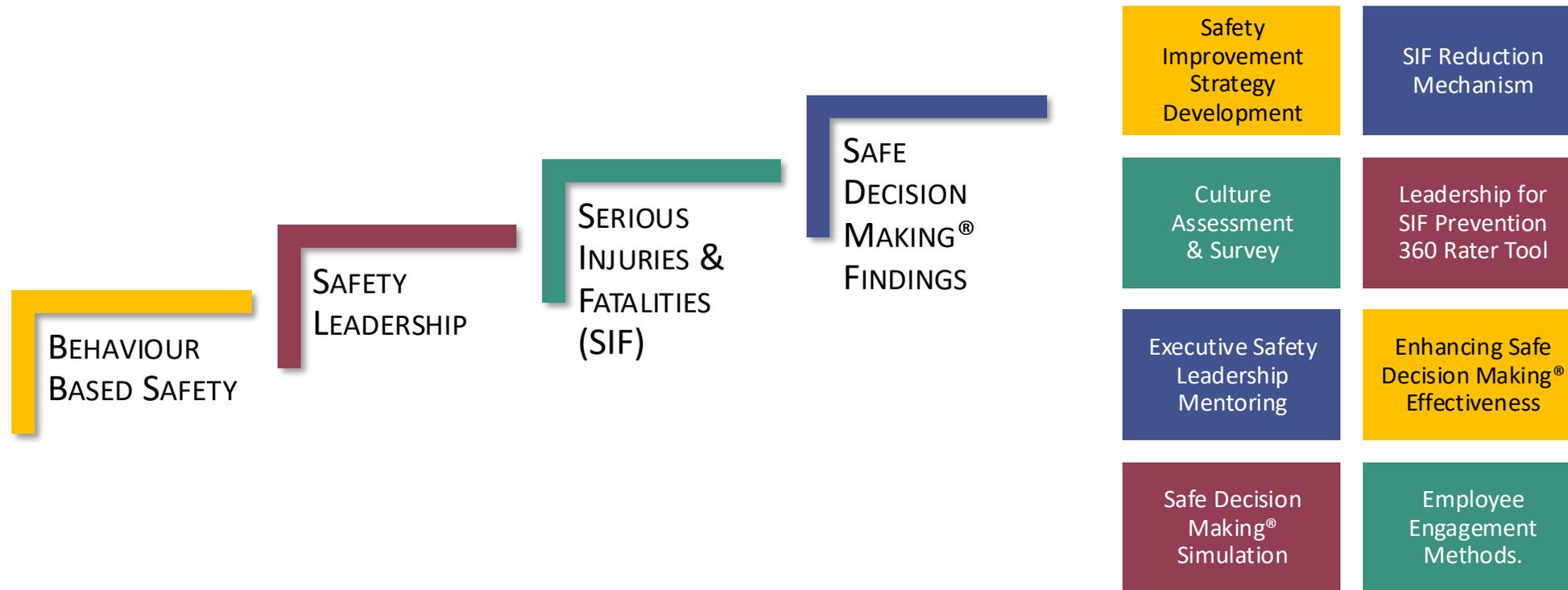




# KRAUSE BELL GROUP IS DEDICATED TO THE PREVENTION OF SERIOUS INCIDENTS AND FATALITIES BY IMPROVING HOW YOUR ORGANISATION FUNCTIONS.

Our research-based interventions strengthen decision-making and leadership, address behaviour and build culture to create safe, healthy, and high-performing organisations.

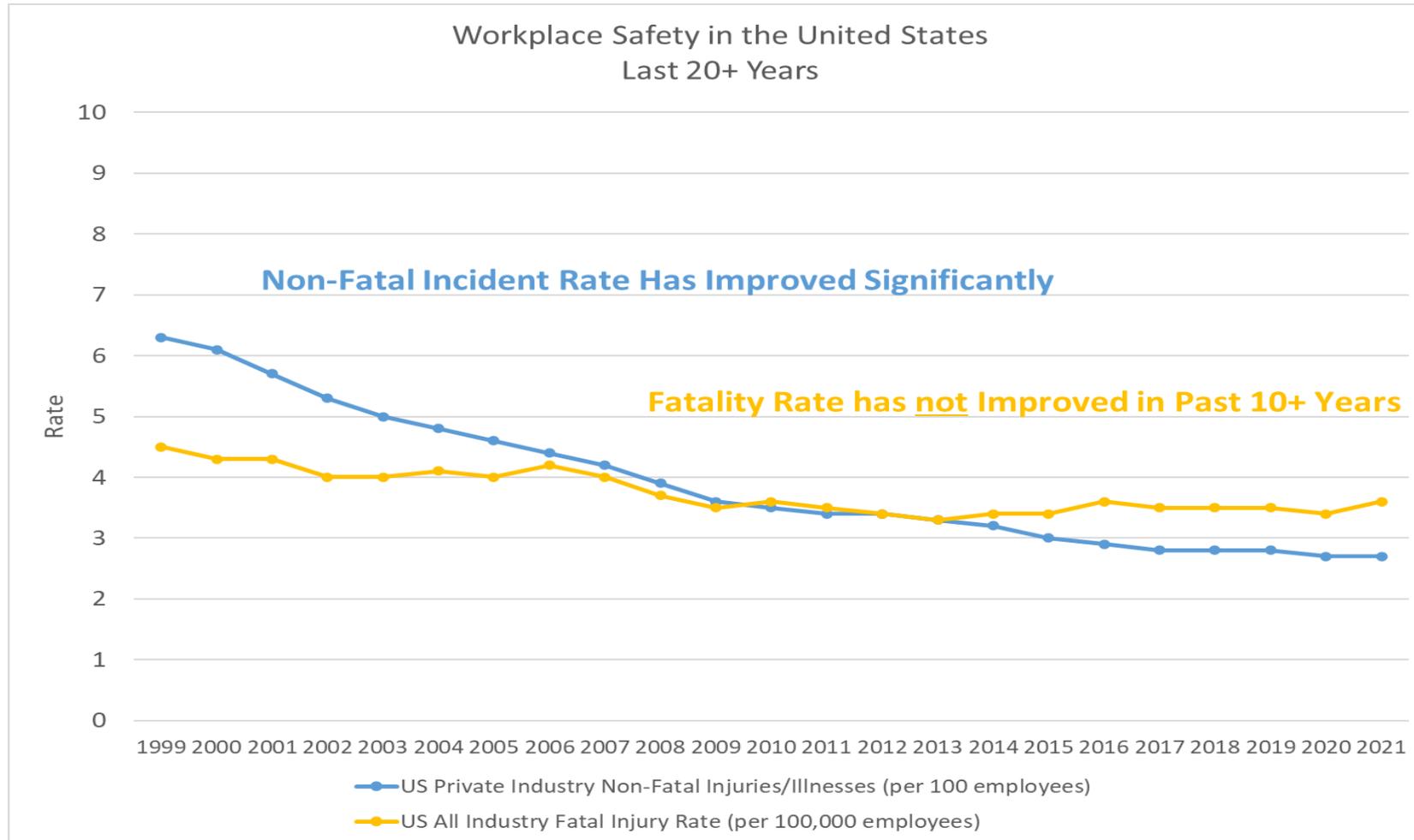


# AGENDA

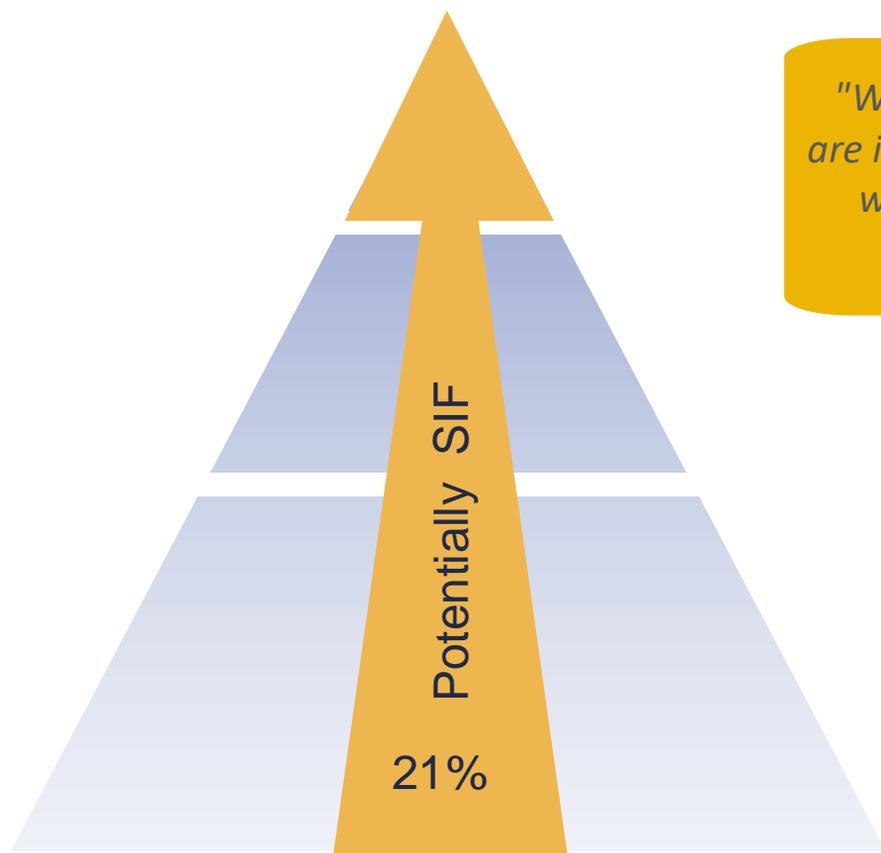
1. Background – how decision making relates to SIF prevention
2. Our Safe Decision Making® Findings
3. The impact of decision-making on culture.
4. How to integrate the SDM™ approach to eliminate SIF's.

BACKGROUND

# START WITH A FOCUS ON SERIOUS INJURIES AND FATALITIES



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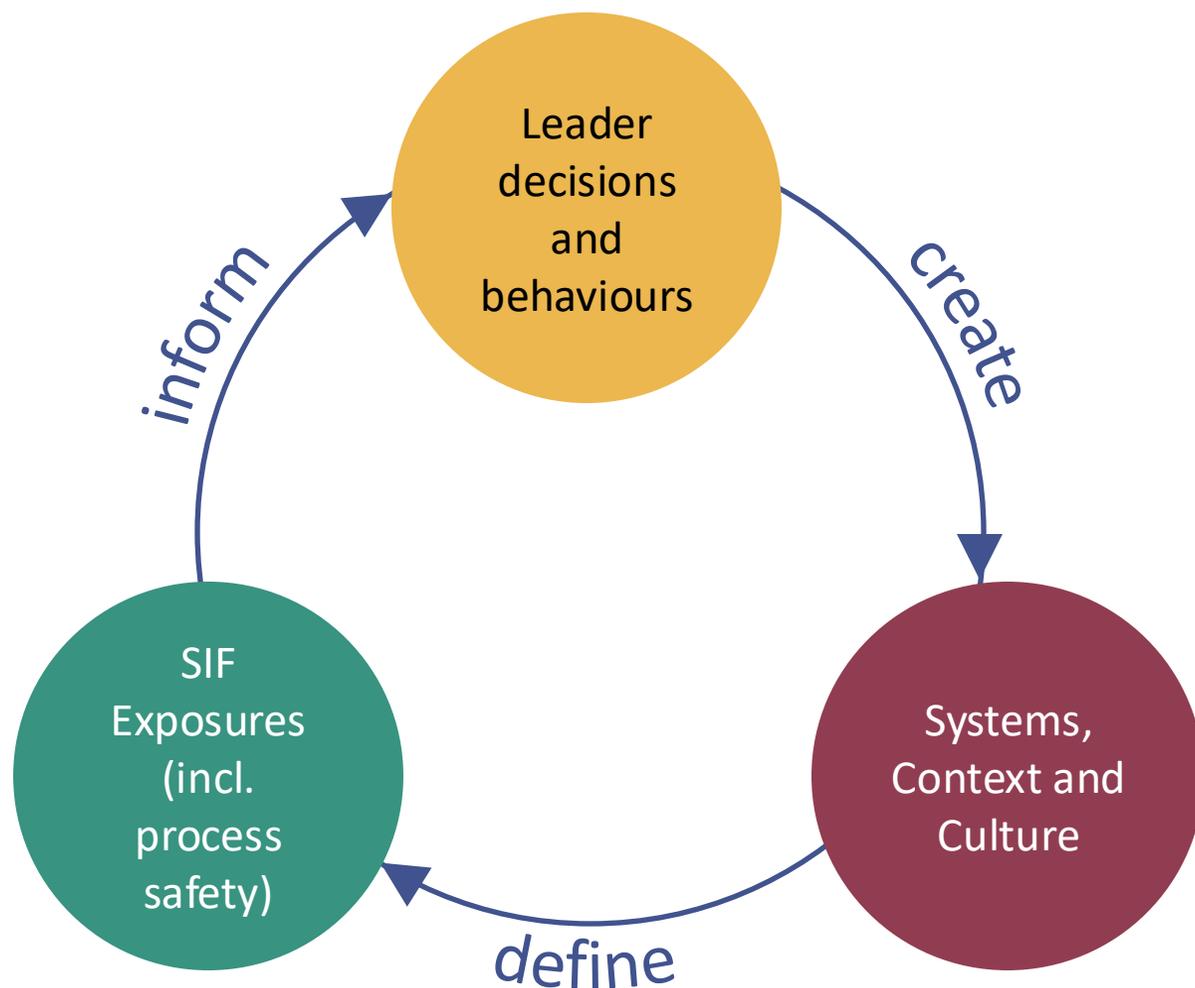


*"We have actually found that by working on the top of the pyramid, we are improving the bottom of the pyramid. Where we used to think that we work on the bottom of the pyramid, it would work on the top. We've actually seen our best injury and illness performance ever."*

Laura Ambrose  
Global Director EH&S Operations  
The Dow Chemical Company

Quote during the 2017 Executive Forum at NSC Congress & Expo in Indianapolis, published as 'Serious Injury & Fatality Prevention - A View from the Top' by NatlSafetyCouncil on 16 august 2018 on Youtube.

# THE SIF FEEDBACK LOOP IS BROKEN



1. Leaders don't fully understand how their leadership behaviours and decisions impact not only systems, but also context and culture.
2. We fail to understand how those systems, context and culture create SIF and process safety related exposure.
3. Leaders receive insufficient feedback of the SIF exposures and surrounding systems and culture to inform their decisions.

# SAFE DECISION MAKING® FINDINGS

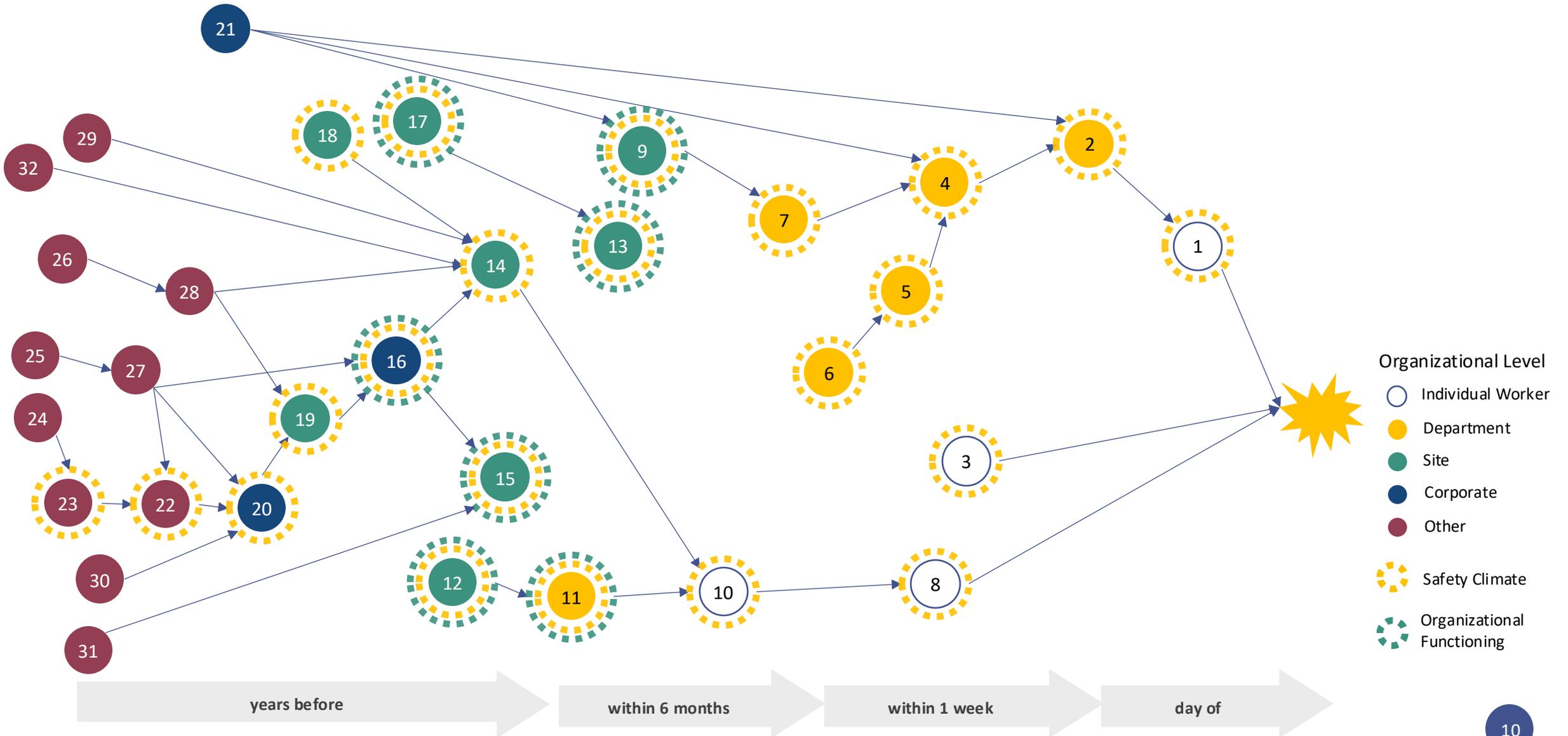
# THE SAFE DECISION DATABASE



Since 2015, we have been studying and compiling data from near misses, fatal, and life-altering events.

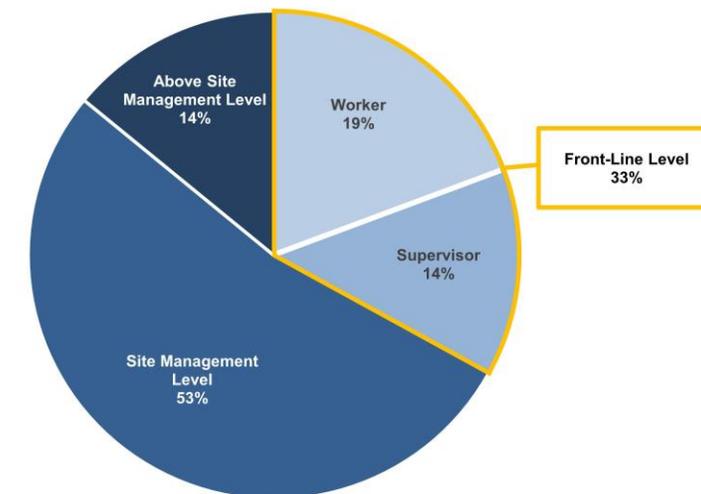
- 43 Participating organisations
- 19 Industries
- 39 Countries Represented
- 300+ SIF Events analysed
- 4,000+ decisions

# EXAMPLE SAFE DECISION NETWORK™ DIAGRAM



# TOP 5 TAKEAWAYS FROM OUR WORK

1. Leaders underestimate the impact of their decisions both on risk exposure AND on culture.
2. Decision making is a process, not an event.
3. Individual decisions are part of a network of decisions.
4. Risk accumulates across the network.
5. Every decision is vulnerable to cognitive bias.



**67%** of decisions were made above the front line.



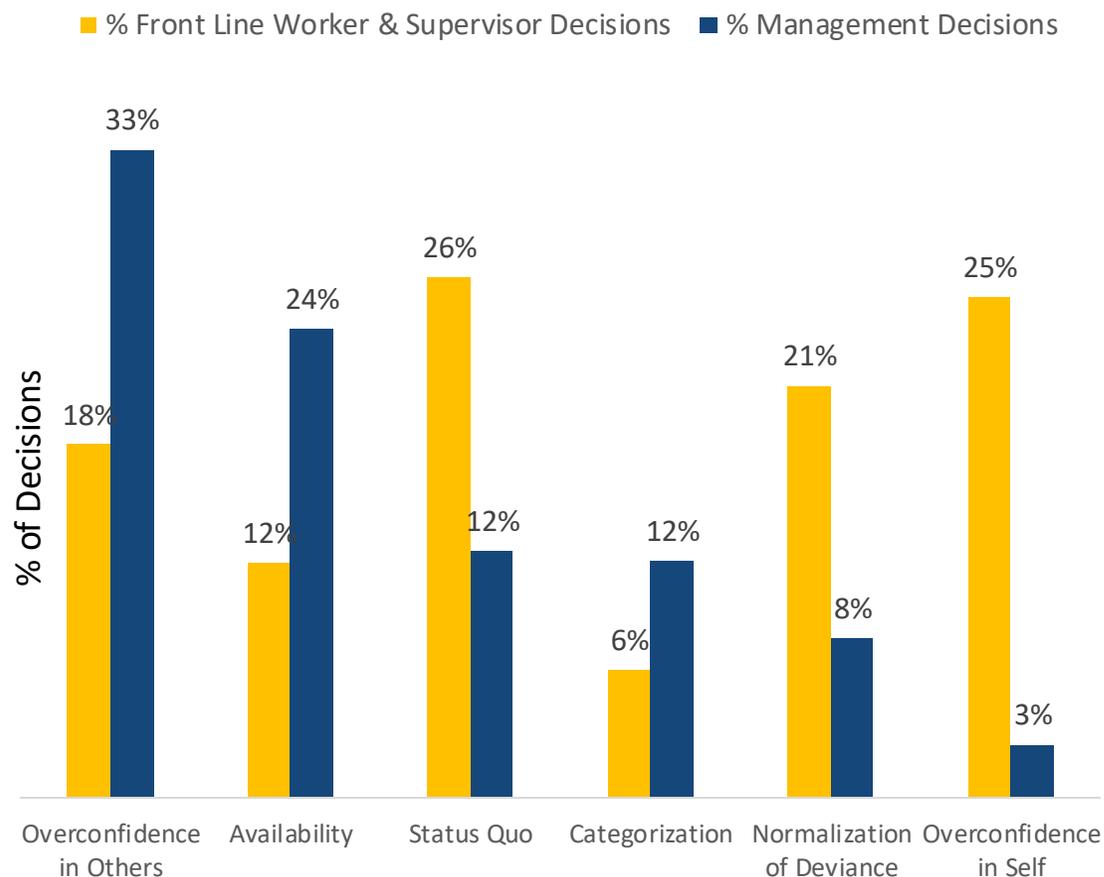
# EVERY DECISION IS VULNERABLE TO COGNITIVE BIAS

## DEFINITION

Cognitive bias is a systematic deviation from rational judgement.

**Overconfidence in Others** was the most common bias affecting management decisions.

**Status Quo** bias was the most common bias affecting front line workers and supervisors.



# IMPORTANT DECISIONS AT EVERY LEVEL

- “Importance” is derived from Frequency, Scope & Duration
- Decisions do not stand alone: Each Level impacts other levels.

## LEADERS ABOVE THE SITE

Global EHS Systems & Standards	12%
Business Strategy & Structure	10%
Leadership	8%
EHS Verification & Validation	6%

## SITE LEADERS

Site-level RA & Mitigation	9%
Assurance Assessments	7%
Work Planning	7%
Work Management of Change	4%

## FRONTLINE SUPERVISORS & EMPLOYEES

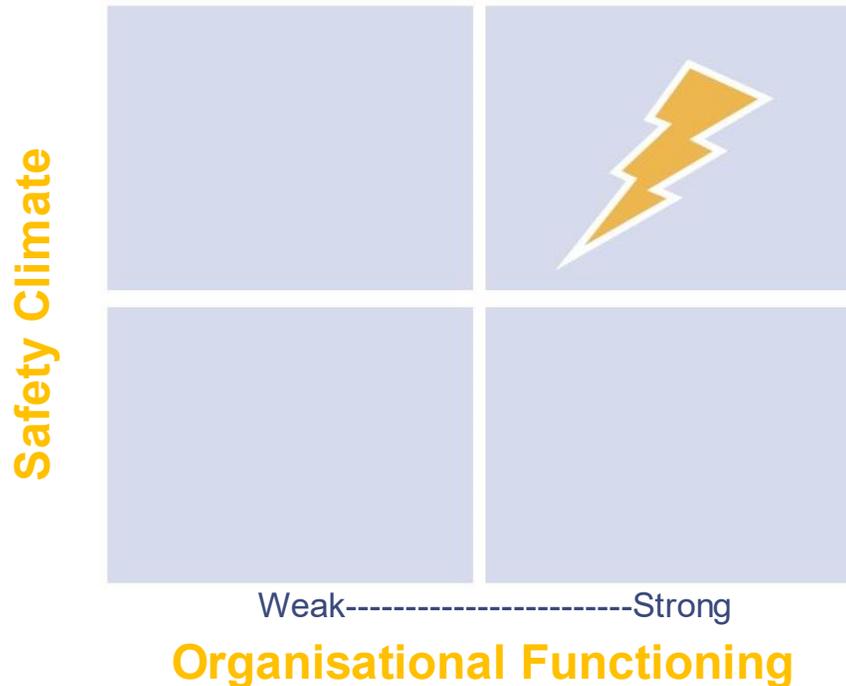
Work Execution	43%
Work Management of Change	16%
Work Planning incl. JHA	15%
Situational Response	12%

# THE IMPACT OF DECISIONS ON CULTURE

## A PRACTICAL EXAMPLE

# INSIGHT 4

CULTURE SUSTAINS PERFORMANCE FOR BETTER OR WORSE



## Strong safety climate...

- The organisation truly values safety.
- Everyone acts in a way that demonstrates that safety is important.
- Focuses people on what's most important.

## Strong organisational functioning...

- All employees trust and respect each other.
- Leads to better engagement, teamwork and discretionary effort.
- Increases motivation to perform.

## Strong safety climate and strong organisational functioning leads to...

- Stellar performance in safety, organisational efficiency and effectiveness.

# IF YOUR CULTURE COULD TALK

*a story about culture change*

Thomas R. Krause

## KEY ELEMENTS OF YOUR CULTURAL INFRASTRUCTURE

1. Perceived Organisational Support (POS)
2. Leader-Member Exchange (LMX)
3. Procedural Justice (PJ)
4. Safety Climate (SC)
5. Upward Communication (UC)

Organisational  
Functioning

Safety Climate

## MAX 737 CASE

They used to have a culture of 'engineers first, managers second' until the take-over of McDonnell Douglas.

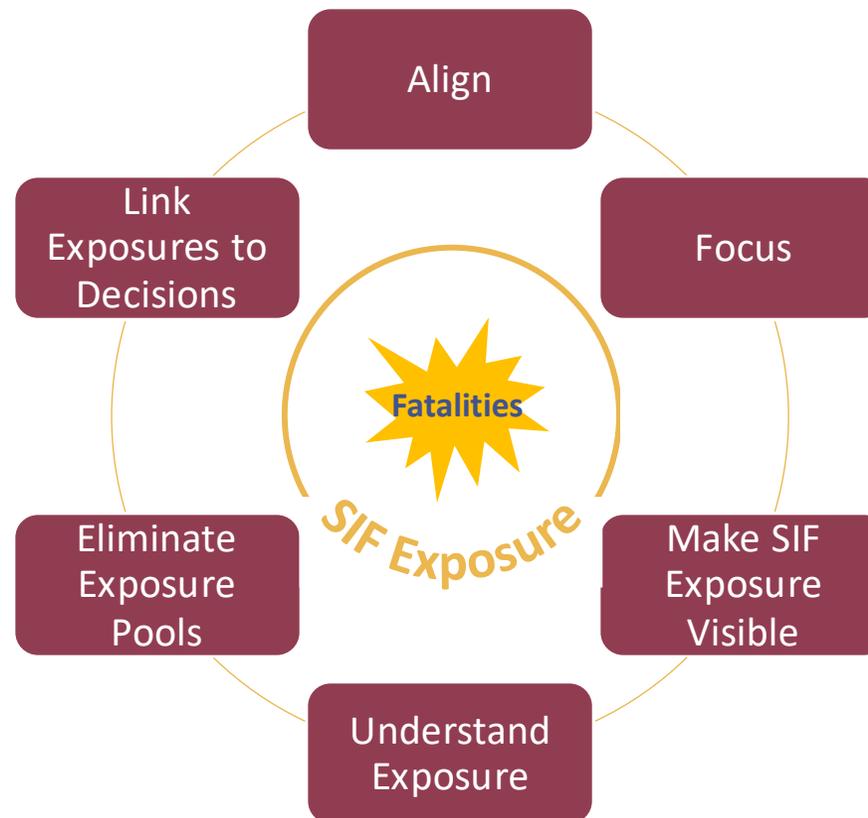
Some key changes were needed for the new MAX737 to be competitive with the fuel and cost efficient Airbus 320neo:

- The MAX737 required larger engines that needed to be positioned such that stalling of the plane became possible.
- This required them to install a new MCAS system that would automatically detect AND correct the risk for stalling, without input from and unknown to the pilot.
- There was only one sensor to provide input to the system

# HOW TO INTEGRATE THE SDM™ APPROACH TO ELIMINATE SIF'S

# THE SIF REDUCTION MECHANISM

## 6 THINGS YOU MUST WORK ON



ALSO JOIN THE WEBINAR WITH GSK WHERE  
YOU'LL LEARN HOW THEY IMPLEMENTED  
SOME OF THESE LEARNINGS

Questions?

## Webinar:

Safety Leadership to prevent  
Serious Injuries and Fatalities (SIF)

with Krause Bell Group and GSK

April 2, 13.00-14.30 (CET)



**SÄKU** Säkerhets  
Kultur  
Nätverket



End of Presentation  
Thank You!



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