

GE Oil & Gas

Subsea Industry Trends, Challenges & Growth Segments

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imagination at work



Agenda

GE Oil & Gas

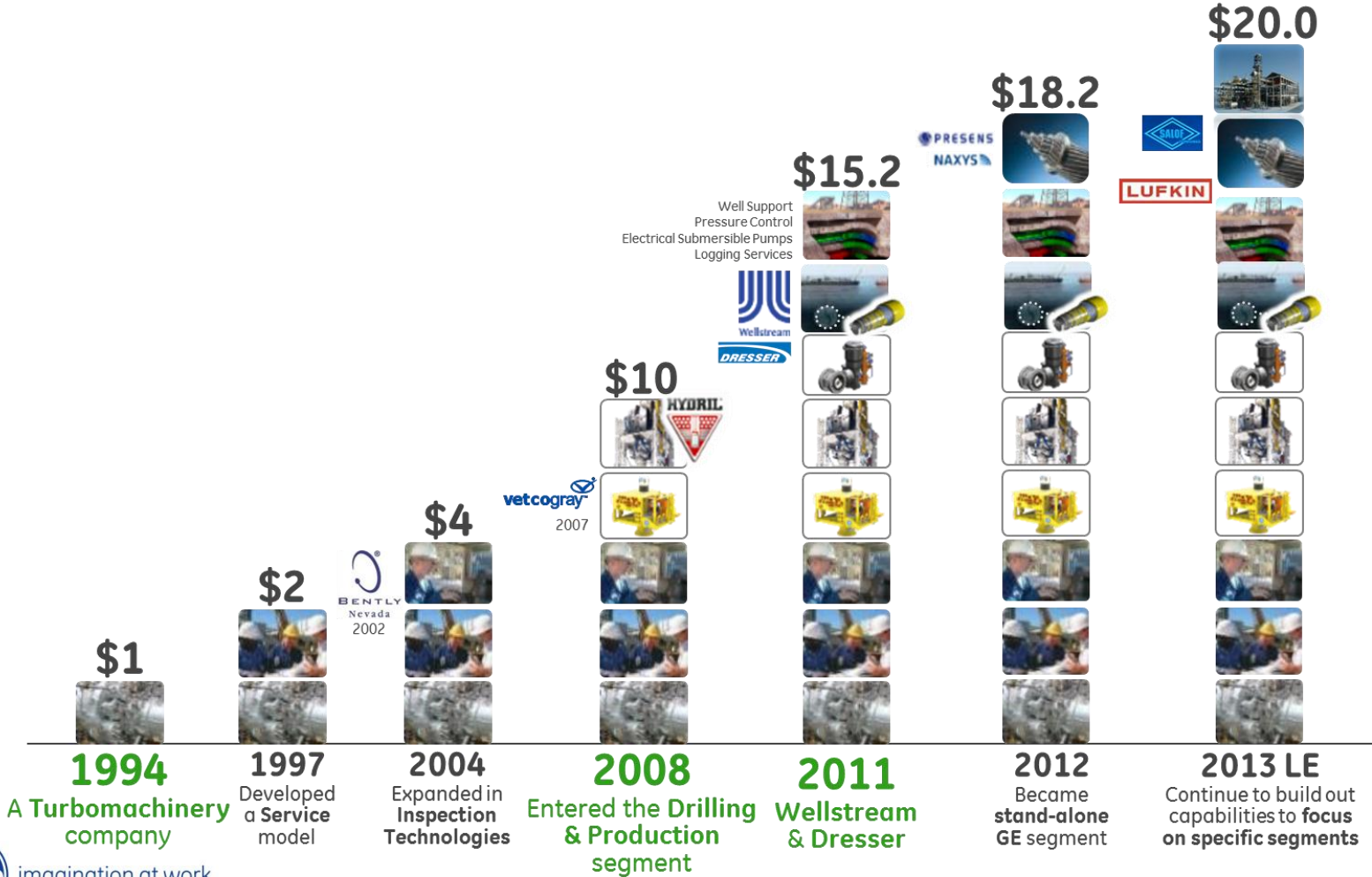
Trends and oil price sensitivities

Growth adjacencies

Summary

GE Oil & Gas ... building on a strong foundation ... redefining what's possible

(Orders \$ in billions)



GE has a distinctive position in the industry

- Key player
- ⊖ Player
- Presence

Selected players	Metrics				Equipment & Related Services					OFS
	Revenues in O&G \$B – 2013E	'10-'13 Rev CAGR	3Y M&A \$B net	Head count	TM ~ 40	SS ~ 30	Drilling ~ 45	Surface ~ 5	AL & DT ~ 15	~ 170
SLB	45.7	19%	14.6	120 k		○			⊖	●
HAL	29.7	18%	0.3	72 k					○	●
NOV	22.3	22%	5.8	52 k		○	●	⊖	○	
BHI	21.7	15%	5.7	58 k					⊖	●
GE O&G	16.1 1.7 17.8	24%	10.0	42 k	●	●	⊖	●	●	
WFT	16.2	17%	(0.1)	70 k					●	●
CAM	10.0	18%	0.7	27 k	○	●	●	●		
AKER	8.2	13%	(1.7)	21 k		●	⊖			
FMC	6.8	18%	0.6	19 k		●		●		
SIE O&G	6.6	17%	0.7		●	○				
Sulzer	4.4	10%	1.2	18 k	⊖	○				
DRC	3.5	22%	0.9	8 k	⊖					

■ O&G Eqpt & Svcs
■ OFS
 Lufkin+Salof (Full Year)

Sources: GE O&G analysis, Thomson Reuters, Capital IQ

SAS '13
\$B

Subsea Systems

Products & Projects



- Subsea Trees (S, M & D series)
- Controls
- Speciality Connectors & Pipes
- Offshore Solutions
- Manifolds & Connectors
- Subsea Power & Processing

- 550 employees
- 8 manufacturing facilities

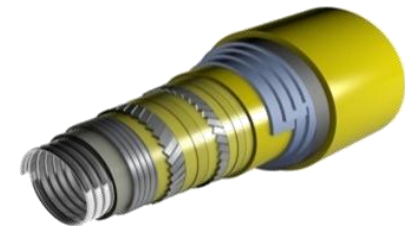
Subsea Services



- Field service
- Fleet & equipment
- Storage & asset management

- 1,090 employees
- 8 major service centres

Wellstream Flexibles



- Risers
- Transfer lines
- Flowlines
- Jumpers
- Pipeline Integrity Services

- 1,160 employees
- 2 manufacturing facilities

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Major industry trends continue into 2014

2013 trends

Increasing capital and technology intensity

Slowdown in North American land activity

Slow development of unconventional ex-NAM

Rapid growth of subsea developments

LNG transforming global gas trades

Growing focus on distributed gas

View for 2014

- Cost/technology inflation continues ... operators facing cash squeeze
- Tension between investor pressure for lower spend and reality of increasing resource and project complexity

- Speed/timing of recovery unclear
- Dry-gas focused drilling stays depressed at low gas prices

- Initial drilling in China starting to yield results ... more clarity by end '14
- Slow progress in Europe, LatAm

- Awards flat/slightly down in '14 after record '13 ... growing again in '15
- Cash spending growth continues, fed by record backlogs

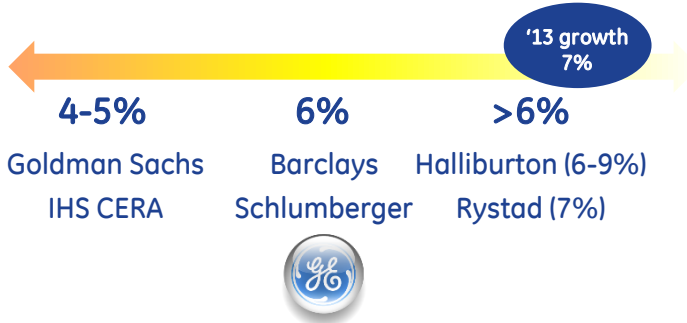
- Wave of Australian projects peaking
- Large pipeline of US/Canadian projects awaiting approval/financing
- Plans moving ahead in Russia, E. Africa, E. Mediterranean

- Increasing interest from policy-makers and potential customers
- Business models not yet defined

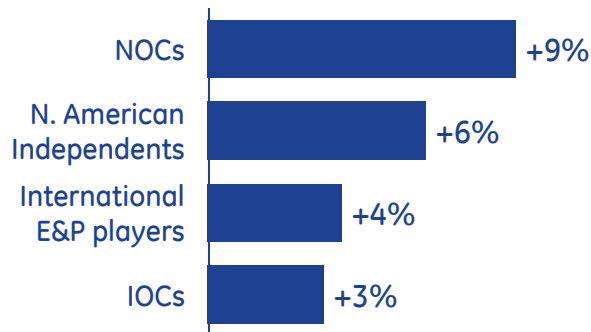
Capex under pressure but spending still growing

Overall outlook remains positive ... led by NOCs

Forecasts for '14 E&P spend growth



'14 spend growth by type of company (Barclays E&P survey)



Resilient

Offshore & Subsea	8%+	<ul style="list-style-type: none"> Spend continues to grow (though tree awards flat) Industry delivering on record backlog
LNG	6%	<ul style="list-style-type: none"> Strong pipeline of projects, esp. in NAM Growth moderating vs. recent years
Mid & Downstream	~4-5%	<ul style="list-style-type: none"> Regional dynamics ... largely decoupled from upstream spend cycle
Opex	6%	<ul style="list-style-type: none"> Less volatile than Capex ... driven by existing asset base



At risk

IOC Mega Projects

- IOCs promising "capital discipline" in '14
- Material risk of delays/ rescoping of major projects ... e.g. high cost N. Sea, West Africa DW



Uncertain

NAM Onshore

~3-6%

- Signs of stabilization ... timing/pace of recovery still uncertain

Wider Industrial

~4-5%

- Driven by wider economic growth esp. in OECD / BRICs

High-profile capex slowdown by IOCs shifting focus towards NOCs and opex

Trends shaping global subsea business

Slowing Capex & Cost Inflation

- Offshore CAPEX growth varies between sources in 2013-17 CAGR -5% (Woodmac) to +12% (Rystad)
- Rapid CAPEX inflation (project complexity and input cost)
- UK oil industry wages are set to increase by 15% in 2013

Ageing fields

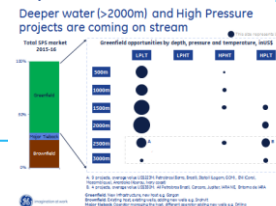
- Fields over 5 years old will increase by 9% by 2016
- Deep water fields over 5 years old +22% by 2016

Increasing sensitivity to Well Integrity

- Operators more cost aware and demanding of reliability
- Increased regulatory scrutiny
- Life extension of ageing infrastructure to make fields economic (e.g. Apache acquiring Forties field)

Deep and remote new basins

- Significant increase in number of projects over 2000m ... from 0 greenfield in 2010-12 to ~15 in 2015-16
- Increasing HP developments, from 1 in 2010-12 to 13 in 2015-16

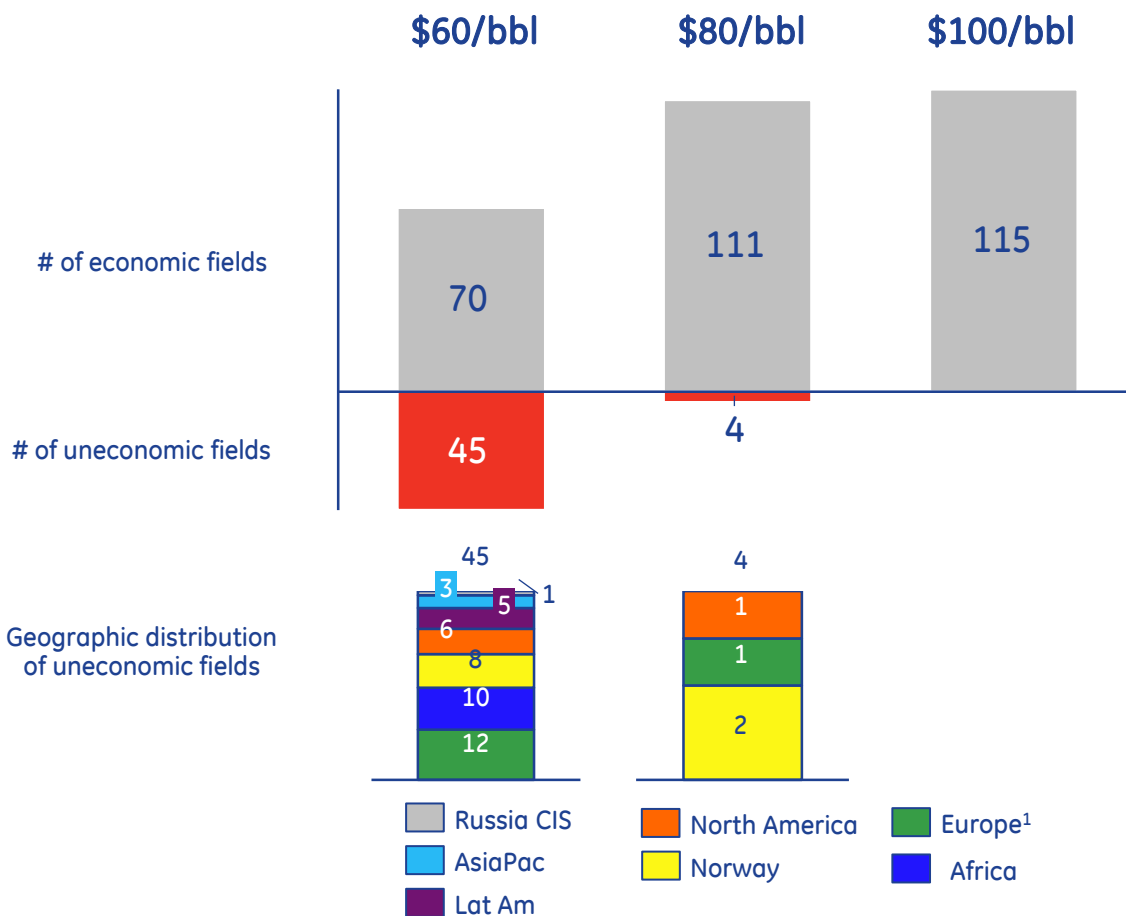


Poor performance of subsea wells

- Low recovery rates and frequent production interruptions: e.g. NCS ... As much as 25% of Subsea wells are non-producing at any one time

Subsea robust at >\$80/bbl

Illustrative results from 115 projects tested at different oil prices



- ~\$100/bbl – default thinking
- Subsea processing accepted
 - High tech exploration continues

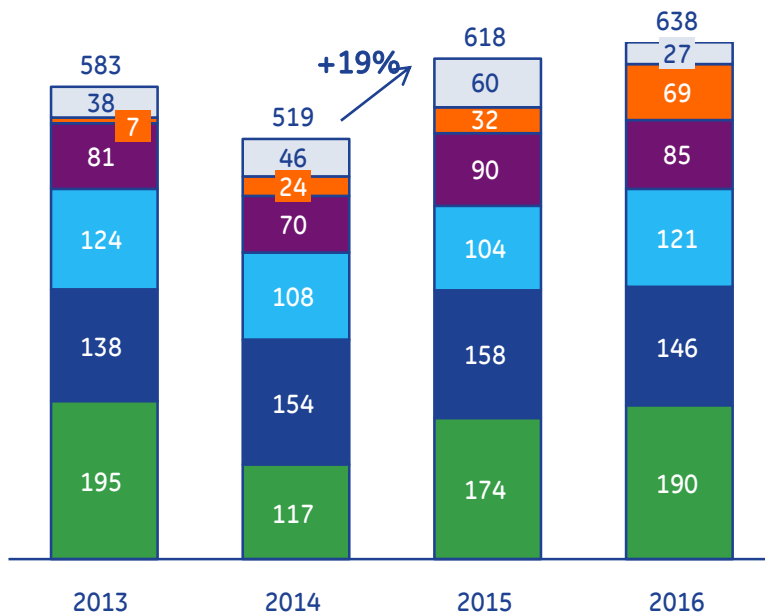
- <\$70/bbl – market contracting
- Aggressive project cost reduction
 - Many African ‘mega’ projects put on hold
 - Shifts towards improving field productivity

Short term wildcards

- Iran/US relations
- Libya, unrest continues ...
- Iraq, exports via Turkey
- Emerging markets growth
- Eurozone

Project costs are increasing ... IOCs focusing on portfolio management

2014 XT awards expected to drop vs 2013



Note: Quest Base forecast for 2013: 543 XT awards; LAM includes Mexico
 Source: GE Subsea Systems Marketing, Quest 2013, Barclays Research

Key regional dynamics

Cost escalation, falling ROIC, causing project deferral

- E.g. Rosebank, Bressay, Hadrian North
- Shell ... "Design one, build many" → capital efficiency

Brazil ... PBR project delays

W. Africa ... towards 'mega' deals; Total, BP & CVX significant in Angola

UK North Sea: Independents continue to increase presence

- EnQuest (Kraken), Premier Oil (Catcher)

Asia Pacific (excl. Australia): Price sensitive region

- Indonesia possessing several deals (Gendalo, Jangrik)

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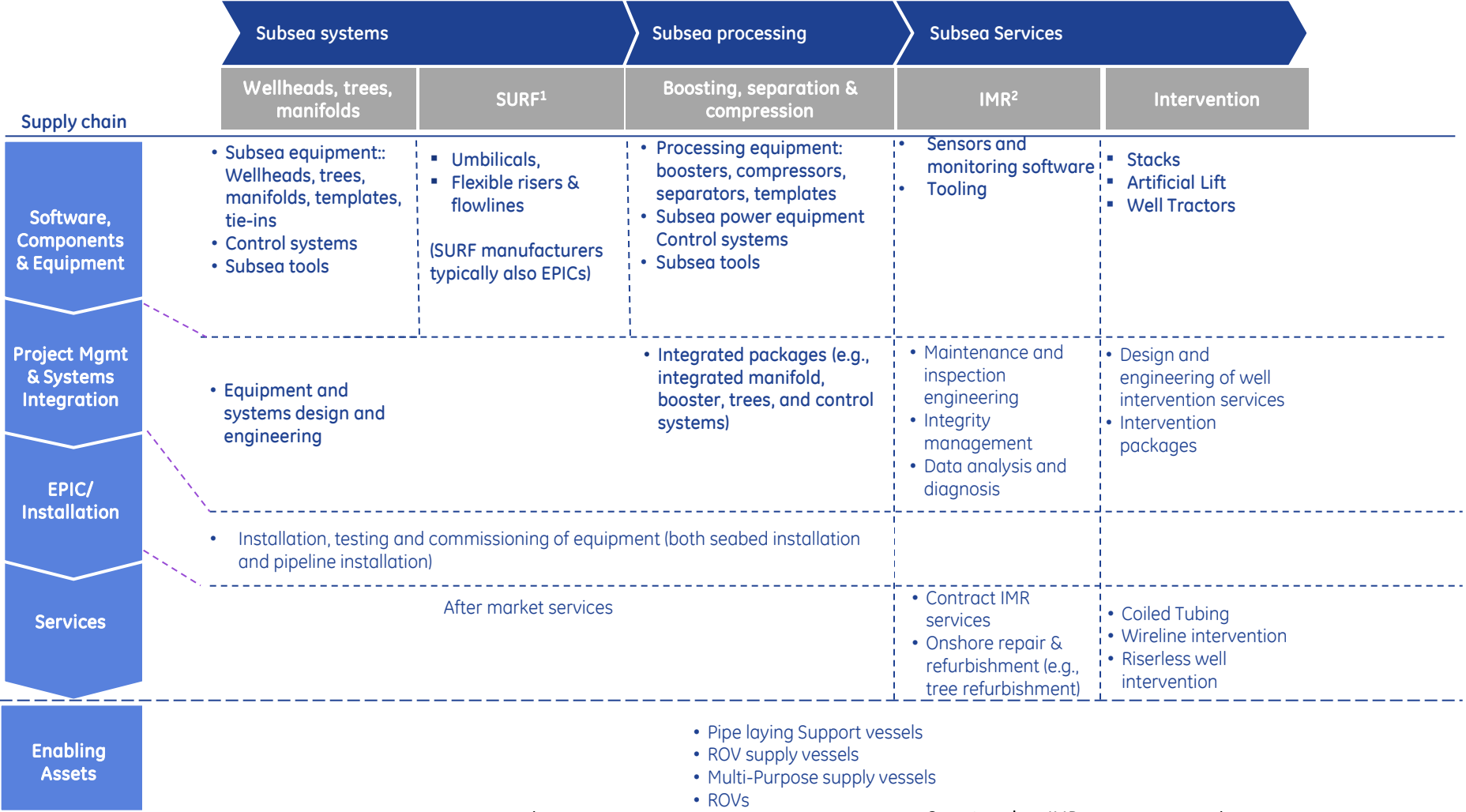
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Subsea adjacent segments



One stop shop EPIC contracts led by vessel owner & operator who manufactures some equipment

One stop shop IMR SVS provided by someone who typically operates ROVs, may or may not own vessels, and contracts out some of scope (XT repair)

One stop shop solution generally thru alliance of partners co-ordinated by vessel owner



1 Subsea Umbilicals, Risers and Flowlines 2. Inspection Maintenance Repair

Industry dynamics ... Effects on Services

- Market growth
- Aging IB - average XT now 10 years
- Brownfield growth
- Move towards VXT post-Macondo
- Controls ... More data, faster, more channels (more bandwidth)
- Sensing & condition monitoring capabilities



Impact on Services

1. Increase in installation activity
2. Increase in shop work (repairs, etc.)
3. More work over related rig activity
4. Added complexity of servicing work

Challenges

- Shop capacity / repair turnaround
- Field service personnel availability & competence
- Engineering resource & Supply chain
- MVS strategy & partnerships with enablers

Opportunities

- Revenue increase for all core services
- LoF extension – Brownfield/repairs Rev.
- Move into adjacencies – intervention
- X-P&L opportunities ... Subsea Integrity

Subsea Services stairway to value

The journey from servicing to services to partnering

Partner Me

Co-manage my subsea fields
Distill all the data and make the right decisions together = IOR
Be remunerated accordingly



Improve my Recovery

Expand the services scope of supply
Interpret & diagnose – tell me what may happen ... and when

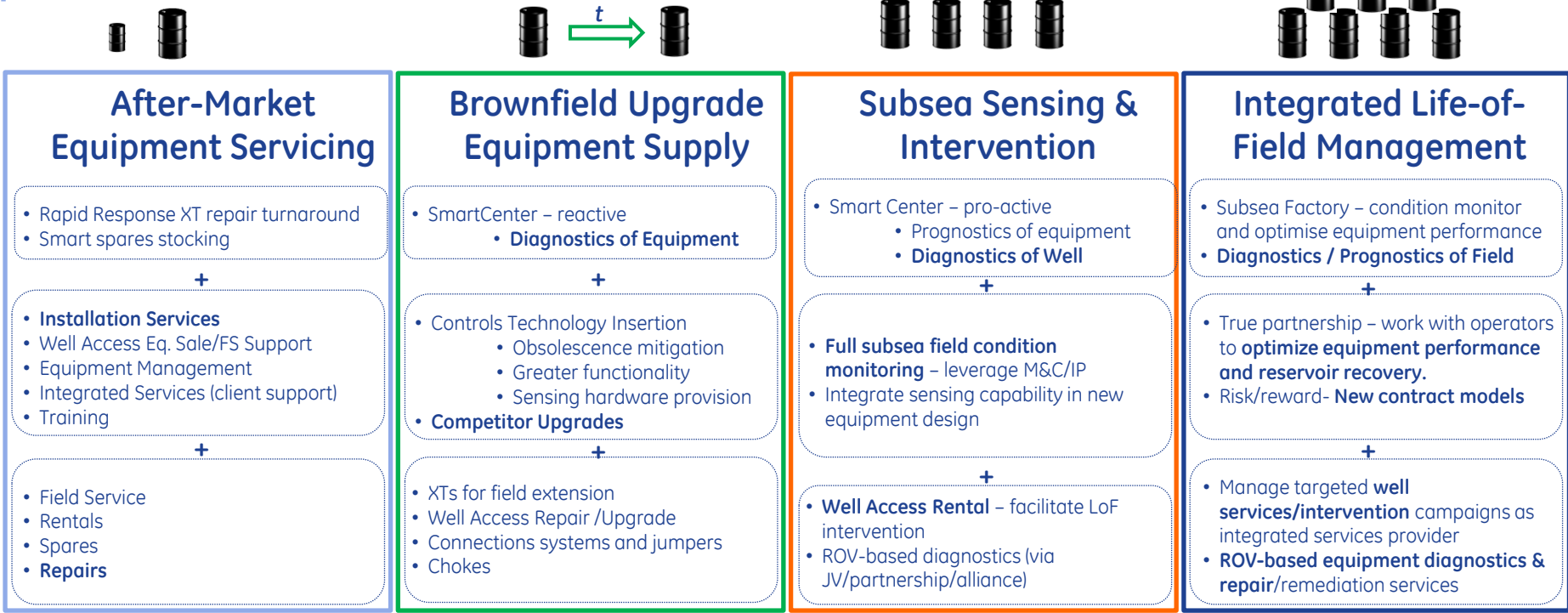
Keep me going for longer

Supply equipment which extends my field life
Tell me what happened

Get me up and running ...

... and keep me up and running

Level of Integration with customer



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Conclusions

Sound upstream fundamentals

Growth into services' adjacent segments

Predictive models & industrial internet

Evolving industry models

Thank you for your attention

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