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2. Be able to critically evaluate and establish strategic direction and governance for OHSES aligned to organisational objectives.

2.1 Analyse safety culture models and maturity frameworks in relation to organisational context.

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Introduction

Introduction

A strong Occupational Health, Safety, Environment, and Sustainability (OHSES) culture is essential for achieving high standards of organisational performance. Safety culture refers to the shared values, beliefs, attitudes, and behaviours that determine how people think about and manage health and safety in the workplace. It influences how decisions are made, how risks are controlled, and how employees behave when faced with hazards.

To understand and improve safety culture, organisations often use safety culture models and maturity frameworks. These frameworks help organisations assess their current level of safety performance, identify strengths and weaknesses, and develop strategies for continual improvement.

This section critically evaluates safety culture models and maturity frameworks by examining:

1. Comparative analysis of recognised safety culture and maturity models.
2. Application of maturity frameworks to different organisational contexts.
3. Strengths and limitations of culture models in practice.
4. Cultural indicators linked to organisational performance.

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What is a Safety Culture Model?

A safety culture model explains how organisational values, leadership, behaviours, and systems influence safety performance. It provides a framework for understanding why accidents occur and how organisations can improve safety.

A maturity framework measures how developed an organisation’s safety culture is, typically progressing from poor or reactive practices to proactive and generative approaches.
Several internationally recognised models are widely used.

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1. Hudson’s Safety Culture Maturity Model

Professor Patrick Hudson proposed a five-level maturity model describing the evolution of organisational safety culture.

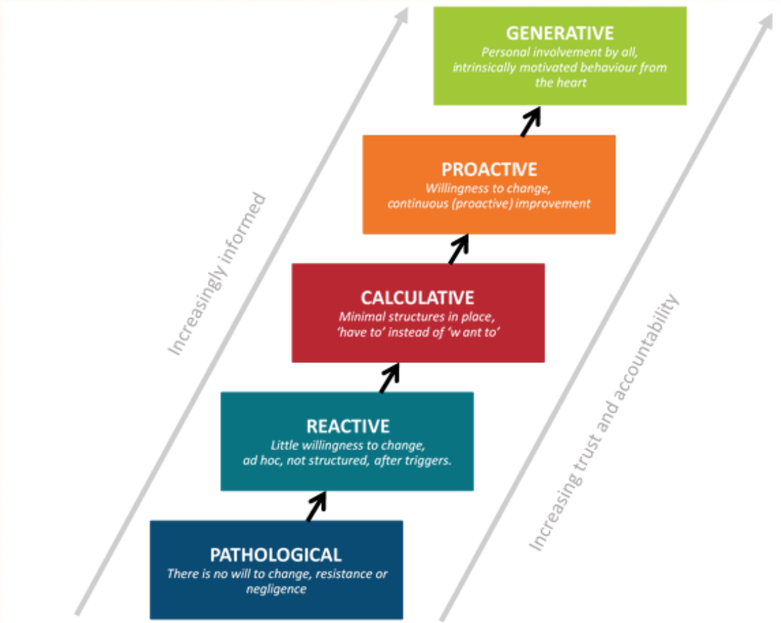
Level	Characteristics
Pathological	"Who cares as long as we are not caught?" Safety is ignored.
Reactive	Action is taken only after accidents occur.
Calculative	Systems and procedures exist but are heavily compliance-focused.
Proactive	Risks are anticipated and prevented before incidents occur.
Generative	Safety becomes an integral part of organisational culture and decision-making.

2. Hearts and Minds Model

Developed for the energy sector, the Hearts and Minds model emphasises employee attitudes and behaviours.
It identifies five cultural stages:

- Pathological
- Reactive
- Calculative
- Proactive
- Generative

Similar to Hudson's model, it encourages leadership commitment and workforce engagement to build a positive safety culture.

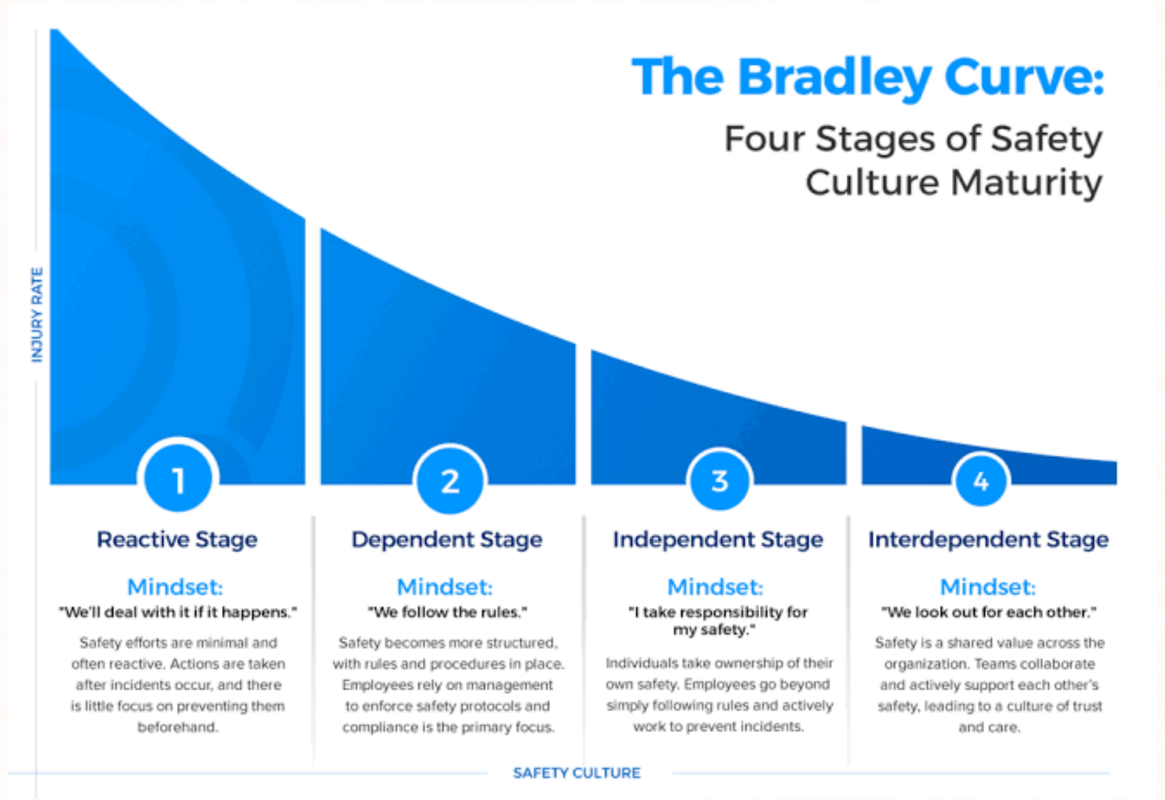


Example
A company that investigates incidents only after someone is injured operates at the Reactive level. An organisation where everyone actively identifies hazards before work begins demonstrates a Generative culture.

3. Bradley Curve

The DuPont Bradley Curve links safety performance with organisational culture and employee responsibility.

Stage	Focus
Reactive	People comply only after accidents occur.
Dependent	Safety depends on rules and supervision.
Independent	Individuals take personal responsibility for safety.
Interdependent	Teams actively care for each other's safety.



The highest level promotes shared responsibility and collaboration.

4. Fleming Safety Culture Maturity Model

Developed for the UK Health and Safety Executive (HSE), Fleming's model focuses on management commitment and workforce involvement.

It measures maturity through:

- Leadership.
- Communication.
- Learning.
- Employee participation.
- Risk management.

The model supports continual organisational improvement.

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Comparative Analysis:

Model	Main Focus	Strengths	Limitations
Hudson Model	Organisational maturity	Easy to understand and benchmark	May oversimplify complex cultures
Hearts and Minds	Behaviour and attitudes	Encourages employee engagement	Difficult to measure attitudes objectively
Bradley Curve	Individual responsibility	Promotes behavioural ownership	Less emphasis on organisational systems
Fleming Model	Leadership and participation	Comprehensive management focus	Requires detailed assessment processes

Critical Evaluation

Each model contributes valuable insights into organisational safety performance. However, no single model fully captures every aspect of organisational culture.
Many organisations combine multiple frameworks to obtain a more balanced assessment.



2. Application of Maturity Frameworks to Different Organisational Contexts

Why Context Matters

Different organisations face different risks depending on:

- Industry.
- Workforce size.
- Operational complexity.
- Regulatory environment.
- Geographic location.
- Technology used.

Therefore, maturity frameworks should be adapted to organisational context.

Manufacturing Industry

A manufacturing organisation may use Hudson's model to improve machine safety and reduce workplace injuries.

Progression:

- Reactive investigations.
- Systematic inspections.
- Predictive maintenance.
- Employee-led hazard reporting.

2. Application of Maturity Frameworks to Different Organisational Contexts

Construction Industry
Construction projects involve dynamic and changing risks.
A maturity framework can assess:

- Leadership commitment.
- Contractor management.
- Permit-to-work systems.
- Behavioural safety.
- Site supervision.

Higher maturity levels result in improved coordination and fewer accidents.

Healthcare Sector
Hospitals may apply maturity frameworks to:

- Patient safety.
- Infection control.
- Medication management.
- Staff wellbeing.

Culture assessments encourage reporting of medical errors without fear of blame.

2. Application of Maturity Frameworks to Different Organisational Contexts

Oil and Gas Industry

High-hazard industries often apply advanced maturity models because consequences of failure are severe.

Focus areas include:

- Process safety.
- Emergency preparedness.
- Major accident prevention.
- Asset integrity.
- Leadership visibility.



Small and Medium Enterprises (SMEs)

Smaller organisations may apply simplified maturity assessments focusing on:

- Leadership commitment.
- Basic risk assessments.
- Employee consultation.
- Legal compliance.

Complex frameworks may be impractical due to limited resources.

Critical Evaluation

Benefits

- Supports continuous improvement.
- Enables benchmarking.
- Identifies weaknesses.
- Prioritises investment.
- Aligns culture with business strategy.

Challenges

- Models may require adaptation.
- Resource-intensive assessments.
- Subjective interpretation.
- Cultural differences between countries.

Successful implementation depends on organisational commitment rather than framework selection alone.



3. Strengths and Limitations of Culture Models in Practice

Strengths

1. Benchmarking Progress

Maturity models allow organisations to measure improvement over time.

Example:

Moving from Reactive to Proactive demonstrates positive cultural development.

2. Strategic Planning

Results support:

- Investment decisions.
- Leadership development.
- Risk management.
- Training priorities.

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3. Strengths and Limitations of Culture Models in Practice

3. Employee Engagement
Culture assessments encourage workforce participation and open communication.
Employees become active contributors rather than passive rule followers.

4. Regulatory Confidence
Demonstrating cultural maturity may improve relationships with regulators and investors.

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Limitations

1. Subjective Assessments
Many cultural indicators depend on surveys and interviews.
Perceptions may differ significantly between employees.

2. Oversimplification
Complex organisational cultures cannot always be reduced to five maturity levels.
Different departments may operate at different stages simultaneously.

3. Behaviour May Not Reflect Beliefs
Employees may follow procedures because of supervision rather than genuine commitment.
Observed behaviour does not always indicate underlying culture.

4. Cultural Change Takes Time
Moving from Reactive to Generative may require several years of sustained leadership commitment. Quick assessments may not capture long-term improvements.

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Critical Evaluation

Culture models provide useful frameworks for improvement but should never replace direct observation, audits, leadership engagement, and performance analysis.

Multiple assessment methods provide a more reliable understanding of organisational culture.

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4. Cultural Indicators Linked to Organisational Performance

What are Cultural Indicators?
Cultural indicators are measurable signs that reflect the health of an organisation's safety culture. They provide evidence of employee attitudes, leadership effectiveness, and organisational behaviour.

Leading Indicators
Measure activities that predict future performance.
Examples:

- Safety observations.
- Leadership site visits.
- Hazard reporting rates.
- Training completion.
- Near-miss reporting.
- Employee participation.
- Audit completion.
- High reporting often indicates a positive reporting culture rather than poor safety.

4. Cultural Indicators Linked to Organisational Performance

Lagging Indicators

Measure historical outcomes.

Examples:

- Lost Time Injuries (LTI).
- Fatalities.
- Environmental incidents.
- Property damage.
- Regulatory violations.
- Compensation claims.

Lagging indicators alone cannot measure safety culture.



Behavioural Indicators

Include:

- Use of personal protective equipment.
- Compliance with procedures.
- Stop-work interventions.
- Peer safety coaching.
- Participation in toolbox talks.

These reflect everyday safety behaviours.

4. Cultural Indicators Linked to Organisational Performance

Leadership Indicators
Measure management commitment.

Examples:

- Executive safety tours.
- Board review frequency.
- Resource allocation.
- Visible leadership involvement.
- Timely corrective actions.

Leadership behaviour strongly influences organisational culture.



Relationship with Organisational Performance

Positive safety culture contributes to:

- Reduced accidents.
- Improved productivity.
- Lower absenteeism.
- Better employee morale.
- Stronger legal compliance.
- Reduced insurance costs.
- Higher customer confidence.
- Enhanced sustainability performance.



Poor culture often results in:

- Frequent incidents.
- Low reporting.
- High turnover.
- Poor morale.
- Reputational damage.

Critical Evaluation

No single indicator accurately measures culture.

Effective assessment combines:

- Leading indicators.
- Lagging indicators.
- Employee surveys.
- Behavioural observations.
- Audit findings.
- Leadership reviews.

This balanced approach provides a more reliable picture of organisational performance.



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Practical Scenario

A multinational chemical company uses Hudson's Safety Culture Maturity Model to assess its operations. The assessment reveals that most sites operate at the Calculative level, relying heavily on procedures but showing limited employee engagement.
To progress toward a Proactive culture, the organisation introduces leadership safety walks, encourages near-miss reporting, strengthens workforce consultation, and provides behavioural safety training. Quarterly reviews monitor leading indicators such as hazard reports and safety observations alongside lagging indicators such as Lost Time Injuries.
After two years, employee participation increases significantly, incident rates decline, and the organisation demonstrates stronger regulatory compliance and improved operational performance, illustrating how maturity frameworks can support long-term cultural improvement.



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Key Takeaways

- Safety culture models and maturity frameworks help organisations understand and improve their approach to occupational health, safety, environment, and sustainability.
- Recognised models such as Hudson's Safety Culture Maturity Model, Hearts and Minds, the Bradley Curve, and Fleming's Model provide different perspectives on cultural development and organisational learning.
- The application of maturity frameworks should be adapted to the organisation's industry, size, complexity, and risk profile, as no single model suits every context.
- While culture models offer valuable benchmarking and improvement opportunities, they also have limitations, including subjective assessments, oversimplification, and the time required for genuine cultural change.
- A combination of leading indicators, lagging indicators, behavioural measures, and leadership indicators provides the most effective means of evaluating safety culture and its impact on organisational performance.

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Thank you