Supply Chain Behaviours and Potential Commercial Models for the Future

Craig Wiggins
Managing Director
Aker Solutions

Cost and Efficiency

@oilandgasuk
#OGConf16
Positive & Negative Supply Chain Behaviours in the UKCS
Mutual Success is Determined by Behaviours

People and teams
- Open and direct dialogue
- Celebrate success
- Leadership responsibility
- Common identity
- HSE mindset
- Just Culture

Hands-on management
- Clear processes
- Clear expectations
- Team work
- Delivering quality results

Customer drive
- Customer focus
- Celebrating success
- Openly discussing bad news

Delivering quality results
- Motivation
- Value mindset
- Culture
- Hands on leadership
- Delivering promises

Plans changing all the time
- Poor delivery
- Frail culture
- Poor behaviour
- Waste

No trust
- (blind trust)
- No challenging of status quo
- Confrontational attitude
- Don’t care
- Blame culture
- Abdication of leadership responsibility

Complicated processes
- Slow decision process
- Accepting defects (rework)
- Silo mentality
- Poor value mindset culture
- Hidden agendas
- Poor marking
Collaborating to Achieve Lean Operations
## Improve efficiency: Engineering
- Simplify TRs and reqs
- Front end loading
- Project start-up
- Leadership programme

## Improve efficiency: Fabrication
- Subcontractor model
- Leaner fabrication
- Leadership programme

## Improve efficiency: Installation
- Effective offshore days
- Offshore readiness
- Standardisation and compliance

## Visioneering and collaboration
- 3D Animation
- Concurrent execution
- Construction / installation method

## Our journey to operational excellence
- Lean methodology
- Removing waste
- Performance boards

## Supply chain cost reduction
- Indirect spend reduction
- Bulk procurement improvement
- Vendor doc handling

## IT / IM cost reduction
- Reduction of IT / IM cost
- Standardise and simplify project application portfolio

## Man-hour cost reduction
- Lean/Value engineering
- Optimisation of resource mix

## Overhead cost reduction
- Optimise cost level across MMO
What is Lean?

- Lean is about the removal of waste that exists within all processes
- Lean is a smarter way of working, it does not mean working faster or downsizing – it is a set of habits, a culture
- Toyota’s production system set the standard for excellence
- In a Lean environment, continuous improvement is a way of operating all the time - everything can be improved
- Leadership is key to changing the way we improve our processes
- Successfully applied by many companies in production / manufacturing as well as to service and transactional environments
- Continually looking for win-win-win...

Win for the client.
Win for the contractor.
Win for the people who do the work.
Lean | What is Waste?

Lean work processes | The eight forms of waste

01 Over-production
To either produce or supply more than is required to carry out a task. Redundant staff may be required. Duplication of effort.

02 Inventory
Inventory must be optimised – it takes up space, requires counting, ties up capital and in the case of spares, could end up being scrapped if the component design is updated.

03 Waiting
All idle time is wasteful, whether waiting or queuing for materials, tools, paperwork, people or a decision to be made.

04 Motion
Unnecessary movement of people or machines that does not contribute value to the process or task. Walking, stretching and climbing are all examples of motion.

05 Transportation
Transportation (excessive movement) of materials or information should be minimised or eliminated. Losses time, often requires handling equipment and goods can be damaged during transportation.

06 Rework
Scrap or rework whether relating to a physical item or a process.

07 Over-processing
Effort in excess of that needed to complete the task. Doing more than required by the customer. Not working to the most effective process.

08 People potential
Not using the mental, physical and creative potential of the employees. Employees are often not motivated, shared vision, poor communication, lack of training programmes or an intimidating organisational culture.

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CNRI Lean Deployment Rollout Session

- **What was achieved?**
  - Introduction and understanding of Lean deployment and its principals
  - Identified current issues across four assets using the Value Stream Mapping tool, identifying areas which would benefit from a Kaizen Event
  - Team building

- **Set up reduction exercise and team building**

- **Value Stream Mapping session**

283 issues identified
CNRI War Room

- War room established
- Held daily at 11:30am
- Combined CNRI and Aker Solutions attendance
CNRI Lean Deployment Notice Board in Place

- Regular updates for the team
- Dates for upcoming Events (VSM / Kaizen / Training)
- Contact information
- Success stories from the CNRI project
- 7 wastes poster
61% of issues identified at the CNRI Roll out session in ‘Execution’ are defects

Project charter created, VSM and Kaizen to be held.

120 issues identified
Commercial Models for the Future
Appropriate Model is Determined by Behaviours and Operating Environment

The range of alternative models can be summarised in the four categories below and represented by the relationship between mutual trust and contractor control:

- **Model A: Transparent lump sum**
  - Mutually agreed estimate of the work
  - Provides client predictability and incentive to contractor
  - Experiences: simple to administer; works for low value simple activities where outcomes can be predicted; for larger more complex scopes needs robust risk process; painshare / gainshare; target cost

- **Model B: Lump sum (no transparency)**
  - Contractor provided estimate of the work
  - Demonstrates poor level of mutual trust
  - Experiences: client often believes that there is significant hidden profit

- **Model C: Fixed profit (also with KPIs)**
  - Cost reduction results in higher return (%) to contractor; overrun results in lower return (%) to Contractor
  - Incentive to keep costs low
  - Experiences: can work for larger more complex scopes; slightly higher administration

- **Model D: Reimbursable cost (also with KPIs)**
  - Mutual agreed estimate replaced by actual spend
  - Demonstrates low mutual trust and predictability
  - Incentive to contractor to control cost is lower
  - Experiences: higher administration; can remove drive for effective change control
New Commercial Models to Encourage Increased UKCS Activity

Tailored to suit individual customers and prevailing market conditions:

- **Lease & Operate (Modification/EPC Project)**
  - CAPEX spend (or part) recovered from agreed operations fee
  - OPEX spend (or part) recovered from agreed operations fee
  - Minimum term

- **Deferred OPEX: Steady State (Duty Holdership/O&M)**
  - OPEX spend (or part) recovered from agreed fee
  - KPI linked to availability/uptime/Bbls
  - Range linked to oil price

- **Deferred OPEX: New Facility (Duty Holdership/O&M)**
  - Cooling off period until operating stability achieved
  - As above

- **Deferred CAPEX, EPC & Deferred OPEX (EPC into Duty Holdership)**
  - Potential for equity ownership from affiliate company (e.g. 10%) after due diligence
  - Combination of above including deferred CAPEX & OPEX

*Suitable margins to reflect mutually agreed risk profile.*
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