



Barrier Management and human performance

Presentation 10.03.21

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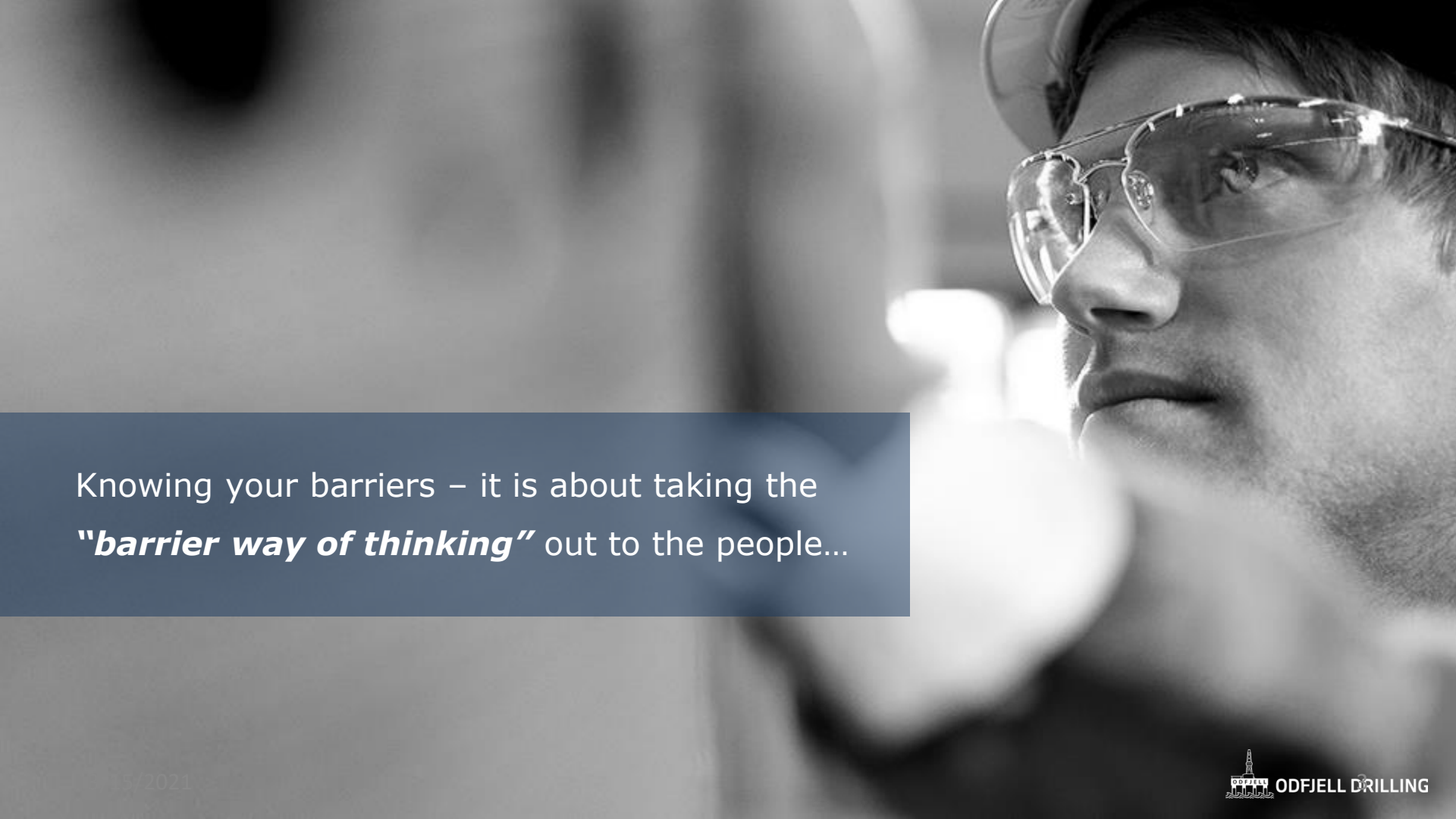


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What is Barrier Management?

Barrier management involves managing, controlling and handling all aspects of health, safety and the environment

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Knowing your barriers – it is about taking the
“barrier way of thinking” out to the people...

Types of Barriers

Technical Barriers

Engineered systems, structures, or other design features which realize one or several barrier functions

Organizational Barriers

Personnel responsible for or with specific competence, directly involved in realizing one or several barrier functions

Operational Barriers

A task performed by an operator, activates one or several barrier functions



Barriers by Example



Technical Barrier Elements (Safety Environmental Critical Elements)

Preventive maintenance
Performance standards

How do we know?

Self verification
Audits and verifications
Competence Assurance



Operational Barrier Elements

Company Management System
Work execution
HSE meetings



Organizational Barrier Elements

Qualification requirements
Competence assurance process

A black and white photograph of two men in industrial workwear. They are wearing white hard hats and safety glasses. The man in the foreground is wearing a dark jacket and gloves, looking intently at a laptop screen. The man in the background is also wearing a dark jacket and is looking at the same screen. The scene is set in an industrial or office environment.

Barrier Management is also about
having focus **on** the people

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Humans contribute to major accident risk

Procedures, training, workload and other human factors influence on how the task is performed

Competence Management



Onshore Induction;
Department / e-learning

Buddy System



Offshore Induction
Safety tour

Systematic Familiarization
Equipment Familiarization



Need of resources
based on competence
requirements

Performance Shaping Factors Influence on Barriers





The nature of Human Factors in Barrier Management can lead to incidents

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Barrier management involves managing, controlling, and handling the human aspects

- Competence skills
- Just culture
- Leadership
- Corrections
- Performance Shaping Factors
- Self-verification
- Appraisals
- Risk Management and Management of Change
- Leadership Procedure
- Communication and feedback

How to ensure human factor contribution...

- Strong leadership
- Proper decision making
- Avoid false truths
- Dare to speak up

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Safety Critical Tasks

Safety Critical Tasks (SCT) are the highest risk tasks which, if not carried out correctly, could lead to serious consequences (Major accidents)

How do Bow-Ties and Safety Critical Tasks relate?

Safety Critical Tasks (SCTs) are developed based on the threats identified in Bow-Ties



Barrier Management, integrated approach:





**Following the barrier management
process will help you go home safely**

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Thank you

Human Performance in Barrier Management

17.09.2019

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