



**Safety Culture Background –
Linkage to ISM
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Learning Objectives

Walk away from today's three presentations with an understanding of:

- What is safety culture and why it is important to your ISMS
- How you assess safety culture
- How you enhance your safety culture

Why Culture Important to DOE

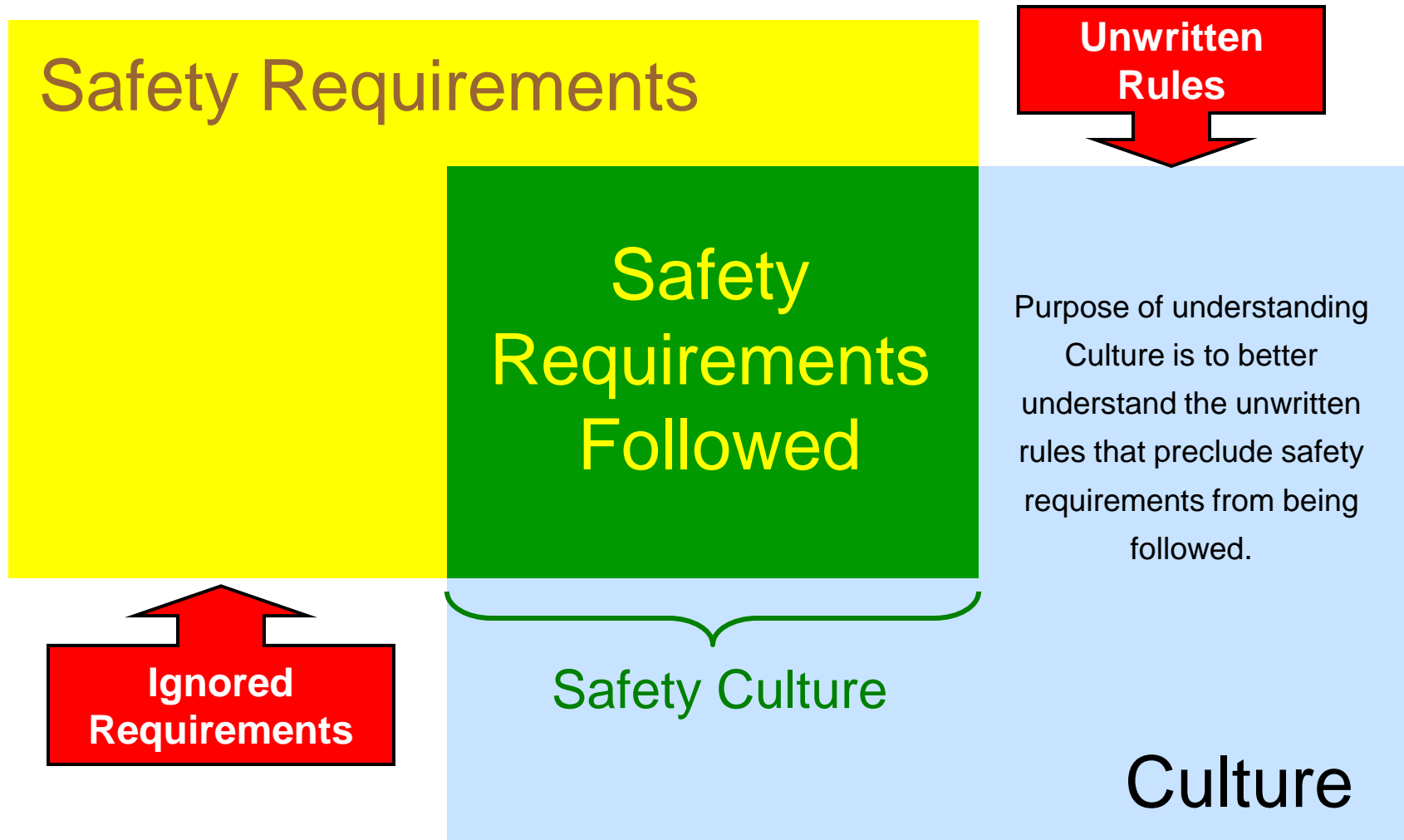
Safety Culture Provides

1. Sustainability for Safety

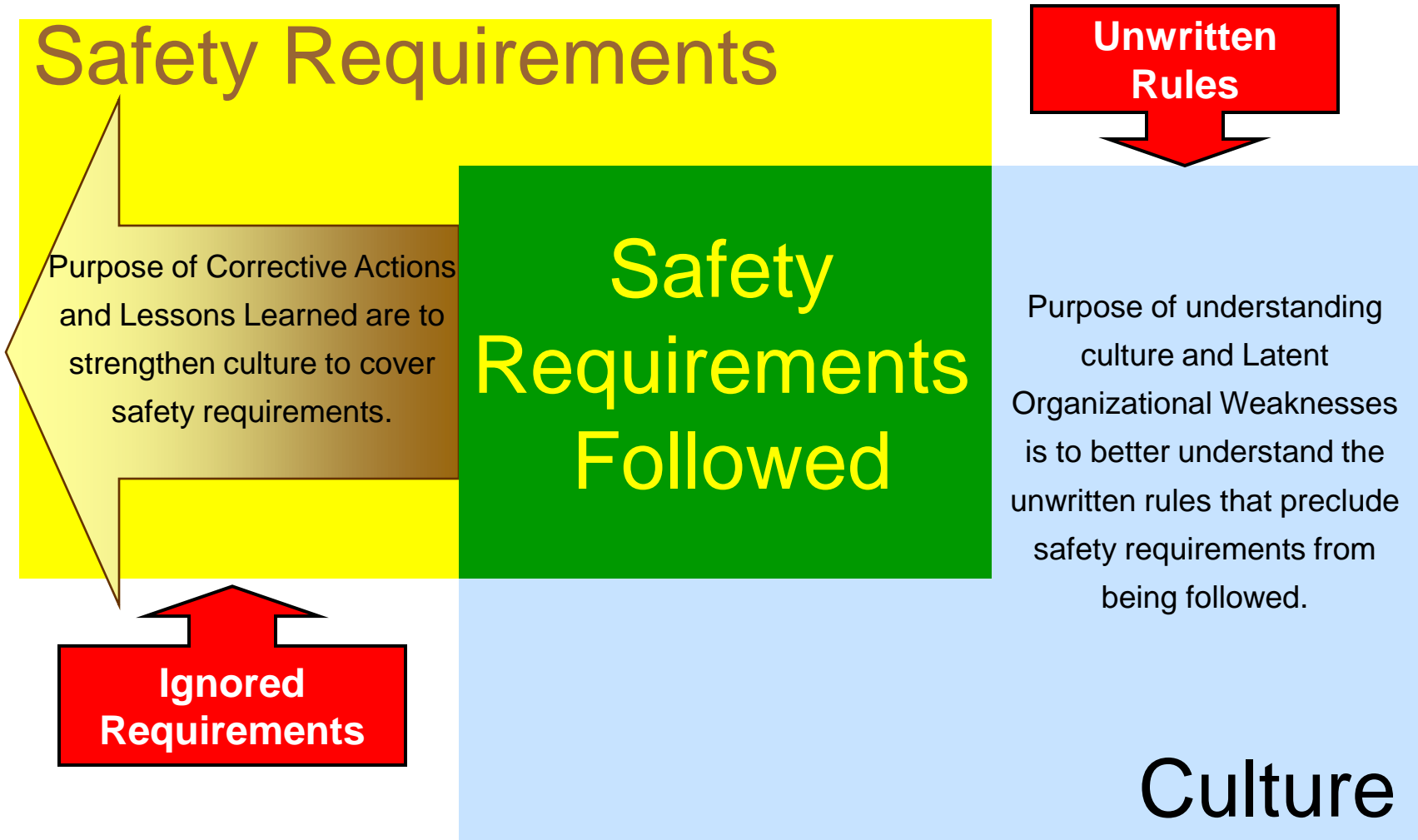
or

2. Inhibitors to being Safe

Why Culture Important to Your Organization



Why Strengthening Safety Culture Essential to Your Organization



Definition of Safety Culture

An organization's values and behaviors, modeled by its leaders and internalized by its members, which serve to make safe performance of work the overriding priority to protect the public, workers, and the environment.

EFCOG Safety Culture Task Group, 2008



Your Role as a Leader

“When we examine culture and leadership closely, we see that they are two sides of the same coin; neither can really be understood by itself

it can be argued that the only thing of real importance that leaders do is to create and manage culture;

that it is an ultimate act of leadership to destroy culture when it is viewed as dysfunctional.”

Schein, Organizational Culture and Leadership, 2004



Approach to Strengthening Safety Culture

- Understand that safety culture is the collective response of organizations to external and internal stimuli
 - Evaluation of safety culture provides an indication of the effectiveness of ISMS
- Educate management on safety culture
 - Establish common understanding & terminology
 - Sensitize to indicators of safety culture (good and bad)
- Management baseline current culture, decide if ISM programs achieving their desired results
 - Sustainability
 - Inhibitor
- Management strengthen safety culture as required



Basics of Safety Culture



Schein Levels of Culture

Artifacts
and
Behaviors

Easy to Observe – Difficult to Decipher

- Includes all phenomena one sees, hears, feels when one encounters a new group
- Includes visible products of group, such as architecture, language, technology, products, clothing, manners of address, emotional displays, myths, stories about the organization,
- Climate – an artifact of deeper cultural level – organizational processes, charters, formal descriptions of how organization works, org charts, etc.

Espoused
Beliefs
and
Values

What “ought to be” versus what “is”

- Leader poses a solution to a problem → not yet a shared basis for determining if request valid
- Group takes joint action and observes outcome
- If outcome is successful for long enough period, then perceived value is transformed to shared values or beliefs and ultimately to shared assumptions. à implies outcome can be tested as successful
- If not testable, still can have social validation but takes longer and no guarantee
- Espoused value = what “ought to be” vice what “is” If “ought to be = is, then strong philosophy
- Must watch for incongruency between espoused beliefs and underlying assumptions for signs of aspirations or rationalizations

Underlying
Assumptions

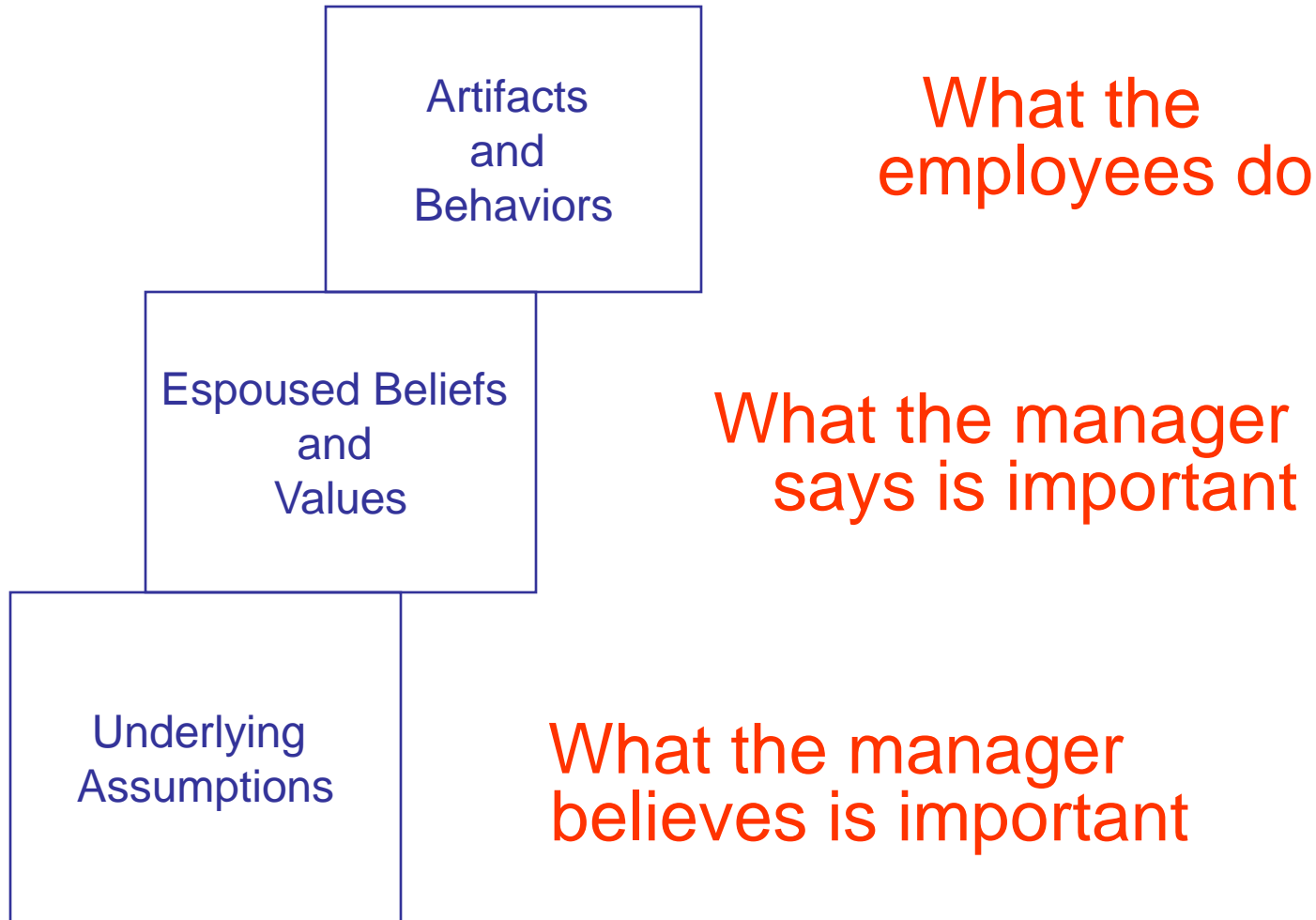
Basic assumptions non-confrontable and non-debatable and extremely hard to change

- Changes require us to resurrect, reexamine and possibly change some of the more stable portions of cognitive structure
- These changes are intrinsically difficult and release large quantities of anxiety
- Rather than tolerate anxiety, we tend to perceive events as congruent with our underlying assumptions even if it requires distorting, denying, projecting, or falsifying to ourselves what is going on around us
- Must decipher underlying assumptions if hope to interpret artifacts

Two keys to be successful at culture change:

1. Be prepared to handle large amounts of anxiety that may accompany relearning → mgt involvement a must !!!!!
2. Determine if genetic potential for learning is present

Perspectives from Schein – Levels of Culture



Unhealthy/Weak Safety Culture or an Intelligent Safety Culture?

Unhealthy/Weak Safety Culture

Artifacts
and
Behaviors

Espoused Beliefs
and
Values

Underlying
Assumptions

*I have found the
enemy, and the
enemy is me*

Intelligent Culture

Artifacts
and
Behaviors

*Workforce does
what you want,
not what you say*

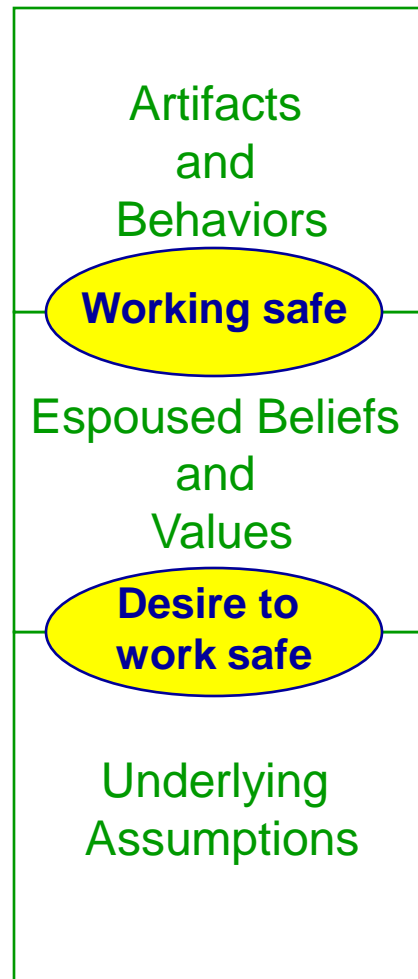
Espoused Beliefs
and
Values

Underlying
Assumptions

Healthy/Strong Safety Culture

Exists when Underlying Assumptions Line up with
Espoused Values which Line up with Artifacts

Healthy/Strong Safety Culture



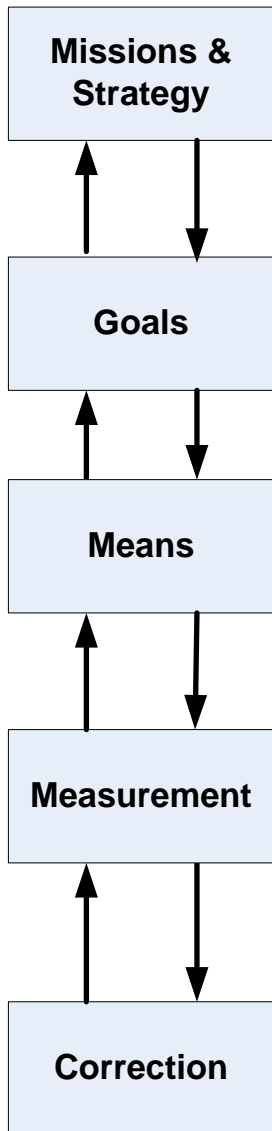
*The next level of
safety improvement
will be the most
challenging*

*Its what you do,
not what you say.*

Alignment between espoused
values and artifacts or
behaviors indicates
**employees buying-into
safety culture**

Alignment between
underlying assumptions and
espoused values indicates
managers walking-the-talk

Steps in External Adaptation and Survival



Obtain a shared understanding of core mission, primary task, and manifest and latent functions

Develop consensus on goals, as derived from the core mission

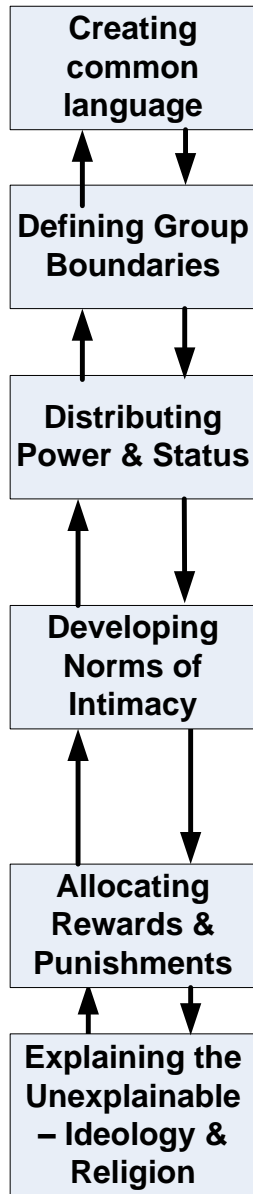
Develop consensus on the means used to attain the goals, such as the organization structure, division of labor, reward system, and authority system

Develop consensus on criteria to be used to measure how well the group is fulfilling its goals, such as the information and control system

This step also involves the cycle of obtaining information, getting that information to the right place within the organization, and digesting it so that appropriate corrective actions can be taken

Develop consensus on the appropriate remedial or repair strategies to be used if goals are not being met

Internal Integration Issues



If the group members cannot communicate with and understand each other, a group is impossible

Group must define itself with respect to who is in, and who is out and by what criteria membership is determined.

Group must determine its pecking order, how members get, retain, and lose power

Consensus is crucial to help members manage feelings of anxiety and aggression.

Every group must work out its rules for peer relationships, for relationships between sexes, and for the manner in which openness and intimacy are handled in the context of managing the organizations tasks

Consensus is crucial to help members manage feelings of affection

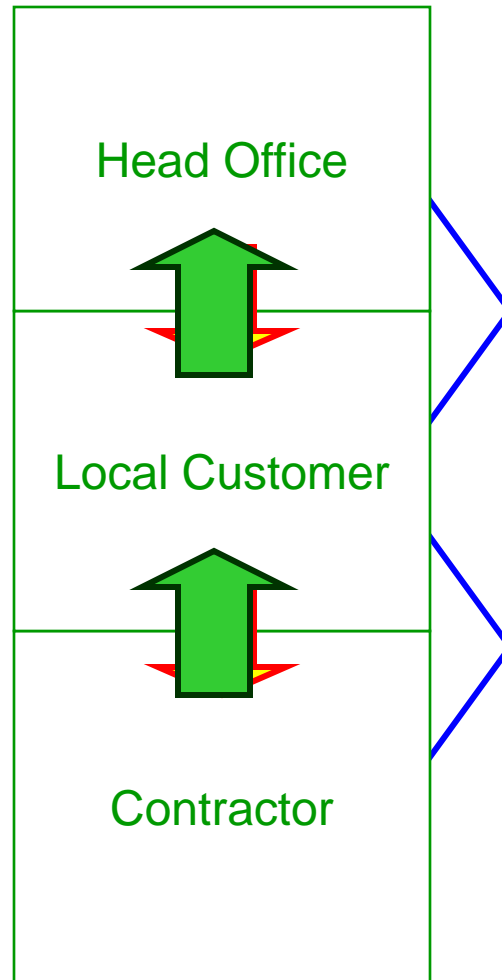
Every group must know what is heroic and sinful and must achieve consensus on what is reward and what is punishment

Every group faces unexplainable events that must be given meaning so that members can respond to them and avoid the anxiety of dealing with the unexplainable and uncontrollable

Sustainable Safety

Exists when Sub-Cultures Align

Healthy/Strong Safety Sub-Cultures



The most relevant model to describe the formation of culture is what the group does to:

- Survive its adaptation to its external environment
- Integrate its internal processes to ensure the capacity to continue to survive and adapt

Organizational Culture and Leadership
Schein (c) 2004

Be Aware of Challenges of Organizational Subcultures

Operator Culture

- No matter how good the engineering is, we have to deal with unpredictable contingencies
- Success of organization depends on us
- We have to learn and operate as a team

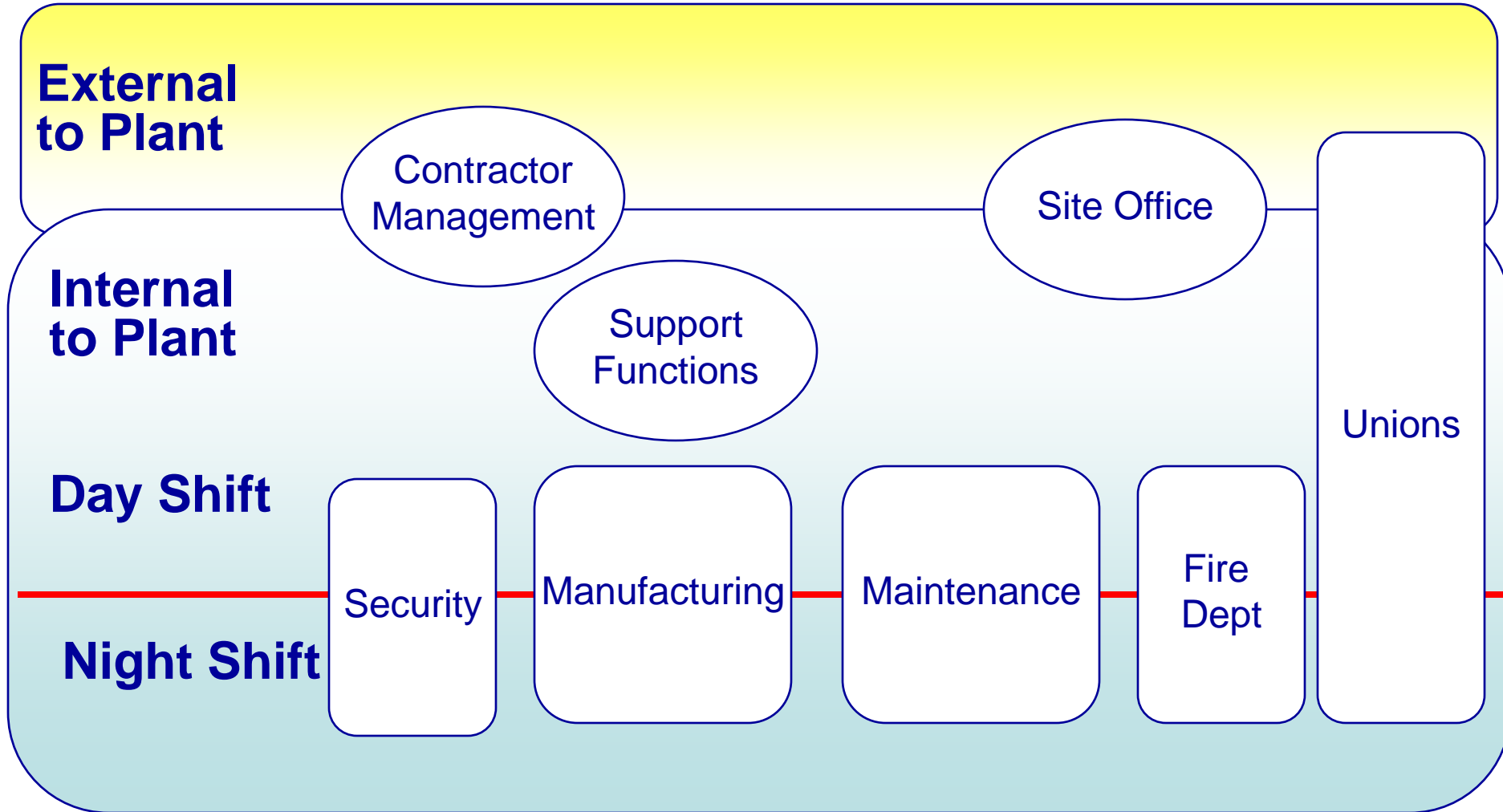
Engineering Culture

- Nature can and should be mastered
- Operations should be based on science and technology
- People are the problem – design out of system

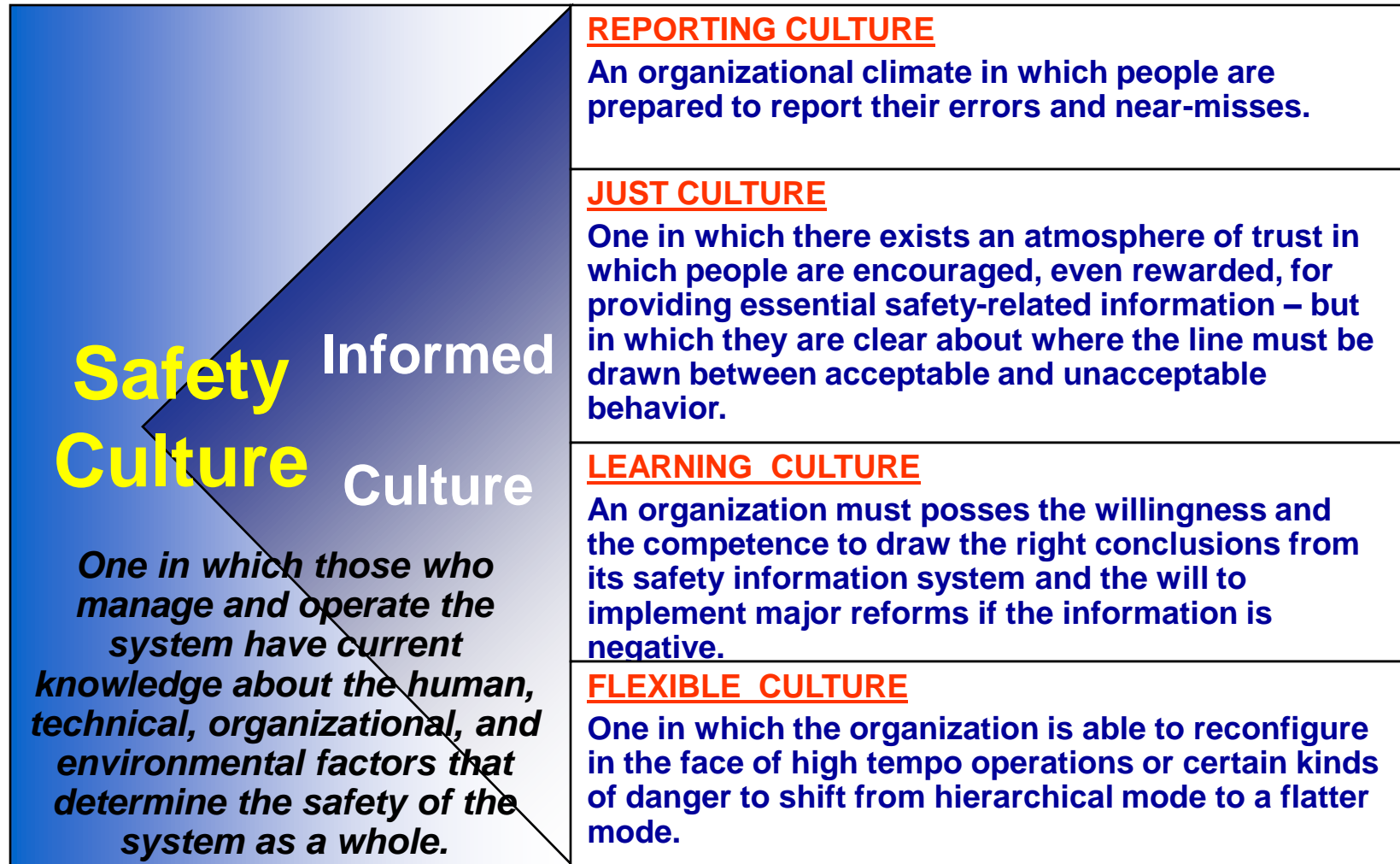
Executive Culture

- Without financial survival and growth, no service to shareholders
- Economic environment perpetually competitive
- Because of size of organization it becomes depersonalized and must be run by rules, routines, and rituals

Be Aware of Challenges of Organizational Subcultures



Components of Safety Culture



Basics on Assessing Safety Culture

Evaluate Your Organization's Safety Culture

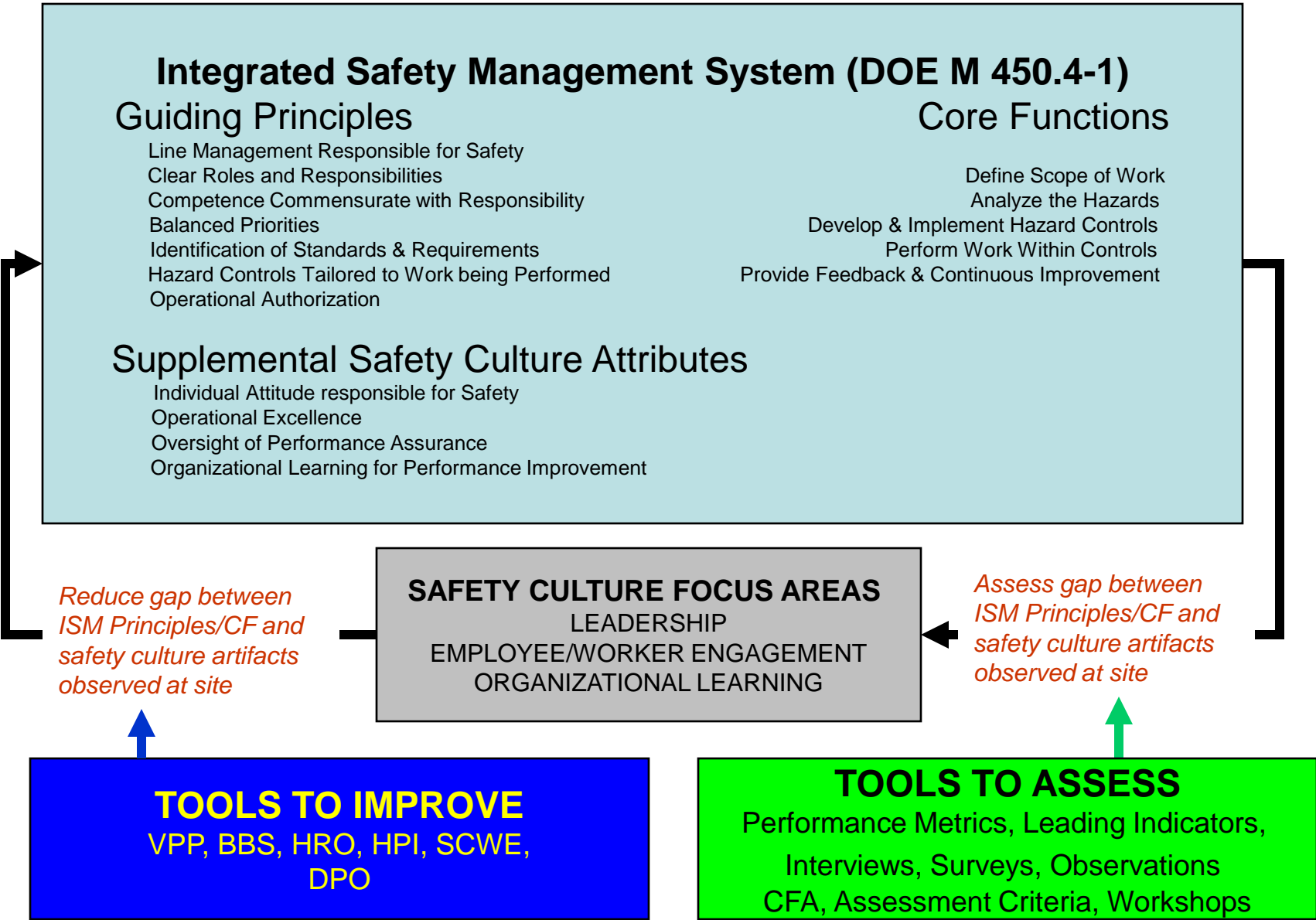
Do your espoused values reflect your underlying assumptions of what is right?

Does the behavior of your organization reflect your espoused values?

How do you know and what does it mean?



Continuous ISMS Improvement Thru Strengthening Safety Culture



Safety Culture Focus Areas w/ Attributes

(DOE M 450.4-1)

- Leadership
 - Clear expectations and accountability
 - Management engagement and time in field
 - Conservative decision making
 - Open communication/raising issues in an environment free from retribution
 - Demonstrated safety leadership
 - Staff recruitment, selection, retention, & development
- Employee/Worker Engagement
 - Personal commitment to everyone's safety
 - Teamwork and mutual respect
 - Participation in work planning and improvement
 - Mindful of hazards and controls
- Organizational Learning
 - Performance monitoring through multiple means
 - Use of operational experience
 - Trust
 - Questioning attitude
 - Reporting errors and problems
 - Effective resolution of reported problems



Methods of Assessing Safety Culture

- Direct observations of work place behavior
- Causal Factors Analyses or Root Cause Analyses
- Surveys
- Face-to-face interviews
- Review of key safety culture related processes
- Performance indicators
- VPP assessments
- Stream analysis



Words of Wisdom When Assessing Safety Culture - I

- Organizational culture can be studied in a variety of ways
- The method one chooses should be determined by one's purpose
- Just assessing culture is as vague as assessing personality or character in an individual
- Think of the assessment in terms of the problem you want to correct – start with the end in mind
- Use the tools to get the information required to fix the problem, not necessarily to fix the culture

Words of Wisdom When Assessing Safety Culture - II

- When human subjects are involved in culture assessments, there is a tendency for them to either
 - resist and hide data they feel defensive about or
 - to exaggerate in order to impress the observer
- Even best organizations generate “toxins” – frustrations with boss, tension over missed targets, scarce resources, etc.
 - When assessing culture, observer may find himself listening to tales of woes from frustrated employees who have no other outlet
- If culture observer has any hopes of getting an accurate picture of organization, a method must be found that encourages the insiders to “tell it like it is” rather than trying to impress the observer, hide data, or blow off steam



Words of Wisdom When Assessing Safety Culture - II

- Observer may be seen as a nuisance, a disturbance, or an audience to whom to play
- Key point is the observer has no way of knowing which of the many possible intervention outcomes are happening and whether or not they are desirable either from a data gathering or ethical point of view
- As a result, one should examine carefully the broad range of interventions and carefully choose which method to use

Level of “Subject” Involvement	Level of “Observer” Involvement	
	Low to Medium	High
Minimal	Observations at a distance	Participant observations, symbols, artifacts
Partial	Questionnaires	Interviews
Maximal	Statistical quality tools	Clinical research, organizational development

Words of Wisdom When Assessing Safety Culture - IV

- Regardless of the way the cultural data is gathered, the organization can be made vulnerable through having its culture revealed to outsiders
- If the organization's culture becomes known to outsiders either through publication or conversations, the organization or some of its members may be put to a disadvantage because data that would normally remain private not becomes public

Analogy: If safety culture is to an organization as character is to an individual, how would you feel if your personality profile was published for all to see?

Words of Wisdom When Assessing Safety Culture - V

- If an organization is to understand its own strengths and weaknesses and to make informed strategic choices based on realistic assessments of external and internal factors, it must at some point assess and understand its own culture
- Note, however the process is not without risks:
 - Analysis of culture could be incorrect
 - Organization might not be ready to receive feedback about its culture

Analogy: If safety culture is like character – functioning in part as a set of defensive mechanisms to help avoid anxiety – conditions might make organization reluctant to accept cultural truth about itself.

Words of Wisdom When Assessing Safety Culture - VI

- A potentially more dangerous risk is that some members will achieve instant insight and automatically and thoughtlessly attempt to produce changes in the culture that:
 - Some members may not want
 - Some members may not be prepared for
 - May not solve the root problem

Analogy: One reason people avoid therapy is that they are not ready for the insights that therapy brings. Insight sometimes produces change “automatically” because certain illusions and defenses can no longer be use.

Words of Wisdom When Assessing Safety Culture - VII

- To study culture and reveal that culture to insiders can be likened to invasion of privacy, which under many circumstances is not welcome
- Therefore students of culture should make their client fully aware that there are consequences of having elements of one's culture laid bare

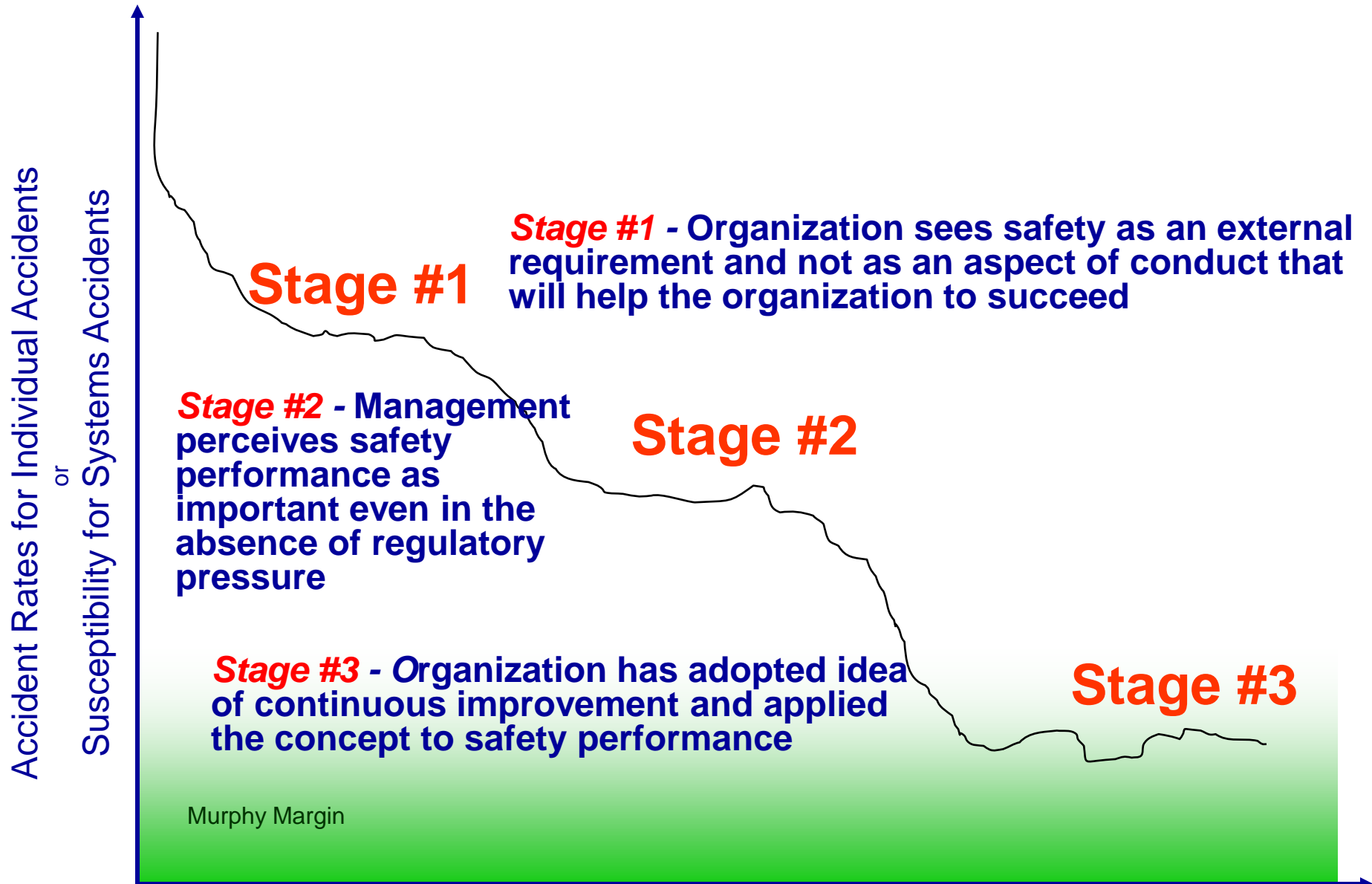
Two keys to be successful at culture change:


- **Be prepared to handle large amounts of anxiety that may accompany relearning → mgt involvement a must !!!!!**
- **Determine if genetic potential for learning is present**

Basics on Enhancing Safety Culture



Stages of Safety Culture Maturity



A vertical decorative element on the left side of the slide, featuring a classical column capital with intricate carvings, set against a solid red background.

“The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn, and relearn.”

Alvin Toffler
“Rethinking the Future”

Human Behavioral Technology Basics

- People do what they have done before
- People do what they see others do
- People don't do what they can't
- Behavior is a function of structure
- Behavior is elicited by antecedents
- Experience makes an antecedent out of an item
- Reinforcement increases frequency
- Punishment elicits only its avoidance
- Null consequences are reinforcement for dysfunctional behavior

Path Forward – Safety Culture

- Understand that safety culture is the collective response of organizations to external and internal stimuli
 - Evaluation of safety culture provides an indication of the effectiveness of HRO programs
- Educate yourself on safety culture
 - Develop a common understanding of concepts & terminology
 - Sensitize yourself to indicators of safety culture bot good and bad
- Baseline your organization’s current culture, decide if your HRO programs are achieving their desired results
- Change your safety culture as required

The Manager’s Role:

“When we examine culture and leadership closely, we see that they are two sides of the same coin; neither can really be understood by itself . . . it can be argued that the only thing of real importance that leaders do is to create and manage culture; that the unique talent of leaders is their ability to understand and work culture; and that it is an ultimate act of leadership to destroy culture when it is viewed as dysfunctional.” (Schein, 2004)