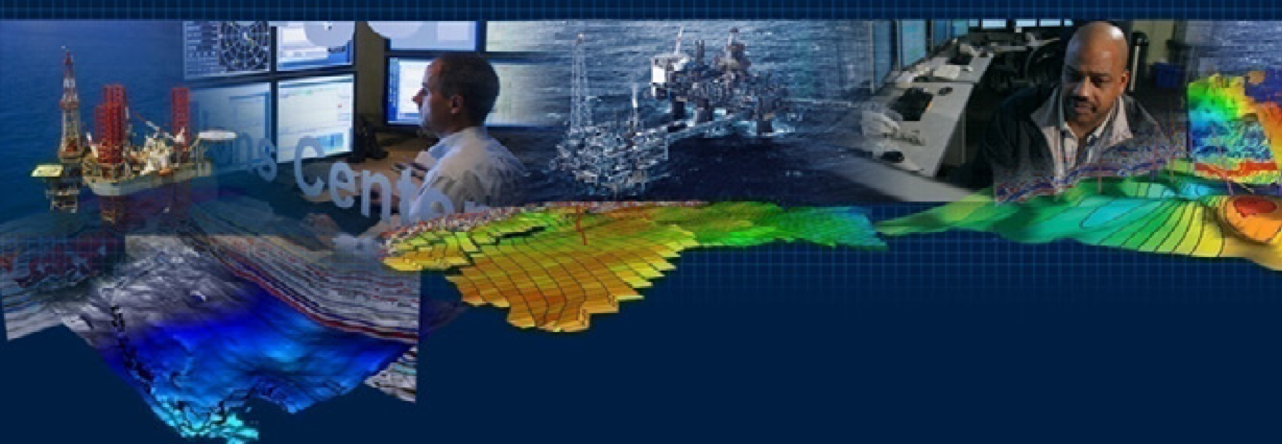
Statoil's Energy Seminar 15th of May

How can we reduce cost pr bbl?

Torjer Halle, Schlumberger Chairman Norway



Mai 2014

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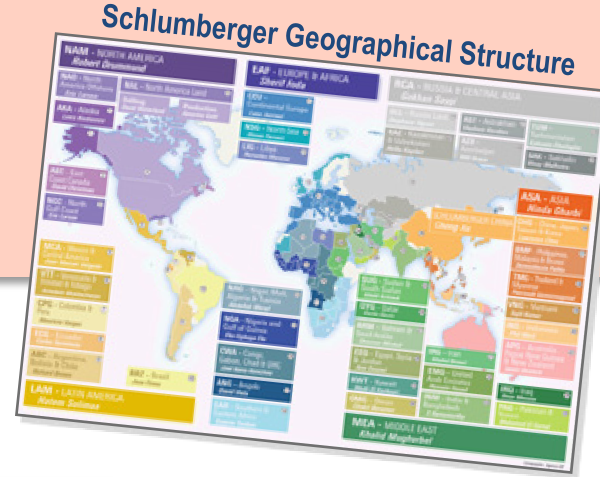
Schlumberger at-a-Glance

2013 Financial Highlights

Revenue: $45.27 Billion

Net Income: $6.77 Billion



123,000 People

145 Nationalities

85 Countries

42 GeoMarkets & 6 Areas

16 Product Lines

65 Research, Development & Manufacturing Centers

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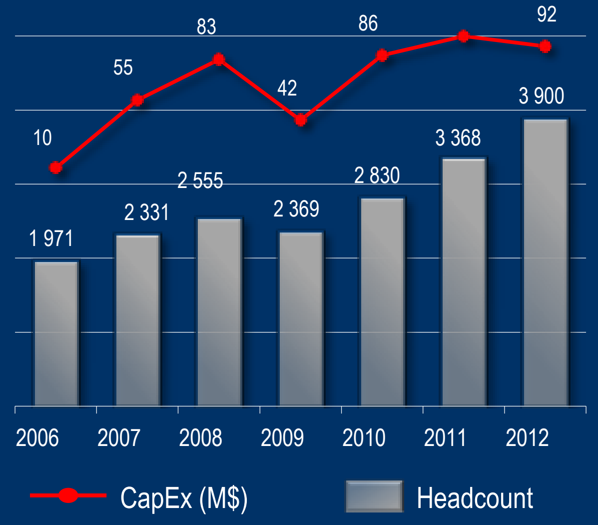
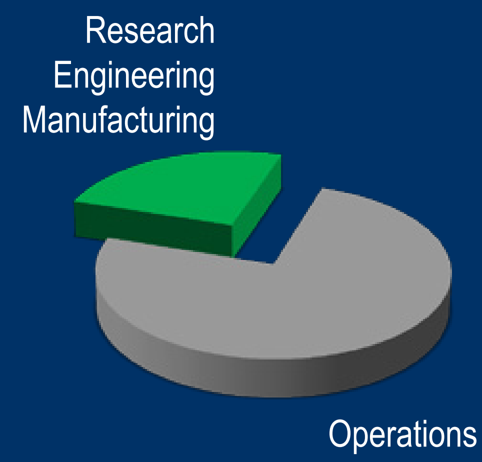
Schlumberger in Norway

Locations

Investment



People



- **3,900 employees**
- **20% females**
- **114 nationalities**
- **48 Locations**

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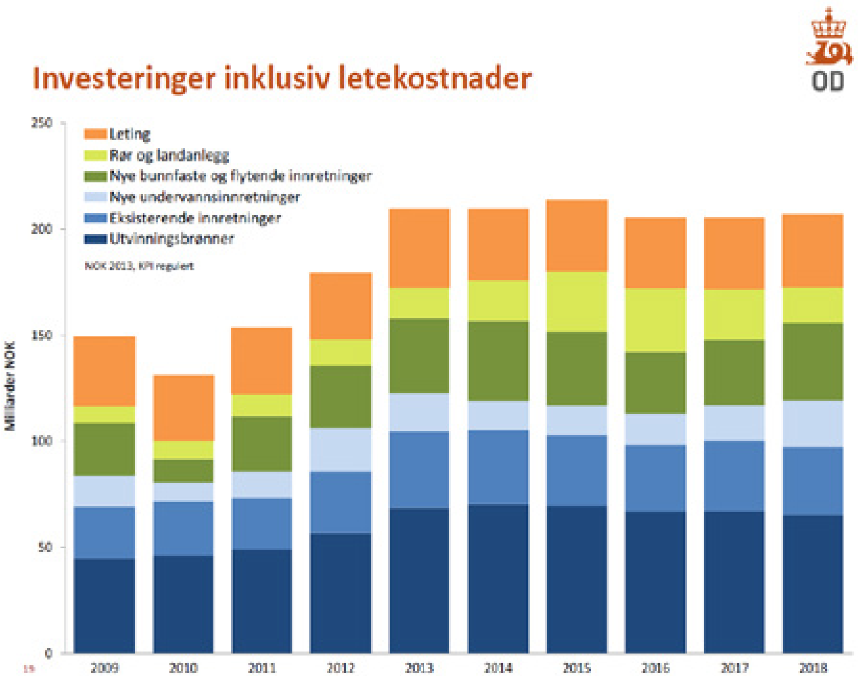
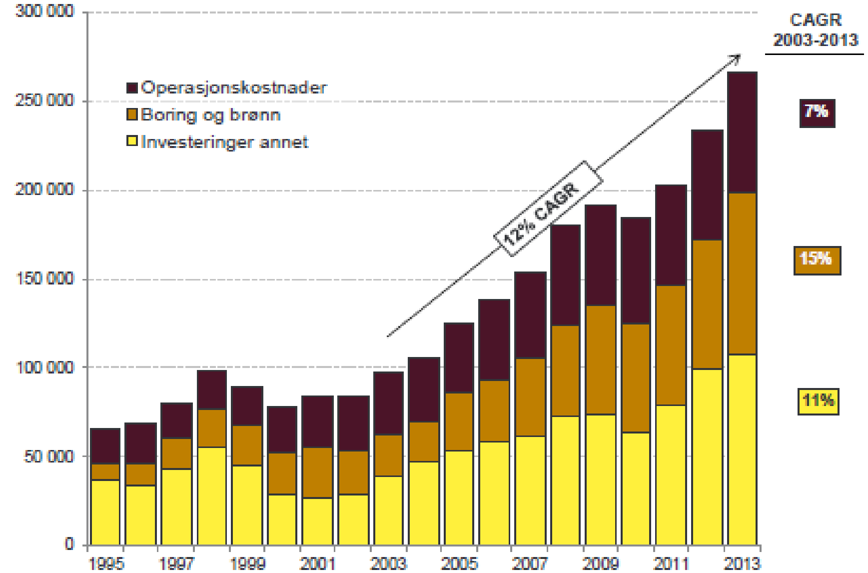
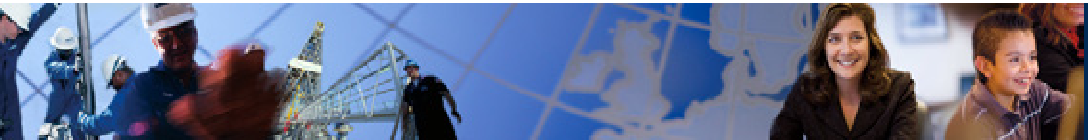
Norway O&G industry caught between cost increase...





Kilder: OD, Rystad Energy



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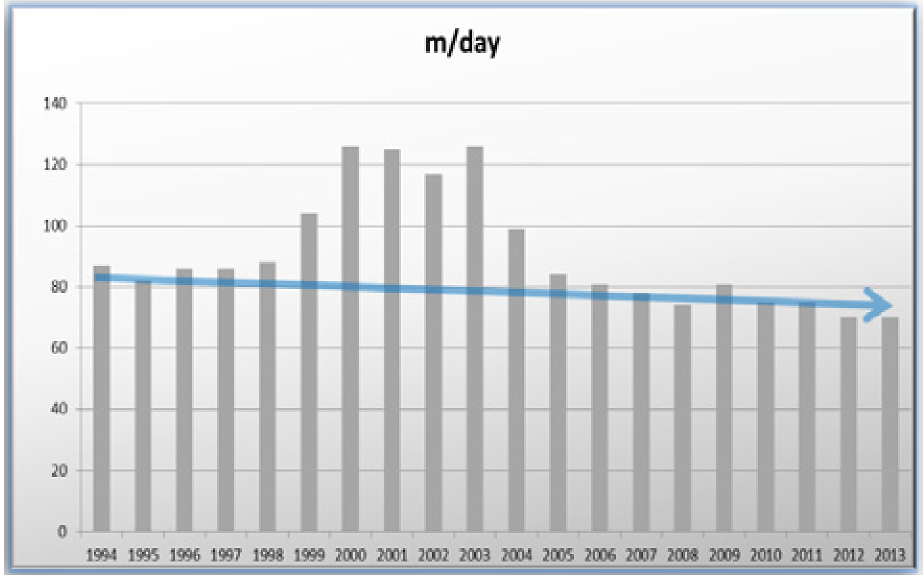
...and drop in drilling efficiency

- Upward trend in 1999
  - Introduction of new Technology
  - LWD Reliability
- Downward trend since 2004
  - Challenging drilling conditions
  - Half automated rigs
  - Older fixed platforms and 2x4 schedule
  - Increased bureaucracy slowing operations
  - Limited focus on efficiency

Norway Meter Drilled Per Year

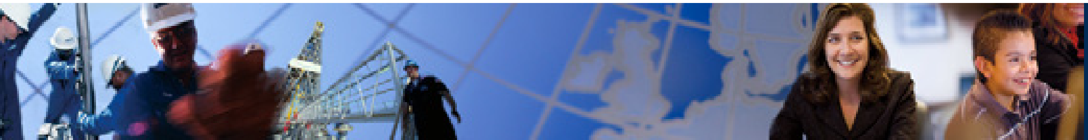
Source: Rystaad



Finansavisen "May cut investments"


Åpner for å kutte investeringene

Bedre på trading



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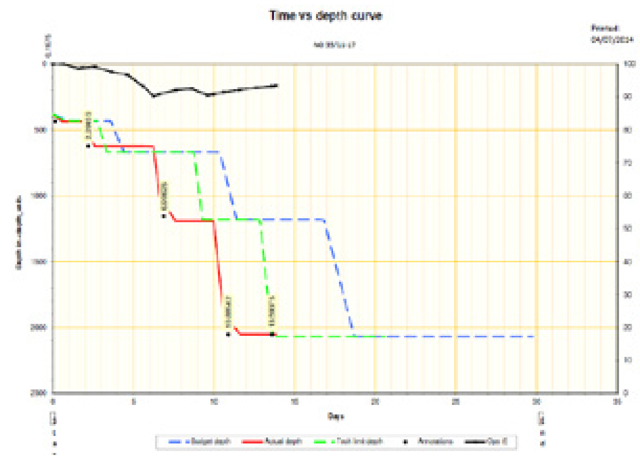
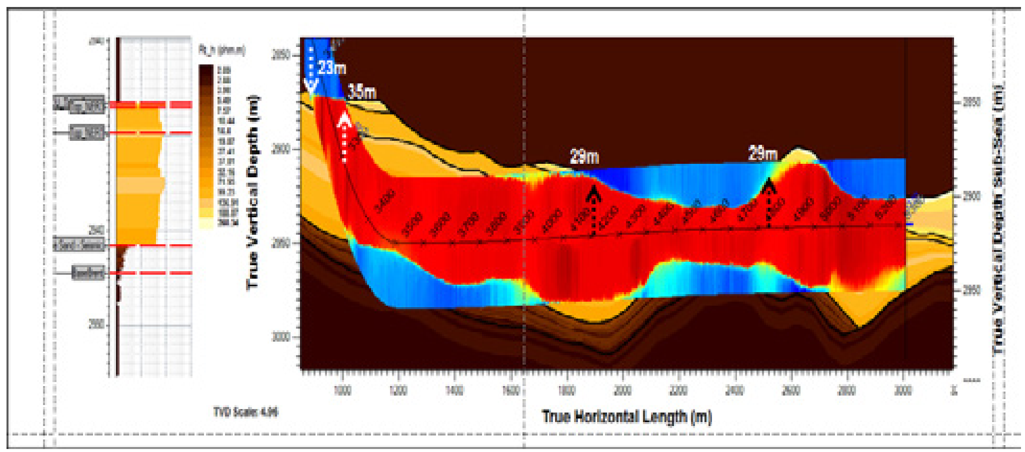
Industry to move to efficiency and cost/barrel optimization…

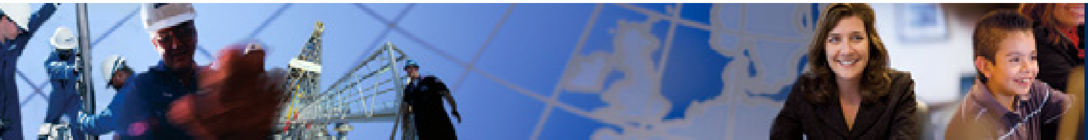
- Improve efficiency

- Cost saving is not the end goal
  - Hinders use of technology
  - Can hide big picture savings

- Maximizing production and reducing cost/bbl is
  - Drilling and placement of the right wells
  - Focused on reduced cost pr bbl







Technology has a key role to play

- Procurement driven sourcing

  Commoditizing of technology…..Price
- Internal bureaucracy in Oil & Gas companies

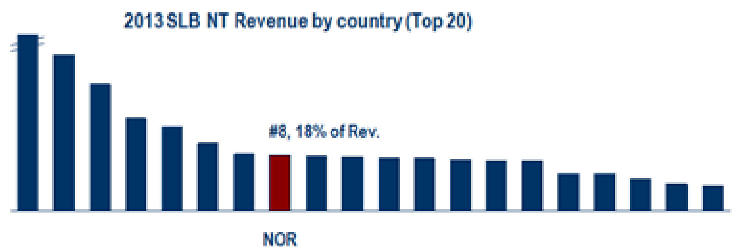
  Operations…….technology department……Procurement department

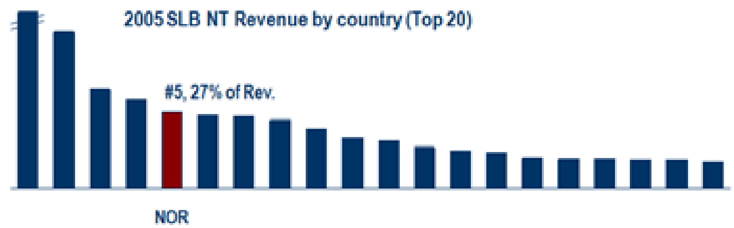
  Seismic while drilling proposal delivered to a client in 2007. Approval for usage December 2013

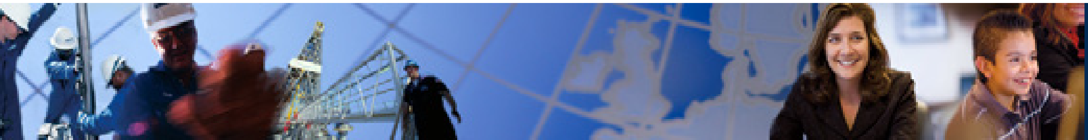
  WDP, Drilling Automation, MPD….
- The "North Sea laboratory" have moved to other areas

  Before North Sea was 3-5 years ahead of other markets

  Today North Sea is 3-5 years behind other markets
- Are we missing the big picture?







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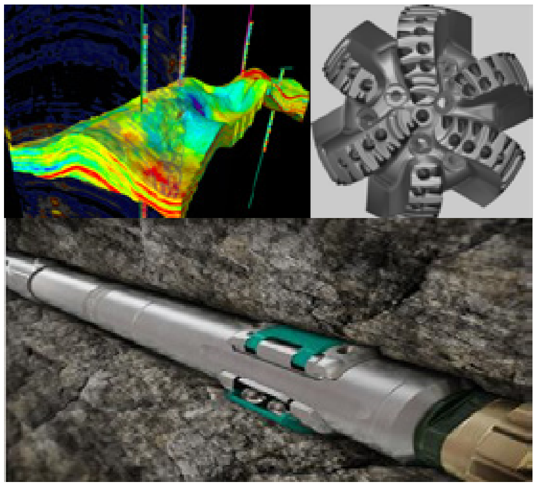
… requiring new contractual models and incentives

All players needs to be aligned and incentivized – feel the pain share the gain

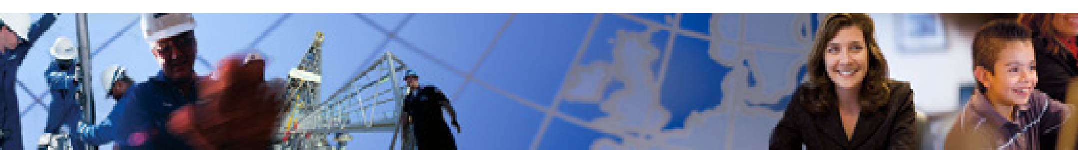


OPERATOR

Integrated Performance Contracts

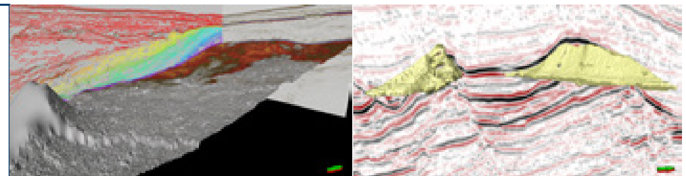
SERVICES PROVIDER

RIG CONTRACTOR



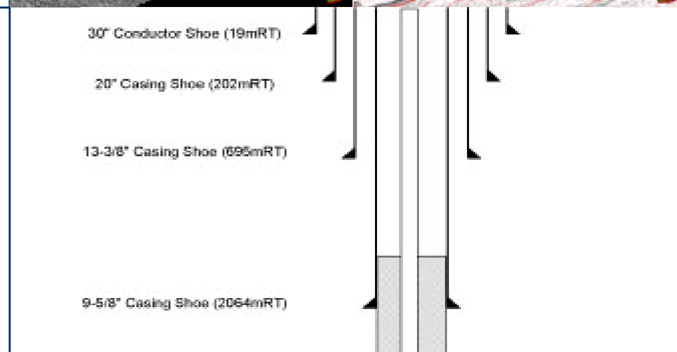
Technology has a key role to play

SURFACE
Technology Driven



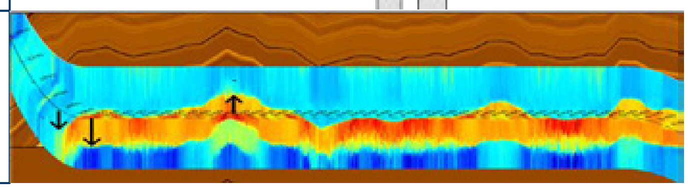
- 4D seismic for well planning and IOR/production optimization
- Better understanding of complex reservoirs in production
- Geomechanics and drilling hazard identification

TRANSPORTATION
Time and Cost Saving

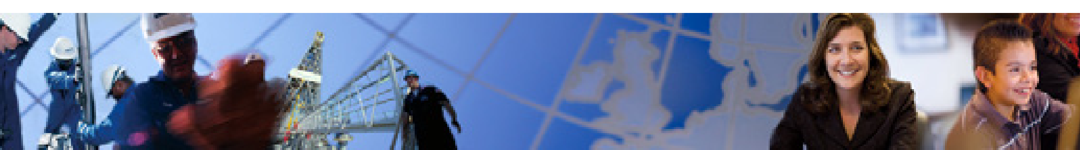


- Standardization
- Industrialization
- Cost savings
- Lean operations
- Well integrity

PAY ZONE
Technology Driven



- Well Placement
- Reservoir drainage monitoring – sea bed seismic
- Continuous planning for next injection and production wells



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SLB – Achieving a Step Change in Performance

Technology

Continuous investment in R&E

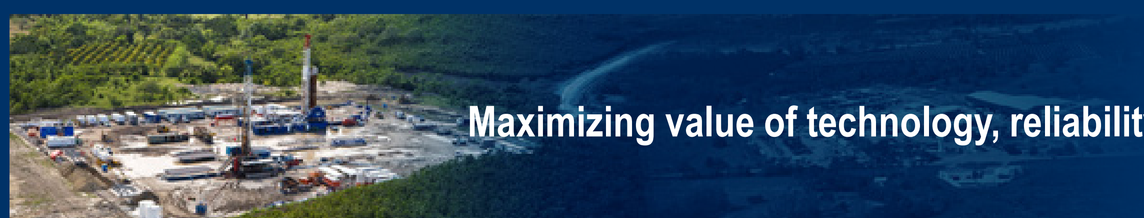
Reliability

Best practices from other industries

Efficiency

Optimizing the support platform

Integration



Maximizing value of technology, reliability and efficiency