

Lessons from RIL's KG basin operations

BY

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KG D 6 Block of Reliance –some facts

- Phase 1 and 2 Project cost: \$8.8 B
- Spent to-date: \$ 5.2 B
- Block area: 7645 Sq.km
- Water depth: 400-2700 meters
- Gas reserve: 15 Trillion Cubic feet
- Steel used: equivalent to 11 Eiffel Towers
- Flow lines and umbilicals length: 450 line KM
- KG D6 has many firsts to its credit
- 350 days of gas production with 100% uptime!
- D 6 contributes one-third to RIL's EBIT!

Believe what the book says!

- Geologists said India's Eastern offshore had no hydrocarbons
- Books said oil deposits happen in deltas
- Reliance believed the book ,ignored the experts and bid for it!

Speed

- Globally deep sea development takes 7-10 years from discovery
- KG 6 produced first oil in 6.5 years flat!
- How?
- When the exploration team was analysing seismic finds, development group already had 70-80 options ready!

How they did it?

- Accept proven technology only
- Choose technology that provided greatest flexibility in terms of expansion
- Go for cost effective technology
- Quizzed deep sea operators and contractors to learn all the mistakes they had done
 - Do not repeat mistakes already done
- Have technical parade of world's best technology firms for choosing specific solutions

Wow solutions- 1

- Challenge : Site prone to flooding
- Solution: Analysed 100 years' weather data. Dredged 5.7 million tonnes of sand from the river to raise the level of the 200 acre site by 4.5 meters!

Wow solutions-2

- Challenge: Sea bed temperature of 5 degrees Celsius unfit for human operation
- Solution: Deployed Robots called ROV's (Remote Operating Vehicles) to set up the 'factory' at 1200 meters depth

Wow solutions-3

- Challenge: Cyclones etc allowed only 4 months' construction; everything had to go like clock work
- Solution: Interface management team formed to coordinate 200 consultants, contractors and fabricators in 12 countries on real time basis; The team worked 24/7 to resolve interface related issues

Wow solutions-4

- Challenge: Though only two fields are producing, project has to take care of future expansion
- Solution: India's first FPSO (Floating production, storage and offloading) vessel deployed (280 m long and 51 m wide). Controls and riser platform (CRP) conceptualised as an off shore control room for future expansion

Wow solutions-5

- Challenge: Reserve forest on the way of the three 24 inch trunk lines from CRP to land
- Solution: Line length extended by 20 km to travel under the river bed

Summary

- Believe the book and not so called experts
- Speed is the most important thing in projects
- Learn from others' (and your own) mistakes
- Be innovative
- Be bold
- Every challenge has a solution
- Think of the future always

Source

- Business world 19 Apr 10