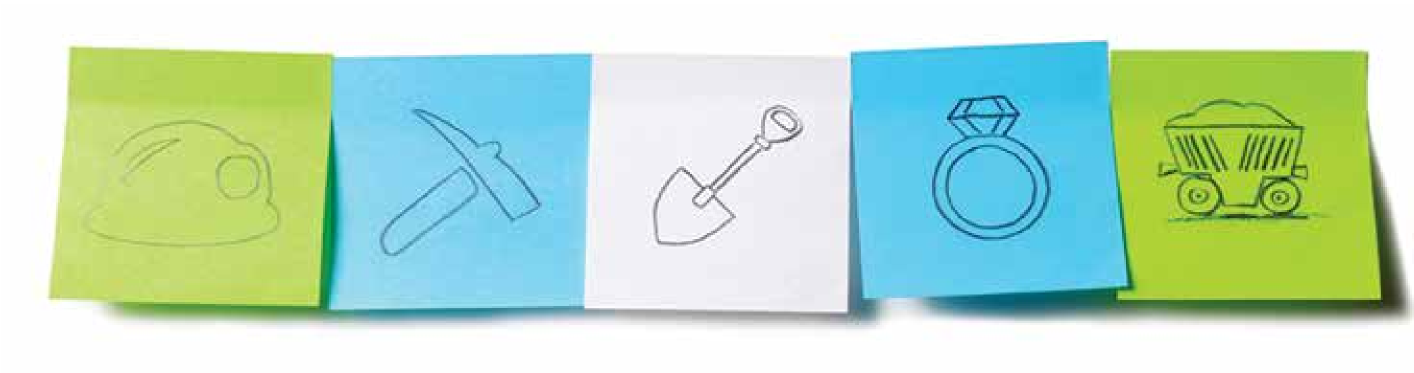
Oil & Gas - Strategy & Innovation Consulting
Signature Solutions



Content

Addressing Challenges and Opportunities in Africa

Deloitte has a proven ability to deliver projects across multiple territories on the continent...

Oil & Gas companies are facing a multitude of challenges and opportunities, including:

- Robust growth and demand for crude oil, natural gas and petroleum products
- Competitive operating environment in all industry sectors
- Challenging regulatory, tax and legal environment
- Increased focus of corporate governance and risk management
- Continuing industry consolidation and asset portfolio rationalisation
- International expansion while the direction of globalisation is uncertain
- Workforce issues – attracting and retaining people
- Growing international role of state-owned companies
- Conflict, unrest and political instability in several oil exporting companies

Deloitte Consulting Africa

Deloitte is the world's largest professional services firm providing audit, tax, consulting and financial advisory services through thousands of professionals in Africa.

There are over 5500 professionals and 360 partners operating throughout Africa. We have a physical presence in 33 African countries and currently service 51. Our local on-the-ground presence ensures that we understand local nuances and how to help our clients navigate challenges. This is supplemented through strong regional practices and global co-operation.

The 33 practices on the continent are structured in terms of the following hubs:

- Southern Africa
- Francophone Africa
- West and Central Africa
- East Africa
- North Africa
- Angola
- Mauritius

Deloitte has a proven ability to deliver projects across multiple territories on the continent harnessing it's network on the ground while also tapping into global centres of excellence where required.

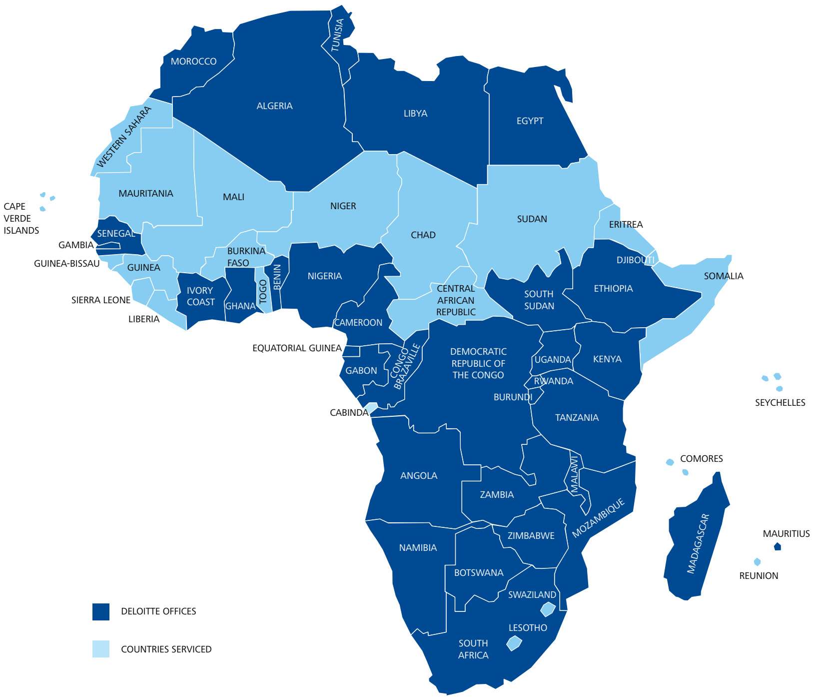
Deloitte Global Oil & Gas Footprint

Consulting in Deloitte Africa is an aligned grouping of businesses, focused on a single objective: to use our knowledge to increase the prosperity of our clients and our people. Deloitte Consulting is the largest professional services firm on the continent.

Deloitte Consulting Service Lines

Human Capital	Business Process Solutions	Strategy & Innovation	Technology
Our capabilities and solution suite enable our clients to comprehensively deal with the people dimension of any phase of their business journey.	Business Processing Solutions provides niche outsourcing and shared services solutions and deliver a range of diverse and effective solutions to our clients.	Our Strategy & Innovation practice supports the strategic agenda of our clients in the key domains of growth, strategic transformation and business improvement and optimisation.	Our organisation is designed to mobilise around industry issues as rapidly as we do around understanding Technology trends and cross-industry implications.

Our presence in Africa



The Africa Consulting Oil and Gas team

The Oil & Gas team's vision is to be the dominant professional services firm in the oil and gas sector in Africa, to be known for service excellence and cutting edge solutions.

Deloitte's Strategy & Innovation (S&I) Resources team is made up of more than 70 professional staff with a diverse range of skills targeted at delivering value for our clients. Our project teams consist of a balanced combination of Engineers (Mining, Chemical, Mechanical, Electrical, Nuclear, Industrial), Chartered Accountants, Analytics and Business Majors who all have extensive experience working in various aspects of the oil and gas value chain, from operations to the boardroom. The S&I team have delivered tangible results on engagements in dozens of countries for some the largest resources companies globally. By leveraging our local skillset as well as Deloitte's premier global network of SME's, we are uniquely positioned to maximise stakeholder value.

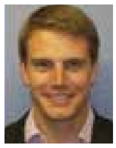
We are supported by a string of knowledgeable teams across the areas of Tax, Audit, Business Process Services (BPS), Technology, Assurance and Technical and Corporate finance across Africa.

Anton Botes
Deloitte Africa O&G Leader

Nivan Moodely
S&I Oil & Gas Leader

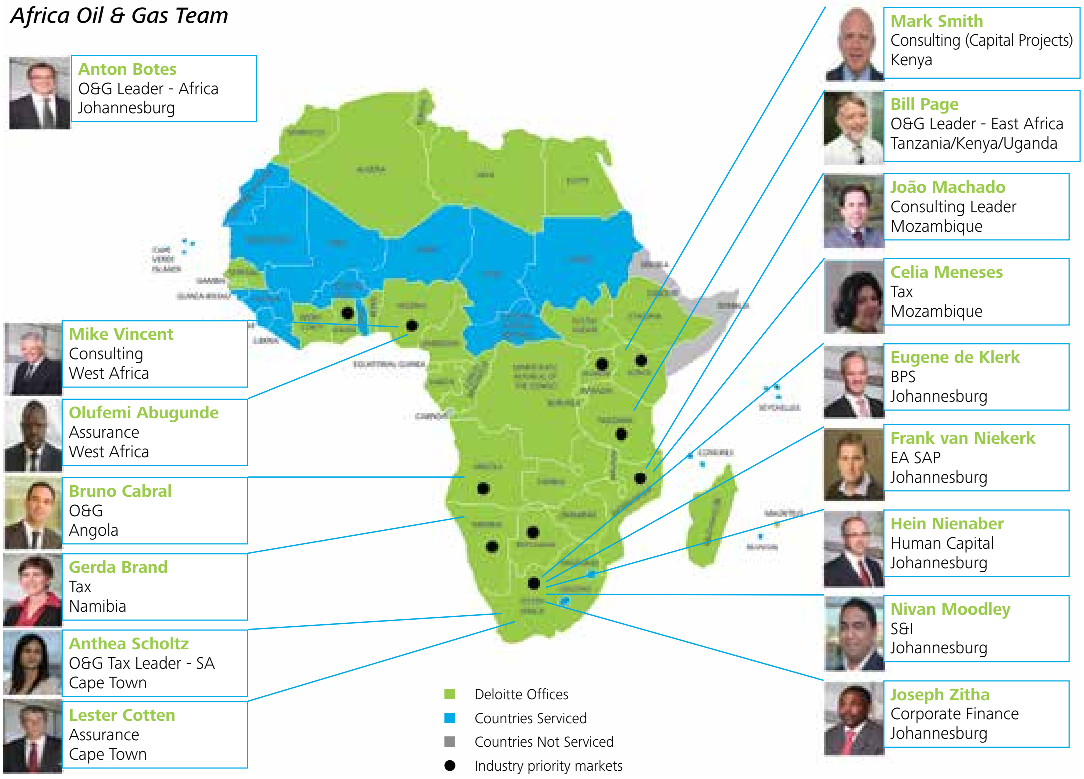
Navesh Ragoonanthun
Associate Director:
Capital Projects

Rhyno Jacobs
Executive Lead:
Operational Excellence



Andrew Grobicki
Executive Lead:
Finance Transformation

Africa Oil & Gas Team



Oil & Gas Operations – Signature Solutions

Select clients Deloitte serves

Deloitte helps organisations build value by uncovering insights that create new futures and doing the hard work to improve performance. Delivering this kind of value requires a broad range of talent and capabilities aligned to the unique needs of specific sectors, businesses and organisations.

Our clients look to us for the ability to implement the ideas we present. They expect excellent performance that draws upon our breadth of industry and service experience. Simply put, we provide our clients with world-class insights that generate tangible and measurable impact. On the right is a snapshot of just some of the Signature Solutions that Deloitte has delivered in the resource industries.

We provide additional detail on these solutions in the next few pages.

Snapshot of Signature S&I Solutions

Distribution Network Optimisation	Asset performance simulation & scenario modelling	Capital Efficiency & Execution Readiness
Strategic sourcing & Supply Chain Optimisation	Target Operating Model Design	Operational Readiness
Localisation Strategy and Implementation / Supplier Development	Sustainable business improvement	Business Case Design
	Policy Review / Compliance	

Distribution Network Optimisation

Service Offering & Approach

Deloitte has extensive experience in the analysis and design of distributions networks across a range of industries. In petroleum products, our approach is to develop and test future demand scenarios against various network options to ensures a robust depot network design with optimal customer to depot allocations.

Deloitte also has the capability to plan and implement the transition to take the existing network to where it needs to be.

Benefits For Our Clients

An optimised distribution network simultaneously improves the following aspects of business performance:

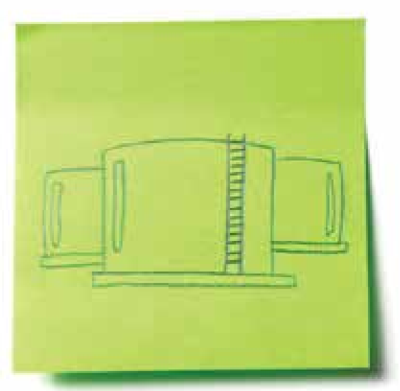
- Lower stocks
- Lower distribution costs
- Improved delivery performance
- Reduced likelihood of stock-outs

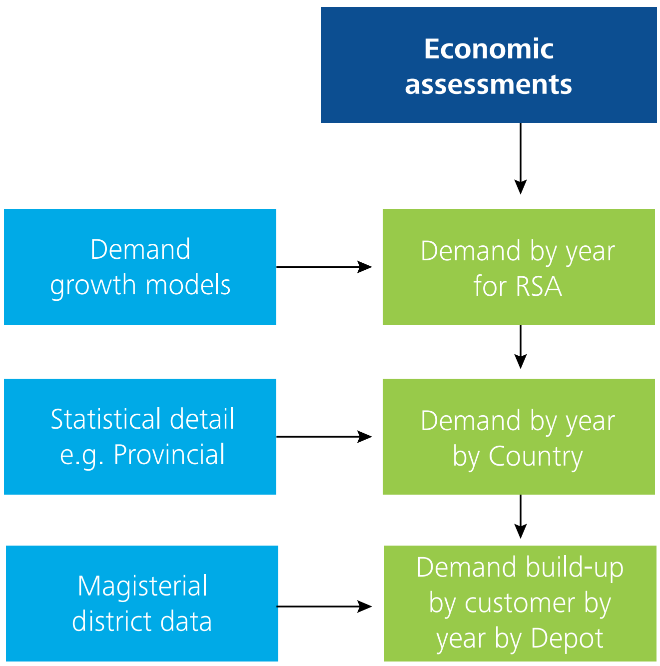
This is achieved by:

- Proper location and number of deports
- Correct allocation of customers and orders to depots and
- Sizing the distribution fleet to match demand.

Our network optimisation approach

Demand scenario planning





Strategic Sourcing and Procurement

Service Offering & Approach

Strategic Sourcing and Procurement entails the alignment of a company and its supply base with the ultimate purpose of minimising the total cost and supply base risk across each link in the supply chain for purchased materials and services. When done properly, this discipline breaks down the traditional barriers between users, buyers and suppliers, resulting in organisations achieving maximum value from their supply chains. Deloitte uses a 6 step approach:

1. Assess Opportunity

2. Define Internal Requirements

3. Assess ExternalSupply Market

4. Develop Sourcing Strategy

5. Execute Sourcing Strategy

6. Implement Sourcing Decisions

Benefits For Our Clients

- Defined category strategies leading to reduced total cost of ownership of products and services
- Reduced supply market risk through supplier portfolio optimisation
- Prioritised, implementable recommendations supported by value propositions and project plans
- Agreed to-be processes that allow for more streamlined and efficient work flows
- Increased product quality and supplier service levels through improved supplier relationships
- An agreed improvement implementation plan with assigned owners and timelines
- Improvement of the organisation’s position through sustained cost and supplier improvement

Spend Management draws on four key levers to drive cost savings and benefits for clients. This results in cost savings, improved quality, improved innovation, and ethical / sustainable sourcing.

Price	Demand	Process	Working Capital
Unit Price	Value Engineering	Analytical Modeling	Payment Terms
Incentive / Rebates	SKU Consolidation	Supplier Fragmentation	Payment Mechanism
Price Volatility	Standardisation	Governance	

Supply Chain Management

Service Offering & Approach

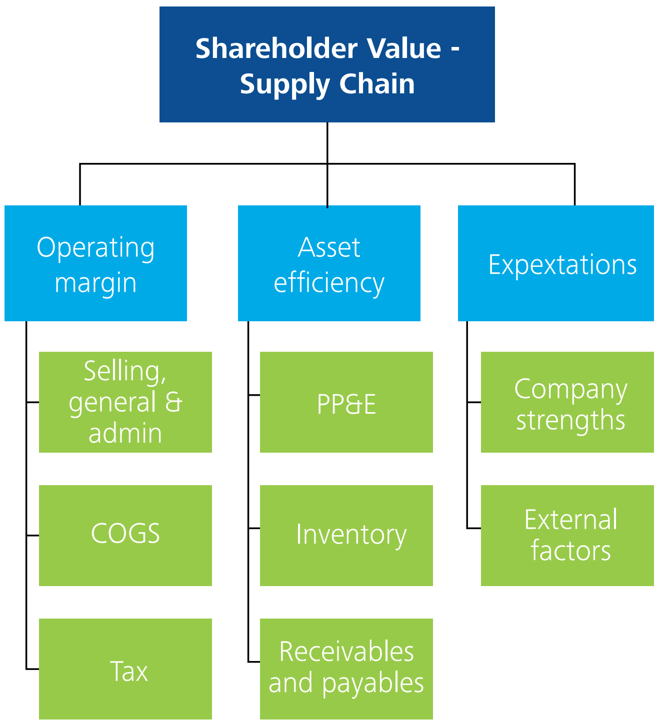
Oil and gas shareholder value is created from more than just increasing the revenue from the quantity extracted – the cost is just as important. Reducing Supply Chain costs by optimising Supply Chain practices is a key lever in increasing shareholder value.

Our selected Supply Chain offerings include:

- Supply chain diagnostics
- Supply chain strategy development and implementation
- Supply chain process reengineering and optimisation
- Logistic network design and optimisation
- Total cost of ownership reduction
- Target operating model design and implementation
- Policy development and implementation
- Supply chain analytics
- KPI and metrics development and implementation
- Tax-efficient supply chain

Benefits For Our Clients

- Standardised and optimised processes across multiple business units that allow for more streamlined and efficient work flows
- Clearly defined supply chain KPIs with related metrics and tracking tools
- Prioritised, implementable recommendations supported by value propositions and project plans.
- Reduced total cost of ownership of products and services.
- Improved service levels to end users.
- Improved cost curve position through sustained cost and supplier improvement.



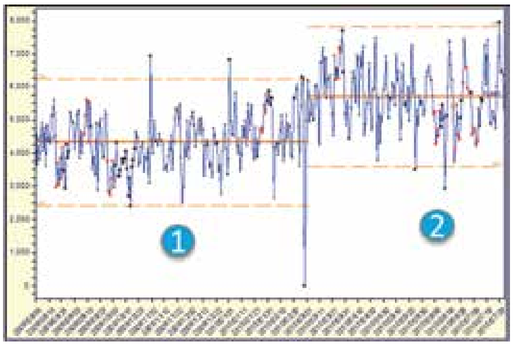
Asset Performance Simulation & Scenario Modelling

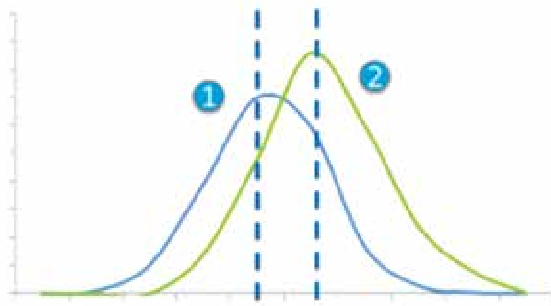
Service Offering & Approach

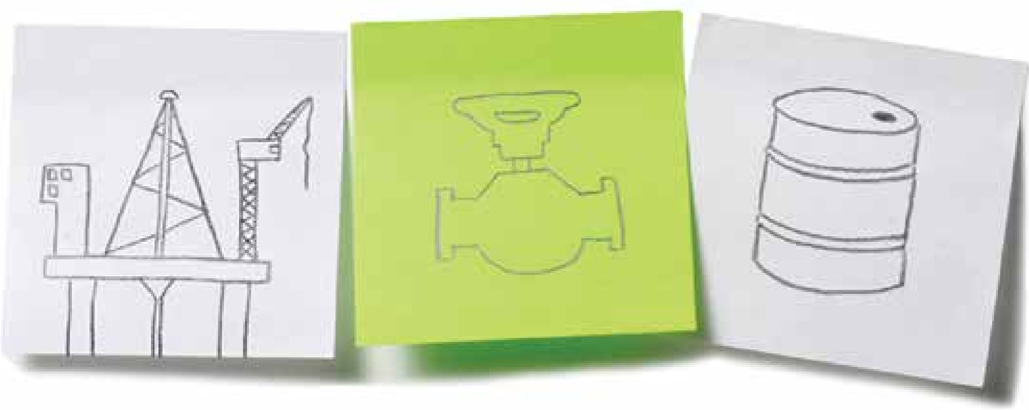
Sites frequently fail to meet budget production targets planned (using average values based on historical performance) and current planning process does not take process variance into account. Process constraints are not fully analysed (process variability not taken into account) and confidence levels in budget targets are subjective, with limited scenario modelling which causes an impact of initiatives on production confidence levels that cannot be fully quantified.

The approach Deloitte uses to resolve these issues are:
- Establish data for analysis from various sources and reconcile the data set with reported production figures.
- Analyse production process to design the model structure that reflects this process.
- Identify the key input variables and fit distributions to these variables.
- Create a base case model calibrated to reflect the performance during the base case data period.
- Evaluate the impact of possible scenarios on budget targets.
- Determine the quantitative effect of improvement initiatives and generate production confidence levels for each case.
- Develop dynamic models for the above modelling and analysis.

Benefits For Our Clients
- Visibility of value chain process constraints
- Improved understanding of how key variables impact production performance
- Enabled effective decision making through scenario modelling
- Insight into the impact of planned projects and initiatives on performance
- Increased confidence in business plans, targets are based on a quantitative analysis.



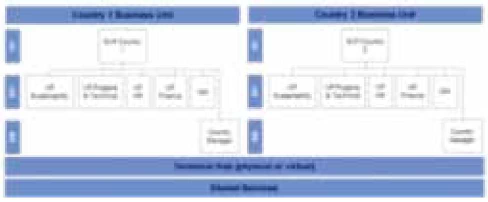




Target Operating Model Design

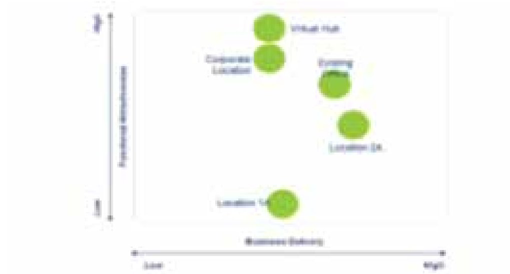
Service Offering & Approach

To better position and focus the business for achievement of efficiency targets. Deloitte assists in reviewing the proposed operating model and identifying, evaluating and recommending location options for the HQ's of the new business units. The scope includes the development of a detailed plan for the implementation of the new BU's, the transitioning of people to the BU structures and the physical establishment of new BU HQ's in new location.

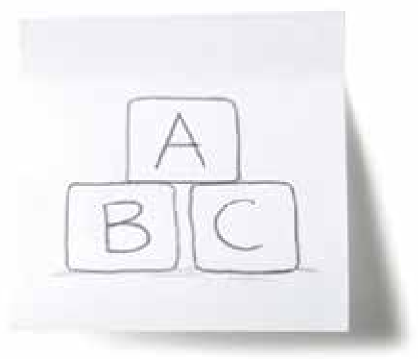


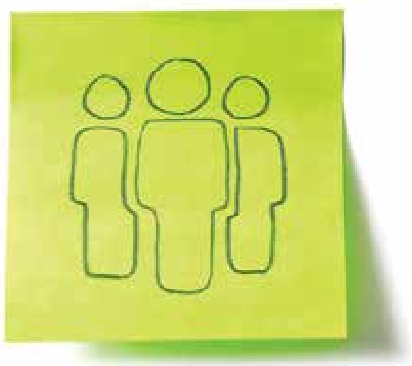
Benefits For Our Clients

- A detailed analysis of the potential locations and the opportunities and implications to the business of each option.
- The development of a common set of considerations and criteria for informed location decision-making.
- Considerations includes key elements of attraction, retention and mobility of key talent. The key outcome is the executive decision on the location for new business units.
- These projects also develop a detailed implementation/transition plan, covering change management and communication, tax and legal, physical infrastructure, technology and BU governance and policy.



The preferred locations are those that deliver on the business needs while also attracting quality skills to deliver on the business mandate





Sustainable Business Improvement

Service Offering & Approach

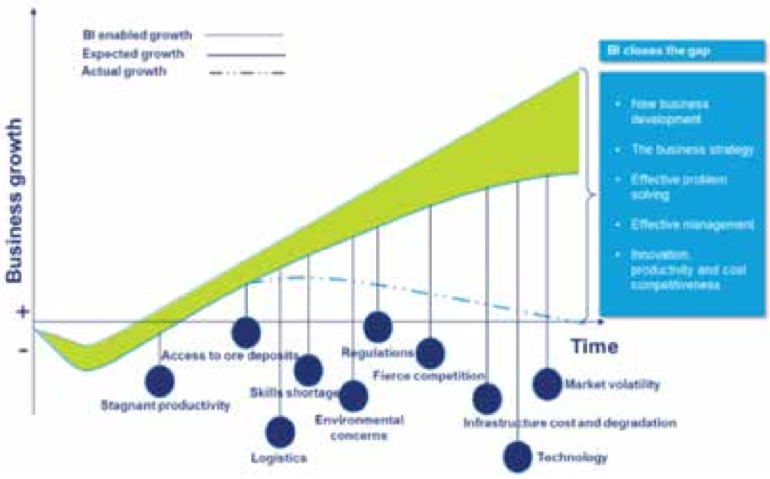
Sustainable business improvement (BI) helps oil and gas organisations improve operations and processes – to fill the gap between where they need to be and where business as usual will take them, thus ensure the right to exist in the longer term.

The approach Deloitte uses is:

Assess as-is state	Access the company's current BI state and requirements
Define the end state	Define the desired sustainable BI end state, project or programme
Approach	Develop the approach towards a sustainable BI programme
Execute	The execution strategy to be employed to entrench the program in the business
Embed	Tools & processes that will sustain business improvement as a business philosophy

Benefits For Our Clients

The sustainable business improvement approach provides a platform that drives business improvement in a sustainable manner. The platform consists of specialised people, streamlined processes and supporting systems. Once this is established, your company will have gone through a culture shift where everybody understands, supports and participates in business improvement. Resulting in a sustainable program which has an impact on the annual business planning metrics.



Policy Compliance / Review
(e.g. South African Fuels Retailing)

Service Offering & Approach

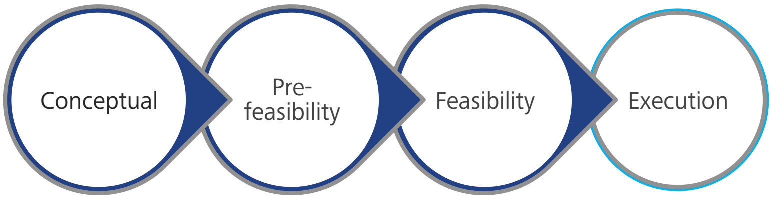
The local fuels retailing business is full of nuances in terms of regulatory and stay in business requirements. Examples in South Africa include the Marketing of Petroleum Activity Return (MPAR), the new Regulatory Accounting System (RAS), and the latest NERSA regulatory reporting requirements (bulk facility licensing & tariff application). Local players across all African countries must also consider up and coming changes and their response e.g. Clean Fuels II, the biofuels industrial strategy, and other potential initiatives in line with the Petroleum Industry Charter empowering historically disadvantages South Africans. This comes at a time when most local Oil Companies are concerned regarding the above inflationary increases in their cost base and the effect this has on margins.

Deloitte has assisted local Oil Companies in understanding and responding to these changes while protecting margins and ensuring a sustainable business case. This has been achieved by deploying resources that understand the local fuels retailing landscape while employing Deloitte Oil & Gas tools and methodologies. By way of example, for Task 141 & RAS considerations, Deloitte leverages off its team of consulting resources with engineering, finance, and management accounting experience. Responding to NERSA requirements typically involves the use of technology and consulting resources, employing a localised set of Deloitte tools and methodologies, to ensure an appropriate reporting solution is developed and enabled.

Benefits For Our Clients

- Review of the impact of regulatory changes, restructure and redesign of the operating model to ensure improved efficiencies.
- Protection of returns through the appropriate choice of business model for each retail site (franchised, dealer owned, retailer owned, branded marketer) based on thorough financial analysis.
- Maximising retail margins by understanding the "true" cost to serve the customer, through the development and use of appropriate Netback and Integrated Margin methodologies.
- Identifying policy and regulatory issues and formulating a strategy and response.

Capital Projects

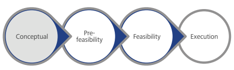


Capital Project Lifecycle

Capital projects usually have to go through four phases before finally being implemented or executed. Within each of these phases, Deloitte offers specialised solutions to assist management in realising optimal profitability and ultimately shareholder value.

The following solutions are catered for in each of these phases:

Conceptual phase • Investment portfolio optimisation • Business case design
Pre-feasibility phase • Capital efficiency • Decision framework design
Feasibility phase • Capital efficiency • Decision framework design • Execution readiness
Execution • Project operational readiness



Investment Portfolio Optimisation

Challenges our clients companies face

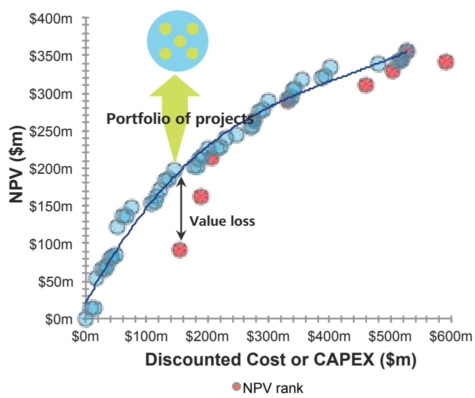
Capital markets expect great things from corporate boards when it comes to capital planning. While stock exchanges follow companies' short-term earnings guidance, they also value companies based on long-term strategic opportunities and capital spend forecasts. The challenge for an executive board arises when one considers the trade-offs between projects with competing strategic objectives, especially when funding requests exceed available capital or dramatically affect annual cash flows.

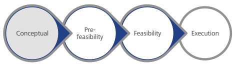
Benefits to your organisation

Advanced portfolio optimisation analysis has a broad spectrum of benefits for management when it comes to making the correct decision at the appropriate time. Through improving the speed of decision making, it allows additional time for management to have executive conversations that unlock deeper insights into their own business. The resultant effect of this process is that managers and the board can rest assured that the decisions they make on capital projects are optimally aligned to maximise shareholder value.

How does the Deloitte solution address the business issue?

Capital portfolio optimisation aims to determine which projects should be selected that would maximise the value objective for a certain funding level, while taking into consideration constraints and dependencies. Our approach firstly consists of understanding the corporate strategy and business objectives to optimise towards, after which project data is collated and analysed to insure robustness and consistency throughout. Thereafter, optimisation algorithms are used to determine the optimal portfolio of projects for a specific capital/cost funding level limit.





Business Case Design

Challenges our clients companies face

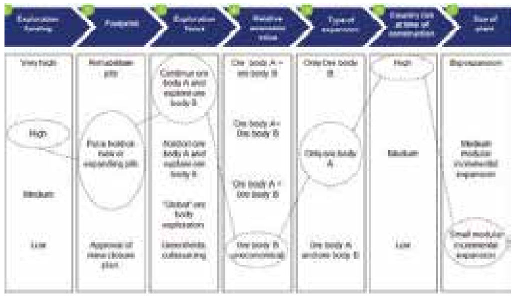
Resource companies constantly seek avenues to expand their asset base, increasing revenue contribution and ultimately total shareholder return. Therefore, there is a constant need in scanning and developing business cases for new areas of growth, while testing various scenarios in a quest to obtain optimal value. In many cases, project definition is based on gut feel and not done in a structured way that is aligned to the strategy and business objectives.

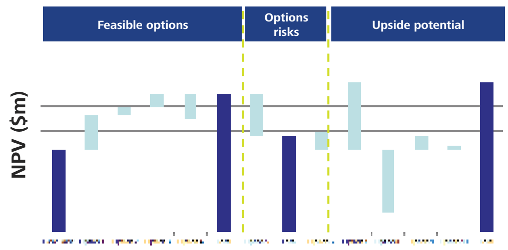
Benefits to your organisation

The success of large capital projects is often dependent on decisions made early on in the project lifecycle. This rings especially true during the project definition phase of major capital projects. Making incorrect decisions in the early phases of the project development cycle normally results in the need for rework and causes unnecessary delays. The application of a structured approach to the project definition, termed business case design, could increase project ROI and prevent unnecessary rework.

How does the Deloitte solution address the business issue?

Our approach consists of several steps, the first of which would be to scan the business environment for specific influencing factors, cost drivers and constraints. Opportunities are then further identified and prioritised, and various scenarios are tested and evaluated against specific project goals and matrices to determine their individual impact on project value. A roadmap is further developed to highlight plausible business opportunities and tested scenarios with their associated risks.





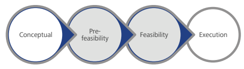
Capital Efficiency

Challenges our clients companies face

Our experience has shown that every large capital project should include a detailed value improvement process, coupled with a rigorous capital business case review. The need for a robust process has been highlighted by the current worldwide economic conditions, where capital funding is constrained and it is crucial that projects deliver on the promised projected returns.

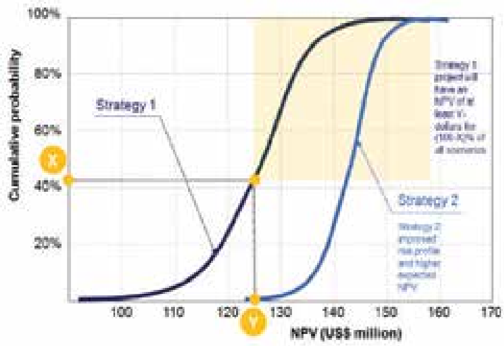
Benefits to your organisation

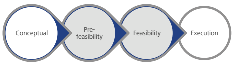
Big capital projects take a considerable amount of time to develop. During this time, many configurations are tested and assumptions are made on which decisions are based, while the business case is continually updated and changed. Since the world can change significantly over the project study period, a structured value improvement and business case robustness review could add value by providing decision makers with the peace of mind that the optimal value has been identified and that the project return numbers are sound.



How does the Deloitte solution address the business issue?

Our approach encapsulates a detailed value improvement process, coupled with a rigorous capital business case robustness review. Value enhancement is achieved by working closely with the project team, targeting areas of potential value through various techniques and focusing on efficiencies, waste and new sources of value. The position of the project in the overall project lifecycle will determine the focus of the review and the warranted analysis. During the business case review, the business case is evaluated, assumptions are tested and validated, risks are framed and key drivers are modelled stochastically, providing a view on the uncertainty associated with the reported project return.



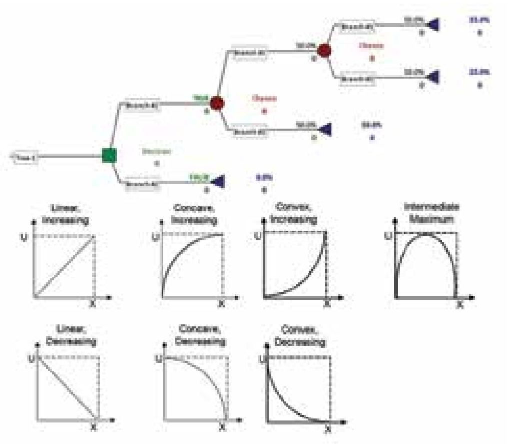


Decision Framework

Challenges our clients companies face
Making tough decisions is a given for companies to prosper in this day and age. However, making such decisions under an enormous amount of uncertainty is usually centred on iterative discussions based on subjective reasoning and expert opinion. Our experience has shown that a credible decision framework approach is required to assist management not only in making the optimal decision, but also in conveying a well-structured and defendable story to its relevant stakeholders.

How does the Deloitte solution address the business issue?
Our approach utilises advanced decision and utility theory, which encapsulates a detailed risk identification process coupled with a matrix of key decisions to be made with its respected alternatives. Value enhancement is achieved by developing a well-structured decision-making framework, while key risk drivers are stochastically modelled to provide a view on the uncertainty associated with the reported alternative return. In addition, the decision framework also deals with multiple objectives in the decision-making process, while testing the sensitivity of assumptions on key decisions.

Benefits to your organisation
Organisations constantly grapple with finding optimal solutions for complex and hard decisions, which are usually accompanied by a time-intensive iterative process of subjective reasoning and expert opinion. However, coming up with an answer to the problem at hand is usually the easy part, as the decision process is often accompanied by conveying the reasoning and assumptions of the decision to relevant stakeholders. Without a well-structured and scientific-based approach, key decisions can be challenging to communicate and fundamentally flawed, influencing company performance and ultimately total shareholder return.

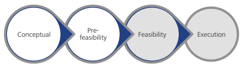


Execution Readiness

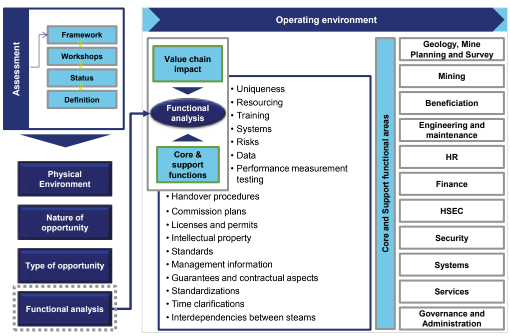
Challenges our clients companies face
Executing major capital projects can involve significant risk, with many projects overspending and delivering late. When a project is not set up for success from the start, the project can be over budget and behind schedule from Day 1.

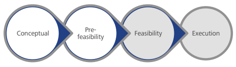
How does the Deloitte solution address the business issue?
Our approach covers a review of both the project management framework and a review of the various business functions to ensure that the project is ready for Day 1 execution. The project management framework review is based on the key fundamentals of governance, risk management, financial management and process improvement. The purpose of the project management framework review is to evaluate the control elements and management practices that most contribute to the project's success or failure. These assessments typically focus on the organisation, the financial and management controls, project systems, tools and work processes that have been established, as well as those planned for the design, right-of-way acquisition, permitting, procurement and construction of the project.

The functional readiness review is conducted concurrently with the project management framework review and refers to the identification and planning of activities that would ensure that the project is not delayed when execution commences. It addresses the readiness of the different functional areas such as exploration, geology and mine planning, development, beneficiation, engineering and maintenance, HR, finance, HSEC, security, systems, services (including ventilation and refrigeration and administration) prior to project execution.



Benefits to your organisation
Major capital projects are expensive; and if not managed well, delays and over-runs could result in major losses. By focusing on the project set-up, processes and frameworks while ensuring project execution readiness, the project will be given the best possible chance of success from the start.





Operational Readiness

Challenges our clients companies face

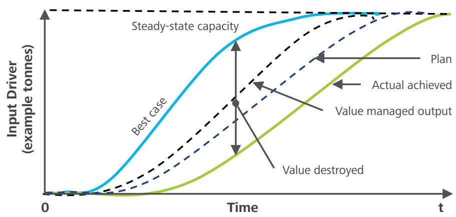
The capital project lifecycle is typified by financial decision making, technical design and rigorous construction planning and execution. Project teams often underestimate the impact of decisions during project development phases in terms of the practical implications on operational readiness. Significant effort is required to ensure that project value be realised during the operational phase, and the start-up/ramp-up is critical to this.

How does the Deloitte solution address the business issue?

The Deloitte experience has shown that project teams have come to understand the capital project assurance imperative, usually applying rigorous focus to the technical design and build aspects of the project. A similar focus on operational readiness is often neglected from the outset, potentially leading to practical challenges in achieving the anticipated return on investment. Focus areas typically consist of but are not limited to underestimating the complexity of operational readiness planning, defining accountability and ownership, accounting for a "uniqueness" factor, establishing team integration, and structuring the top level correctly.

Benefits to your organisation

There is no "silver-bullet" solution to operational readiness planning and execution. Projects, by their very nature, exhibit unique complexity; and these should be individually considered when planning for efficient operational readiness. Typically, Deloitte has identified that Greenfield and Brownfield expansions require different planning strategies in order to leverage their different competencies. Essentially, operational readiness planning requires consideration, planning and, importantly, a budget from as early as the study phases of a project. An operational readiness project plan should be created and be integrated into the overall project plan – making the decision to integrate operational readiness planning into the project development process the starting point. Effective operational readiness planning will benefit your business if managed correctly, improving the realisable value of large capital projects and ultimately increasing shareholder value.



Deloitte Qualifications

Procurement – Strategic Sourcing

Client situation

The client is one of Canada's largest integrated energy companies with its foundation in Western Canada and focusing on conventional oil and natural gas assets, heavy oil production and upgrading and transportation infrastructure. Within the past year, the client announced an expectation that its procurement team would produce $200 million in savings per year. The client engaged Deloitte to lead the strategic sourcing effort for two categories – production fluid hauling and sand management – and assist with achieving these savings. Deloitte estimates it will help the client achieve $16 MM in savings (10% of spend) and assist with knowledge transfer of the strategic sourcing process.

Client

Integrated large energy client

Canada

What we did

Challenges
- Procurement was required to produce $200 million in savings per year
- The category management team had not fully implemented or embraced the client's new 8 step strategic sourcing process
- The category management team did not have the skills and staffing levels required to fully address all categories identified

Our approach
- Developed category strategies and lead cross functional teams through Husky's category management process
- Performed a spend analysis and segmentation of categories based on current spend and long term demand
- Identified opportunities gaining business and executive commitment through the development of business cases
- Understood the industry structure and value levers to prioritize opportunities
- Managed the sourcing process including evaluation
- Assessed new market entrants and non-traditional suppliers
- Developed and recommend commercial and contracting strategies
- Developed category scorecard to measure supplier performance and identify opportunities
- Understood demand and forecast requirements in order to source
- Identified overall value opportunities

Client achieved
- Identified savings opportunities of 5-10% for both categories
- Knowledge transfer of a strategic sourcing methodology to client's category management team
- New analysis techniques were acquired by the business analyst team and category managers

Procurement – SSO Strategy

Client situation

This oil and gas company was seeking to develop a strategy to expand the scope of its current shared services operations through a two-day client intensive workshop. The primary goals were to: align the vision of the Shared Services Organization (SSO), identify the services and geographies to be served, agree on appropriate service models and governance, and develop and short and long-term executable roadmap.

Client

Fortune 500 O&G company

North America

What we did

Challenges
- The company was looking to reduce costs for the more transactional functions in its Procurement function by moving to a Shared Services model
- The company had already identified and implemented a strategy for its SSO, however progress had stalled:
  - Lack of clarity on decision making power within the run and change organization
  - There was little alignment between key business stakeholders on next steps
-

Our approach
- Designed a workshop and confirmed that direction, scope and level of detail met client expectations
  - Performed 8 client interviews in the weeks leading up to the workshop
  - Socialized proposed workshop materials and conducted mock workshop walkthroughs with key members of the client team
- Deployed a Deloitte team familiar with both the project and the Client (had previously done similar work for the client)
- Gathered best practices related to the agenda topics
- Guided participants through a two-day workshop to address all of the client's goals

Client achieved
- A clearly articulated the Procurement Shared Services Strategy
  - Alignment of all members of the SSO to one strategy
- A clear, actionable and specific short-term roadmap

Capital Programme Management– Cost Management

Client situation	The client was experiencing high finding and development costs, and project delays that signified the need for sharp focus on strong capital management, including all costs and timing. The client required a strong cost management initiative to help mitigate the impact of inflation and rising costs. The objective was to optimize developments and implementing innovative technology
Client	Large Upstream Client EMEA

What we did

A segmented approach was followed to deliver significant results

Front End Engineering and Design (FEED):
- Strengthening pre-project studies and engineering to control costs.

Optimising Existing Assets:
- Leveraging and benefiting from new developments and existing operations through initiatives such as standardization of Floating Production, Storage and Offloading (FPSOs) and pooling of drilling rigs.

Contractor Management:
- Promoting new contractors - particularly those from emerging countries which would help tap the local talent.

Client achieved

- The client achieved increased recovery rates and access frontier resources.
- Better managed risks and cost escalations by adapting EPC contracts.
- Improved cost management process with FEED.

Management Accounting and Customer Profitability

Client situation	The client found it difficult to make decisions regarding customer profitability and channel optimisation (where to put the molecule to yield the highest return). The current Netback model was found to be insufficient in understanding how the margins of a product are built up as it moves through the value chain. Poor cost resolution, and ungoverned overhead allocation, prevented line of sight of the real margins for each value chain activity. Furthermore the situation was complicated by the need for reporting of costs associated with storage at regulated facilities as well as new legislation regarding the calculation of retail and wholesale margins.
Client	Large Retail Oil Company South Africa

What we did

Scope
- Development of a methodology to measure customer profitability and assist the client in maximising return on each molecule.
- Assist the client in understanding how the integrated margin of each product is built up as it moves through the value chain.
- Enable decision making to obtain maximum return on each molecule profitability through channel optimisation.

Approach
- Map the value chain and fully understand how costs and revenue flow through each part of the chain.
- Overlay product supply patterns on the value chain in order to develop a cost allocation methodology for overheads and other unallocated costs.
- Develop a cost allocation manual that is governed, and compatible with the requirements of the regulator (now and in the foreseeable future).
- Match certain regulated income components with certain costs in order to calculate margins of interest (retail, refining, and logistics margins).
- Ensure the appropriate cost resolution is available to support the integrated margin solution.
- Ensure that the integrated margin reporting tool is aligned with the established Netback calculation.
- Enable the integrated margin reporting tool throughout the organisation by developing a governed calculation process and a specific user output / interface.

Client achieved

- The client incorporated the integrated margin reporting tool in decision making regarding channel optimisation.
- Clear visibility was given to the margins of interest for each value chain activity (retail, refining and logistics margins). As such further optimisation of these activities in serving each client were possible.
- A central governed process providing a single verifiable customer profitability output was now available for all pertinent business units (planning, marketing and sales, logistics/supply chain and refining).

Response to Change in Regulation – MPAR and RAS

Client situation		Client	
	The client wanted to understand what effect the change in the regulatory environment would have on the business and formulate a response to protect margins and prevent value leakage.		Large Retail Oil Company South Africa

What we did

Scope
- The financial impact which Task 141 would have on the client's retail and commercial businesses.
- The potential implications on the client's existing business model.
- The unintended consequences (industry-wide & macro-economic) which Task 141 may bring about.
- Any potential "first-mover" advantage which the client may be able to exploit as a consequence of the new regulatory environment.

Approach
- Conduct a full review of the revised controlled fuels price setting mechanism - Task 141 requirements.
- Calculate the potential impact of RAS on the clients current business:
  - Develop a Benchmark Service Station for the client to compare the required retail return with the anticipated allowable return defined by the DoE.
  - Determine net asset base, working capital requirements.
  - Apply rate of return.
  - Adjust for operating and maintenance expenditure.
  - Adjust for depreciation and taxes.
  - Determine indicative retail margin.
  - Determine the change in recovery based on current and indicative retail margin.
  - Unpack levers to "beat the benchmarks", determine how else sites could fail.
- Conduct an Economic Impact Assessment (EIA) for estimating T141's impact on the economy and petro-chemical sector:
- Input / output and Computable General Equilibrium (GCE) model to determine price and employment impact on the economy.
- Stakeholder Engagement Overview & Plan
- Impact / influence analysis.
- Stakeholder Mapping.
- Commitment Analysis.

Client achieved

- An underlying analysis of the anticipated regulatory pricing changes and the expected impacts.
- Elucidation of the critical strategic insights relating to the analysis and impacts above.
- An overall Stakeholder Engagement approach and objectives to articulate the clients position.
- Key activities required within the Stakeholder engagement approach.

Strategic Intervention to Mitigate the Impact of RAS on Profitability

Client situation		Client	
	The client wanted to assess the impact of RAS on profitability and to identify key strategic interventions that would mitigate the RAS impact. Furthermore the client wished to identify opportunities to renegotiate its contracts with its service station operators.		Large Retail Oil Company South Africa

What we did

Scope
- A "plug and play" model with "on/off" toggles for different business options that will help in the service station strategy decision making process.
- Detail rationale for the final recommended options (footprint, business model).
- Recommendations for the restructuring of current contracts.

Approach
- Gather and analyse available data
  - Internal analysis (financial and non-financial service station data).
  - External analysis (industry and macro-level data).
- Categorise service stations into segments and develop targeted negotiation strategies.
- Develop a financial model to assess the impact of RAS customers profitability:
  - Aggregate impact analysis.
  - Impact analysis per segment.
- Identify options to renegotiate contracts with dealers:
  - Quantify the impact of key interventions
- Highlight further opportunities to review strategy and improve performance.

Client achieved

- The customer understood the consequences of RAS on their retail network income and where the majority of change would arise from.
- Suitable negotiation strategies were devised for the pertinent service station operator categories in order to address the potential change.
- Further strategies were delivered to increase retail network income through:
  - strengthening the service station footprint.
  - Improving the customer offering at qualifying service stations.
  - Optimising the efficiency of distribution and storage operations.
  - Engaging with government stakeholders to ensure the optimal implementation of RAS.

Business Improvement – Blending and bunkering

Client situation

The client was looking to determine the most viable solution to blend its off spec fuel product with high quality product. The initiative focused on two areas:
- The sourcing of the off-spec and high quality products
- The most viable location for blending facilities

Client

Refining

EMEA

What we did

Scope
- The study included product sourcing through trading and from refineries.
- Blending / storage facilities (including terminals, tankages etc.) in Singapore, Malaysia and the Persian Gulf were assessed.

Approach
- The study included secondary as well as primary research. The study reviewed the blending process and determined the most optimal process for the client. We also assessed the blending and storage facilities in Singapore, Malaysia and the Persian Gulf.
- This included examining the various bunkering / terminalling facilities across the island to determine the most appropriate facility from which to obtain petroleum product.
- Once again the areas were split into secondary research (collection and collation of data on vessel type, arrivals and frequency data as well as traffic data etc.); whilst parallel to this the primary research was done.

Client achieved
- A detailed understanding of the refining and lubricants market in Singapore, Malaysia and Persian Gulf.
- An independent assessment of the storage and blending facilities available to a player in this market.
- The ability to make an informed decision on whether which market to enter and how to enter the respective market.

Market analysis – Bunkering facilities

Client situation

The client has started its bunkering business in west coast of India and due to strong growth potential, the client wanted to expand its business to mainly two ports in the east coast of India.

Client

Oil Logistics Company

Asia

What we did

Scope
- Scope of the study included:
- A traffic analysis of ships to the respective ports
- Bunkering Potential Analysis of the ports, and the surrounding areas
- Infrastructure Assessment
- Assessment of the Regulatory Environment to do business in these areas

Approach

The study included secondary as well as primary research:
- The secondary research phase involved collection and collation of data on vessel type, arrivals and frequency data as well as traffic data at the two ports and collection of information on bunkering development plans at the two ports, cost structure including taxes and duties for bunkers in India and other competing international ports, etc.. Various secondary data such as Ministry of Shipping releases and reports on the bunkering development, internet-based research on the bunkering, etc.
- The Primary Survey was carried out at the two ports, covering 35-40 primary contacts, which included Shipping Lines (domestic and international)/representatives, shipping agents, ship captains, a Petroleum Corporation, bunker suppliers/importers, port authorities, etc..
- Deloitte performed extensive analysis on the data collected and provided value-adding recommendations to the client. .

Client achieved

After the data analysis, Deloitte delivered the following to the client, to enable them to make a more informed decision:
- Projection of the vessel traffic for next 10 years
- Projection of bunkering off-take from the two ports for next 10 years at different price levels
- Bunkering Infrastructure Assessment at the two ports
- Regulatory Environment Assessment for bunker fuel (marine fuel) supply at the two port

Enterprise Asset/Capital Project Management

Client situation

The client needed to effectively integrate capital projects functions to prevent cost overruns. Deloitte was contracted to assist in Establishing an effective Asset Management organization which will reduce out of service time and optimizing the asset lifecycle

Client

Offshore Drilling Contractor

What we did

Approach
- Optimize Physical Assets by ensuring that assets operate at design parameters with minimal non-productive time (NPT)
- Optimize Life Cycle Costs by optimizing initial and on-going investment to extract maximum operating and financial value
- Optimize resources by maximizing the contribution from those who manage the asset through performance reviews and assessments
- Minimize the risk by managing engineering, operational and financial risk of the asset
- Optimize of the asset value sources by developing complementary sources of value (operations/ maintenance/management competencies)

Client achieved
- The client realised a totally integrated asset management system, including asset planning, maintenance and shipyard systems enables the client to have more information visibility between different functional groups and “cross functional” information can be gathered in a much shorter time frame.

Capital Project Management

Client situation		Client	
Client situation	Enable the client to address the entire project lifecycle and efficiency issues, while designing and implementing processes which are documented, standardized, and scalable for reuse on other deep-water assets/platforms	Client	Large US Integrated Oil & Gas Company

What we did

Approach
- Create a project management framework for the business processes for multiple deep-water assets in the Gulf of Mexico
- Optimize and standardize contract management and administration
- Optimize project controls to improve interface management, project management, cost control and schedule coordination while reducing risk
- Optimize schedule and engineering task coordination, decision-making and performance measurement
- Optimize management of IT infrastructure to ensure it is tailored to the business, and applications are optimized/rationalized
- Optimizing HSE to ensure that metrics are optimized, and critical success factors are applied to incidents and contractors

Client achieved
- A transparent and integrated project management office for multiple deepwater platforms, including the active use of process maturity model (PMM) processes, and a set of implementable business processes and procedures which can be standardized for other global assets.
-
- An optimized set of procedures which enables the client to have increased visibility into the breakdown, cost and time constraints of individual processes, the gap between existing and best practices, and the savings associated with process improvement

Review Construction, Engineering, and Environmental Consulting

Client situation		Client	
Client situation	Provide an approach to understanding and mitigating the risks in extended business relationships. CRC services help our clients structure, monitor, and strengthen contractual relationships with other businesses to maximize revenue, manage cost, and boost performance.	Client	Large Mid-stream Oil and Gas

What we did

Approach
- Performed a contractor risk assessment to summarize and categorize contractor population and perform initial risk assessment of contractors based on key risk criteria.
- Analysed contractor risk assessment results to define the project plan and select the contractors to review.
- Performed CRC analysis by evaluating the billing transactions to verify that agreed-upon rates and other conditions are utilized (e.g., definition of overtime, material charges, travel expenses).
- Communicated the results through the review or preliminary findings, clarified any questions, and confirmed potential overcharges.
- Assist with the set-up of on-going compliance analysis to include feedback around contracts, contract administration, and account payables controls.

Client achieved
- CRC identified more than 9 million dollars in potential savings. Additionally, CRC increased the efficiency and effectiveness of overall contract management for the client.

Capital Project Risk Assessment

Client situation		Client	
Client situation	The client required the designed and implementation of a risk management process in connection with the proposed development of a $7b new oil refinery project in Canada.	Client	Large US Integrated Oil & Gas Company

What we did

Approach
- Design a risk management process at stage gate 1, feasibility analysis.
- Developed risk management tools that are consistent with the enterprise risk management framework
- Conducted risk review workshops to:
- Identify, evaluate and prioritize project risks
- Develop mitigation plans, and
- Monitor progress of mitigation activities

Client achieved
- Developed and executed risk management approach for the client and delivered a risk profile and mitigation plans.

Major Capital Project Strategy and KPIs

Client situation

Based on a number of third party reviews (IPA, DNV, JVPs etc..) INPEX were required to clarify their direction for the INPEX Masela project and also to build internal capability and competency to deliver the project. Central teams did not exist within the client to develop strategies, performance reporting or conduct business improvement projects. There was little collaboration and communication across the project. Leadership and attempts to previously implement organizational strategy was lacking

Client

Large Indonesian Oil & Gas Company

Indonesia

What we did

Scope

- Development of a strategy that focuses on the execution of FEED and achievement of FID.
- In alignment with the strategy and good practice major capital project execution, development of a suite of KPIs to execute the strategy and measure mcp project performance.
- Implementation of a strategy and reporting framework to ensure sustainability of the delivered solution within the client.

Approach

- INPEX required a strategy to assist in the execution of their major capital project, including the development of a set of strategic objectives and critical success factors, execution initiatives to build internal capability and enhance competency across the organisation. To measure this a set of KPIs were developed to provide line of sight into the execution of the MCP and also the execution of the strategy. Further we developed a clear set of SoPs to provide INPEX with a set of processes and ensure sustainability and knowledge exchange.
- As it is the first time for INPEX to execute such a MCP, they required some external advice around what is required for them to pass FID. The Masela project is unique as it is a dual FEED for FLNG and a single FEED for SURF, all bids are lump sum and run by a complex JV Participant and government structure, due to Indonesian regulations.

Client achieved

- A strategy that incorporated the entire business outlining initiatives required to make improvements within the business and build capability and competency
- Clear steps required to deliver FEED and achieve FID
- A set of KPIs that provide line of sight across INPEX to ensure effective decision making and provide clarity on accountabilities to measure performance
- Repeatable and sustainable process to ongoingly measure, refine and report on the strategy and KPIs

Management Accounting and Customer Profitability

Client situation

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Client

Large Retail Oil Company

South Africa

What we did

Scope

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