

Disruptive Innovation: incentives, risks and ideas

The vision of a
technology driven company:

Technip

Roberta Pires

Technology Officer

Disruptive Innovation incentives

1) Market scenario of cost reduction.

- More creativity
- More collaboration
- More risk taking



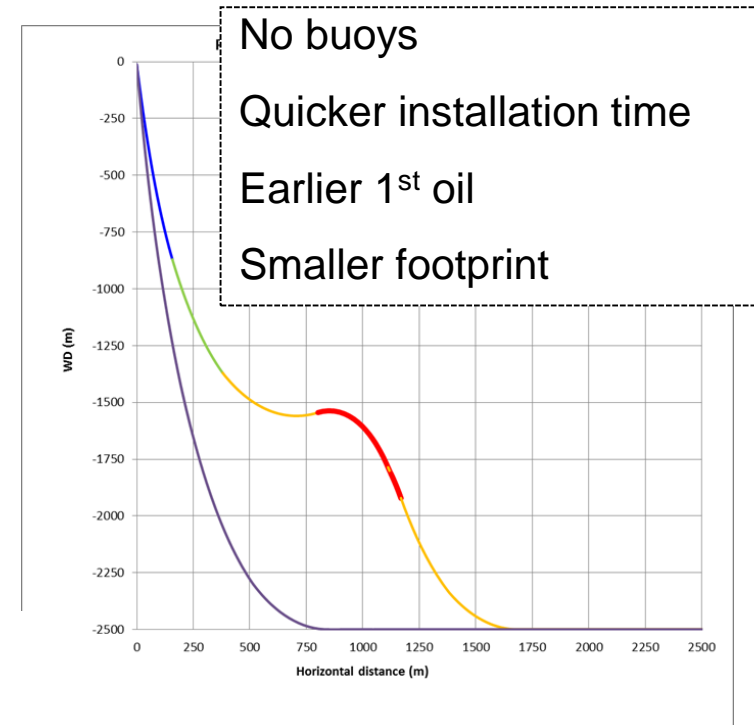
2) Innovation is now trendy

Easier to make it happen

- Internally: from trainee to CEO
- Externally: suppliers and clients

~~3) 1% obligation → for suppliers, so far, this is just not happening. R&D&I almost fully financed with company own funds~~

- ~~Loss of potential → suppliers have knowledge, solutions, sense of urgency and energy to seek and deploy new technical solutions → a lot more could be done with more funding~~
- Example: composite flexible pipes. Uttermost importance for **cost effective** free hanging at Ultra Deep Water, being an enabler in some cases.



Disruptive Innovation Risks

1) Culture, culture, culture!

- Big company mindset versus innovation mindset
 - Controls, processes versus chaos, freedom
 - Silos versus holistic vision
 - Hierarchy versus entrepreneurship
 - Error tolerance low versus medium/high



2) Market scenario of cost reduction → less funding

3) **Oil&Gas is a risk adverse business.** Collaboration and early engagement is key to eliminate the right risks at early stages.

4) Intellectual property (paranoia?)

- Endless discussions for non disclosure agreements
- Missing the opportunity of “open innovation”: start-ups, universities, etc.

Technip



Competitiveness of Deepwater Technology

Rio Oil & Gas, 27 Oct 2016



Innovation: Ideas to make it better

1) Designing culture

- Objectives and time allocation: 70% 20% 10%
70 20 10
- Guarantee funding for the “20” and “10” above
Day to day job Innovation in group Innovation individually
- Leaders must foster innovation: top → down!
- Tolerance to error
 - Fail fast, learn fast!
 - Celebrate R&D&I projects that come to an end

2) Not cutting internal funding → Innovation strategy → long term vision (“patient funding”)

3) Raise more funding for technology suppliers → rethinking 1% obligation law

4) Collaboration and early engagement for innovation: operators, suppliers and sub-suppliers getting together

5) Open innovation: just do it

6) Generic worldwide toolbox with a set of potential smart NDA (?)

Technip



Let's do it!

Roberta Pires

rpires@technip.com

