Health and Safety Essentials

Lecture 7 – Human Behaviour and Organisational Culture in OHS

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Undergraduate Diploma in Occupational Health and Safety

Recap last week's topic

Which of the following qualities is *more strongly linked to leadership than management*?

A. Planning and scheduling tasks

B. Enforcing rules

C. Inspiring and motivating others

D. Monitoring compliance

Recap last week's topic

Paul O'Neill transformed Alcoa by making which principle the foundation of his leadership?

A. Profit and market growth

B. Worker safety and moral accountability

C. Innovation and risk-taking

D. Customer satisfaction

Do not edit
How to change the design

Which of the five bases of power: Legitimate, Reward, Coercive, Expert, or Referent, do you think most influences a positive safety culture, and why? Choose top two

ⓘ The Slido app must be installed on every computer you're presenting from

slido

Recap last week's topic

Slido Question: Which of the five bases of power—legitimate, reward, coercive, expert, or referent—do you think most influences a positive safety culture, and why?

"The leaders who build strong safety cultures rely more on *referent* and *expert* power—respect and credibility, rather than on authority or coercion."

Learning Objectives

Human behaviour is at the centre of Occupational Health and Safety. Even with strong systems, procedures, and technology, people ultimately determine whether safety is achieved or compromised. This lecture explores why people behave the way they do, how organisational culture shapes behaviour, and how leaders can influence positive safety outcomes.

- Understand key factors influencing human behaviour in OHS.
- Distinguish between innate and learned characteristics.
- Explain safety culture and safety climate.
- Analyse real-world failures caused by behavioural and cultural weaknesses.
- Identify strategies to strengthen OHS culture.

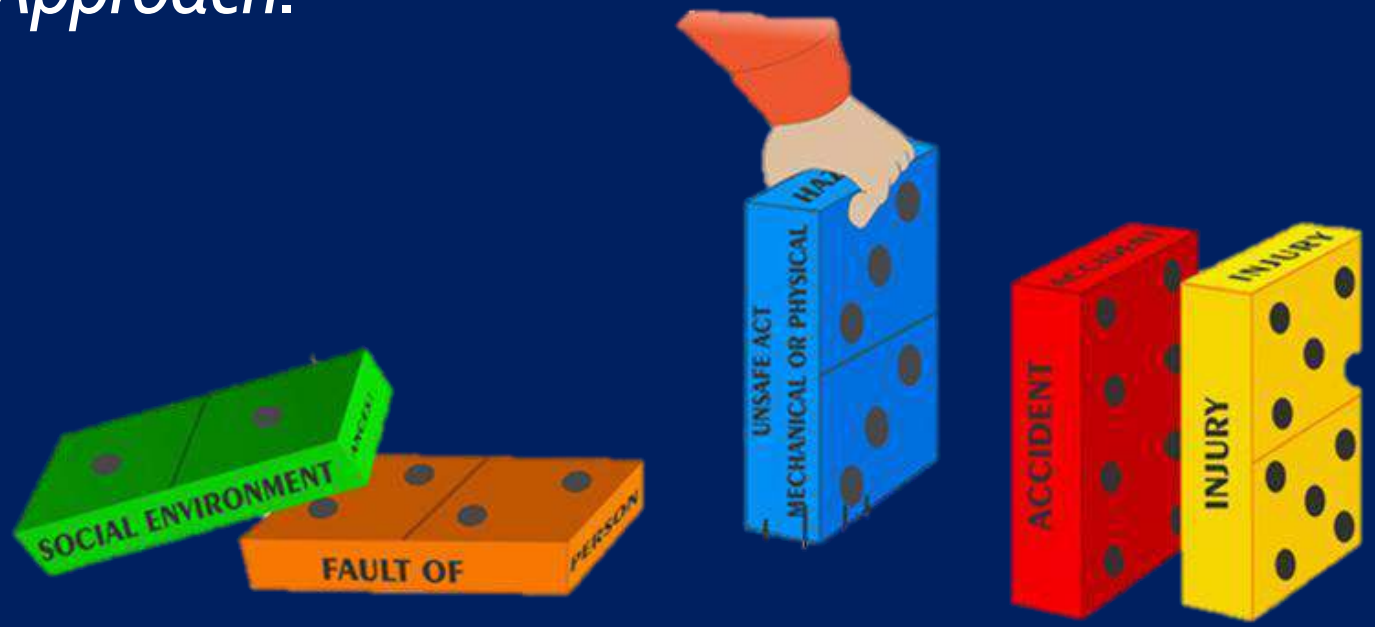
- Men are disproportionately involved in road accidents and fatalities, particularly in younger age groups, while older people are also vulnerable and overrepresented in crash statistics, especially concerning fatalities. Within the young and middle-aged groups, males have higher fatality risk and a higher rate of crashes, whereas older drivers have more crashes and are at a higher risk of severe injury – Ryan et al. 1998 (Accident Analysis & Prevention) https://www.sciencedirect.com/science/article/abs/pii/S0001457597000985
-)

By gender

- Males: Men account for a larger proportion of both road accident casualties and fatalities across most age groups.
- Females: While less frequently involved in crashes, certain age groups of females face a higher risk of severe injury due to physical vulnerability.
- By age
- Young drivers (16-24): This group has the highest rates of fatal crash involvement per licensed driver, with the highest risk for males.
- Middle-aged drivers (25-64): This group accounts for a large number of road accident casualties, with males in their 30s and 40s having the highest rates of crashes and fatalities.
- Older drivers (65+): This group has a lower crash rate but higher rates of crashes involving serious injury or death due to their physical vulnerability and higher rates of turning or right-angle crashes.

Domino Theory

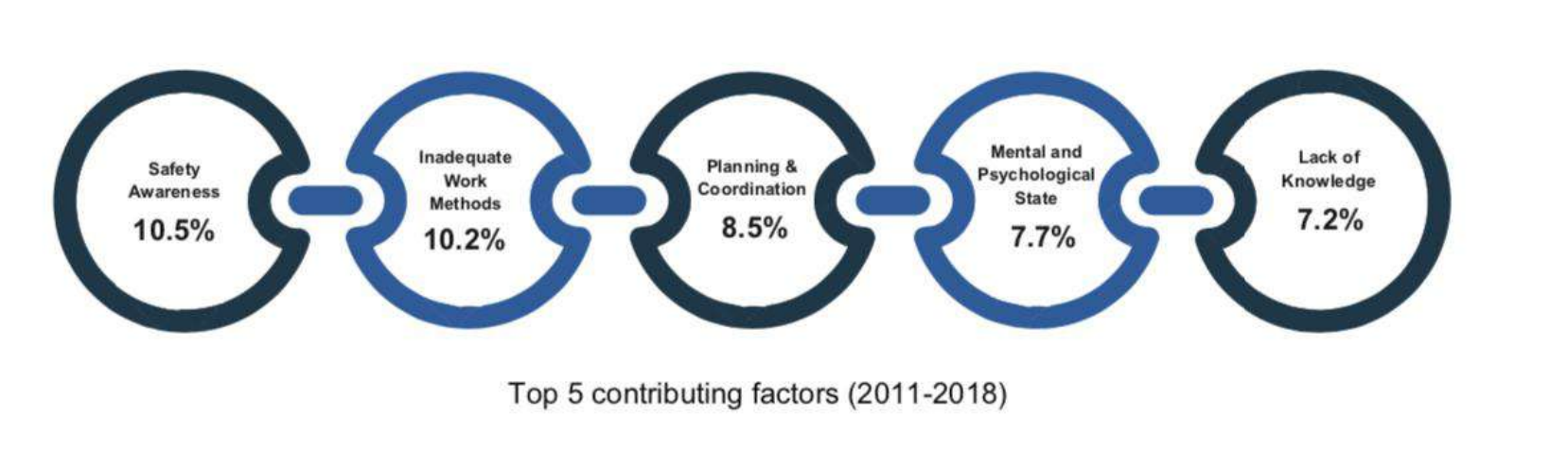
- Herbert W. Heinrich found the domino effect in safety, developing the Domino Theory in his 1931 book, *Industrial Accident Prevention: A Scientific Approach*.



Controlling Behaviour prevents 98% of Accidents

Factors Influencing Human Behaviour

- According to the European Maritime Safety Agency (EMSA) 2019 report on "Annual overview of marine casualties and incidents 2019", 2 out of 3 of all incidents (between 2011 to 2018) were contributed by human factors. The top factors include (1) 10.5% - lack of safety awareness, (2) 10.2% -inadequate work methods, and (3) 8.5% -poor planning and coordination.



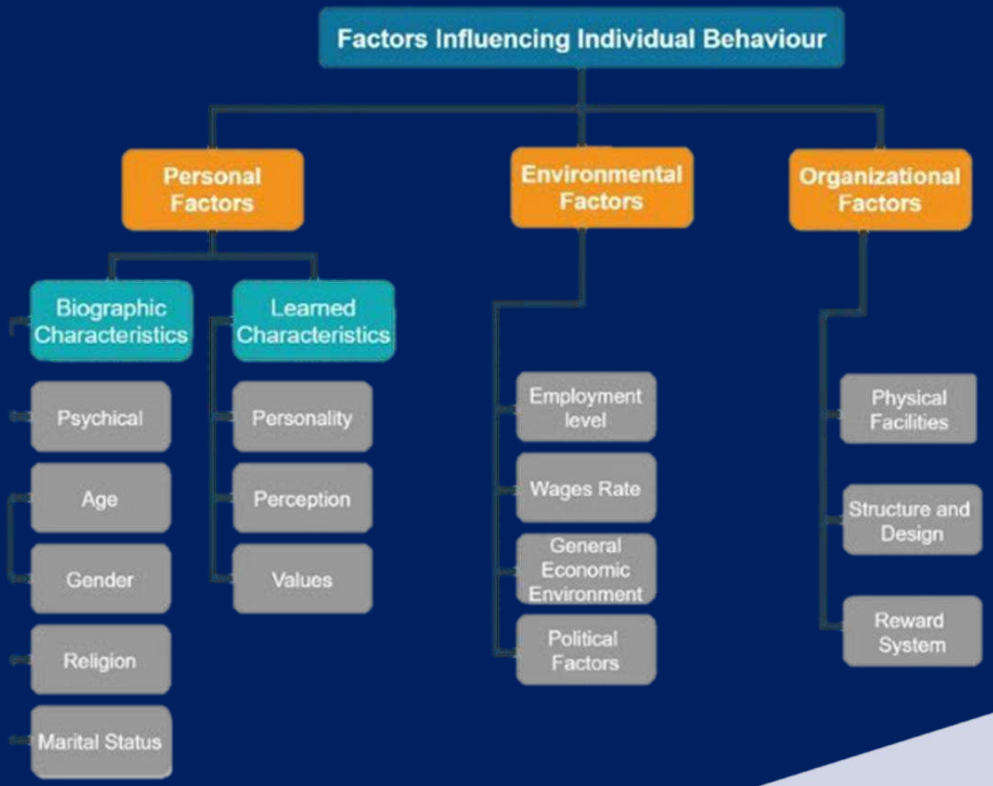
Top 5 contributing factors (2011-2018)

Human Behaviour in Organisations

- Human behaviour is among the most complex aspects to understand.
- In organisations, numerous challenges influence employee behaviour and vice versa.
- Managers must:
  - Assess specific tasks.
  - Identify required skills.
  - Form teams with complementary abilities.
- Key to success: Analyse safety settings, individual capabilities, and limitations beforehand.

Factors Influencing Organisational Behaviour

1. Personal Factors
    1. Biographical Characteristics
    2. Learned Characteristics
2. Environmental Factors
    1. Economic Conditions
    2. Social, Political, and Legal Influences
3. Organisational Factors
    1. Workplace Facilities
    2. Structure and Design
    3. Leadership
    4. Reward Systems



Personal Factors: Biographical Characteristics

- Physical: ability, reaction speed, manual handling capacity, ergonomics
- Age: physical capability, risk-taking tendencies, attention span
- Experience / Tenure: familiarity with hazards vs complacency
- Cultural background: norms, communication style, attitudes toward authority
- Religion / Beliefs: fatalism, risk acceptance, modesty affecting PPE use
- Marital / Family status: stress, fatigue, distraction, risk perception
- Language & literacy: understanding training, signage, procedures
- Migration status: job insecurity, fear of reporting, willingness to challenge unsafe instructions

Personal Factors: Learned Characteristics

- Personality
  - Traits like persistence and dominance affect workplace behaviour.
- Perception
  - Influences how individuals interpret and respond to situations.
- Values
  - Core beliefs guide attitudes, motivation, and decision-making.

Environmental Factors

- Economic Factors
  - Employment Levels: Job scarcity impacts satisfaction.
  - Wage Rates: Salary significantly influences motivation.
  - Economic Environment: Public sector employees face less fluctuation than private-sector counterparts.
- Other Factors
  - Social, political, and legal influences shape workplace dynamics.

Organisational Factors

- Physical Facilities
  - Housekeeping, noise, heat, lighting, and ventilation etc... affect performance.
- Structure and Design
  - Organisational hierarchy shapes roles and responsibilities.
- Leadership
  - Effective leadership fosters guidance and support.
- Psychosocial
  - Workload and pace, empathy, anti-harassment policies, fair treatment
- Reward Systems
  - Recognition and compensation directly impact motivation.

Break

Breakout Room Activity – Human Behaviour in Catastrophic Events

1. Watch the assigned video clip in your breakout group
2. Analyse the incident using THREE FACTOR LAYERS:

- Each group must list:
  - A. Personal Factors (Human Behaviour / Individual)
  - B. Environmental Factors (Conditions / Context)
  - C. Organisational Factors (Culture / System)

- 📝 Output (clear and simple): 2 examples of each factor

Breakout Room Activity – Human Behaviour in Catastrophic Events

Tenerife Airport Disaster:
https://www.youtube.com/watch?v=8K9fUc5O_G0

Chernobyl:
https://www.youtube.com/watch?v=eB1vfga9Y_c

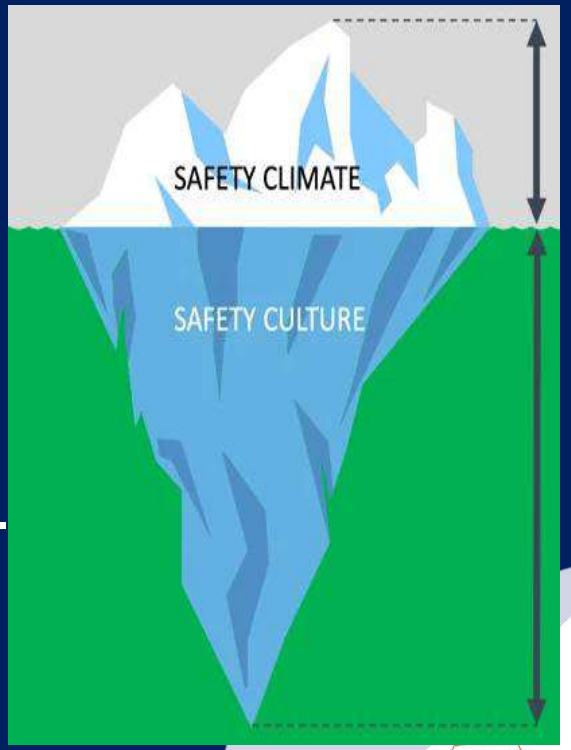
Challenger:
https://www.youtube.com/watch?v=TJIXIhypGL0

Safety Culture and Climate

Defining Safety Culture and Climate

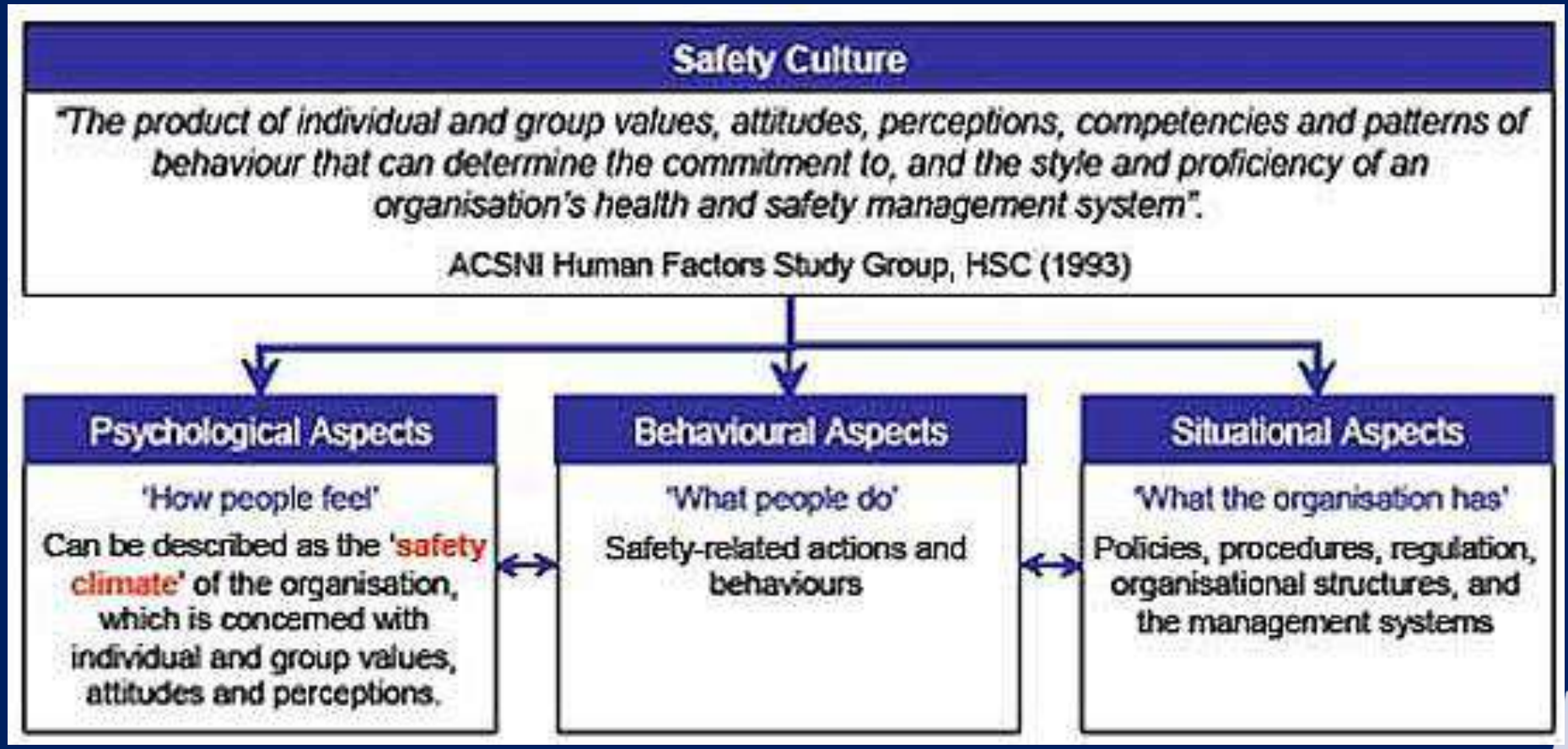
- Safety Climate:
  - Perceptions and attitudes at a given point in time.
  - "How people feel about safety here and now.“

- Safety Culture:
  - Broad concept.
  - Values, attitudes, and norms shaping safety behaviours.



https://www.youtube.com/watch?v=dJS6utTdvJk

Cooper's Three Dimensions of Safety Culture



Changing behaviour requires influencing all three, not just giving instructions.

Reason's Swiss Cheese Model

Errors occur when multiple system weaknesses align. Human error is usually **a symptom**, not the cause.

“Human error is usually a symptom, not the cause”

Traditional thinking:

- “A worker made a mistake - that’s the cause.”
- Modern thinking:
- “Why did the worker make the mistake? What conditions, systems, pressures, or cultural issues allowed that mistake to happen?”
- The “human error” is the last link in the chain — not the root cause.

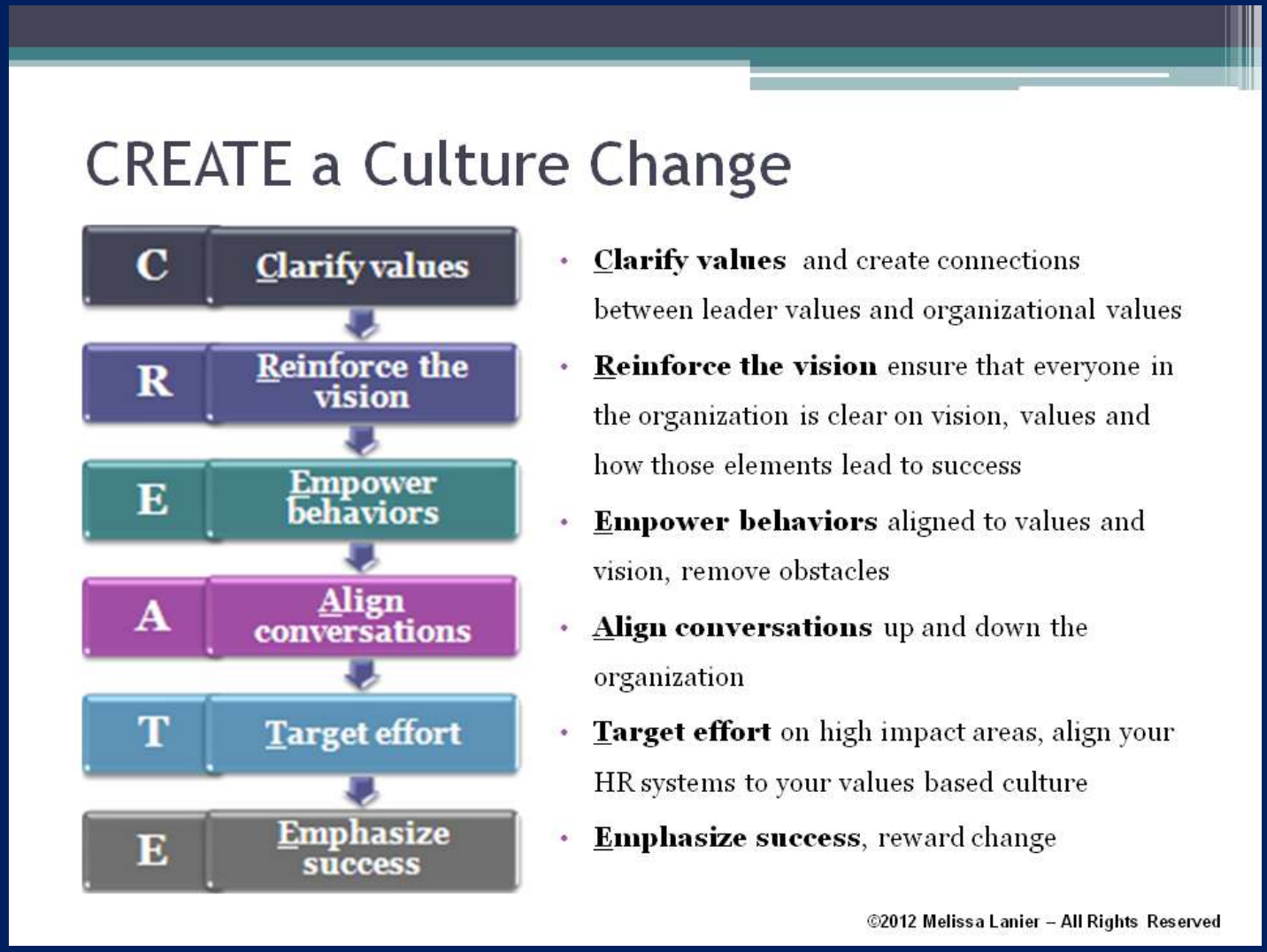
✔ Examples of deeper causes:

- production pressure
- poor supervision
- unclear procedures
- fatigue
- inadequate training
- normalisation of shortcuts
- fear of reporting
- confusing equipment layout
- poor communication
- flawed policies
- So the worker’s action is *the visible symptom* — not the disease.

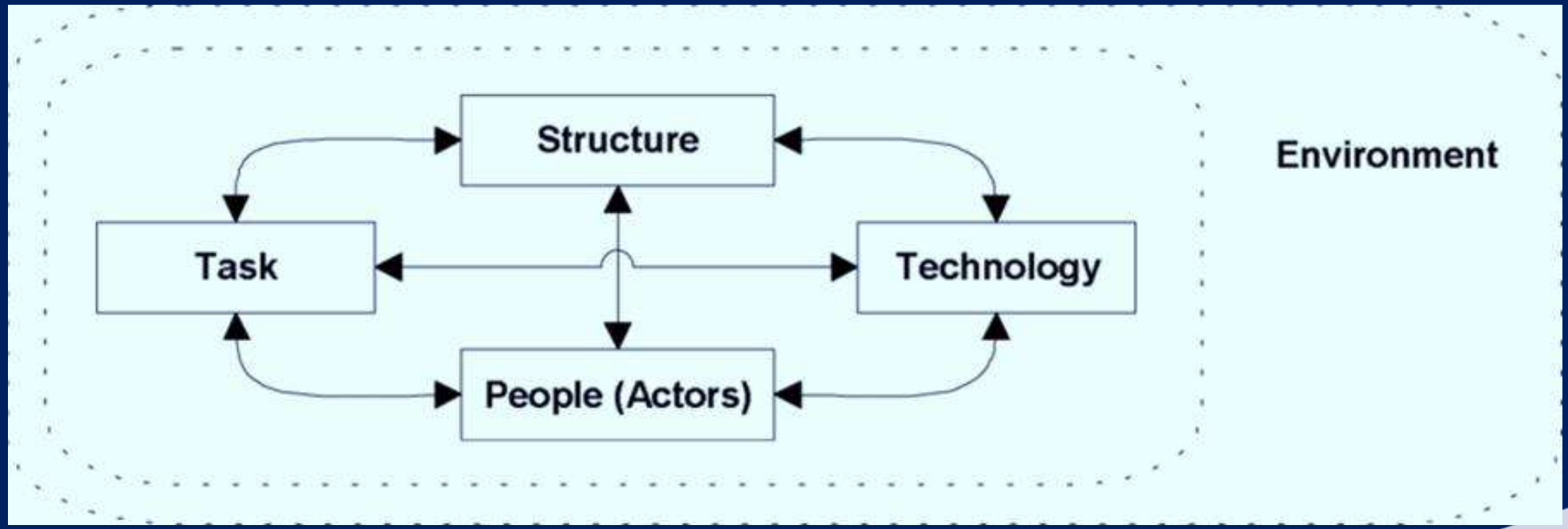
Bangladesh Examples

- On 24 Nov 2012, a fire broke out at the Tazreen Fashion factory in Dhaka, Bangladesh, killing over 110 workers and injuring many more. The factory produced garments for international brands, but it lacked proper safety measures. Workers were locked inside the building, and emergency exits were either blocked or poorly marked. Many employees were forced to jump from upper floors to escape the fire. The factory produced garments for brands such as Walmart, Disney, Sears, C&A, and Kik.
  - https://www.youtube.com/watch?v=yi2fvOKKLzE
- In April 2013, the Rana Plaza building in Dhaka, Bangladesh, collapsed, killing over 1,100 garment workers and injuring thousands more. The building, which housed multiple garment factories, was not built to support industrial equipment or heavy loads. Despite visible cracks in the structure a day before the disaster, workers were ordered to return to their jobs under pressure from factory managers. The collapse highlighted ser neglect in safety protocols, worker rights, and ethical leadership. Factories in Rana Plaza produced clothing for well-known brands, including: Primark, Benetton, Mango, Walmart,and El Corte Inglés.
  - https://www.youtube.com/watch?v=9Fkhzdc4ybw&t=237s

Organisational Change and Culture



Leavitt's Model of Organisational Change



Managing Resistance to Change

- Managing Resistance to Change
- Header: Overcoming Resistance
- Content:
  - Sources of Resistance:
    - Uncertainty.
    - Loss of trust.
    - Fear of incompetence.
  - Solutions:
    - Clear communication.
    - Employee involvement.
    - Incremental changes.

Reason for Resistance	How to Address It
Loss of control	Allow those affected to have a say in decision-making, participate in planning, and take ownership of the process.
Uncertainty during change	Establish a sense of security by providing clarity through defined processes, straightforward steps, and clear schedules.
Sudden changes without warning	Keep everyone informed about developments and ensure communication is timely and transparent.
Too many changes at once	Limit unrelated changes to avoid overwhelming people. Where possible, maintain familiar elements and avoid unnecessary alterations.
Loss of face for those associated with the status quo	Acknowledge and celebrate valuable aspects of the past to preserve dignity and respect for previous contributions.
Doubts about competence	Offer comprehensive resources such as training, mentoring, and support. If feasible, run new and old systems concurrently during the transition phase to build confidence.
Increased workload	Designate specific individuals or teams to focus solely on managing the change process. Recognise and reward their contributions.
Ripple effects impacting other areas	Expand the circle of stakeholders to include all affected parties. Collaborate with them to identify and mitigate disruptions.
Past resentments resurfacing	Address historical grievances with conciliatory actions before emphasising forward-looking goals.
Genuine threats from change	Be honest and transparent about potential hardships. Take swift and equitable action, such as offering a significant one-time redundancy package with robust support, rather than prolonged, incremental cuts.

Breakout Room or discussion

Discussion: Managing Resistance

- Content:
  - Topic: "What are common challenges when managing resistance to change, and how can they be addressed?“
  - Instructions:
    - Role-play as managers/employees navigating change.
    - See next slide for scenario and roles.
  - Timer: 10 minutes.

Breakout Room 3 Role-Play Setup

Roles:

1. OHS Manager (Facilitator): Responsible for explaining the new system, addressing concerns, and managing resistance.
2. Team Leader: Represents middle management, expressing concerns about increased workload and doubts about staff competence.
3. Employee A (Senior Worker): Resistant due to discomfort with technology and a preference for the old system.
4. Employee B (New Hire): Open to the new system but worried about ripple effects on workload.
5. HR Manager: Mediator, focusing on addressing morale and ensuring fair treatment.

Discussion following Breakout Room 3

After the role-play, participants discuss:

- What worked well in addressing resistance?
- What could have been done better?
- How can these strategies apply to other OHS changes in Malta?

Developing Positive Safety Cultures

Indicators of a Positive Safety Culture

- HSG65 Guidelines
  - https://www.hse.gov.uk/managing/index.htm
- Direct link to Free pdf download:
  https://www.hse.gov.uk/pubns/priced/hsg65.pdf
- Indicators:
  - Control mechanisms.
  - Communication processes.
  - Cooperation among teams.
  - Competence and training.

5 Steps towards Creating a "Safety Culture"

- Create and Broadcast Clear Policies and Procedures
- Provide Training
- Create a Report System
- Creating and Measuring Your Plan
- Building Commitment and Trust

Source: https://www.linkedin.com/pulse/5-steps-towards-creating-safety-culture-organization-post-chemaly/

Employing with Health and Safety in Mind

- The Role of Recruitment in H&S:
  - Hiring skilled and competent staff is critical for maintaining safety standards.
  - Recruitment should focus on both technical competence and alignment with organisational safety values.
- Key Considerations:
  - Job Descriptions: Clearly outline responsibilities and safety expectations.
  - Person Specifications: Include essential qualifications, skills, and desirable traits like teamwork and temperament.
- Pre-Employment Checks:
  - Verify qualifications, experience, and security clearances as needed.
  - Conduct background checks for roles with significant safety responsibilities.
- Interview Process:
  - Use open-ended questions to assess understanding and attitudes toward H&S.
  - Example: "Can you share your approach to maintaining safety in your current role?"
- Cultural Fit and Team Dynamics:
  - Evaluate personality traits and alignment with the organisation's safety culture.
  - Consider structured tools like personality profiling or psychometric testing for balanced assessments.

Strategies for Sustaining Safety Culture

- Sustaining a Positive Culture:
  - Leadership commitment.
  - Recognising and addressing negative influences.
  - Continuous monitoring and feedback.
  - Employee Involvement
  - Training and Development
  - Rewarding Positive Behaviour
  - Integration into Daily Operations

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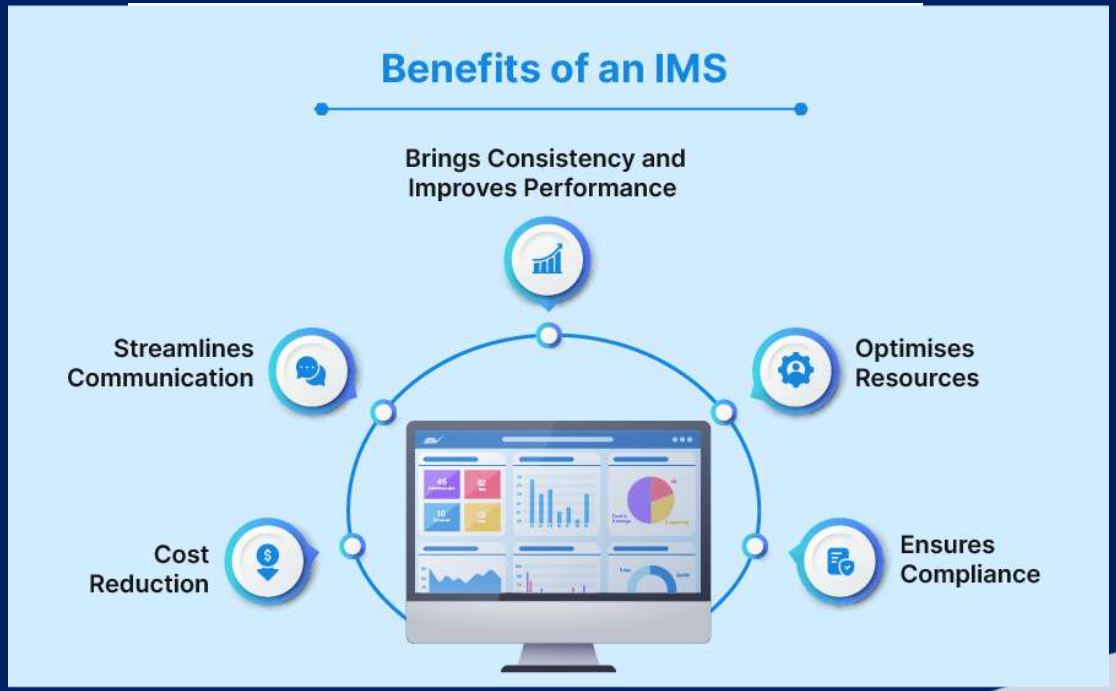

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