

OEM vs Non-OEM:
A Supplier's Perspective



IRE
OIL & GAS FZE

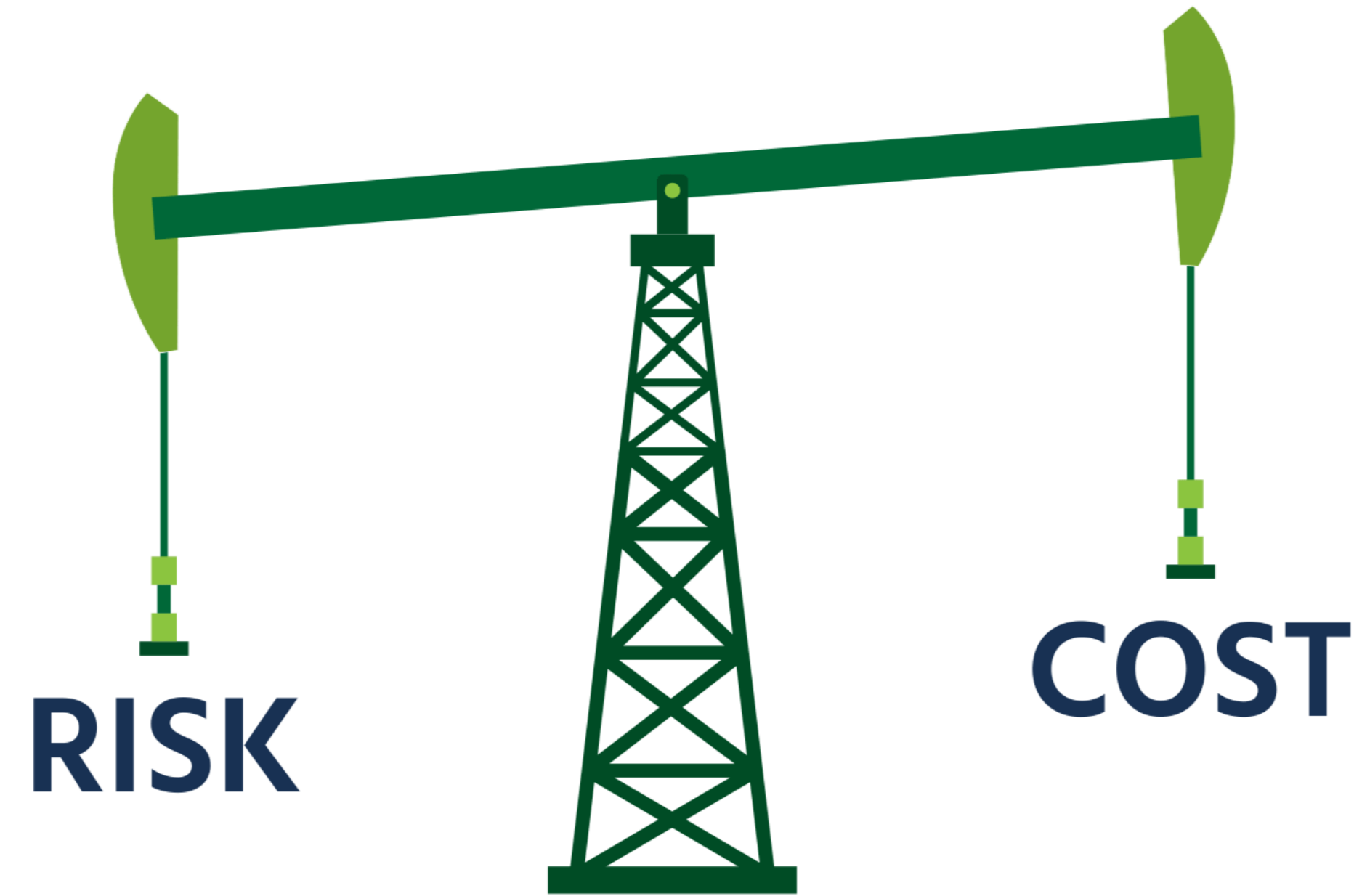
IADC SAPC Presentation 19th
November 2020

EMBRACING CHANGE
ADVANCING INNOVATION

IRE is an equipment supplier for drilling contractors. We work closely with OEMs and Non-OEMs. Our perspective here will hopefully offer some interesting insight into the problems and possible solutions. We are impartial to both OEMs and Non-OEMs and purely want what is best for our drilling contractor customers.

For the sake of this discussion, we will not focus on one type of equipment. We are very aware OEM vs Non-OEM is going to have very different implications for different equipment categories. This presentation considers core drilling equipment categories such as Well Control, Rotary System, Hoisting System & Mud System.

- OEM
- OES
- Aftermarket
- CEM
- ARF
- COC
- COS
- SOF
- CBM



Risk of failure or liability too high with Non-OEMs

Depressed market can't afford high OEM prices

1. OEM Aftersales service and support
2. Delivery times on OEM spares
3. Cost and support for OES spares (buyout)
4. How reliable is reverse engineering?
5. Is API sufficient?
6. Culture of distrust to Non-OEM
7. Operator contracts limit non-OEM trials
8. Product bulletins and technical updates exclusive to OEMs and owners

IADC Drilling Middle East 2019 Conference in Abu Dhabi on 10th & 11th December 2019.

The panel included:

- Drilling Contractor (Valaris & H&P)
- Operator (DPE)
- OEM (NOV)
- Non-OEM (RigQuip)
- Service Company (Cansco)



Let's review their perspectives in more detail

1. OEM preferred for safety and reliability and the easiest benchmark
2. OEM not always effective on aftersales (location, cost, delivery)
3. Operator bears the biggest risk and needs evidence based data to accept non-OEM
4. Contractor unable to effectively qualify non-OEM option

1. Life cycle overview, total cost of ownership
2. Drilling Contractor best qualified for maintenance but reliant on rig data, API and OEM
3. Not all equipment viewed the same e.g. WCE vs Mud System
4. Non-OEMs and Drilling Contractors often have higher recertification standards than OEM.

1. OEM is the sensible option with advanced recertification procedures
2. QA/QC process to ensure continuous product development
3. OEMs need to charge premium to cover risk and liability and fund R&D
4. Can drilling contractors validate and qualify non-OEM option?
5. It is not OEM's duty to be QMS auditor or support Non-OEM activity

1. The equipment owner is better qualified to manage repairs
2. Non-OEMs also design and build equipment and rigs
3. API Q2 endorses Non-OEM
4. Faster, cheaper & better customer service
5. Non-OEM work instructions better than OEM

▶▶ WHO IS IRE AND WHATS OUR ROLE IN THIS?

Manufacturers



USA



Canada



Europe

Customers

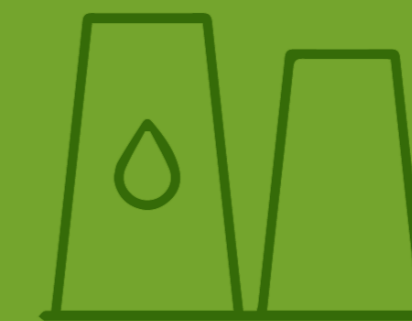


IRE
OIL & GAS FZE

Middle East

Africa

India



▶▶ WHO IS IRE AND WHATS OUR ROLE IN THIS?



1. We source the right products and link them to the right customers in the right markets
2. Maximize the value of our customers purchase
3. We work with OEMs and Non-OEMs
4. We provide both OEM and Non-OEM recertification for our partner brands



1. Two types of Non-OEM: buyout and aftermarket
2. Current standards need to be improved
3. Non-OEMs can offer better value, delivery, quality and support
4. More collaboration is needed from OEMs with repair shops and distributors
5. Culture of distrust towards non-OEMs if they want to reduce drilling rates

CERTIFICATION : Top Drive IBOPS

- OEM buys IBOP from OES and supplies worldwide with ABS/DNV cert
- Cost impact ignored for regions which don't require ABS/DNV
- Authorised distributor for OES offers IBOP without ABS/DNV & saves driller 20-30%
- Resistance from drilling contractor and operator to accept OES direct from source

QUALITY : Iron Roughneck Spares

- Non-OEM recertification facility gathers data and experience for manufacturing OEM assets
- Observes common failure/wear points in OEM design
- Non-OEM designs and builds modified upgraded parts
- These are sold to drilling contractors for lower price than OEM part
- Drilling contractor chooses Non-OEM for better performance, price and delivery.

COST : AC Motor

- OEM buys AC motors from another manufacturer (OES) and uses in OEM equipment
- End user goes to buy spare from OEM but finds the price is too high
- Supplier is able to work with OES and offer the same motor at a much lower margin to save the drilling contractor money
- Reputation of motor brand is upheld

DELIVERY : Bearings

- OEM buys bearings from another manufacturer (OES)
- Often OEMs remove part numbers or ID tags of OES and replace with OEM tag. No mention of OES or OES part number in manuals or drawings.
- OEM sells OES product at high market value, despite having economies of scale on that product.
- OEM often lacks stock to meet demand and quotes long lead times
- A supplier is able to find the same product and offer at substantially reduced cost, often with better delivery too.

Specification: Who is qualified to decide if OEM preferred spec is not required?

Quality: Reverse engineering is not always reliable. Product needs tested and certified to a standard.

Liability: Non-OEMs and Suppliers do not have the strength like OEMs to carry full warranty and liability.

Contract: Creates tension and disagreements with the Operator

1. Culture
2. Operator Flexibility
3. Role of International Standards
4. Collaboration
5. Non-OEM a proven alternative
6. Role of data an AI will enhance equipment lifecycles further

1. What is the biggest barrier for drilling contractors using Non-OEM (NOEM) for aftersales parts and service?
- a) Lack of regulation/standards
 - b) Losing OEM warranty protection
 - c) Lack of knowledge of NOEMs
 - d) Restriction from operators

1. Is using OEM parts and service sustainable long term for oil and gas?
2. Is the owner or builder more qualified to handle after sales servicing and repairs?
3. Is the owner capable/responsible for verifying the use of non-OEM?
4. What is the environmental impact of OEM vs Non-OEM?
5. What is the process to determine whether equipment should be OEM or Non-OEM certified?
6. Should OEMs be more open book about OES purchases?
7. Can Non-OEMs offer same warranty and liability as OEMs to end users?



Thank you!

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