Investigating safety culture

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If you see this in a rail depot, does it help your investigation?
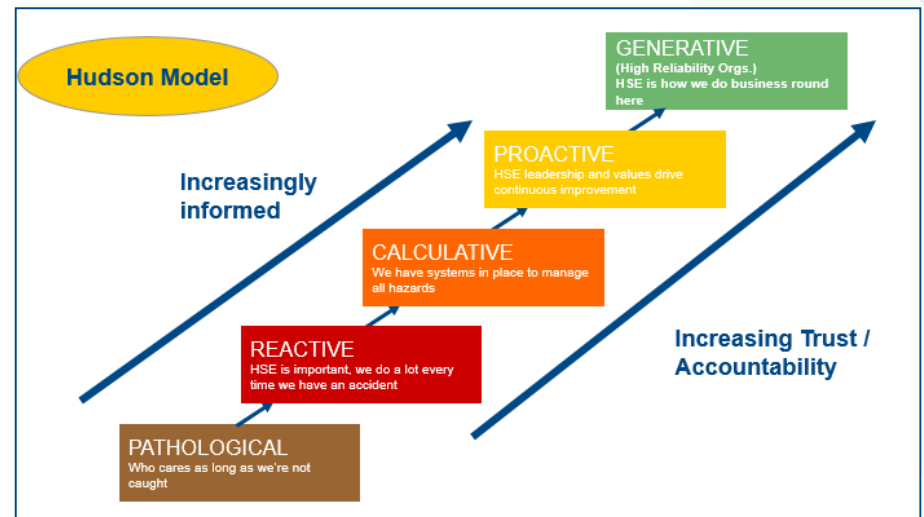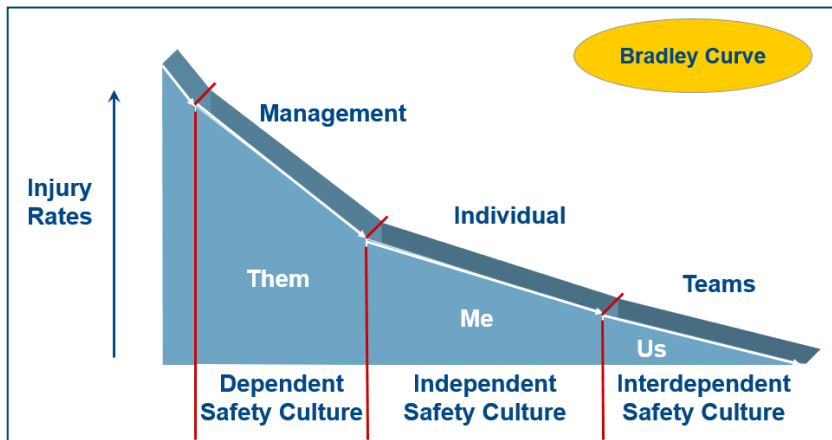
What is safety culture?

"The safety culture of an organisation is the product of the individual and group **values, attitudes, perceptions, competencies** and patterns of **behaviour** that determine the commitment to, and the style and proficiency of, an organisation's safety management"

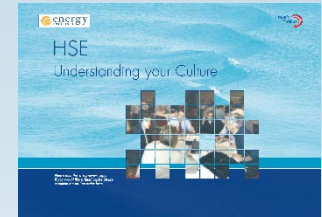# These simple explanations are sometimes the most useful!

The way we do things around here!

What happens when management goes home!

There are many ways of representing safety culture – the Bradley Curve is easy to explain while the Hudson Model is based on published research

Bradley Curve

Injury Rates

Management

Individual

Them

Me

Us

Teams

Dependent Safety Culture | Independent Safety Culture | Interdependent Safety Culture

Hudson Model

Increasingly informed

GENERATIVE
(High Reliability Orgs.)
HSE is how we do business round here

PROACTIVE
HSE leadership and values drive continuous improvement

CALCULATIVE
We have systems in place to manage all hazards

REACTIVE
HSE is important, we do a lot every time we have an accident

PATHOLOGICAL
Who cares as long as we're not caught

Increasing Trust / Accountability

Using the Hudson model – examples of how the culture feels personally for management

PATHOLOGICAL	REACTIVE	CALCULATIVE	PROACTIVE	GENERATIVE
I accept that injuries are unavoidable in this kind of work	I have to take safety seriously as my bonus is partly tied to the accident rate	I say I take HSE seriously as I know this is expected of me	I find HSE interesting and feel competent to manage it	I am always on the lookout for new ways to manage HSE
I believe I have done my job when I have told everyone to work safely	I visit work sites when they are having serious problems	*I like to have accident investigations closed out*	*I try to have the best HSE performance among my peers*	*I will not allow business decisions to be taken without considering HSE*
I walk on when I see something dangerous as that's the supervisor's job	*I believe HSE is best managed by HSE specialists*	I avoid selecting contractors with a bad HSE record, if possible	I follow up action items personally after incidents and hazard reports	I trust my supervisors and workforce to tell me if there are problems
When we have an accident I find out who is to blame and get rid of them	I send warning letters when people are found behaving carelessly	*I think all accidents could be prevented if people only do what they are told*	*I agree that management bears responsibility for system failings that cause incidents*	*I create the conditions for my staff to solve the problems they encounter*
I think that meeting the legal requirements is good enough	*I feel comfortable if we have bought a reliable safety program*	I believe pre-qualification ensures that all our contractors are safe enough	I look for other ways than incidents to measure success of our HSE activities	I am aware that not every solution will work first time and seek to learn why

▶ **Practical characteristics are mapped in the brochure "Understanding your Culture"**

So if I go back to the photograph at the start of this section, it can be described as a Broken Window – and is evidence

Broken Windows Theory

- If a window is broken and left unrepaired, people walking by will conclude that no one cares and no one is in charge

- Soon more windows will be broken, and a sense on anarchy will spread

- In a city, relatively minor problems (such as graffiti and public order) are the equivalent of "broken windows" – invitations to more serious crimes

What are the 'broken windows' (related to safety) you find during your investigation?

Broken Windows

- What are the 'broken windows' you find during the investigation?
  - Appearance and housekeeping?
  - Asset condition
  - Processes and procedures
- Who is responsible for identifying and tackling these 'broken windows'?
- How is this monitored?

…..beyond the broken windows

- "Safety is not found in a single person, device or department of an organisation instead it is created and sometimes broken in systems not individuals" (Dekker)

- So 'broken windows' only one manifestation of risk

- Deepwater Horizon – focus on low personal injury rates obscured the bigger picture

- Organisational values and beliefs, control of hazards at source and complexity of the system are important
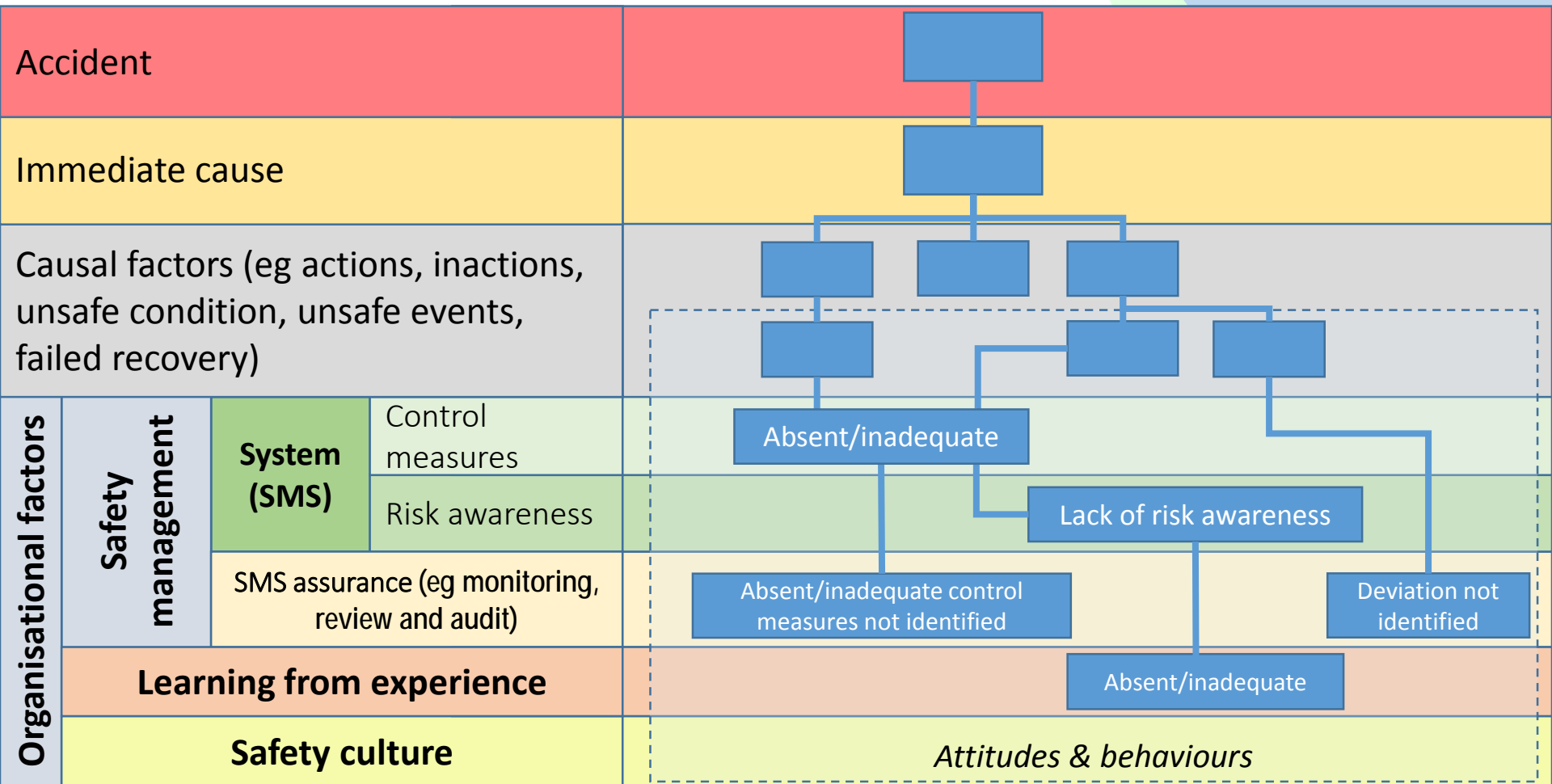
How can we investigate safety culture?

- If it is difficult to define and measure it will be difficult to investigate!

- Serious non-compliances may be a clue

- RAIB investigation remits normally include management/ organisational issues

- This has the potential to 'capture' safety culture, but…

- …may not always be obvious and may be indirect

- Persistent questioning of why certain causal factors are present helps uncover cultural issues

Understanding organisational factors

Evidence of safety culture issues

- The RAIB often finds evidence of safety culture issues when investigating organisational factors
- An organisation's safety culture is often revealed by:
  - Interviews
    - questioning of actions, assumptions and their influences
  - Documentation and its tone
    - internal/external safety audits,
    - briefings or newsletters,
    - internal investigations
  - Questionnaires
    - exceptionally!

Potential traps

- Beware of subjectivity

- A bad outcome is not always evidence of poor safety culture

- Treat uncorroborated witness evidence and post-accident staff surveys with care

- Areas of uncertainty should be clearly identified

Safety culture and SMS

- SMS and safety culture are not interchangeable

- However, research suggests a positive link between a developed SMS and good safety performance

- Deficiencies in the SMS may indicate issues with the wider organisational culture

Addressing safety culture in recommendations

- Recommendations to address safety culture issues should be carefully targeted at specific areas of concern, for example:
    - lack of reporting
    - not learning from experience

- Local or company wide focus?

Conclusions

- There are many definitions of safety culture but no single agreed definition. It is not a management system it is a concept!

- Investigation findings with regard to safety culture should be based on solid evidence, rather than subjective judgements

- Cultural factors can exist at the level of the individual or the wider organisational level

- Examination of organisational factors by means of systematic causal analysis is the best way of revealing the underlying attitudes and behaviours