

GULF RESEARCH PROGRAM

# Overview of the GRP Project for the Development of a Safety Culture Evaluation Toolbox

June 2023

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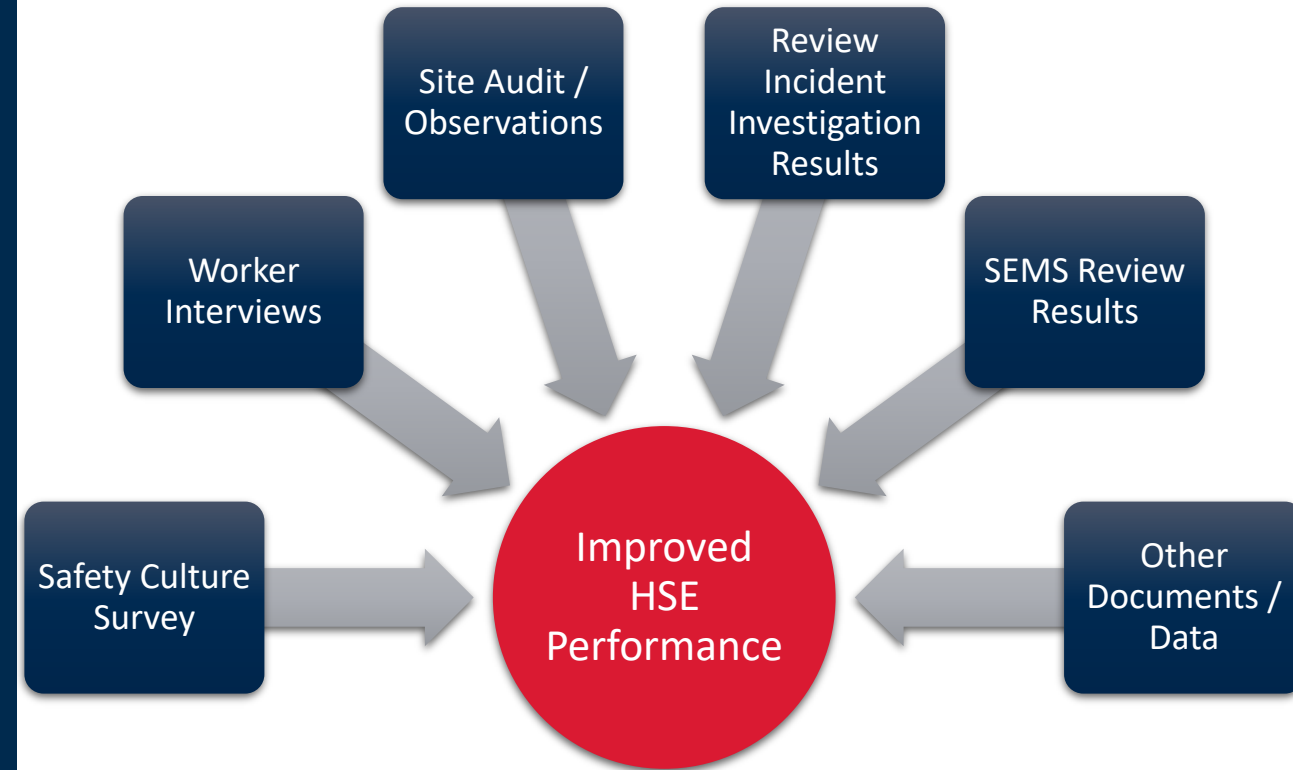
# Project Overview

## Title:

Developing an Integrated Offshore Energy Industry Safety Culture Evaluation and Improvement Toolbox

## Purpose:

Develop pragmatic tools and guidance for the self-evaluation and assessment of safety culture for US Gulf of Mexico (GOM) offshore assets



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# Project's Objectives

- The development of a safety culture evaluation toolbox
- Contents to include:
  - Access to an electronic survey
  - Access to spreadsheets with the different checklists
  - Automated data analysis
  - Automated report generation
  - Process to help identify Organizational safety culture maturity
- Benefits of the tool kit include:
  - No need to develop internal tools
  - Rapid analysis due to established procedures and algorithms
  - Uses multiple inputs (data streams) to evaluate safety culture
  - Based on best practices



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# Characteristics of Safety Culture Issues

- Chronic work backlogs
- Problems that never seem to get better
- Misplaced ownership, invisible/ineffective leadership
- Many incidents involve “people not following procedures”
- Repeated root causes – over and over and over...
- Corrective actions don't address root causes
- Fixes don't stay fixed
- No/poor company memory



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# Safety Culture and Associated Safety Culture Factors

## Safety Culture Factors

1. Leadership Commitment
2. Hazard Identification
3. Personal Accountability
4. Work Processes
5. Continual Improvement
6. Environment for Raising Concerns
7. Effective Communication
8. Respectful Work Environment
9. Inquiring Attitude

Definition - “the core values and behaviors of all members of an organization that reflect a commitment to conduct business in a manner that protects people and the environment” (BSEE, 2016)

Their selection is based on several factors:

- 1) They align very well with the research and reviews conducted for this project
- 2) The BSEE safety factors are familiar to owners and operators in the US Gulf of Mexico
- 3) The ability to build upon these factors

# Safety Culture Survey



Onshore / offshore surveys



The question list can be customized to meet the needs of specific companies (adjust phrasing/terminology)



Implemented the survey in an online survey tool. Support for Survey Monkey, Google Forms, LimeSurvey, etc.



Automation of survey results - Data analysis and writeup of the survey results (results in Microsoft format )



Automation will be done via R and Python workbook so the codebase can be maintained easily



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# Safety Culture Survey



Forty-five (45) questions – mapped to the Safety Culture Factors

- Six (6) demographic questions
- Scale is a 5-point Likert



Two (2) questions – that are open-ended



Survey takes approximately fifteen (15) minutes to complete



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# Employee Interviews



Photo by cottonbro: <https://www.pexels.com/photo/woman-holding-clipboard-3205566/>

- Interview data collected from all levels of an organization

## Value-added to:

- Gain a clearer understanding of how the organization views various aspects or factors of the safety culture
- Combine with information from other data streams to help provide clarity on the culture and maturity
- Provides an opportunity for the worker to share examples or to expand into areas of the safety culture that were not specifically (or sufficiently) addressed in the survey



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# Employee Interviews



Eighteen (18) questions – all tied to the Safety Culture Factors

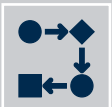
Grading is based on supports, partially supports, offers little or no support to the questions, or is not applicable  
Opportunity to make additional clarifying comments



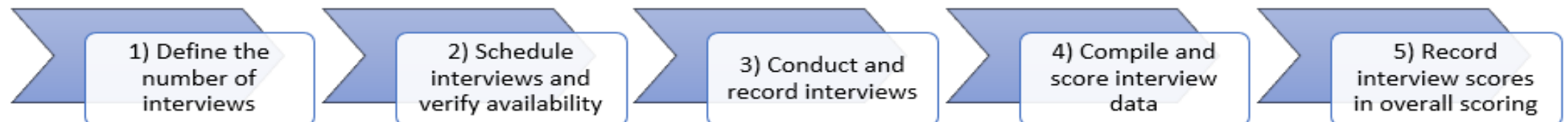
Interviews are voluntary, involving personnel at all levels of the organization



Interviews are typically 30 – 45 minutes long



Process



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# Site Safety Walkthrough

In contrast to perception-focused data from surveys and interviews, data obtained from a site visit and facility walkthrough by the assessment team provides “hard” data

Site safety walkthroughs offer the ability to:

- Physically observe the conditions at the facility
- Provide a clearer picture of the safety culture
- Include the results in the overall safety culture assessment and maturity model evaluations
- Compare physical data is to the softer, perception data from surveys and interviews
- Provide a means to help draw conclusions about perception vs. reality



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# Site Safety Walkthrough Checklist



Forty-one (41) questions

- Grading is based on supports, partially supports, offers little or no support to the questions, or is not applicable
- Opportunity to make comments



Focus areas

- Initial site safety briefing/orientation
- Impromptu Personnel Discussions (if the opportunity is available)
- Life Safety Apparatus/equipment
- Housekeeping
- Work observations (Observe work in progress, if possible)
- Equipment condition (insulation, paint, rust, etc.)

1) Schedule and confirm the visit

2) Conduct the facility walkthrough

3) Compile and score walkthrough data

4) Record walkthrough scores in overall scoring

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# Review of Incident Investigations

A review of incident investigation reports can provide insight into the safety culture of a facility/company

The quality of the incident investigation reports are indicative of the priority that is placed on learning from previous incidents; a key element of a safety-conscious culture

The importance that an organization places on the timely completion of corrective actions identified in incident investigations is an indicator of the safety culture of both management and workers

During this review, there may be investigation results that can be tied to safety culture factors

# Common Findings from Incident Investigations

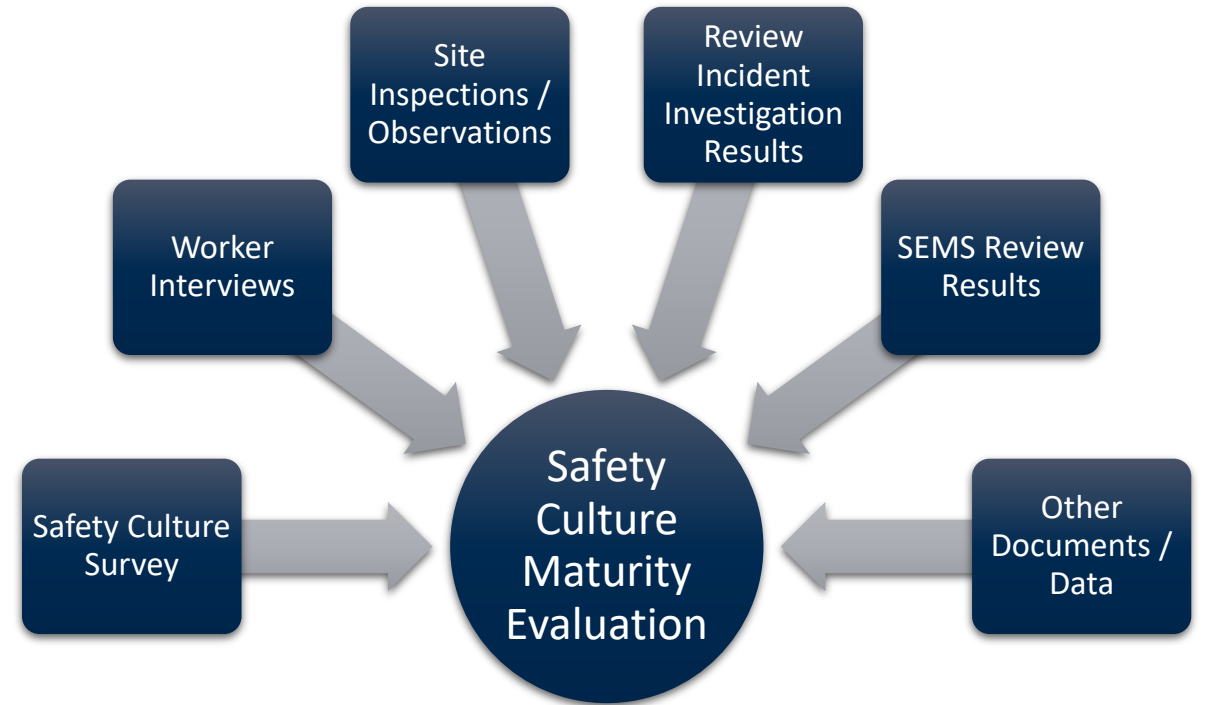
- Management system failures
- Actions/inactions of managers
- Actions/inactions of workers
- Failure to follow procedures
- Procedures are wrong or confusing
- Procedures are missing
- Inadequate training
- Proper tools not available
- Insufficient staffing

# Results (Interviews, Walkthrough, Reviews, Etc.)

- Three (3) options for each question
  - Yes – Response supports the question
  - Partial – Response partially supports the question
  - No – Response provides little or no support to the question
- Overall score is generated
  - >85% – Most items appear to be in good practice
  - 70% - 85% - Some items appear to be in good practice
  - <70% - Opportunities for improvement have been identified
- Traffic light color system employed for visual representation (**green**, **yellow**, **red**)

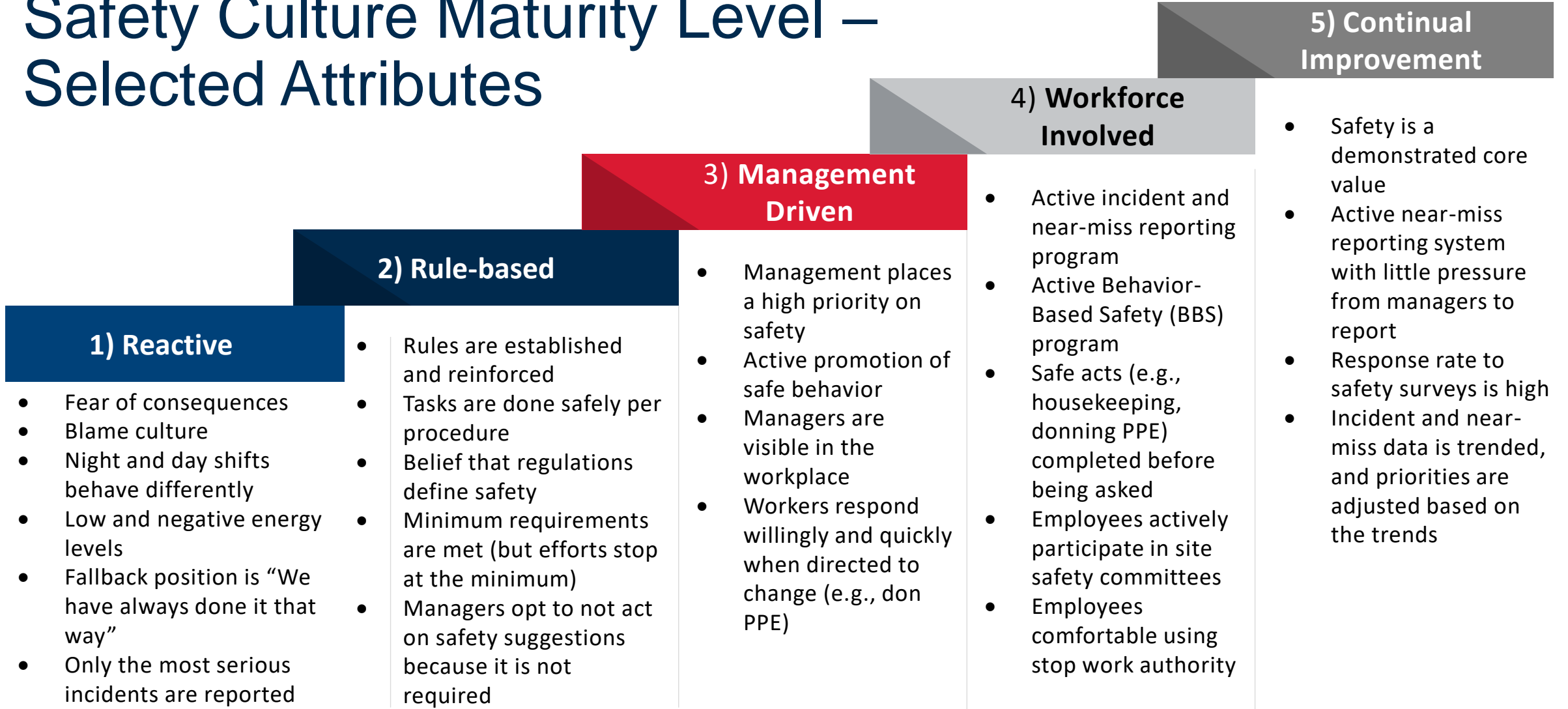
Interview Questions	Yes	Partial	No	N/A	Free Response / Auditor's Comments
	○	○	○	○	
<b>TOTALS</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>18</b>	
<b>SCORE RATING</b>					<b>87.50</b>
<b>SCORE RATING</b>					<b>4.38</b>

# Safety Culture Maturity





# Safety Culture Maturity Level – Selected Attributes

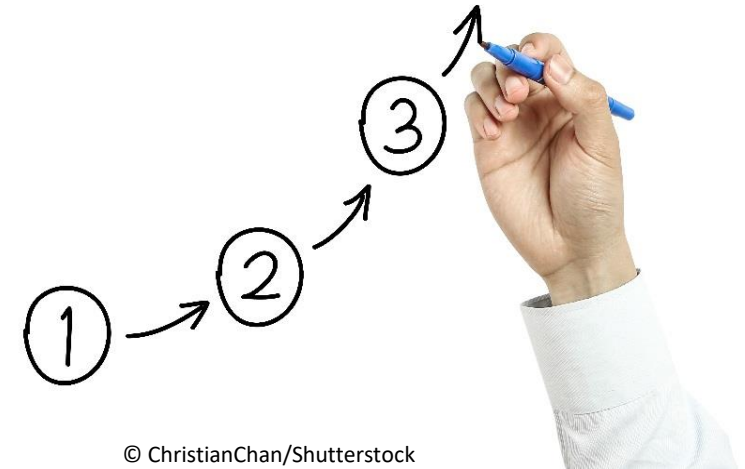




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# Next Steps

- Project outcomes to support an **industry pilot** that will:
  - Help determine the maturity level of safety culture within the organization
  - Identify areas of excellence and opportunities for improvement
  - Help provide culture ownership to offshore and shore-side personnel
  - Identify potential gaps with respect to culture, health, and overall safety between management, supervisors, and personnel
  - Raise the profile of health and safety within organizations
  - Create a baseline for the organization to monitor the impact of safety culture interventions



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# Thank You

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