



Why the focus on **safety culture** matters to improve companies' profitability significantly

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- Ferring Pharmaceuticals is a research-driven, specialty biopharmaceutical group committed to helping people around the world build families and live better lives.
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Why the focus on safety culture matters to improve companies' profitability significantly

Agenda

- I. Theory
- II. Models
- III. Easy to use approach
- IV. Outlook
- V. Q&A



Detailed incident investigations of major disasters always flagged unsatisfying focus on **'safety culture'** as one of the outstanding reasons





Some definitions of (Safety) Culture based on scientific literature

Culture

Culture consist in patterned **ways of thinking, feeling and reacting**, acquired and transmitted mainly by **symbols**, constituting the distinctive achievements of **human groups**, including their **embodiments in artifacts**. The essential core of culture consist of **traditional ideas** and especially their attached **values**
(Kluckhohn, 1951)

quoted from Hofstede, Culture's Consequences, 2001

Safety Culture

The product of 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 **health and safety management**

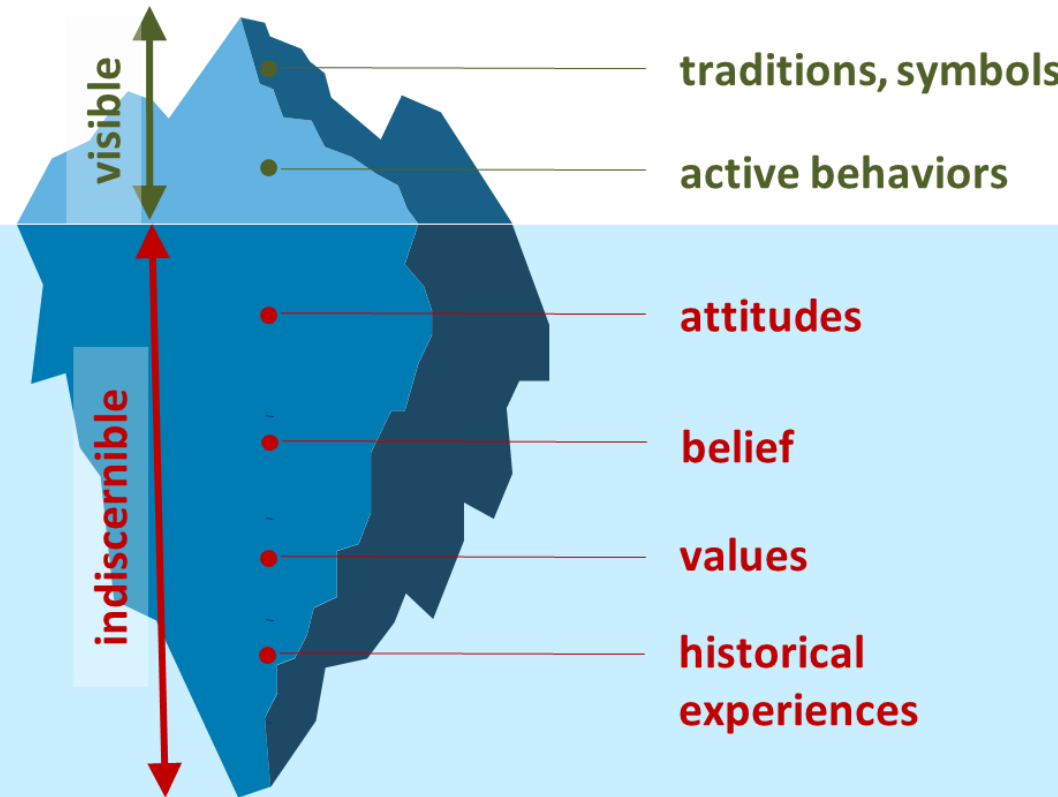
Advisory Committee on the Safety of Nuclear Installations (ACSNI), 1993



What is the **meaning** of a company's specific (**Safety**) **Culture**

Safety Culture

is the way how we do things around here



A company is interested in...

- economic success (profitability)
- employee attraction
- not to harm employees
- low error rate and good product quality
- its reputation



A company-specific safety culture is based on the interaction of managers, employees and specialists for occupational safety

***“That’s the way
how we do things
around here”***



Behaviors

Behaviors enables continues improvement by **learning from peers**

Safety Leadership

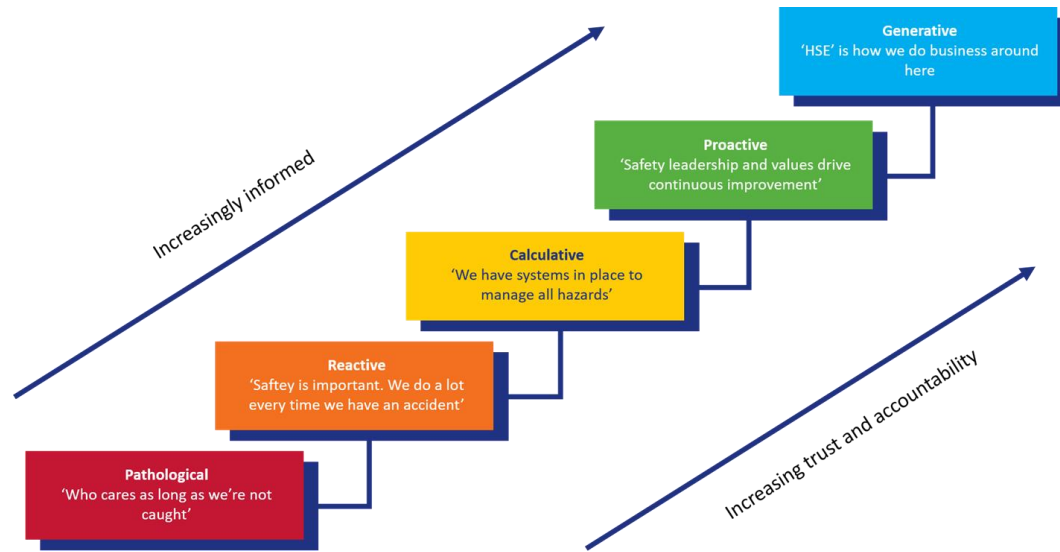
Safety Leadership sets the tone for the company and demonstrates **engagement from the top**

Compliance

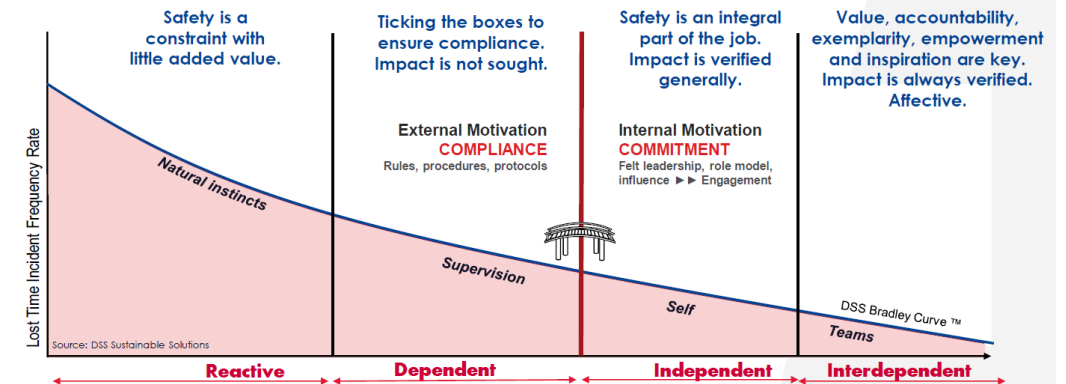
Compliance ensures that **(legal) requirements** are met



How can you evaluate a companies' (safety) culture?

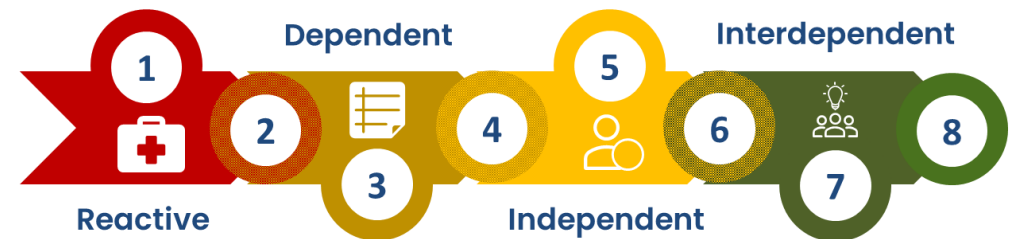


Understanding safety culture transformation



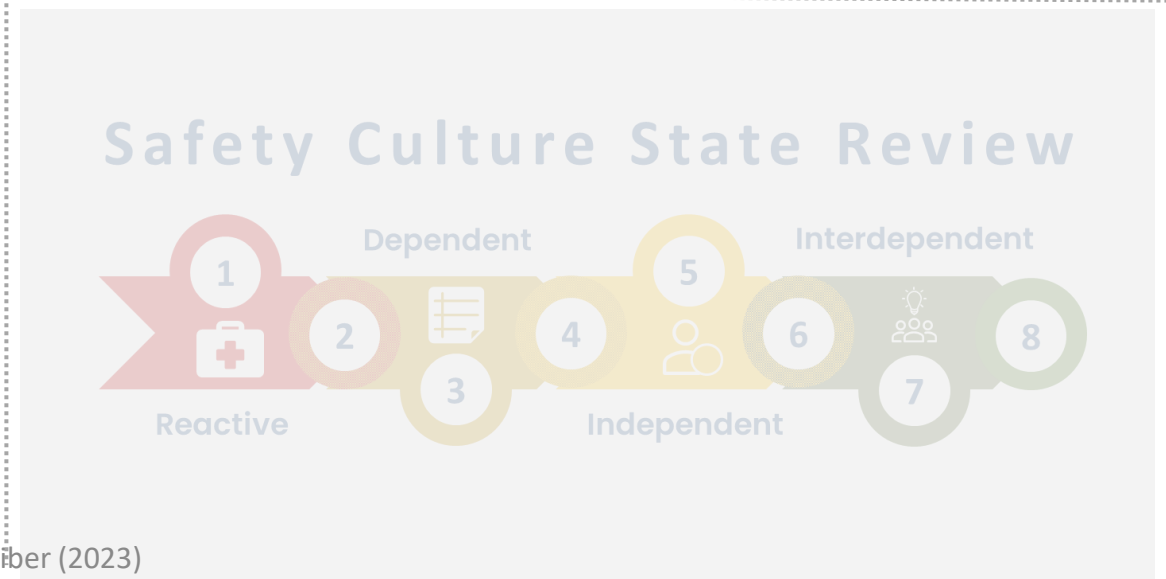
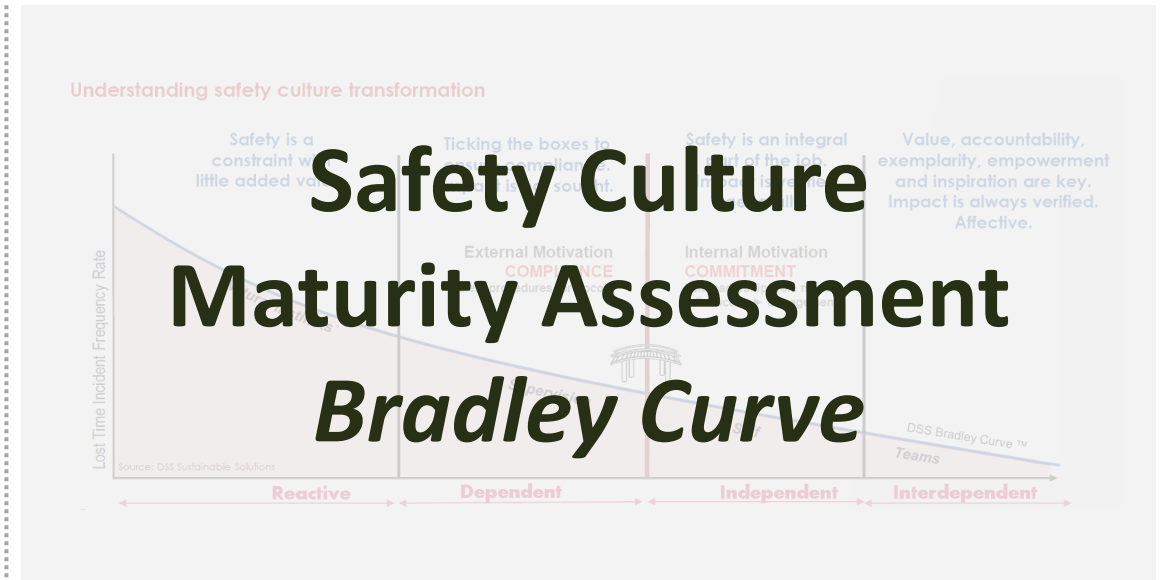
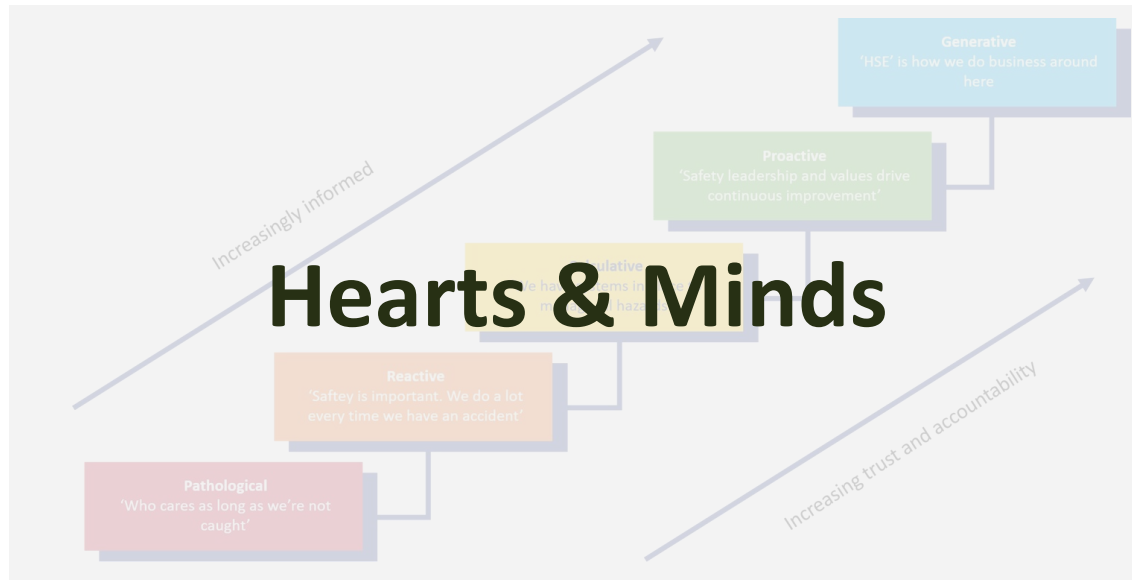
- 5 PROGRESSIVE**
Safety has been fully integrated into all business processes.
- 4 PROACTIVE**
Safety has great priority and is continually improved.
- 3 CALCULATING**
Safety rules are considered important.
- 2 REACTIVE**
Any change in behaviour is ad-hoc and temporary.
- 1 PATHOLOGICAL**
'Ignorance is bliss.'

Safety Culture State Review





How can you evaluate a companies' (safety) culture?





Hearts & Minds – meaning of the stair steps

Reactive

safety is taken seriously, but only after things have gone wrong. Managers feel frustrated about how the workforce won't do what they are told.

Pathological

people don't really care about HSE and are only driven by regulatory compliance and/or not getting caught

Proactive

moving away from managing HSE based on what has happened in the past to preventing what might go wrong in the future. The workforce start to be involved in practice and the Line begins to take over the HSE function, while HSE personnel reduce in numbers and provide advice rather than execution

Calculative

focus on systems and numbers. Lots of data is collected and analysed, lots of audits are performed and people begin to feel they know "how it works". The effectiveness of the gathered data is not always proven though.

Generative

organisations set very high standards and attempt to exceed them. They use failure to improve, not to blame. Management knows what is really going on, because the workforce tells them. People are trying to be as informed as possible, because it prepares them for the unexpected.



Hearts & Minds - The toolkit

Understand your culture and prepare people for change

Understanding your HSE culture

Making Change Last

Learning from incidents

Learning from incidents

Improve practices and procedures

Making compliance easier

Improve leadership

Improving Supervision

Understand and manage your hazards and risks

Risk Assessment Matrix

Working Safely

Driving for Excellence

<https://heartsandminds.energyinst.org/>



The Safety Culture Ladder (SCL)

- Some similarities with Hearts & Minds, however it's different and has the purpose **to certify a company culture**



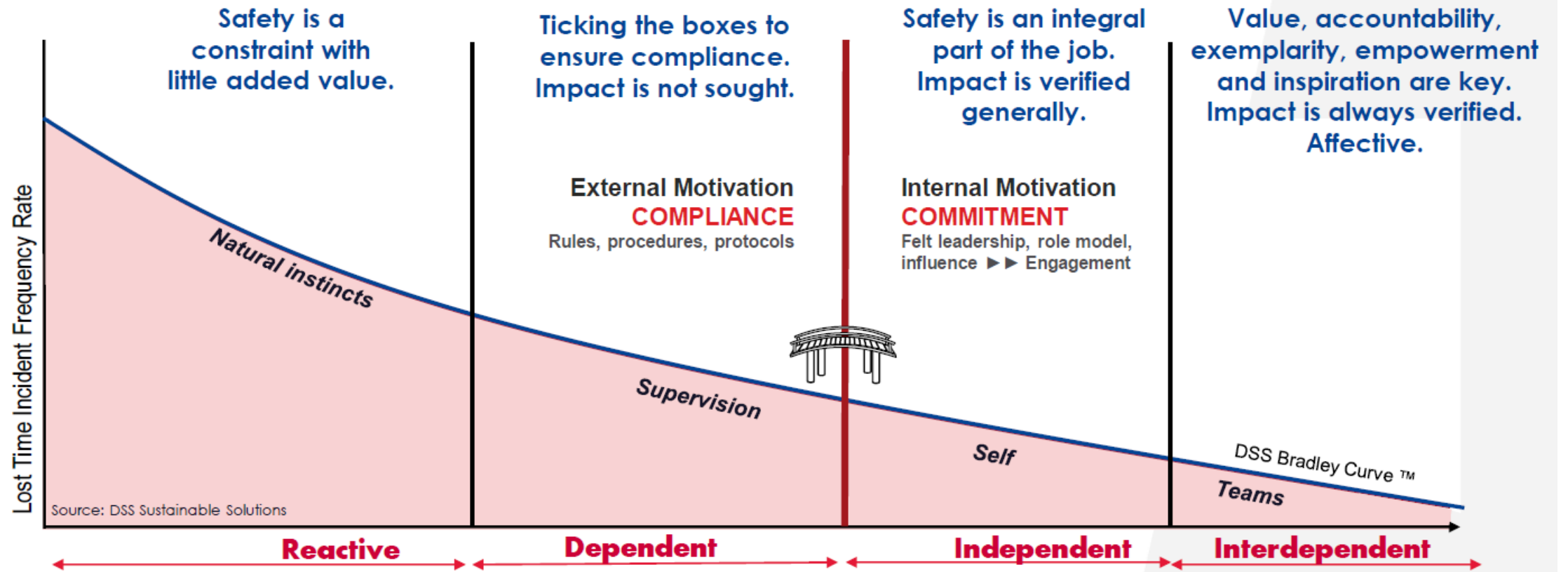
- SCL can be certified by ...
 - Aboma Certificering BV
 - Bureau Veritas Inspection & Certification Netherlands
 - DEKRA Certification BV Netherlands
 - Dekra Certification BV Germany
 - DNV
 - Kiwa Deutschland GmbH
 - Safex Certificatie
 - SGS Nederland
 - TÜV Rheinland
 - Zertifizierung Bau GmbH
 -

<https://safetycultureladder.com>



The DuPont approach (**Bradley curve**) relates the maturity level of a safety culture to accident performance and is very easy to understand as a model

Understanding safety culture transformation



<https://www.consultdss.com/transform-culture/dss-bradley-curve/>



dss+ carries out a detailed maturity assessment of companies' safety culture and proposes projects to achieve continuous improvement

- 11 elements, grouped into 3 main categories, are reviewed via interviews within the organization by external consultant
- Internal assessors can be trained to support the assessment
- The assessment is carried out based on a non-public assessment tool (Excel)
- As a result, a score between 1 (reactive) and 4 (interdependent) is calculated for each element, and an average score across all elements
- Based on the assessment, specific projects will be proposed and discussed with SLT

Leadership

- Management commitment
- Vision & Objectives
- Policies & Principles

Organisation

- Safety Accountability
- Training & Development
- Motivation
- Effective Communication

Operations

- Procedures & Standards
- Incident Investigation
- Observation & Audits
- Contractor Management

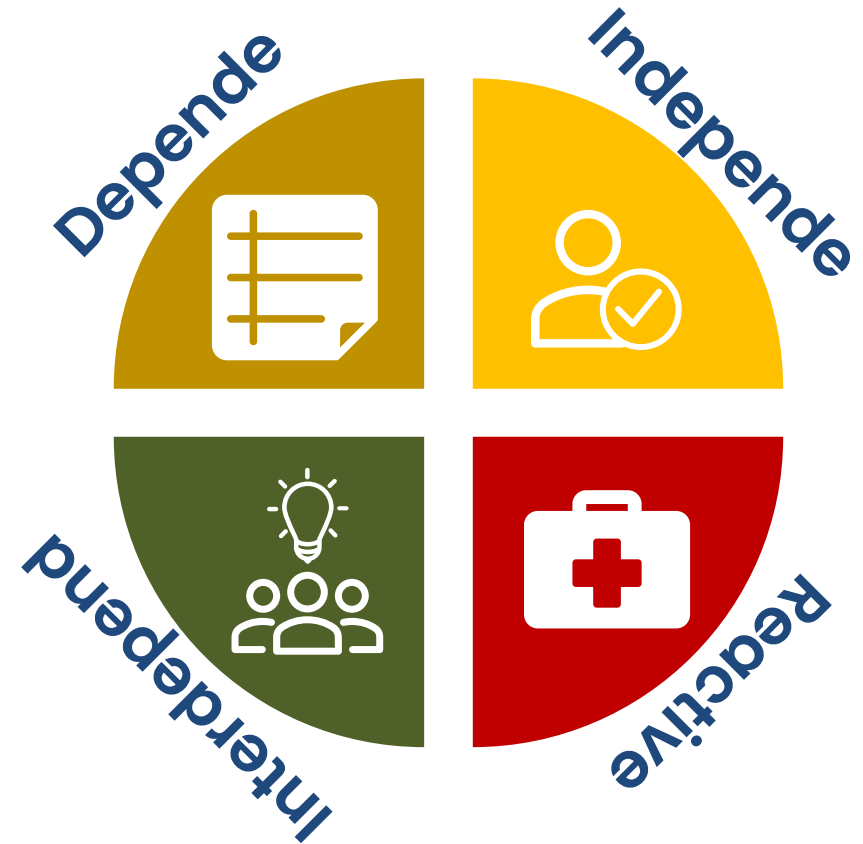
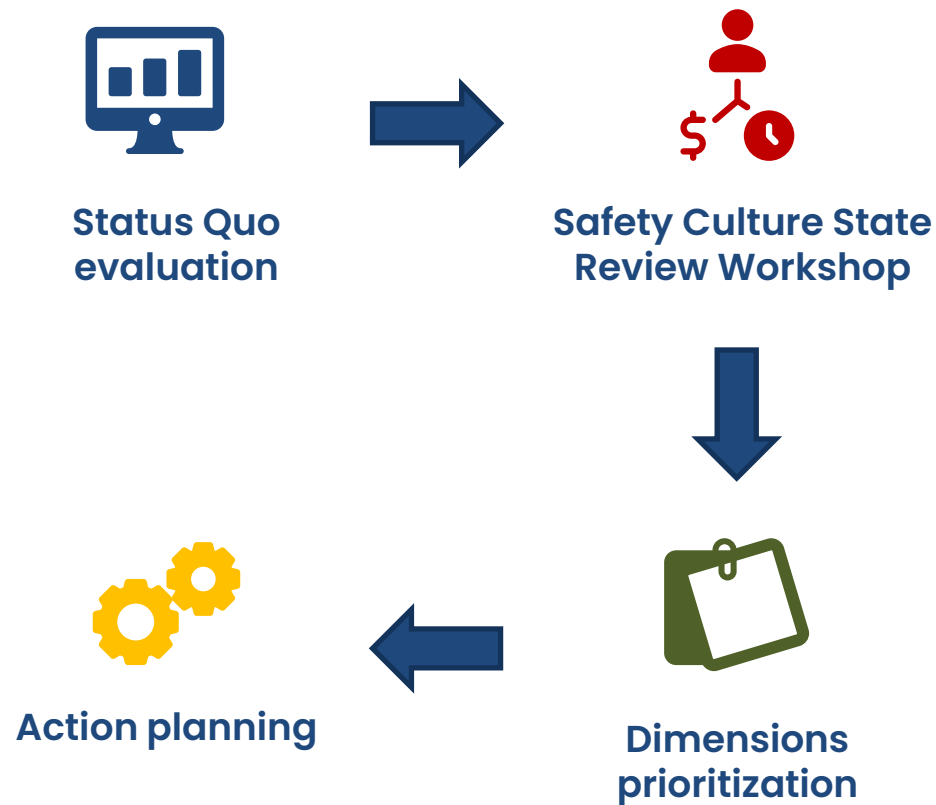


Comparisation of programs targeted to influence and improve a companies' safety culture

	Bradley Curve	Hearts & Minds	Safety Culture Ladder (SCL)	Safety Culture State Review (SCSR)
Developed by	dss+ (DuPont)	Shell / Energy Institute	TenneT / nen	
Starting Year	1990th ->	1990th , 2000th ->	2020 ->	
Theory Model	Covey / Collins	Swiss Cheese	???	
Science based	No (partially)	Yes	No	
Driven by	External consultants	Internal resources	External certifier	
Certification	No	No	Yes	
Cost impact for impl.	High	Middle	Very high	
Effort for assessment	High	Low	Very high	
Impact to company	Middle (+)	Middle (+)	Fewer (--)	
Supporting material to access	Not available / highly difficult to access	Fully available and easy to access	Partially available	



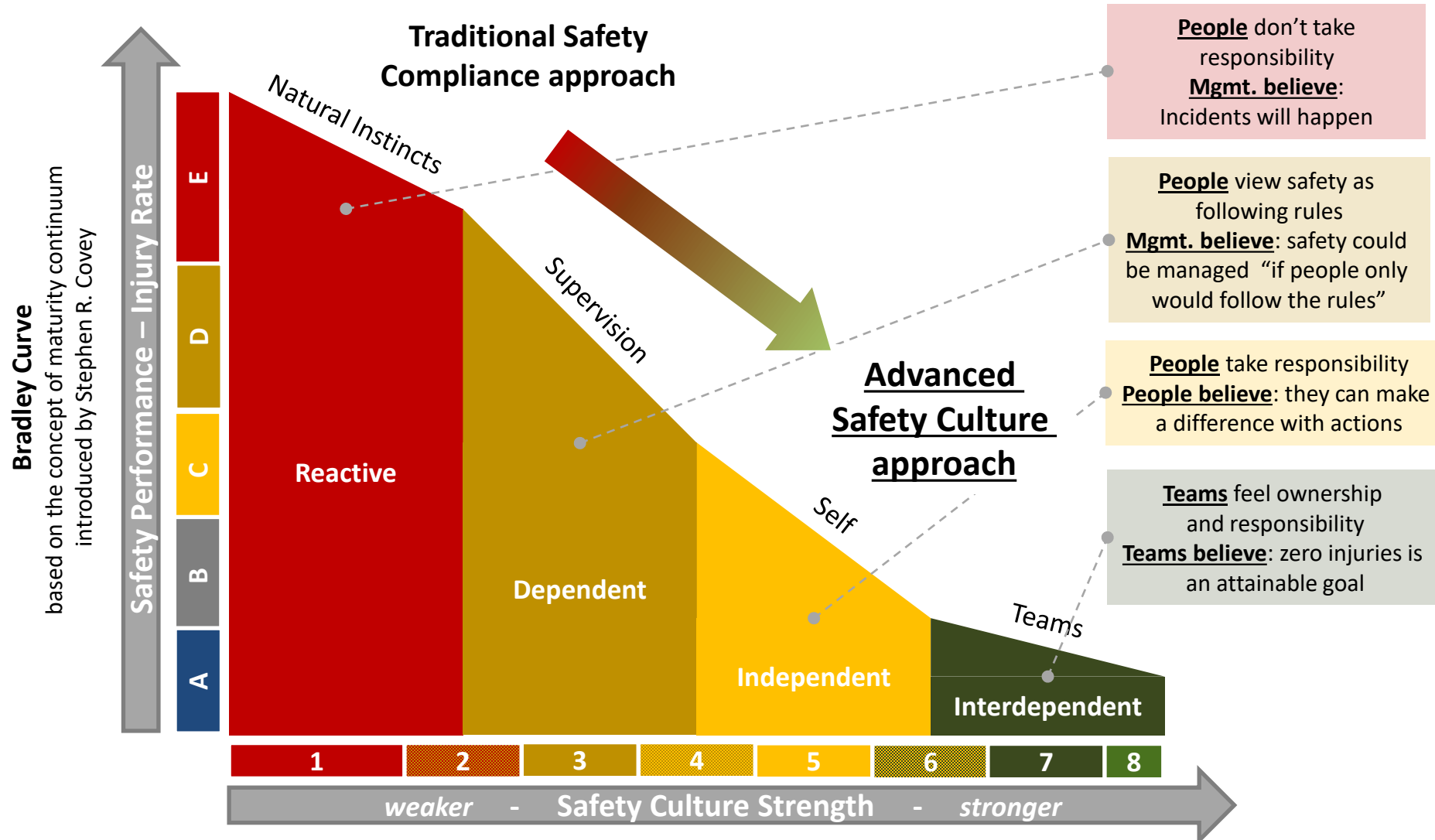
Introducing the concept of the **Safety Culture State Review (SCSR)** to determine maturity levels (states) of a companies' (safety) culture?



based on **Covey's categorization of high-performance teams** (Covey, S., *The 7 Habits of Highly Effective People*. London, 1989)



The Bradley approach enables senior management to define a clear medium-term goal with regard to HSE. Each state includes specific measures to achieve the goal





The meaning of the four states of a safety culture

Concept of maturity continuum introduced by Stephen R. Covey

A) Dependent (supervisor)

Dependence is the paradigm of *you* – *you* take care of me, *you* come through me; *you* didn't come through; I blame *you* for the results

Dependent people need others to get what they want.



B) Independent (self)

Independence is the paradigm of *I* - *I* can do it; *I* am responsible; *I* am self-reliant; *I* can choose

Independent people can get what they want through their own effort



Interdependent people combine their own efforts with the efforts of others to achieve their greatest success

Interdependence is the paradigm of *we* – *we* can do it; *we* can cooperate; *we* can combine our talents and abilities and can create something greater together

C) Interdependent (team)



Progress by chance

Reactive is the paradigm of *minimalism* - only take action when something bad has happened or a penalty is imminent

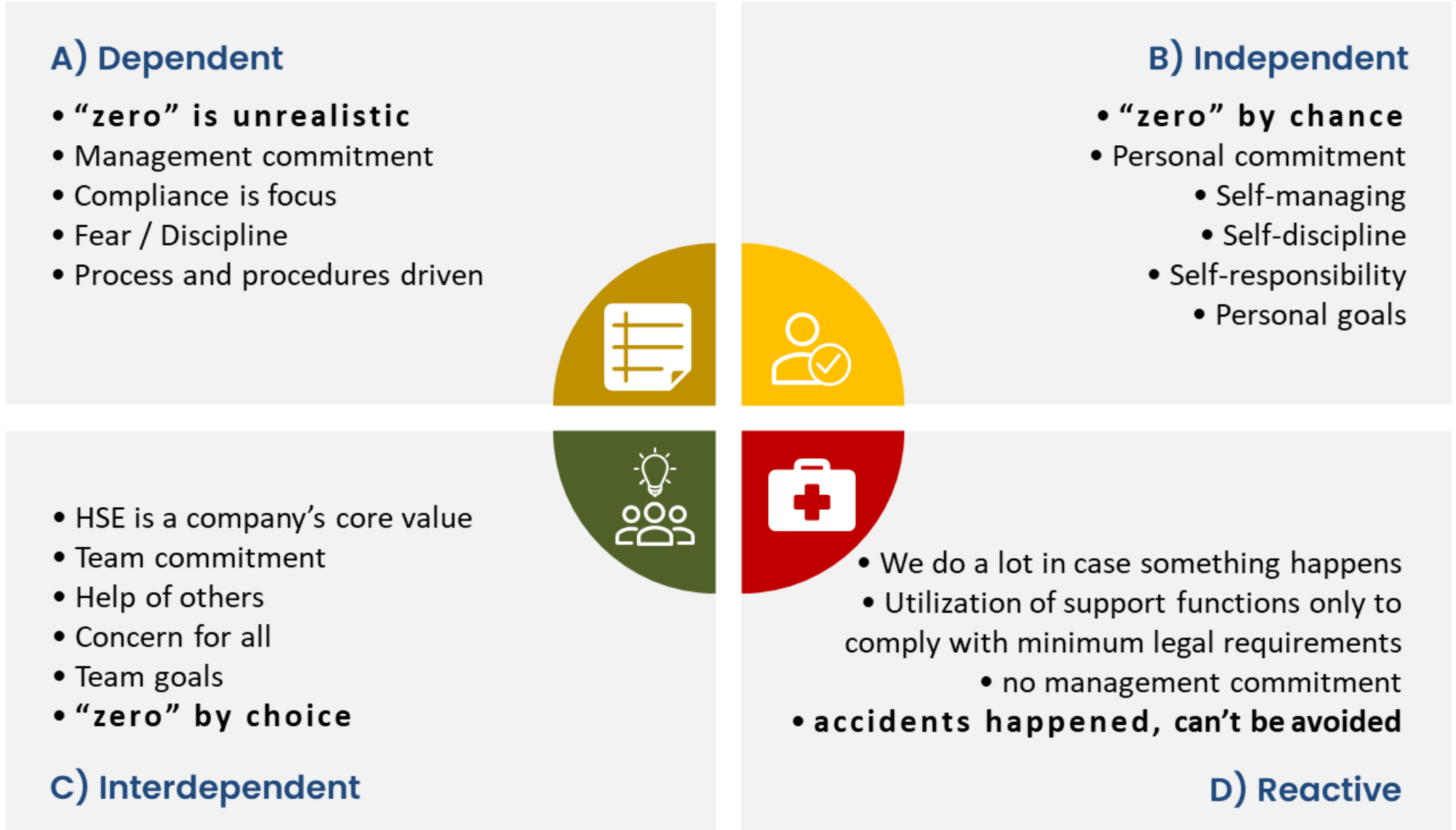
D) Reactive (minimum compliance)



Covey, Stephen R., The 7 Habits of Highly Effective People. London, 1989.

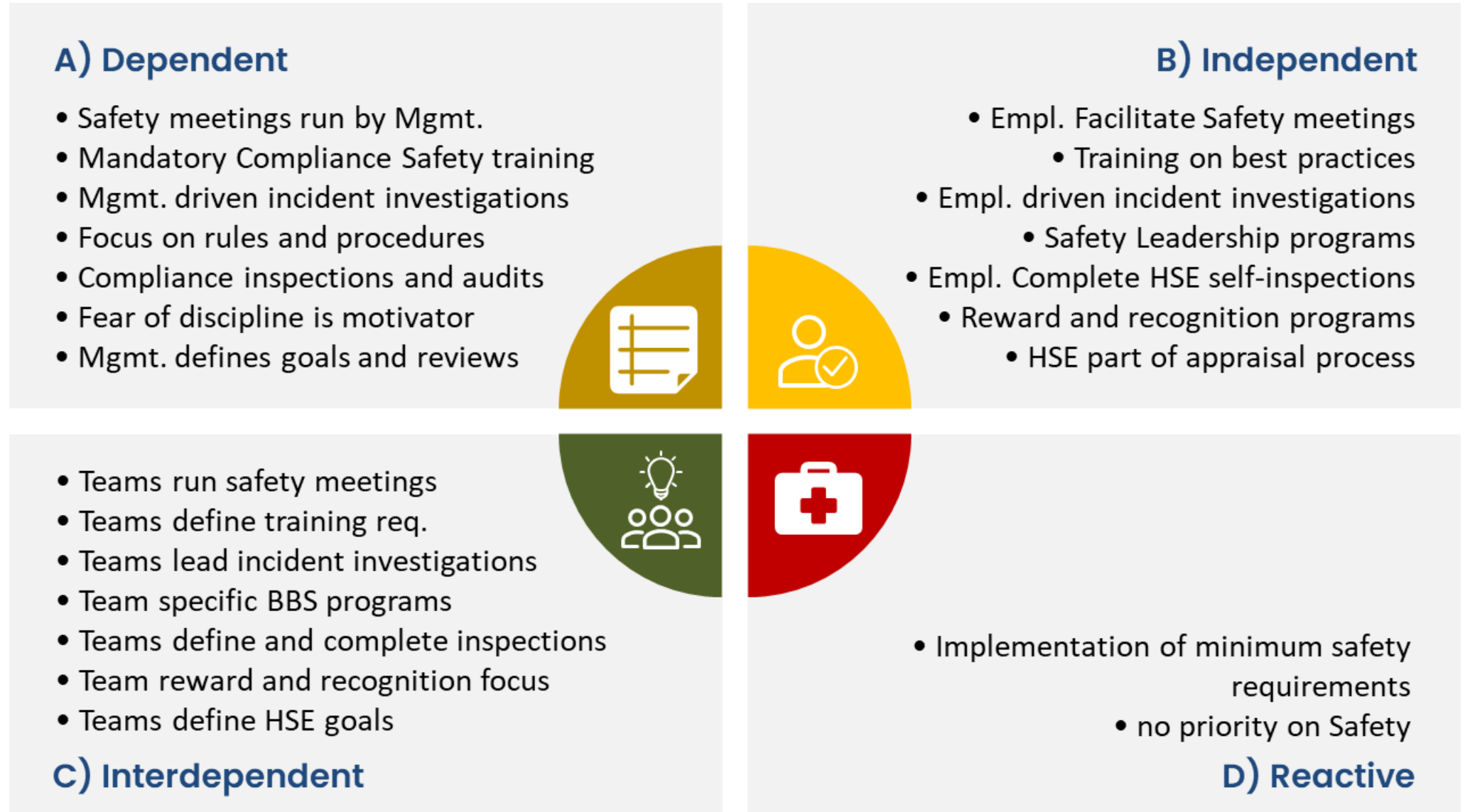


The cultural values of the four states of a safety culture

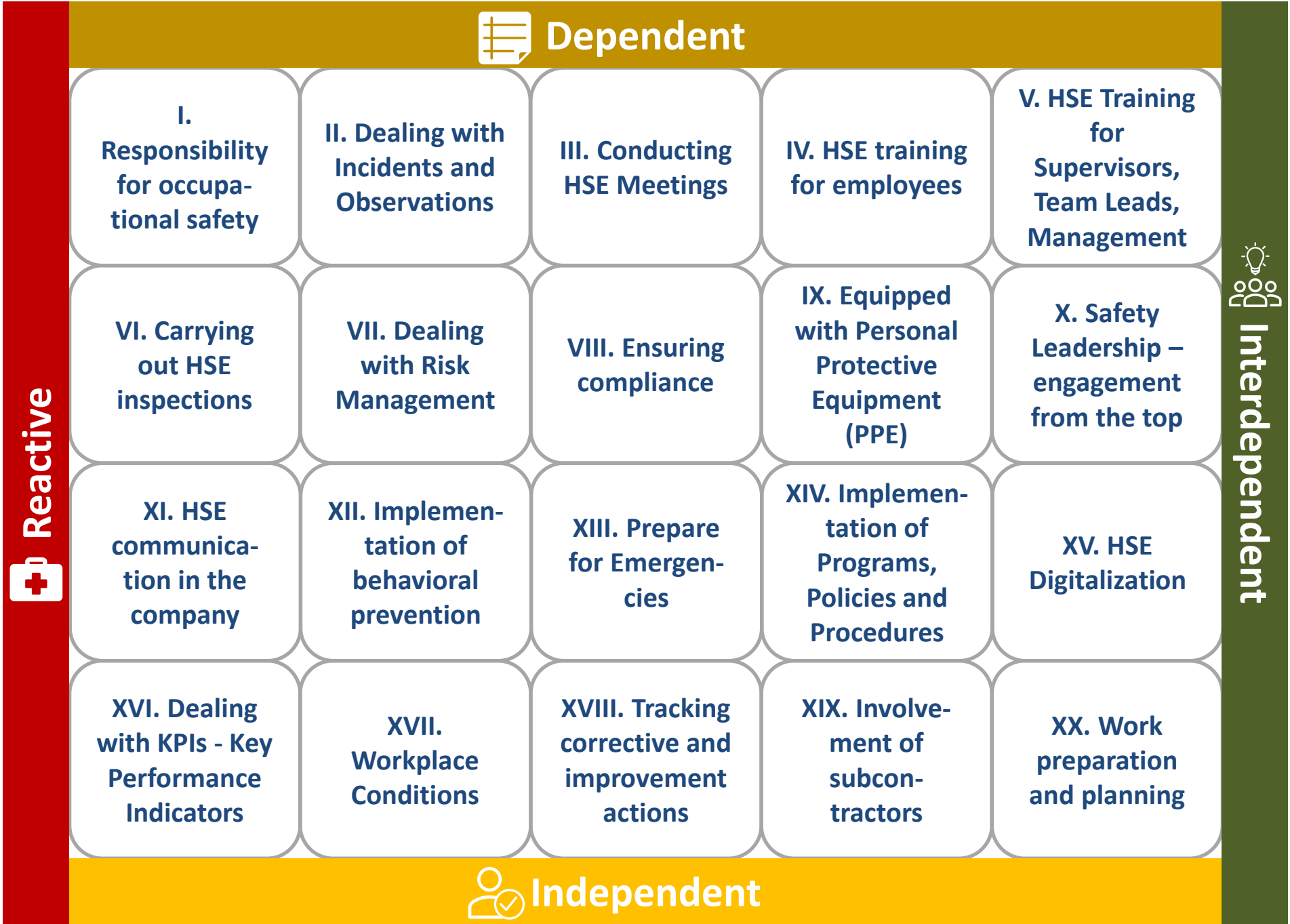




The characteristics of the 4 states of a safety culture



20 Dimensions have been selected that significantly influencing the companies' safety culture





Status Quo
evaluation



Safety Culture State
Review Workshop



Prioritization of
dimensions



Action planning
& 3y Strategy

How to get started ?

Plan

Do

Check

Act



Step 1 - Status Quo evaluation



Status Quo evaluation

- Analyze the current HSE performance data
- Internal review of dimensions
- Defined adjustments to the SCSR model

Plan



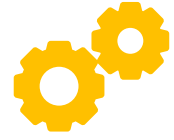
Safety Culture State Review Workshop

Do



Prioritization of dimensions

Check



Action planning & 3y Strategy

Act



Step 2 - Safety Culture State Review Workshop



Status Quo evaluation

- Analyze the current HSE performance data
- Internal review of dimensions
- Defined adjustments to the SCSR model

Plan



Safety Culture State Review Workshop

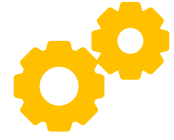
- Carry out SCSR workshops within the organisation and with Senior Leadership Team (SLT)
- Analyse the results of the workshops and present it to SLT
- Set with SLT short and medium goal

Do



Prioritization of dimensions

Check

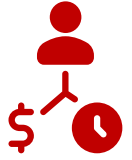


Action planning & 3y Strategy

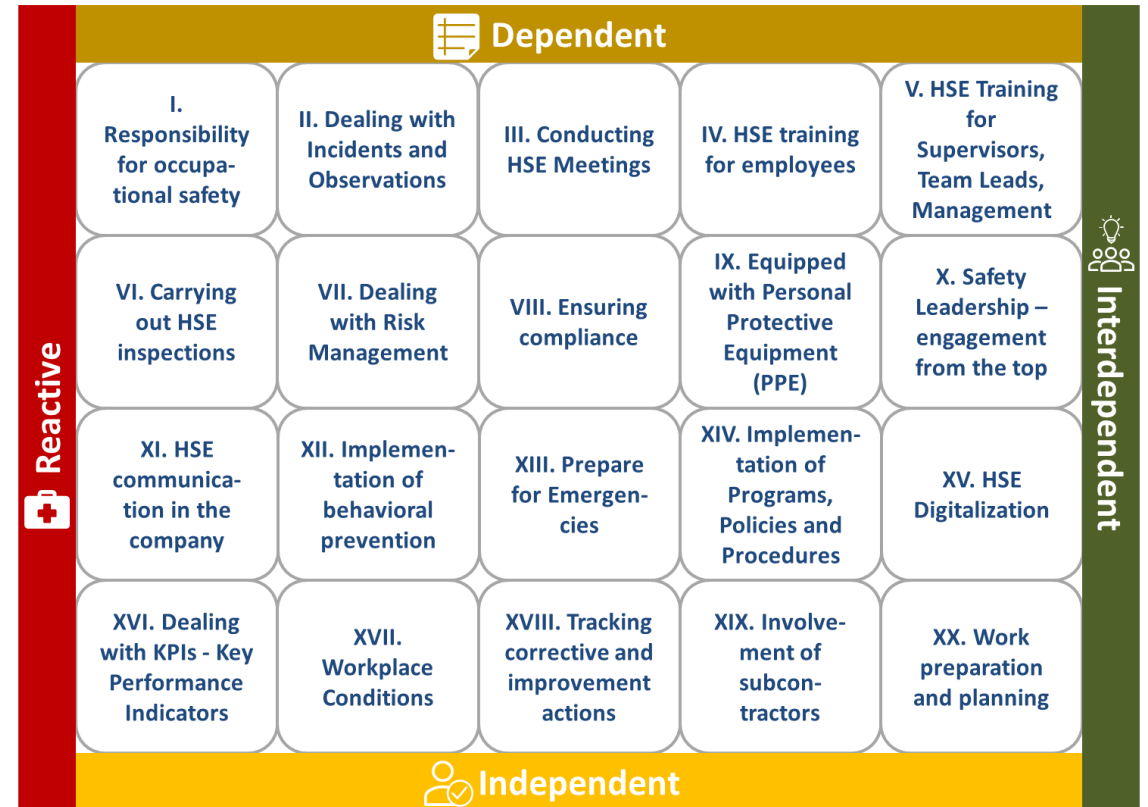
Act



Safety Culture State Review Workshop



- **Interactive workshop** with up to 25-30 participants, preferable f2f
- Duration: 4 hours
- Agenda: (a) Introduction of the SCSR concept, (b) Dimensions influencing companies' safety culture, (c) interactive assessment, (e) real time evaluation, (f) where we want to go?, (g) definition of improvement actions and commitment
- Housekeeping: Wallpapers, each dimension presented on a poster, flipcharts, points to evaluate, etc





Which of the four states best characterizes the current situation in your area?

Safety Culture State Review – survey statements

II. Dealing with Incidents and Observations

A) Dependent

Accident investigations are carried out sporadically for all classes of incidents; there is no systematic follow-up of measures; no systematic approach for observations reporting.



B) Independent

Accident investigations are carried out systematically for all classes of incidents, there is a systematic approach for follow-up of measures and analysis of the incidents. Incidents are communicated within the company. Employees are encouraged to report observations



Investigations are carried out both in the case of incidents and observations; both are systematically analyzed and communicated within the company. Teams taking ownership for incident investigations; observation reporting is a fundamental element of cont. improvement



C) Interdependent

Accident investigations are only carried out in the event of serious incidents, there is no systematic investigation approach and follow-up of measures and analysis of incidents.

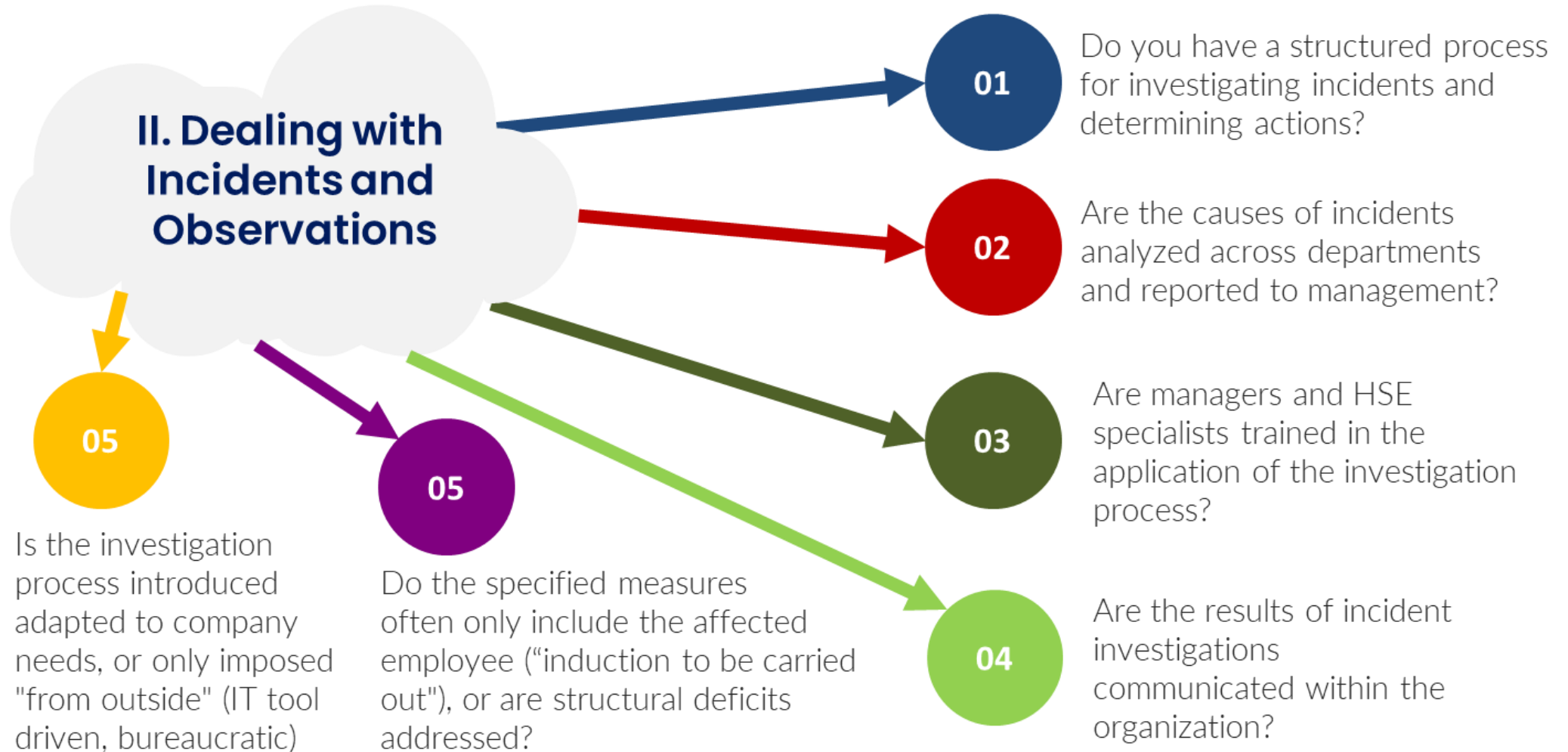


D) Reactive



Why the selected dimension matters for determining the state of your safety culture?

The following questions should help you to discuss the dimension in the workshop





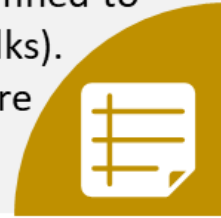
Which of the four states best characterizes the current situation in your area?

Safety Culture State Review – survey statements

X. Safety Leadership – engagement from the top

A) Dependent

HSE is supporting the leadership team to develop and implement a leadership program. Therefore a dedicated leadership training has been rolled out and measures are defined to keep control (e.g. count of safety walks). Managers aren't fully engaged and are taking a 'tick in the box' approach to comply with expectations



B) Independent

A Safety Leadership program has been rolled throughout all levels by senior leaders. Managers are regularly at site engaging with the workforce asking for feedback. Leadership teams also continuously communicating on HSE matters.



Leaders and Managers are at site by own interest. It has been a dialog communication (2-way approach) implemented to raise HSE topics. Leadership team takes ownership to follow up on agreed measures. HSE topics are communicated transparent and without any fear.



C) Interdependent

There is not any safety leadership program in place



D) Reactive



Which of the four states best characterizes the current situation in your area?

Safety Culture State Review – survey statements

XII. Implementation of behavioral prevention

A) Dependent

After serious events, employee-related ad-hoc campaigns are developed and implemented by the HSE department, such as "Safety Standdown", "7 Days HSE" etc.



B) Independent

Campaigns are prepared by the HSE department on the basis of what happened, the risk potential and suggestions by the employees, and are implemented in a structured manner by the supervisors together with the employees, for example "monthly HSE campaign".



All employees are repeatedly trained in specific behaviors and behavior patterns. As a result, employees learn why events occur and learn techniques to prevent events from occurring. The training program is carried out by the employees themselves (train the trainer).



C) Interdependent



There is not any behavioral prevention program in place

D) Reactive



Which of the four states best characterizes the current situation in your area?

Safety Culture State Review – survey statements

XV. HSE Digitalization

A) Dependent

For individual HSE tasks, decentralized approaches for digitization have been introduced, such as carrying out accident investigations and recording and evaluating of KPIs.



B) Independent

A centrally controlled IT tool for the collection and use of HSE data has been implemented. Only a defined group of employees / supervisors has access to the IT tool and use of the data. The IT tool has not yet been tailored to the company's requirements.



The centralized IT tool is tailored to the needs of all employees, easy to use including the use of mobile apps, and leads to a simplification of internal procedures and processes (reporting of observations, conducting inspections and safety walks, subcontractor management, KPI reporting, action tracking, information sharing)



C) Interdependent

There is no systematic approach for the digitization of HSE data in the company

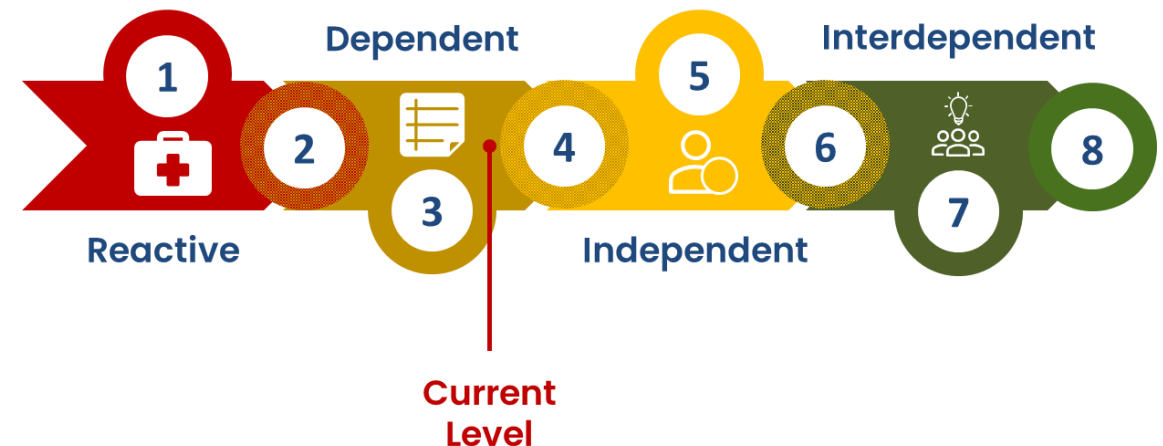
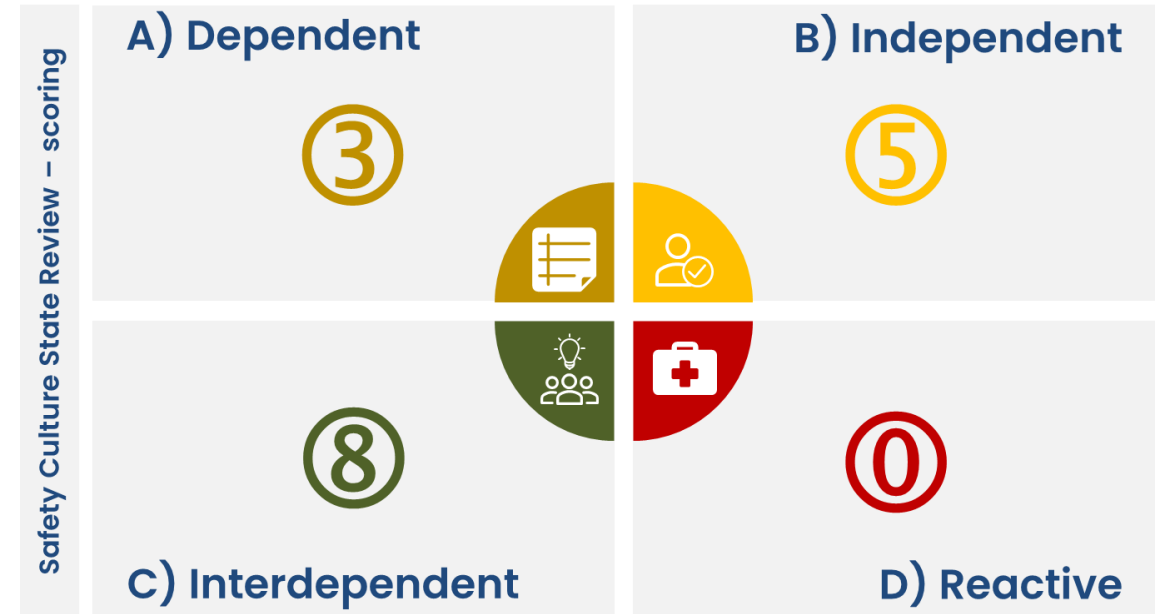
D) Reactive





How to score each state to calculate a Safety Culture State Review index?

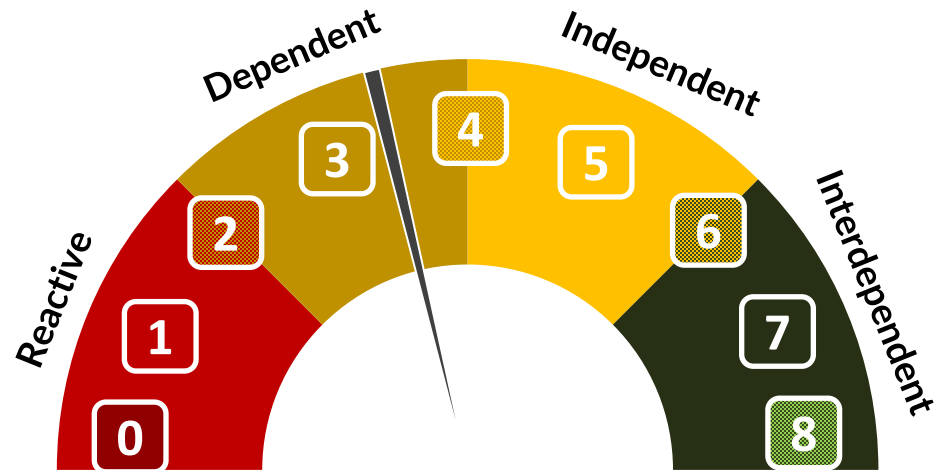
- The calculation of the SCSR-Index during the workshop is a **15 minutes exercise** and will give a dedicated result to participants
 - Each dimension will be rated by the workshop participants
 - Each state is assigned a score (0, 3, 5, 8)
 - First, the average of each dimension is calculated, and then the average of all dimensions.
- The average of all workshops-index is defined as SCSR-Index



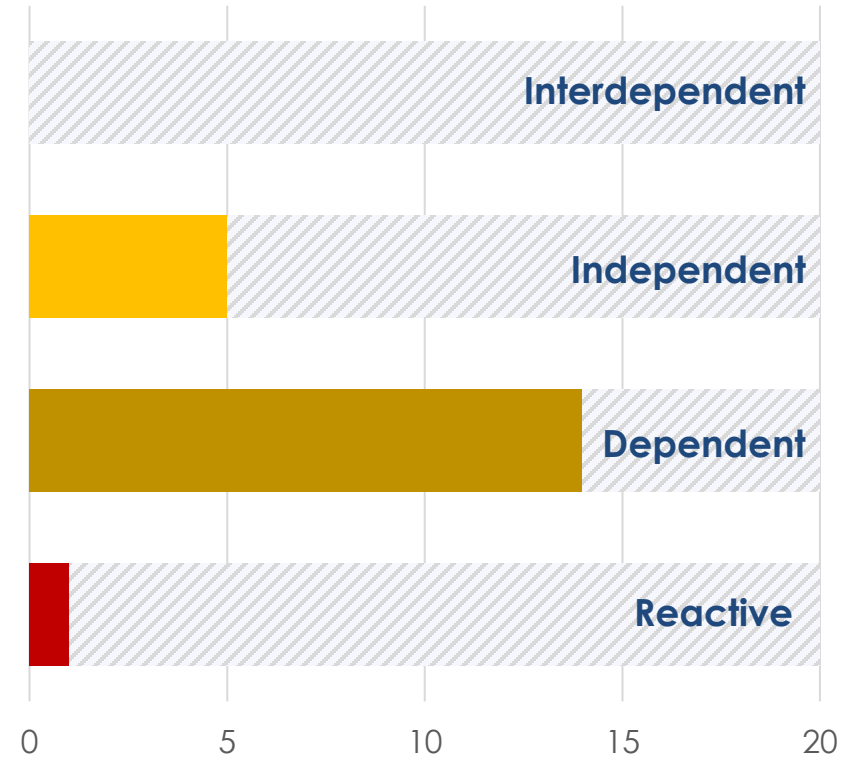


Overview results of the Safety Culture State Review

Example data



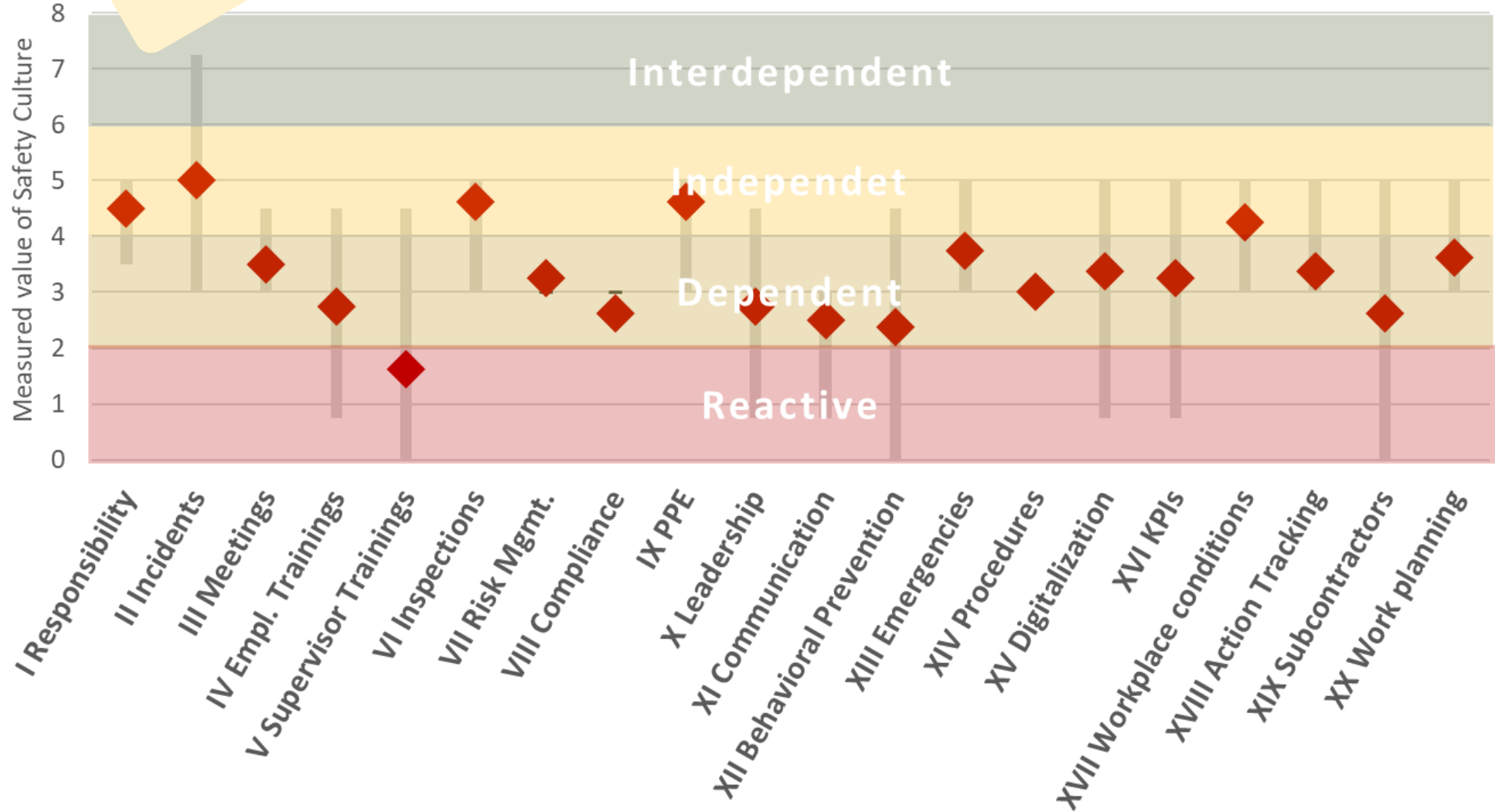
Result of the SCSR
3,4





Detailed results for the dimensions of the Safety Culture State Review

Safety Culture State Review Dimensions - Analysis

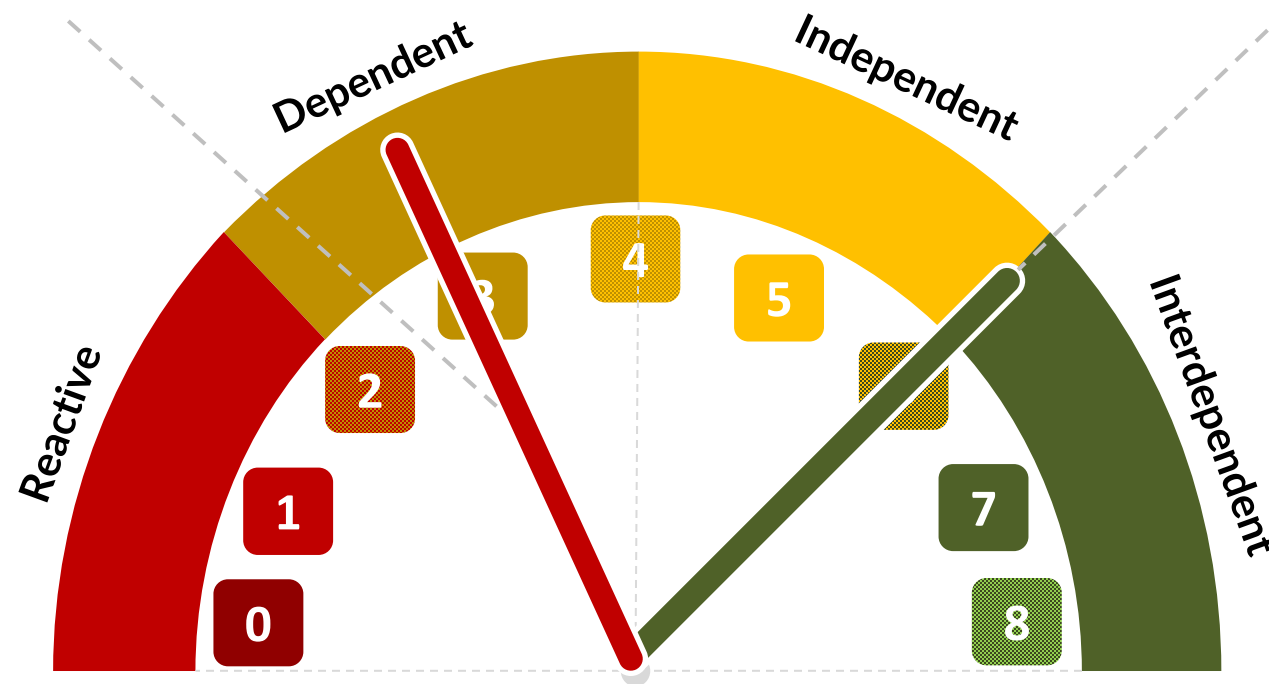




The **SCSR-meter** helps to visualize the current and desired state of companies' safety culture

Current state based on questionnaire results

Desired state based on management decision





Step 2 - Safety Culture State Review Workshop



Status Quo evaluation

- Analyze the current HSE performance data
- Internal review of dimensions
- Defined adjustments to the SCSR model

Plan



Safety Culture State Review Workshop

- Carry out Safety Culture State Review workshops within the organisation and with Senior Leadership Team (SLT)
- Analyse the results of the workshops and present it to SLT
- Set with SLT short and medium goal

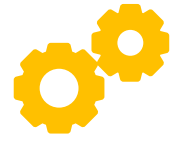
Do



Prioritization of dimensions

- Prioritize 4 dimensions for short term and medium term
- Take in mind for periodization: current status, low hanging fruits, integrate with other initiatives, largest different rating
- Resource planning and budgeting

Check



Action planning & 3y Strategy

Act



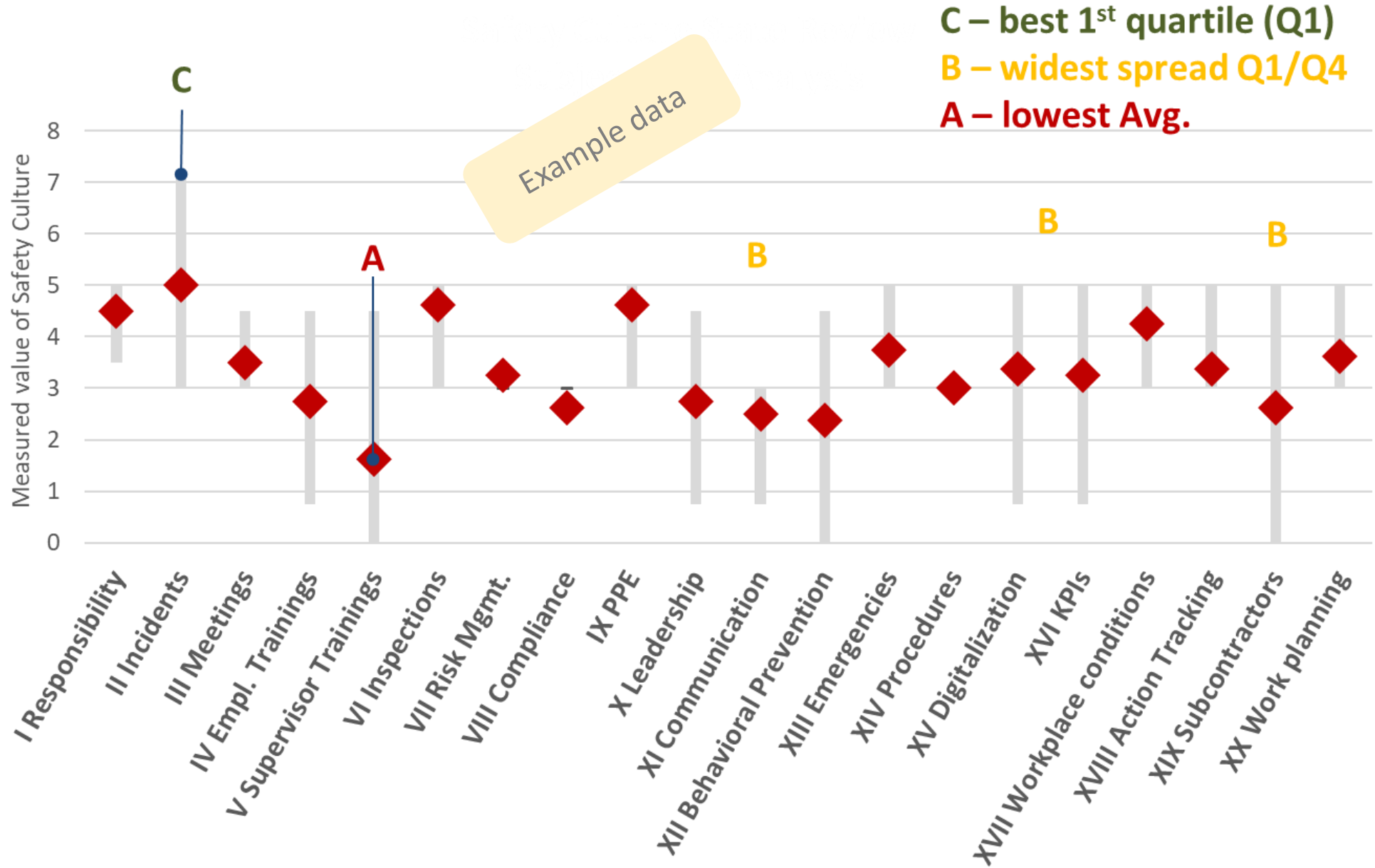
Prioritization and action planning



1. Prioritize 4 to 6 dimensions for further discussions
2. Agree with participants simple, clear and ambitious measures
3. For each measure an action owner and progress reporting process shall be defined
4. Take in mind for periodization: current status, low hanging fruits, integrate with other initiatives, largest different rating
5. Summarize results of the workshop



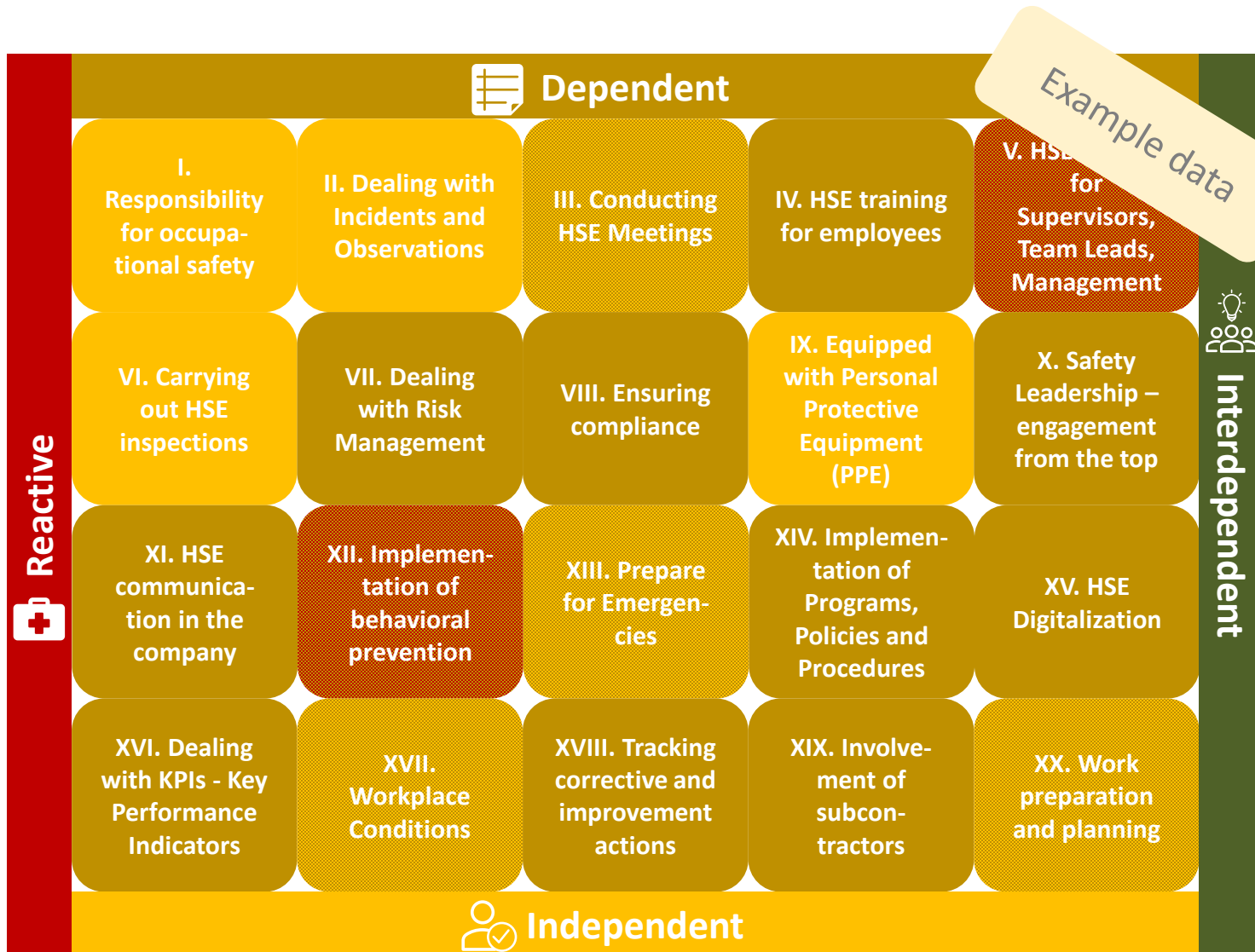
Prioritise dimensions to improve companies' safety culture





Prioritize dimensions to improve companies' safety culture

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8



- Example case studies
 - Construction company
 - Power Supply Utility



Step 2 - Safety Culture State Review Workshop



Status Quo evaluation

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Prioritization of dimensions

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- Take in mind for periodization: current status, low hanging fruits, integrate with other initiatives, largest different rating
- Resource planning and budgeting

Check



Action planning & 3y Strategy

- Develop a specific action plan
- Issue a SCSR-report
- Approve action plan by SLT, quarterly review with SLT
- Define and get SLT endorsement of mid-term EHS strategy
- prepare follow up SCSR workshops for continuous measurement

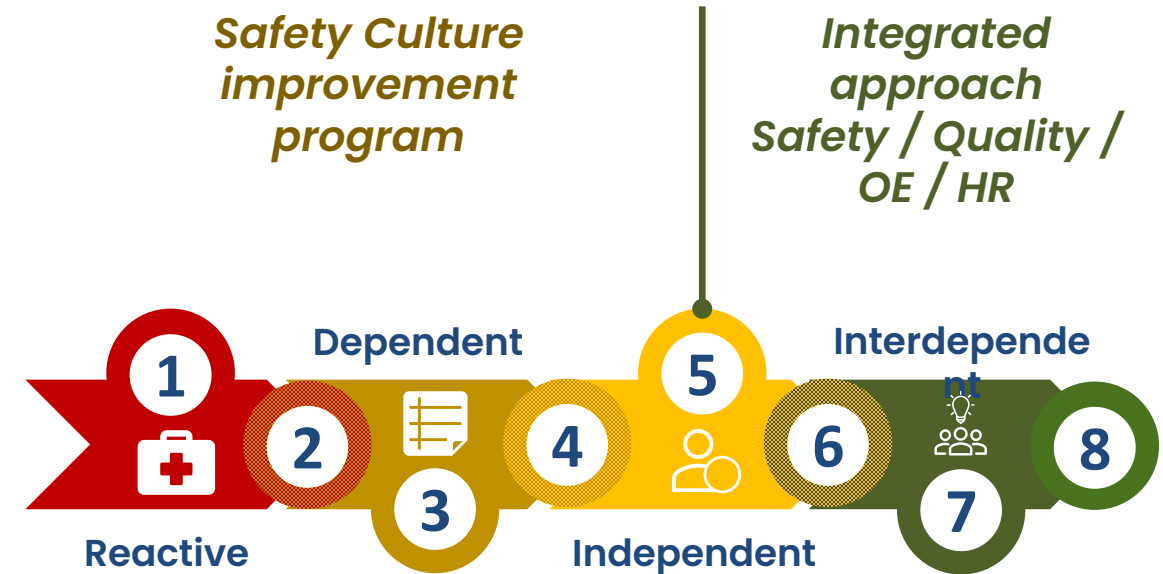
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Develop a 3 years strategy plan and get it endorsed by the SLT

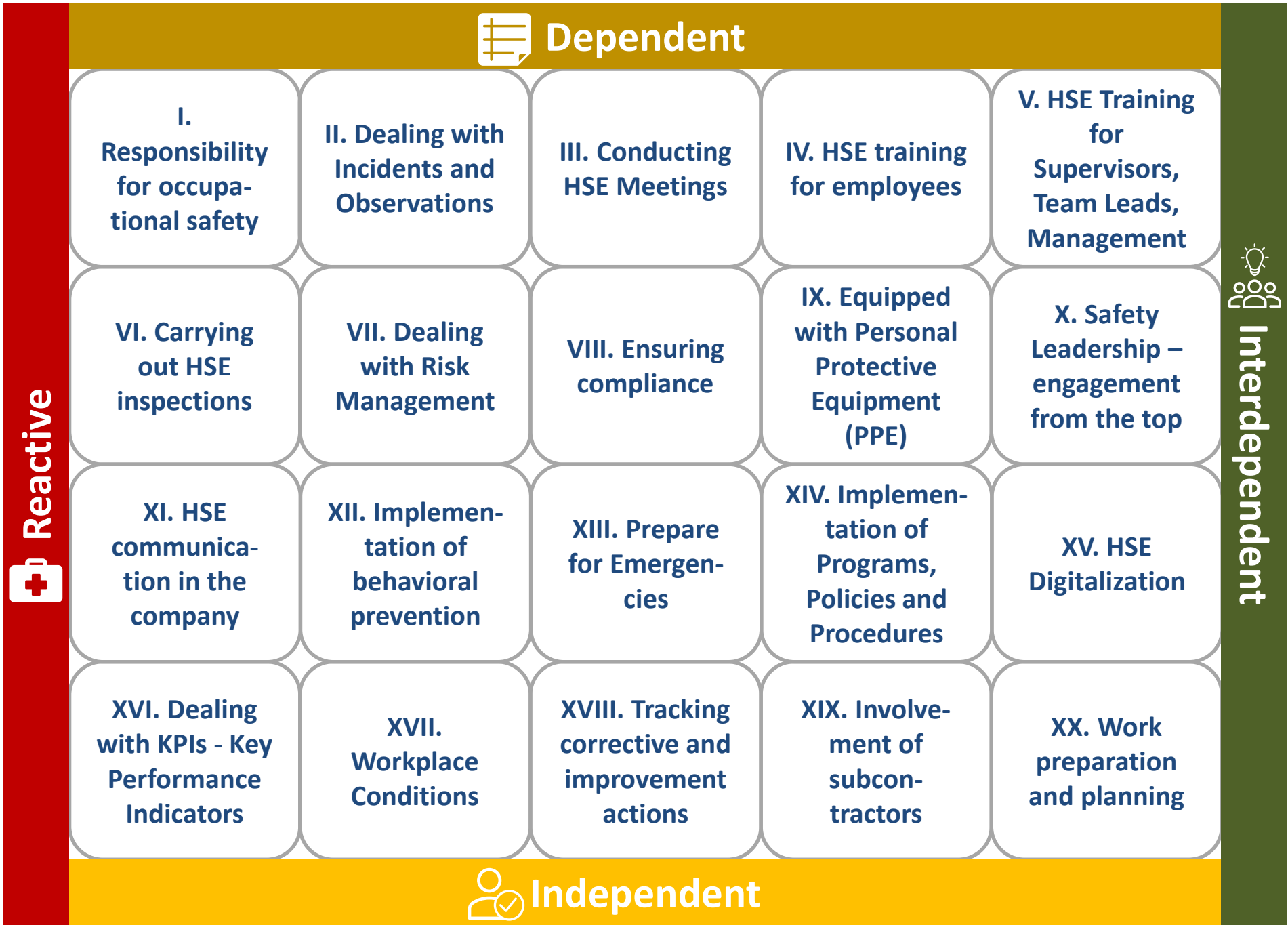


- **Painting the picture** - how the company might look like in 3 years time applying the new ways of working
- Clearly state that from achieving **level 5 and above**, all areas within the company are effected from the transitional change program
- The **SCSR approach can be easily adapted to Quality Management / Product Quality and Operational Excellence**. Also all HR programs are effected from this change program.
- **Combining the programs for safety culture, quality culture, operational excellence and HR will lead to a sustainable increase in profitability.**



<https://safetyculturestatereview.com>

The 20 Dimensions can also be used for Quality and Operational Excellence, they are universal





Comparison of programs targeted to influence and improve a companies' safety culture

	Bradley Curve	Hearts & Minds	Safety Culture Ladder (SCL)	Safety Culture State Review (SCSR)
Developed by	DuPont / dss+	Shell / Energy Institute	TenneT / nen	own suggestion
Starting Year	1990th ->	1990th , 2000th ->	2020 ->	2022 ->
Theory Model	Covey / Collins	Swiss Cheese	???	Covey / Collins
Science based	No (partially)	Yes	No	No (partially)
Driven by	External consultants	Internal resources	External certifier	Internal resources
Certification	No	No	Yes	No
Cost impact for impl.	High	Middle	Very high	Low
Effort for assessment	High	Low	Very high	Low
Impact to company	Middle (+)	Middle (+)	Fewer (--)	
Supporting material to access	Not available / highly difficult to access	Fully available and easy to access	Partially available	Easy to access (open source)



Close out statement

Safety can't be a *priority*
(priorities change daily and are political),
it must be a ***core value*** embedded
in the very DNA of the company so
that's it very much
'what we do around here'

Scott Geller