E&P Operational Improvement
Next steps for Oil & Gas businesses in Africa
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Section 1
PwC Oil & Gas Expertise
Operational Improvement
**PwC E&P Centre of Excellence support E&P companies to...**

- Execute/anchor strategies and change
- Align activities, roles and responsibilities to changes - or HQ directions
- Prepare for new operational responsibilities and projects – small or large
- Improve Operations (Subsurface potential – Facility constraints)
- Establish a common, documented, view of “how we operate”

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**Change through a minimum-disturbance approach**

- Preparation for new...
- Improvement
- Alignment
- Organisational (re)design

→ BMS
Section 2

Operational challenges we face
The objective is to close the gap between ambitions and performance

- On average 95% of all employees are unaware of, or do not understand its strategy (The office of strategy management – Robert S. Kaplan and David P. Norton).
- North Sea private benchmark (2010) – 4 Billion USD could be gained by participants – if all assets were producing on par with Top Quartile performers. (90% Production Efficiency)
- Leading IOC: Our daily battle to optimize production and eliminate reasons for shortfalls continuously give us 4-7% increased production.
- In a study of 318 industrial E&P megaprojects, almost half (47%) of projects had significant operational problems (Merrow, 2011)
- Significant value destruction occurs during transition from project development to operations, as preparation for operation (readiness planning) has started too late...
The situation we normally meet

Today
- What we do
- How we do it
- Who does it

Tomorrow
- What we do
- How we do it
- Who does it

Our context
We advocate a systematic approach

- Secure our license to operate (Compliance)
- Develop and document shared (best) practices
- Create a platform for continuous improvement
- Create a platform to support growth.

Level 1: Immature
Level 2: Basic
Level 3: Standardization
Level 4: Increased efficiency
Level 5: Continuous improvement

What is the ambition level?
What is the motivation?
Section 3
Operational Excellence Approach
Critical: Define and recognize the playing field

The Goals!

- The unified – OUR - way of working
- Driving execution of strategy
- To clarify roles and responsibilities - expectations
- To support growth
- To manage Risk
- To secure alignment to Capital Value Projects
- To support Continuous Improvement / Learning Organizations
- To support delegation of authorities
- To clarify functional and hierarchical interfaces (horizontal & vertical)
Section 3 – Operational Excellence Approach

Our standard delivery method - illustrated

1. Interview to get an overview of the Project Process

2. Mapping of current Major Project processes

3. Develop “To-Be” processes (activities, roles and responsibility)

4. Description and documentation of activities, interfaces, roles and responsibility

Initial analysis
- Project risk and mitigating actions
- Interview project resources
- Process analysis on existing processes

As-Is
Internal Best Practice
Value- Driver discussion
Blueprint Comparison

As-Is Real

To-Be

RACI

Example: Process Owner

Business Area

Accountable
RACI
Process

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18 October 2013
Accelerate the process
The participants have their "day jobs" – and progress must be visible

<table>
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<tr>
<th>Estimated effective time per stream</th>
<th>2 weeks</th>
<th>7 to 8 weeks</th>
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<td><strong>Project steps per stream</strong></td>
<td>Pre-read</td>
<td>As-is</td>
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<tr>
<td><strong>Main objectives</strong></td>
<td>Gather material</td>
<td>Construct as-is SAMs</td>
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<tr>
<td><strong>Number of workshops per stream</strong></td>
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</tbody>
</table>

*Initial workshops require management attendance
**SAM: Strategic Activity Map

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Secure context and link between strategy and execution

Vision, mission, values

Strategic positioning
Organizational design and System reengineering

Strategic analysis
Internal analysis
External analysis

Blueprinting approach (with reference models)

Strategy

Operationalization and execution

Objectives that support strategy
Activities (Processes)
Roles and responsibilities
Structure and systems

Business Management System
We use simple "building blocks" to link Activities to Goals – and identify interfaces, opportunities and pain-points

- We use the building blocks to facilitate workshops - focusing on goals, activities and roles
- The workshops must create process ownership and involve key stakeholders
- We can identify the information flow and necessary systems to support To-Be operations.

Activity chains - candidates for optimization
E&P blueprints are E&P "model processes" to support project execution – securing completeness and speed

- PwC E&P blueprints are reference models describing how functional units fit together as a coherent system - to create economic value - and competitive advantage

- PwC E&P blueprint are used to accelerate, facilitate and quality assure strategic change projects

- The blueprints "imbed" continuous improvement and captures checkpoints across the value chain.
Example on a blueprint section...

Ensure to develop and maintain Asset Management (Portfolio) strategy:

1.1. Ensure alignment with COMPANY overall portfolio strategy
- Obtain strategic guidance (input) from COMPANY management & Portfolio strategy
- Establish criteria for ranking Operated and Partner operated assets in line with COMPANY strategy
- Develop and maintain (annually) strategic guidance for COMPANY portfolio of producing assets.
  → COMPANY Portfolio strategy for producing assets.
- A/R: GM Production
- R: Asset Managers
- C: E.ON MD in charge of Strategy (T&D)
- Ensure to develop and maintain portfolio view and 1.2. prioritisation of all existing assets.

2. Ensure to conduct initial preparation

2.1. Ensure Initial Preparation for Operated Assets
- Assign Asset manager in accordance with asset priority (focus)
- Nominate and establish Asset Team
- Setup meeting structure
- Setup necessary committees
- Initiate ARP

2.2. Ensure Initial Preparation for Partner Operated Assets
- Assign Asset manager in accordance with asset priority (focus)
- Nominate and establish Asset Team
- Initiate ARP

Activity chains - candidates for optimization
Secure a holistic view – and robust interfaces
(Custodianship, interfaces and handover points)

Corporate Processes, Gates/Handover and Transitions

Explore - Drill

Major Project

Operations

Support Functions

• Project Management
• Procurement and contracts
• Commercial & legal
• HSEQ
• Subsurface
• Facilities
• Var. (HR / IT / Etc)
Section 4

*Industry Relevant Examples*
Recent Oil & Gas Operational Improvement projects
**Typical growth paths - Organizational transition**

### 1. Exploration focused
- Exploration Centric
- Well Delivery crucial/ext.
- Support under CFO

### 2. Exploration to production shift
- Exploration still dominant
- Well Delivery Capabilities
- Non-OP Dev. & Prod. Team
- Admin/IT under CFO
- Commercial / Legal becomes critical
- Support functions more vital

### 3. Major Development → 4 Production
- Exploration still value driver
- Development & Production Team build-up to handle major operated project
- CFO - Finance & Controlling
- Commercial critical – to support Asset/Offset
- Support functions elaborated / separate

---

**Diagram**

- **GM**
- **HSEQ**
- **HR**
- **BD/Portfolio**
- **CFO** & Support
- **Procurement**
- **Com. & Legal**
- **Exploration**
- **Drilling**
- **NON-OP Develop. & Prod.**
- **Major project (Operated)**
- **Production (Operated)**
- **Operated Project #1**
- **Project Assignees /Proc.**
- **On Shore Support**
Industry examples

1. Improve "Process Effectiveness" of well delivery...

2. Improve "Process Effectiveness" related to Production Efficiency...
Section 4.1

*Improve Well Delivery*
What are the Well Delivery "Value Drivers"

Primary drivers
1. Improve Well Delivery Timeline
2. Ensure lessons learned from drilling operations
3. Improve stability of plans
4. Ensure best use of internal/external resources
5. Ensure best use of drilling equipment

Critical success factors
- Understand & collaborate with internal client
- Drive understanding of consequences of changes
Example of Extract from a Well Delivery blueprint

Section 4.1 – Improve Well Delivery

Goal / Sub-goal

Activity 1

Role w/RACI

Information

Information System

Trigger / KPM

4. Ensure concept selection and initial planning
   - 4.1. Initiate and assess site survey
     - 4.1.1. Inform exploration about site survey initiation (ref. Exploration 12.1)
     - 4.1.2. Contribute in defining scope of site survey and provide requested input
   - 4.2. Review site survey
   - 4.3. Perform site survey activities
   - 4.4. Perform initial well design selection process and prepare for concept selection
     - 4.4.1. Obtain approved Well Proposal
     - 4.4.2. Hold a cross functional well concept design peer assist workshop to identify well concepts and constraints
     - 4.4.3. Establish/create probabilistic time and cost estimates with risk assessment
     - 4.4.4. Develop well concepts with preliminary well designs
     - 4.4.5. Hold cross functional concept selection review meetings
     - 4.4.6. Prepare recommendation for well design concept(s)
     - 4.4.7. Develop well decision tree for relevant outcomes
     - 4.4.8. Identify long lead items (LLI)
     - 4.4.9. Update contracting strategy and project objectives
     - 4.4.10. Develop procurement plan

RACI Matrix

Geomodeling
   - Import data from various sources
   - Generate 3D structural framework
   - Import interpretation logs, properties
   - Develop variograms (reservoir properties)
   - Estimate Hydrocarbons In Place (scenarios)
   - Estimate reserves for the prospect
   - Develop and present findings

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<tr>
<th>Exploration Department</th>
<th>Field Development</th>
<th>Drilling</th>
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<tr>
<td>Mtr. Prospect Evaluation</td>
<td>A R C, I</td>
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<td>Prospect Evaluation Team</td>
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<td>Discovery Promotion Team</td>
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<tr>
<td>Drilling Engineer</td>
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</table>
**Engagement to improve Well Deliveries**

(For many operators – the most costly / risky they do...)

**Section 4.1 – Improve Well Delivery**

- Manage Change scope
  - 2.5.1. of work in Wells
  - 2.5.2. Assets
  - Study the impact of the change in scope of work on the budget, well design, material design and availability
  - 2.5.3. Coordinate with Technical Services for material availability due to change in scope of work
  - 2.5.4. Material and Budget
  - Prepare a summary document for assets addressing the impact of the change in scope of work on material and budget
  - 2.5.5. Conduct Meeting with Assets & DDE teams to discuss impact and budget allocation for the change of scope
  - 2.5.6. Obtain Asset Approval on material availability
  - Schedule well and carry over well's budget for next financial year depending on availability of rigs and resources

- Act – findings will update programs and management system

- Primary Objective
  - Identification of Drilling capabilities incl. rig scenarios
  - Selection of most valuable option

- Purpose
  - Quality Assurance focus on plan
  - Organizational learning and continuous improvements

- Level of Complexity
  - Standard, normal, repetitive, known areas 0 – 30
  - Slightly more challenging, risks on sub-activity levels 30 – 50
  - Challenging, stretched designs, prototype 50 – 70
  - Complex, towards company competence limit 70 – 100
## Section 4.1 – Improve Well Delivery

### Making processes "relevant for me"!

<table>
<thead>
<tr>
<th>Ensure Project Initiation</th>
<th>Drilling Manager</th>
<th>Well Team Leader</th>
<th>Marine rep</th>
<th>HSEQ Manager</th>
<th>HSEQ Leader</th>
<th>Drilling supervisor</th>
<th>Procurement</th>
<th>Logistics coordinator</th>
<th>Procurement</th>
<th>Asset Owner/ GM Exploration</th>
<th>Asset Owner/ GM Exploration</th>
<th>Consortium</th>
<th>HR Advisor</th>
<th>Finance</th>
<th>Accounting</th>
<th>CEO</th>
<th>Disciplines</th>
<th>Operational Geologist</th>
<th>Regional Drilling Manager</th>
<th>IT-department</th>
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<tbody>
<tr>
<td>Provide initial input from G&amp;G and Asset to develop project and secure License approval for decision to drill.</td>
<td>I</td>
<td>C</td>
<td>I</td>
<td>A</td>
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<td>Prepare initial time/cost estimate</td>
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<td>Perform rig screening</td>
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<td>Gain Rig Intake board approval from E-On Ruhrgas HQ</td>
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<td>Define project requirements</td>
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<tr>
<td>Specify project demands, planning, execution and results of well project</td>
<td>A</td>
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<td>Propose staffing</td>
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<td>Develop stakeholder list</td>
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Section 4.2

**Improve Production Efficiency**

Summary of Benefits that can be achieved
What are the Production Efficiency "Value Drivers"

Production and Operation
1. Maximize facility uptime and throughput
2. Minimize constraints to Subsurface Potential
3. Optimize production → Daily Production Assurance
4. Capture and act on reasons for Production Shortfalls
5. Reduce/minimize lifting cost
6. …

Critical success factors
1. Understand & collaborate with subsurface
2. Balance the Short & Long perspective (wrt "what to fix and what to change/improve")
Initiatives to improve Production Efficiency
(While securing Reservoir Management – i.e.: Growth)

Facilities / Infrastructure

Long Term Facility Plans (Infrastructure Masterplan)

Facilities Potential “Planned”

Production Assurance & Shortfall Analysis

Production Optimization Support

Subsurface Potential “Forecasted”

Long Term Field Development Plans (LoF)

Subsurface / Field

Operated Assets / General

1. Adapt to minimize constraints to Subsurface Potential
2. Maximize facility uptime and throughput
3. Optimize production → Daily Production Assurance
4. Capture and act on reasons for Production Shortfalls
5. Reduce/minimize lifting cost
6. …

Critical success factors

1. Understand & collaborate with subsurface
2. Balance the Short & Long perspective
   (wrt “what to fix and what to change/improve”)
Depends on collaboration with subsurface

**Summary of Benefits that can be achieved**

**Operated Assets / General**
1. Adapt to minimize constraints to Subsurface Potential
2. Maximize facility uptime and throughput
3. Optimize production → Daily Production Assurance
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---

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18 October 2013
Maximizing value creation depends on two pillars

1. Engineering disciplines to influence the top-line (Production / IOR / EOR)
2. Operations and support services to reduce lifting cost.

Significant when engaging high-cost IOR and even more so EOR.

Reserves are “quantities of petroleum which are anticipated to be commercially recovered from known accumulations from a given date forward”. Reserves growth will have both a technical perspective as well as a commercial/cost aspect. Any initiative that “grows the fish” will influence Ultimate recovery.
Section 5

Ensuring Continued Improvement
Securing Continuous Improvement
(The concept of process ownership)

Ensure to document process improvements in “BMS”

Ensure to measure process performance

Ensure to attend annual process management meeting to analyze process performance

Ensure to identify process improvement opportunities

Ensure to implement the improved process and process metrics

Ensure to communicate the improved process documentation

Receive and prioritize process improvement suggestions throughout the year

Non-critical improvements

Critical improvements

Ensure to design process improvements with respective process metrics

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PwC 18 October 2013
Thank you for the attention!

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Appendix 1

Further Examples (Asset Mgm) and BMS
Q1: Will company structure promote "asset custodianship"
Or: Are we facing silos – pursuing functional objectives...

Scenarios:
- 4 Asset Owners?
- Different "Owner focus"
- Multiple hand-overs
- Interface & Links dependent on project maturation process

Asset Manager Challenges:
1. Operational readiness?
The real proof of project success. Focus on Influence during project...
2. Influence in early phase of project.
3. Influence / participation during Exploration and Appraisal
Q2: What are the Asset Management "Value Drivers"

Operated Assets / General
1. Maximize facility potential
   (Facility uptime and throughput)
2. Utilize subsurface potential
3. Utilize external opportunities.
   E.g. "Asset tenants"
4. Review and reshape commercial contracts
5. Reduce/minimize lifting cost
6. Influence BD/portfolio
   (Regional insight / awareness)
7. …

Partner Operated Assets
1. Contribute to operational improvements
2. Capture and Share knowledge
3. Manage Operators
4. Review and reshape commercial contracts
Developing processes to address the value drivers (1/2)

1. Ensure alignment with COMPANY overall portfolio strategy
   - Obtain strategic guidance (input) from COMPANY management (Portfolio strategy)
   - Establish criteria for ranking Operated and Partner operated assets in line with COMPANY strategy
   - Develop and maintain (annually) strategic guidance for COMPANY portfolio of producing assets.
   - COMPANY Portfolio strategy for producing assets.

2. Ensure to develop and maintain portfolio view and prioritisation of all existing assets:
   - Develop and maintain overview of existing Assets (Op & POP) with relevant information required to prioritise
   - ARP for each asset
   - COMPANY Portfolio strategy for producing assets.
   - COMPANY Asset Priority Overview

3. Ensure to maintain and develop relationship with key stakeholders:
   - Agree key stakeholders
   - Assign representatives to different stakeholders
   - Interface key stakeholders

4. Ensure to Capture and Share knowledge:
   - Capture and share knowledge from Projects
   - Capture and share knowledge from Review / Audits / Inspections
   - Capture and share knowledge from studies
   - Capture and share knowledge from Incidents

Operated Assets / General
1. Maximize facility potential (Facility uptime and throughput)
2. Utilize subsurface potential
3. Utilize external opportunities.
   - E.g. "Asset tenants"
4. Review and reshape commercial contracts
5. Reduce/minimize lifting cost
6. Influence BD/portfolio (Regional insight / awareness)
7. ...

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   (Regional insight / awareness)
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Partner Operated Assets
1. Contribute to operational improvements
2. Capture and Share knowledge
3. Manage Operators
4. Review and reshape commercial contracts

Appendix 1 – Further Examples (Asset Mgm) and BMS
Considerations to Asset Custodian model
Addressing asset management challenges

Secure the best portfolio perspective across value chain

1. Exploration
   - Exploration decisions
   - Good hand-over
   - Collaborative appraisal
   - Cross discipline cooperation during and after exploration

2. Appraisal & Development
   - Best concept selected
   - Forward looking
   - Project Consideration
   - Operational perspective
   - Strategy (Risk/return)

3. Project
   - Project mobilization
   - Appropriate FEL
   - Best possible PDO
   - Timely sanctions
   - Project Execution
   - Time / Cost / HSE

...and looking ahead:
- Support readiness for operation
- Secure commerciality
- First years operation

Success from:
- Exploration decisions
- Good hand-over
- Collaborative appraisal
- Cross discipline cooperation during and after exploration

Success from:
- Best concept selected
- Forward looking
- Project Consideration
- Operational perspective
- Strategy (Risk/return)

Success from:
- Project mobilization
- Appropriate FEL
- Best possible PDO
- Timely sanctions
- Project Execution
- Time / Cost / HSE

Success is:
- Ready for operation
- Clear/shared asset strategy
- Realize subsurface potential
- Driving Production Efficiency
- Achieving Plan attainment
- Promoting Subsurface agility
- Promoting Operational agility
- Always - Commercial agility

Interface Surprises
   → Marginalized business case
   → Options not explored

2. Too late project creation.
   - or too fast (costly) spin-off
   - Resources scarcity
   - Insufficient Proj Mgm
   - Concept ambiguity

3. Operations not prepared
   - Missing processes
   - People and capabilities
   - Lacking systems
   - Lacking documentation
   - Lacking spares / logistics
   - Lack of suppliers
   - Lack of commercial arrangements for shipment, allocation ....

Influencable by Asset Manager?
After QA - bridging Blueprints to the Management System

Goals and activities are documented in any desired BMS format.
Appendix 2

PwC Solution Areas
Solution Area: Core E&P Improvement
“E&P Blueprinting”

Client issues by domain:

**Exploration:** Obtain access to acreage, and accelerate evaluation and development handover

**Field Development:** Fast tracking where possible by standardizing concepts – to reduce time to first oil.

**Major Projects:** Major Project approach and control

**Prepare for Operation:** Transition to Operation - achieve planned production

**Operations:** Production Efficiency – realizing subsurface potential

**Reservoir Management:** Maximizing economic resource exploitation

**Asset Management:** Global/Local portfolio. Own & Partner Op.

**Well Delivery:** Efficiency, Capacity

**HSEQ:** In all we do – Being fit for purpose

PwC service offerings:
PwC have industry trained project leaders and practitioners to support clients in end-to-end or specific functional improvement. We offer fixed or flexible project models to drive operational improvement, where we will create documented processes, with clear roles, responsibilities, interfaces and dependencies. The project may be include Information and technology requirements, and development/update of Business Management Systems.

Toolbox / Methodology:
We have developed a comprehensive but modular toolbox, with industry practices for all relevant domains, to guide and challenge improvement opportunities.
A methodology proven in IOC and NOC to accelerate Analysis, Design and Implementation – secure management control and key stakeholder involvement.

Our key Client credentials:

- **Statoil**
  - Process Improvement
  - Operational Models
  - Develop BMS

- **E.ON**
  - Operational Improvement
  - Operational Strategy

- **GDF Suez**
  - Operational Improvement
  - Operational Strategy

- **Wintershall**
  - Develop Operational Processes, prepare for operatorship.

- **BASF Gruppe**
  - Exploration cycle time, Well Delivery, Production Optimization and HSE

- **Faroe Petroleum**
  - Exploration, drilling, HSE and Asset Mgm.
**Solution Area (Strategic Competence Management)**

**Client issue**

*Step change phases* from Exploration, to Development and Production sets out a need for **continuous upgrading and alignment of competence and skills.**

*Increased focus on competence management from the Oil & Gas regulatory bodies*, requiring improved competence planning, tracking and transparency.

The *need for enhanced talent practices* to effectively *compete in the “war of talent”.*

*Uncertainty in sourcing competence base* to meet future business opportunities

Ensure the right skills to the tasks through **efficient utilization and allocation of resources**

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**PwC service offerings:**

Based on our extensive experience from several projects, PwC has developed a comprehensive framework covering the majority of issues our clients meet with regards to management of competence. When implemented, strategic competence management enables the client to manage their competence base in a way which supports their short and long term strategic goals.

**Toolbox / Methodology:**

The client issues are widely recognised across the group members in the xGeo initiative and through our work we have developed a common methodology supported by several accelerators applicable for most projects.

The area is strengthened by several SME's and a large international Talent management network of specialists.

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**Our key Client credentials:**

- **Competence management**
- **Competency model**
- **Talent management**
- **Competency modelling and role profiling**
- **HR Sourcing and capability development**
- **Competence mapping**
Solution Area: Supply Chain

Client issues:
Weak connection to internal customers: errors in PO and contractual agreements creating long lead time
Poor supplier performance and reliability: Insufficient communications, inadequate performance management and absence of supplier performance improvement programmes
Strategic sourcing: functions are fragmented and the pre-qualification process is ineffective. Lack of strategic sourcing and category management capabilities
Supply planning: incomplete, or insufficiently robust demand plans, leading to service delays, over/under stocking of goods...
Excessive stock levels: misalignment of demand and supply due to poor supply planning
Technical capability: Procurement teams have insufficient depth of market knowledge and business understanding in the areas that really matter to the business

PwC service offerings:
We have developed a comprehensive but modular service offering addressing each of the 6 identified main issues through a dedicated module.

Toolbox / Methodology:
The 6 issues, identified through the X-geo initiative (Norway, ME, Poland, Russia and UK) are widely common across regions. The X-geo initiative is currently developing specific methodologies for each of the modules.
The modular approach creates a pragmatic toolbox, avoiding the risks of “wide scoped supply chain transformation projects”.

Our key Client credentials:

- Statoil
  - World class proc
  - Process alignment

- G Rails
  - Strategic sourcing
  - Inventory optimization

- PGNiG
  - Strategic sourcing

- BP
  - Purchase to pay
  - Material management
  - Procurement-Users integration

- Shell
  - Supplier relationship mgmt
  - Strategic sourcing
  - Demand planning

- Competency Development
**Asset optimization (Operational Excellence)**

**Client issue**
For a long period of time many Refineries have been struggling with cost-cutting pressures, including shrinking margins and old equipment/plants with need to improve/invest.

**Typical Pains:**
- Maintenance execution too reactive and corrective
- Low time on tools; inefficient use of craftspeople
- Old/unchallenged cultural behaviours
- Too complex business processes, improvements stalls
- Insufficient operating budget control and cost management
- Poor cross functional cooperation
- Weak management decision support
- Contract terms not known to execution level
- Lack of strategic sourcing, pooling of demand. Best market prices not achieved

**PwC service offerings:**
To gain sustainable cost reductions, our three stage methodology addresses the limitations of traditional approaches by focusing on where the root causes are embedded across the business, taking into account key processes and the key process interfaces coupled by the strategy, organizational design and behaviours driving the business model.

1. Initial insight quantitative analysis (What are the potential savings?)
2. On-site diagnostic – tailored tool for the task (Where are the potential savings?)
3. Improvement plan (How do we realize the savings?)

“We walk the talk with the client, and cash in the benefit!”

**Toolbox / Methodology:**

A global Community of practitioners in Norway, Canada, UK and US

→ A tested and well defined diagnostic tool tailored for the industry (specific for downstream and upstream)

**Our key Client credentials:**

1. Mongstad refinery
2. Kalundborg refinery
3. Tjeldbergodden metahnol plant
4. UK Shelf, Upstream
5. Chicago, Downstream
6. Trinidad, Upstream
7. Houston, Upstream
8. California, Downstream
9. Texas, Downstream

**Opportunities:**

A. Gazprom (Russia)
B. Lukoil (Russia)
C. Rosneft (Russia)
D. Zarubezhneft (Russia)
E. Kuwait National Petroleum Company (KNPC)
F. Abu Dhabi Oil Refining Company (TAKREER)
G. Petro SA (South Africa) – Proposal
H. Preem (Sweden) – Meeting held
I. Neste Oil (Finland) – Meeting held
J. ENI (Italy)
**Solution Area: KPI**

**Client issues:**
- Absence of a robust Performance Management mechanism to align organizational performance to corporate strategy, goals and objectives
- Poor performance visibility and insufficient data to support decision-making
- Targets set either lack ambition/ do not drive growth or are unrealistic and over ambitious
- Insufficient value analysis to link strategy with operational performance
- Lack of closed loop system for continuous performance improvement
- No single source of truth; multiple repositories for performance data
- Reliance on time consuming, inefficient processes for data consolidation and generation of KPI’s and Management Dashboards

**PwC service offerings:**
Multiple offerings related to the development or improvement of Enterprise Performance Management

**Toolbox / Methodology:**
- PwC currently has a comprehensive Enterprise Performance Management (EPM) Blueprint, which covers “process, technology, people” across the entire EPM value chain (Strategy to Plan, Measure to Forecast, Recognise to Reward)
- The X-Geo KPI team is working to develop an O&G specific blueprint, by:
  - Identifying components of the value chain that are most critical/ unique to O&G
  - Incorporating O&G specific leading practices & common performance indicators within these components

**Our key Client credentials:**

- Corporate Planning, Budgeting and Performance Management Model
- Implementation of Integrated Planning & Performance Management Framework
- Design of an Enterprise Reporting System
- Performance Management Reporting
- Upstream KPI system improvement
- Design of Solomon Reporting System

February 2013
PwC Profile & Oil and Gas expertise

- PwC is a world leading advisor to the Energy industry, working with exploration, production, downstream and service companies to provide business solutions tailored to the Energy sector. For more than 100 years, we have helped energy companies succeed.
- We serve more clients in the FT Global 500 companies than any other professional services firm.
- We have over 2,500 energy and utilities clients around the world with more than 400 partners and
- We have 3,100 professionals solely dedicated to serving energy companies globally.

Energy Global Practice – 25 Centers of Excellence

- 13 regional energy Centres of Excellence
- 12 other important energy offices

Industry Thought Leadership

- “Oil & Gas Deals” – PwC’s O&G deal analyses
- The wealth of nations: How well do countries’ petroleum strategies align?
- Transport and Logistics 2030 – PwC Thought Leadership
- Oil & Gas Operational Improvement