

Strategic Project Management: Greater Business Results in an Uncertain Economy

An Oil and Gas Perspective

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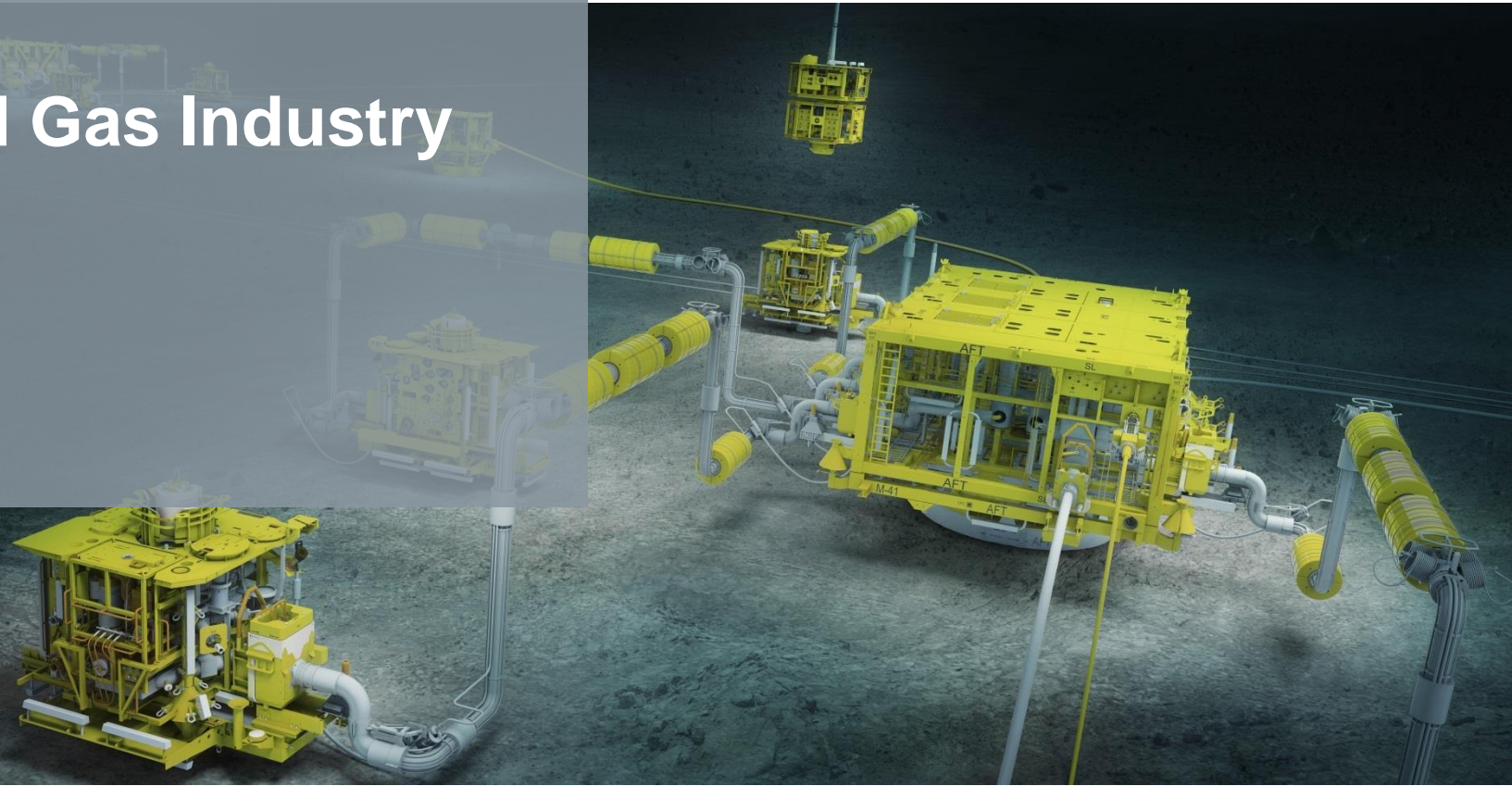
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HSSE Moment – Sense of Humor



- Sense of Humor – **Less Sick Leave?**
- Humor helps people with
 - Stress
 - Changes
 - Communication
 - Conflict
- Makes it easy to handle challenges
- Improve people's ability to think freely and **generate new ideas**. This can have a positive impact on the business.
- People with a sense of humour have **less health problems** and a **stronger immune response** than those with a serious approach

The Oil and Gas Industry



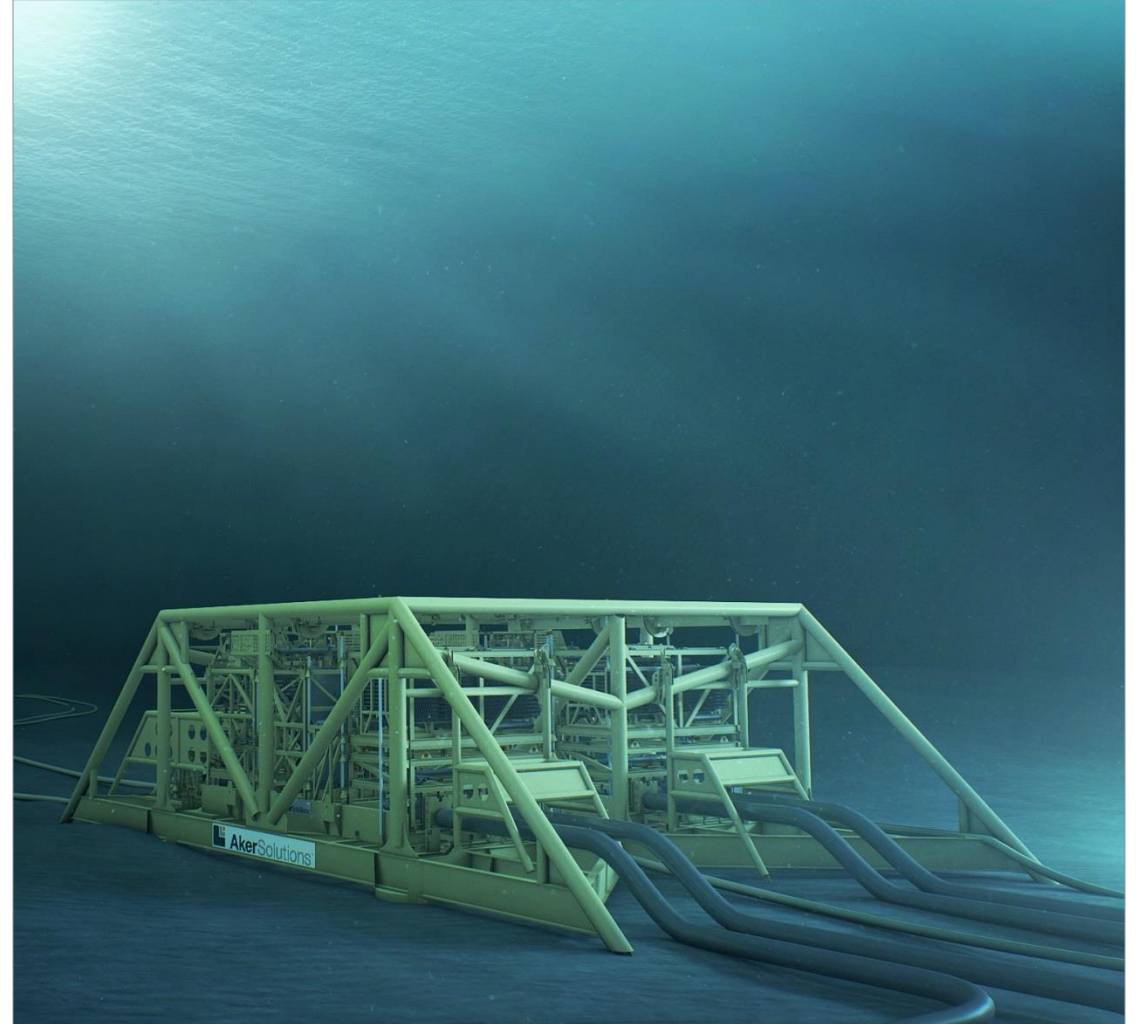
The Market in 2015-16

- Continued market uncertainty and challenging commercial environment amid concern over capital constraints and oil prices
- North Sea activity projected to be sluggish for the next 1-2 years
 - Projects like Johan Sverdrup to support industry
 - Was expected to see gradual recovery from 2017
- Near-term uncertainty on timing of awards

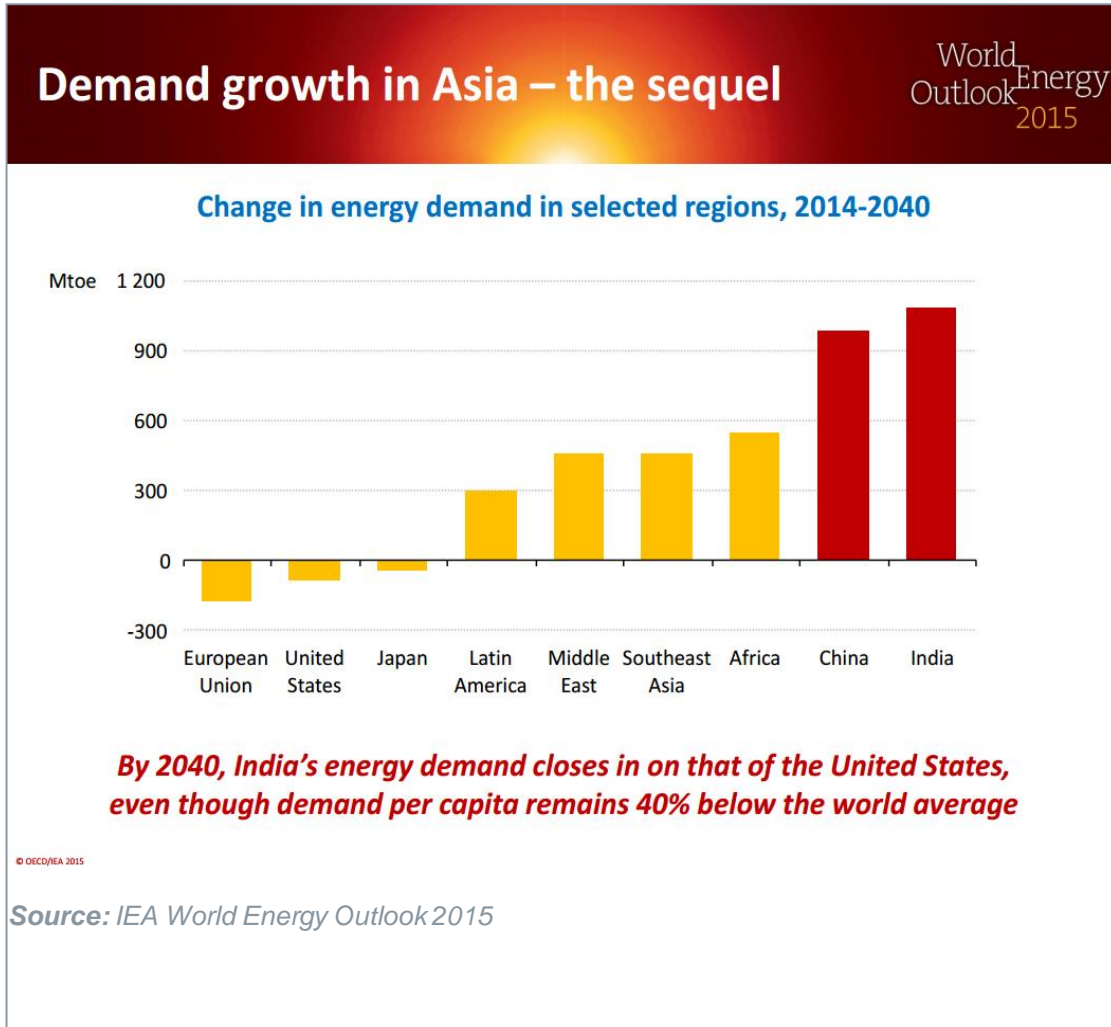


The Outlook Today

- Market outlook for oil services remains challenging
- Some signs of brownfield recovery, as oil prices seen stabilizing and industry cost cuts having an effect
- Increased demand for front-end engineering services an early indication of a pickup in activity ahead
- Lower project break-even costs likely to spur new industry investments and project sanctions this year
- Industrywide shift required to ensure sustainable development for the oil and gas sector



Energy Market Drivers



- Long term demand driven by growth in population and wealth – particularly in developing countries
- Lack of viable substitutes to oil and gas
- Rapid depletion of existing producing reserves
- More complex and inaccessible reserves

Technology

More for less

Unconventional methods

Tight oil / Gas

LNG

Automated Fields

- Longer operation and higher yield through injection of water or gas such as CO2
- Hydraulic fracturing of stone formations containing oil or gas (fracking) is likely to spread beyond the U.S.
- The production of heavy oil from oil sands will become more environmentally friendly and less energy-intensive.
- The global market for liquefied natural gas (LNG) will continue to grow strongly. Gas being flared, and thus wasted, today can be used and marketed in the future.
- Maintenance free E-Fields operating on the sea bed

Deeper

Farther

Harsher

Tight

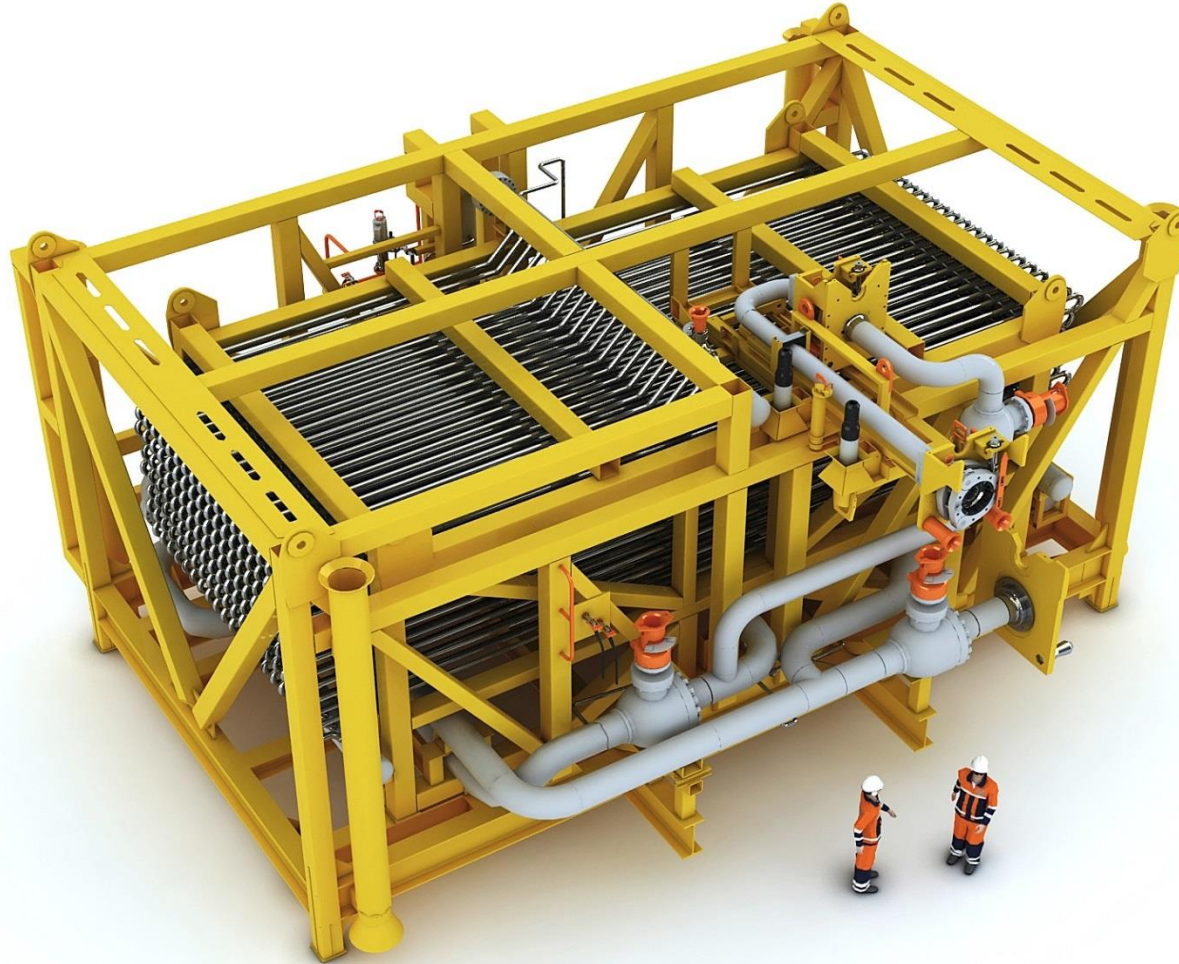
Subsea
Factory

It is All About People

- Shale revolution in the United States - O&G industry struggled to draw people
- Emphasis on critical technologies and risk management, university partnerships – Young talent joining the sector
- Downturn and resulting layoffs threaten to damage the industry's brand
- Imperative that oil companies be innovative in approach to talent acquisition, development, and deployment
- Knowledge transfer from senior employees to the next generation is necessary
- People as critical as capital, if not more so, for the recovery of the industry



People Driven Delivery



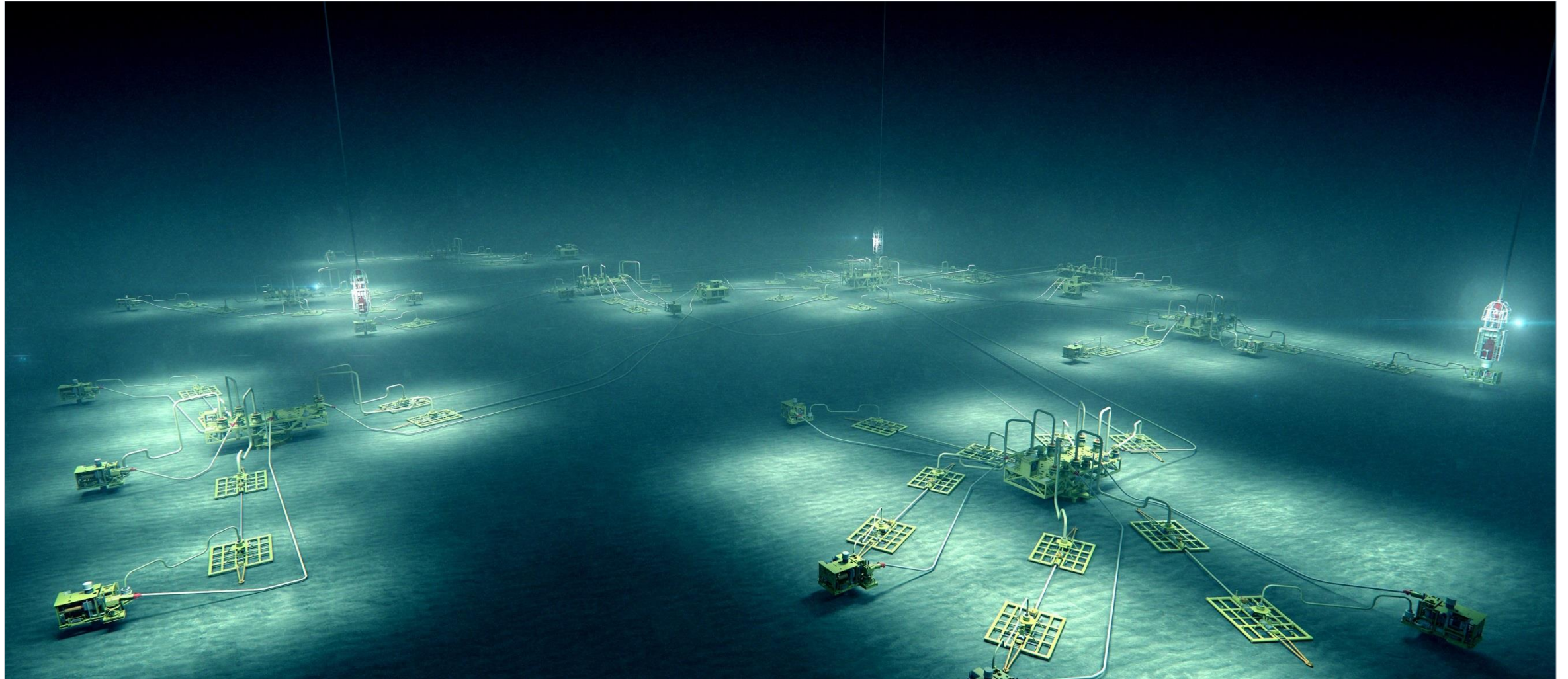
People Driven Delivery



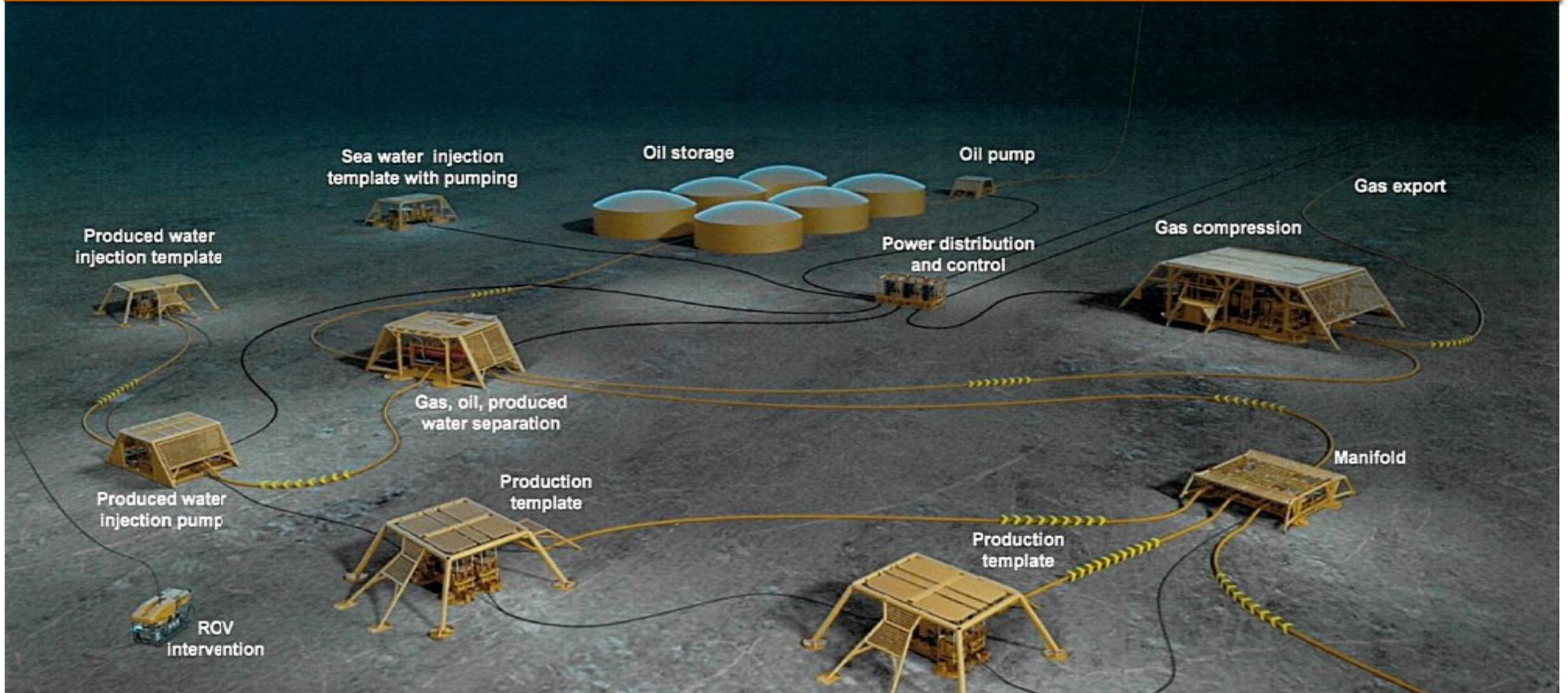
People Driven Delivery



Vision 2020 - Subsea Factory



A Vision



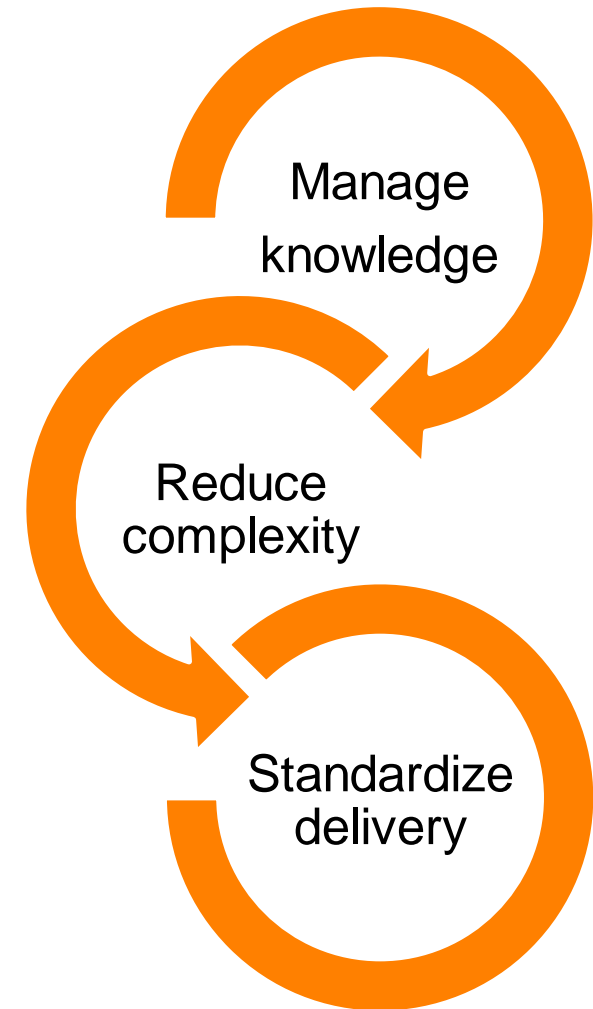
Source – Statoil

The Need for Change

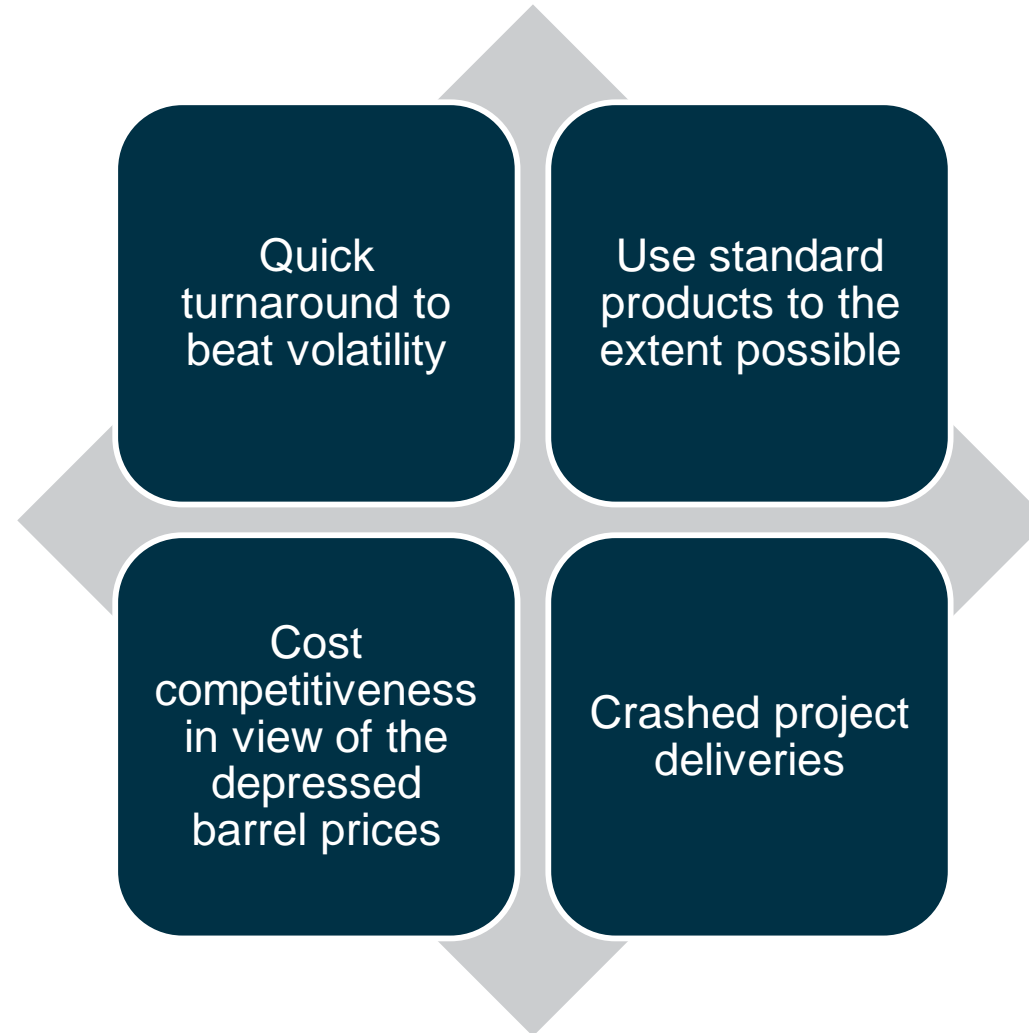


Learnings

- Cost efficiency is king
- Balancing agility in the present with sustainability and resilience in the long term
- Do not re-invent the wheel
- Standardize, harmonize and simplify
- No place for a famine or feast mindset
- The oil and gas industry is full with incidents and failures
- Capturing lessons learnt and applying it to projects is an imperative
- Capturing lessons and managing the knowledge continues to be a challenge to the industry
- Processes and products need to get more lean and standardized
- Need to reduce complexity
- Need to ensure that we do not cut cost at the cost of safety



Expectations of Customers Today

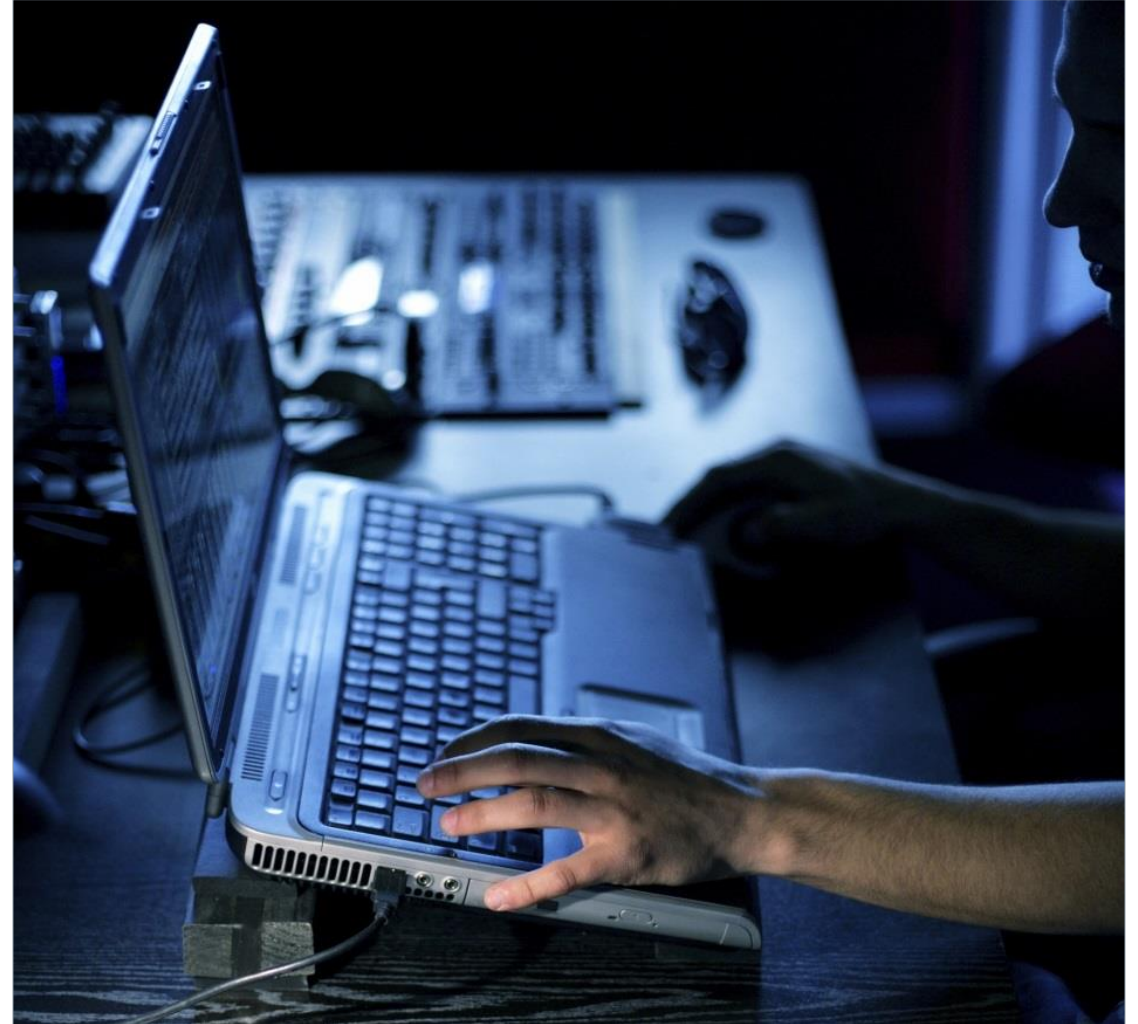


The Need for Change

- No place for **silos** working mindsets
- **Leveraging synergies**, **pooling volumes** for procurement, **learning lessons** from each other needs to become the order of the day
- While **innovation** needs to be encouraged always, using **standard designs** as much as possible needs to be the new norm
- **Cost – benefit analysis** needs to happen as an integral part of design just like HSE, integrity and reliability

Digitalization

- The oil and gas sector has been a bit slow in embracing new IT tools
- The situation is beginning to change
- Focus Areas :
 - Smart Products.
 - Big Data
 - Data analytics, platforms, networking technologies
 - IoT, Industry 4.0
 - Digital fields



Enhancing Business Models and Project Execution



The Project Environment

Complex

Multiple Stakeholders

Ambiguous Scope

Political Influence

Stringent Regulations

Virtual Teams

Cultural Diversity

High Interdependencies

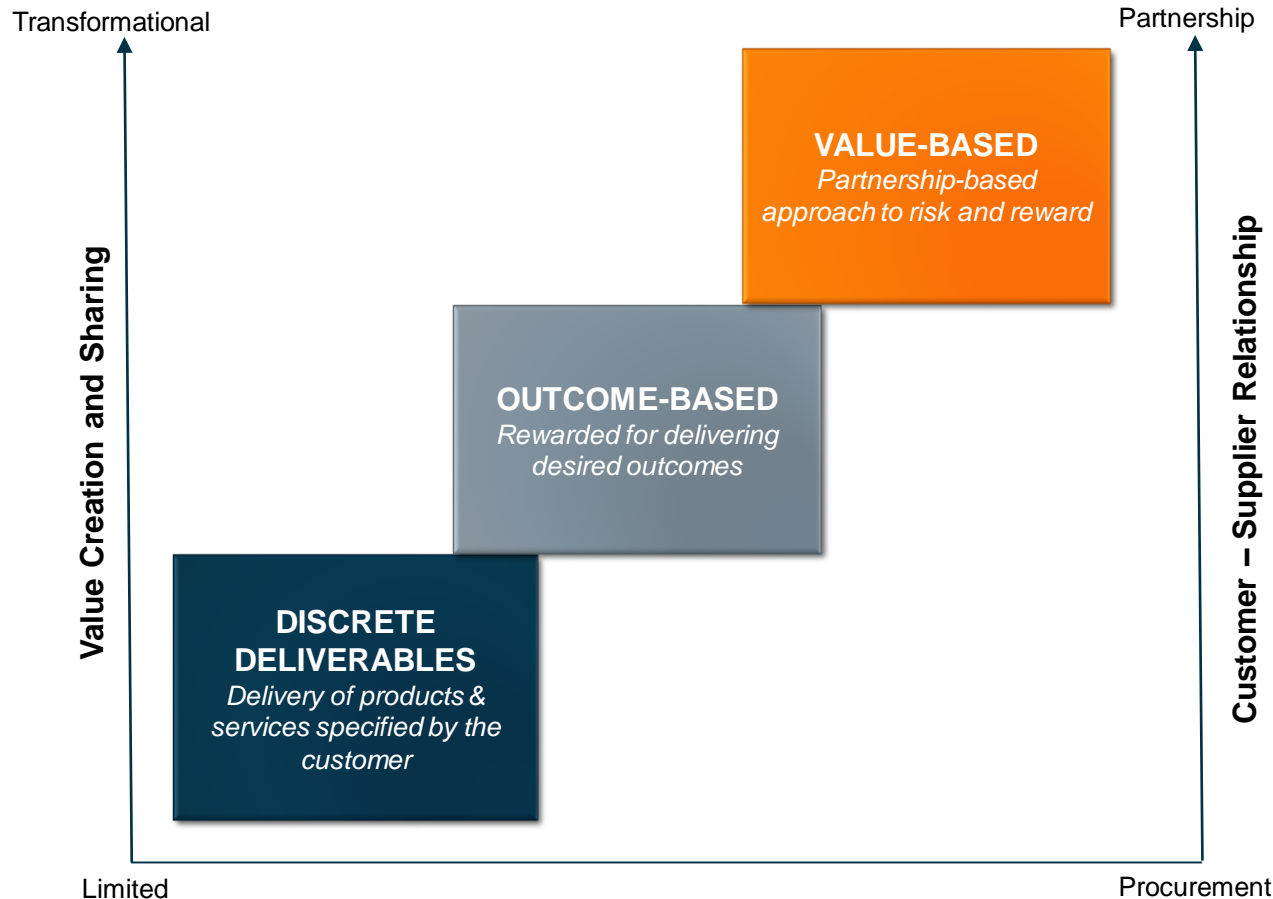
Technology advancements

Harsh environments

Unforeseen constraints

New Business Models to Drive Value and Productivity

Business transformation



Examples of new commercial models

Partnerships & Alliances <i>Investment in achieving mutual goals</i>	Equity ownership and financing SPS – SURF Alliance Contractors, Operators coming together to form alliances
Products as a Service (PaaS) <i>Customer no longer owns the physical asset</i>	New Rig of the Future (\$ per foot) Pay for availability and power by the hour Focus on Total Cost of Ownership (TCO) for products and services Performance-based (availability) lease contracts for pumps
Vertical Integration <i>Selling scale & breadth of offering</i>	SPS-SURF End to end solution across the value chain

Project Execution Model

- A more refined gated process to manage risk by:
 - Validating completion of every milestone
 - Validating the quality level of every milestone
 - Learning lessons, documenting and implementing them at every milestone
 - Adopting a more agile and dynamic approach



Some Additional Aspects of Project Execution

- Dealing with the unexpected - before it becomes a problem
- Protecting the company
- Gaining management support
- Ensuring consistent and dependable delivery every time
- Provision of informed decision making about people resource.



Why, What and How of Project Management

Why

Define the reason and the motivation for the project,
The need, environment and business opportunity.
Help understand the big picture and
Create motivation among the staff.

What

Define the end product of the project which will be delivered . How could
this project contribute to our product,
Why the customer will buy our product
Why our product is better than what is available on the market

How

Define how the objectives and competitive advantage are going to be
achieved (SOW, WBS, Project Matrix)
Cost Leadership

Some Directions in Project Management

- Recognize that change is the only constant
- Sharp focus on strategy over projects
- Proactive project leadership
- The move away from operational hierarchies to leverage employee strengths
- The increased need for accountability and social responsibility
- Remote work, PM tools & security - global project execution models – **Geography is history**
- More emphasis on softer skills, not just technical training



The Project Manager

Communicating the WHY, not just ROI

Golden circle of project management

Evoking the human aspect of projects

Humor, social and balance

Being a story teller

Emotions drive people, and people drive performance

Being a bridge builder

Look beyond walls and build bridges between generations and continents

The Project Manager

Being a process disruptor

Create or re-build processes that stand in the way

Being a mentor

Transmit organizational know-how, mentorship & lessons learned

Building community

Inspiring a tribe of values to drive loyalty, leadership & authority

Arousing buy-in and sponsorship engagement

Understanding “What’s in it for me?”

Traditional and Strategic Project Managers

Traditional PM

Controls

Monitors

Manages Risks

PM IQ (Methods)

Escalates and reports conflicts

Starts with ROI

Accidental Project Manager



Strategic PM

Coaches

Empowers

Exploits Opportunities

PM EQ (Leadership)

Masters soft skills and resolves conflicts

Starts with WHY

Certified Project Manager

Sustainable Solutions



The VUCA world

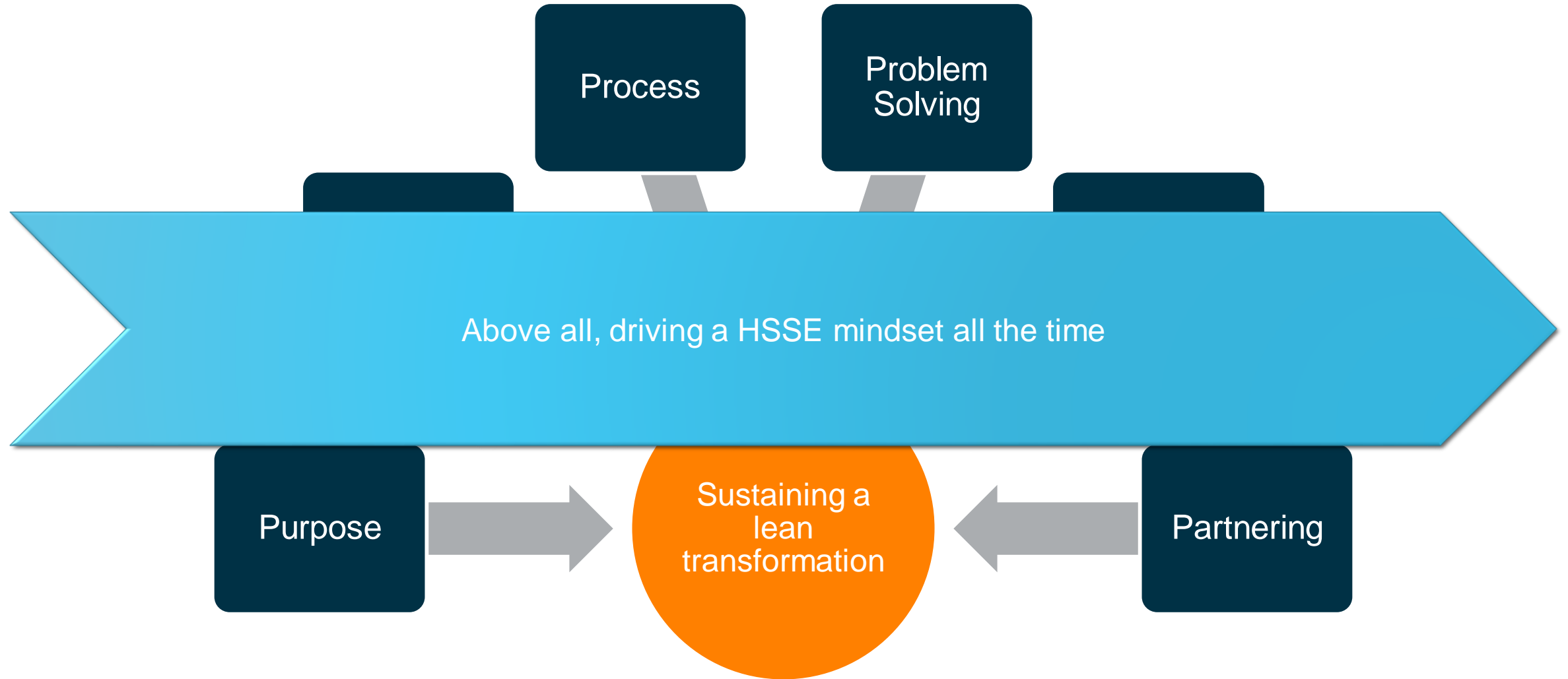


Some Organizational Imperatives

- Embed continuous improvement into the very fabric of the organization through :
 - Persistent Leadership
 - Proactive Change Management
 - Managing what you measure – Creating , measuring the right metrics and then managing
 - **Data driven decision making – Process Mining tools like VSM, Process-X-Ray.**
 - Doing fewer things better - Hone in on top improvement opportunities, allocate resources effectively and manage the changes to completion



Some Organizational Imperatives – The Lean Leader



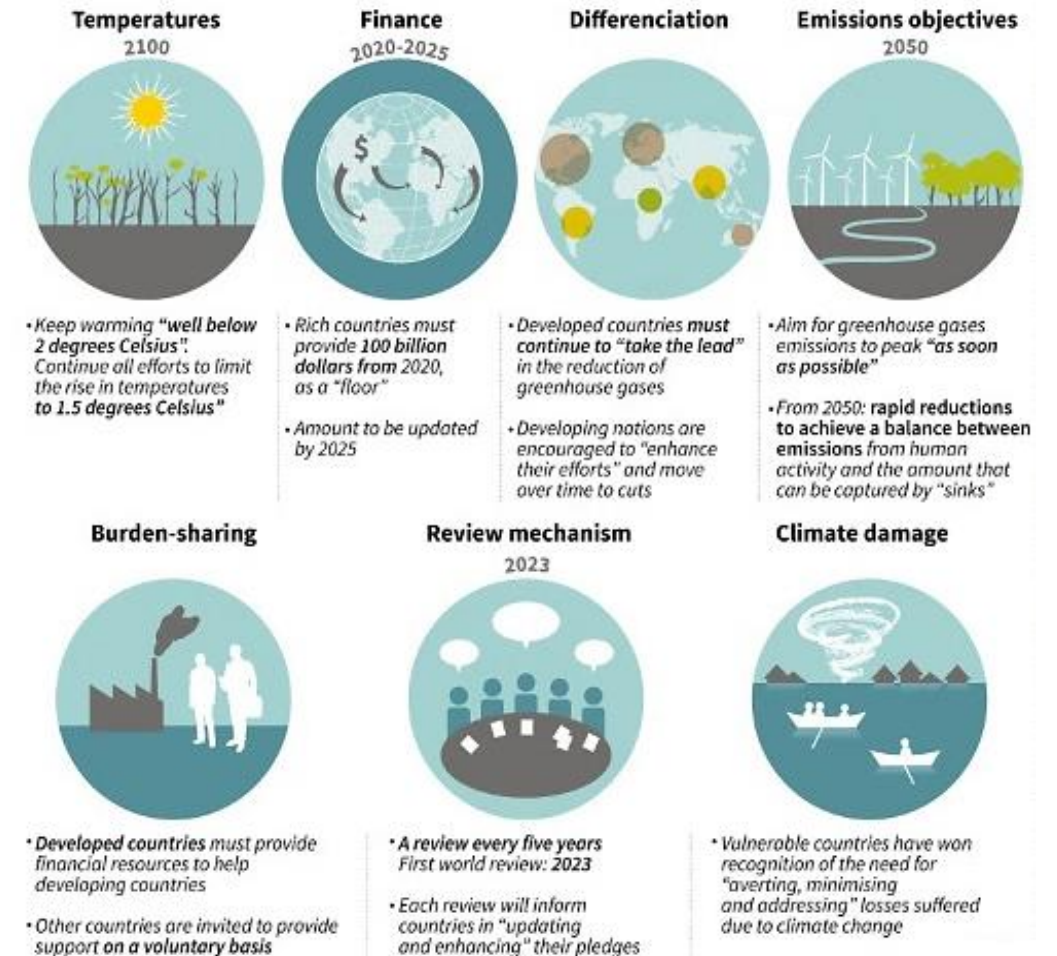
Overview of the Paris Agreement – COP21

Overview of the agreement

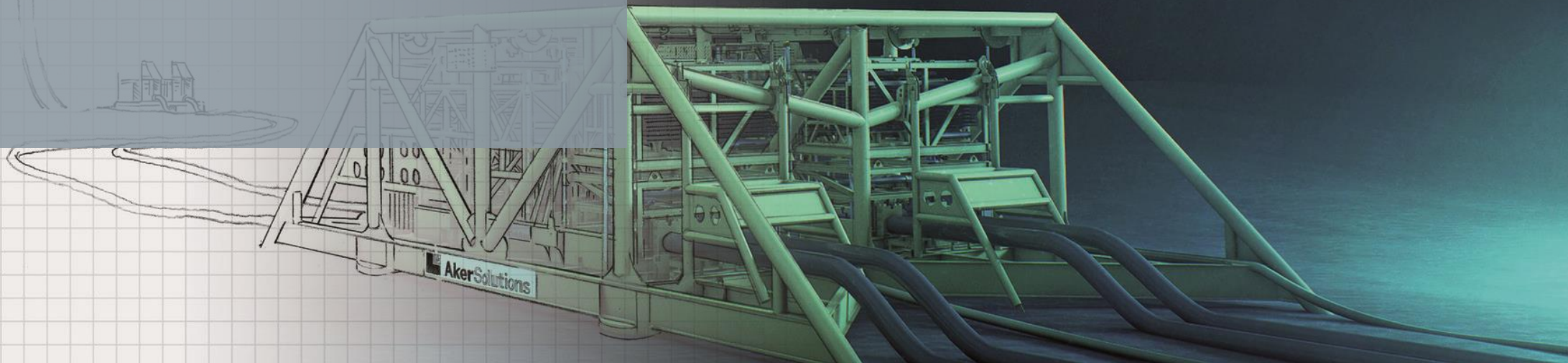
- The Paris Agreement is an **agreement** within the United Nations Framework Convention on Climate Change (UNFCCC) **dealing with greenhouse gases emissions mitigation, adaptation and finance starting** in the year **2020**
- An **universal legal agreement** with binding obligations to maintain successive targets and to pursue domestic mitigation measures – **189 countries** have submitted their plans
- The agreement has a long-term goal to **hold temperature increase** to well **below 2°C**, and pursue efforts to limit to 1.5°C
- Global emissions to peak as soon as possible, **net zero emissions** in the **second half of the Century**
- 5-year ambition cycle: A **global stocktake every five years** starting in 2018 with increased ambition over time
- The agreement will create **transparency, accountability** and **compliance**

Source: EU Commission, UN, IEA

Key components of the agreement



Industry-Academia Collaboration



Knowledge Succession in Oil And Gas

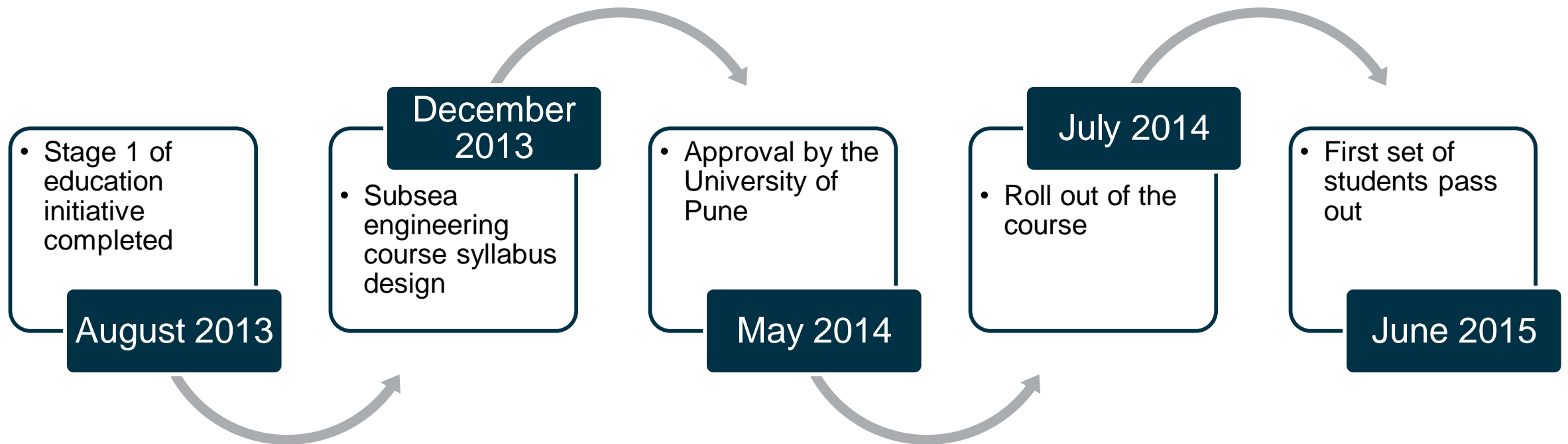
- Being a knowledge based industry, transfer and succession plan for knowledge transfer is a relevant subject
- Handover from the baby boomers to the millennials

The need for industry-academia collaboration

- Academia has not kept pace with the latest technologies in oil and gas
- In addition to the above, it is important to build the right mindset to enter this industry
 - HSE mindset
 - Building the right attitude
- Industry academia collaboration on an ongoing basis is the need of the hour
 - Joint industry practices
 - Introducing the subject in the current curriculum
 - Setting up laboratory for conducting studies

The Subsea Engineering Initiative

- Aker Solutions and MIT (Maharashtra Institute of Technology, Pune) decided to collaborate to start a course in Subsea Engineering in 2013



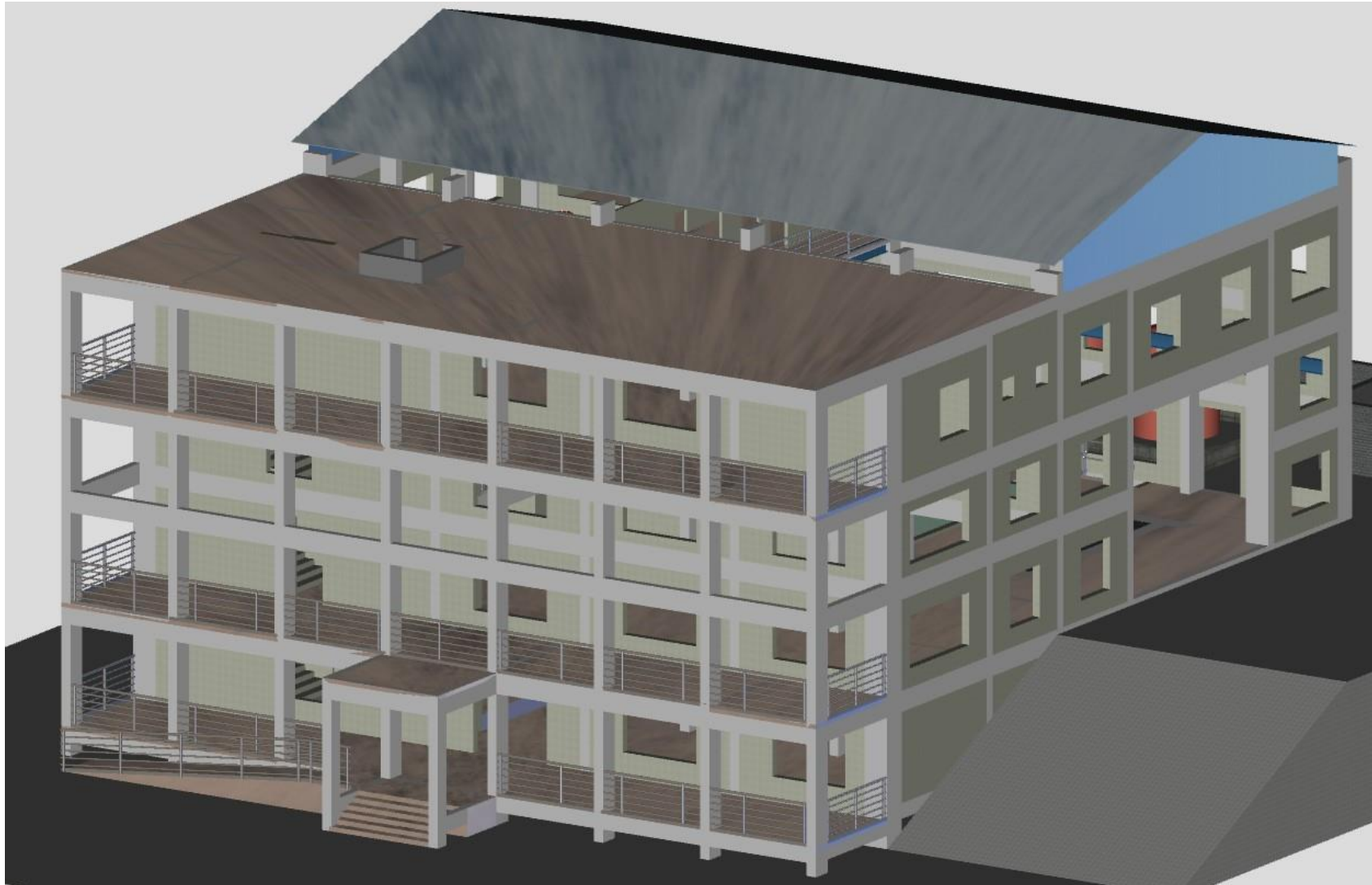
The long term plan is to have about 50 students pass out of the college annually with this value added course

The Subsea Laboratory

- Aker Solutions signed MoU with MIT– 28 May 2015
- Skill development for engineering graduates aspiring to enter the oil and gas industry
- Creation of a subsea laboratory for hands-on experimental work by engineering students
- Increasing awareness among academia to create talent in the emerging areas of the oil and gas industry



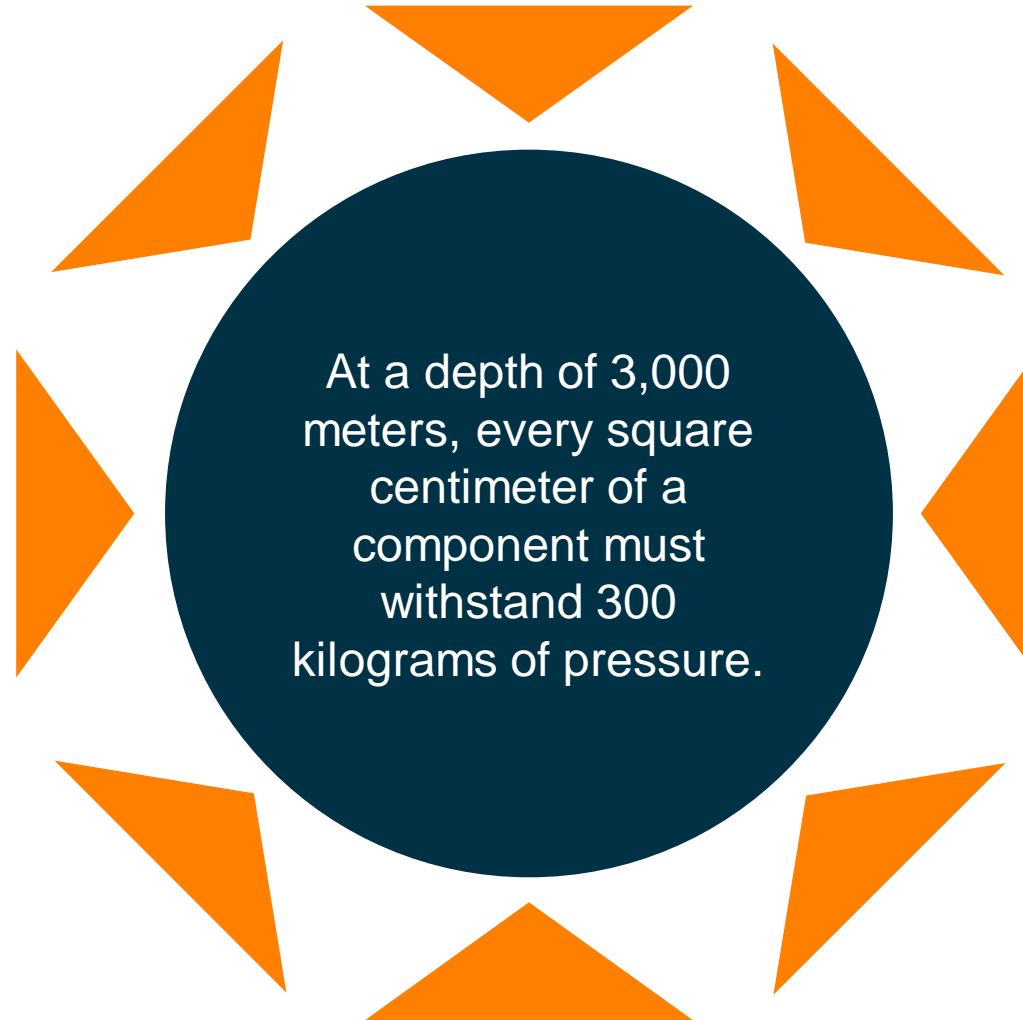
Architectural View of the Subsea Laboratory



Conclusions



Safety, Reliability and Integrity



Project Management Responsibilities

Key responsibilities

Demonstrate a strategic mindset

Deliver project performance
safely

Create a sustainable business
position for the organization

Thank You

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