



# Enterprise Transformation Practice

## Business Transformation: Case Study

### Overview

Country or Region: Nigeria  
Industry: Oil & Gas- Government Agency

### Customer Profile

The client is a commercial international Corporation engaged in petroleum activities. The Research and Development Division was set up in 1977 to solve the operational and technical problems of the Oil and Gas Industry through the application of the results of scientific research and the development of technology. The division strives to become a world-class Petroleum Research Centre, which is driven by innovation & quality.

### Business Situation

R&D organization in the company lacks focus on research and development activities, and has not quite lived up to its onerous mission to carry out research, develop technology and provides services to Oil & Gas industry participants, especially in comparison to other peer NOCs. The R&D setup does not have adequate qualified scientists and researchers, and therefore is largely confined to providing laboratory services.

### Proposed Solution

The solution approach by Enterprise Transformation Practice at Nihilent covers the entire strategic planning process and included business assessment, strategy design & formulation and implementation of the various strategic initiatives identified to achieve the objectives and goals for the client Nihilent proposed to carry out the workshops and focus discussions with all the relevant stakeholders in bottom-up and top-down way. The bottom-up approach ensures alignment of the entire organization to the process of strategy design and the top-down approach gives the insights about where the organization wants to be or would like to achieve in coming years. The recommendations were rolled out in a 5-year operational roadmap with key strategic initiatives identified across 12 different themes. Out of which, 7 themes were **Technical** in nature focusing on overall appraisal of Oil & Gas resources in Nigeria and rest were defined as **Foundational** Themes, which ensured strong capability building to support Technical themes within NNPC R&D.

### Business Benefits

- Clearly identified deliverables for enhancing the oil company' value additions to NNPC group and Oil & Gas industry, Operational roadmap 2020, complete details of technical and foundational initiatives
- Handholding & training of champions on a range of clearly defined solution frameworks used for strategy formulation, execution and tracking
- Clearly defined Strategy Map & Scorecard
- Detailed benchmarking study

### Nigeria's state oil corporation

### Project North Star- R&D Strategy

**“R&D SHOULD BE A THINK-TANK, A RESERVOIR OF KNOWLEDGE WITH PROVEN EXPERTISE IN OIL AND GAS BUSINESS”**

### Group General Manager at the client company

Research and development is a long-term investment in the future, serving as the cornerstone for innovation driven growth. While there is a significant immediate economic impact from R&D activities the big pay-off from investments in R&D are longer-term sustained economic gains through strengthened global competitiveness and even creation of entire new industries.

The challenges of meeting growing global demand for energy against the backdrop of naturally declining production and reserves from existing fields are significant. In order to meet these challenges, the industry is moving into new areas with the growth of unconventional resources.

The industry situation puts a lot of pressure on Research & Development divisions of the Petroleum Corporations to constantly innovate and improve Quality of the products to provide high end services. Underlying many R&D strategies are hypotheses or assumptions about technical or scientific approaches that are likely to be most fruitful.

Nihilent brings in understanding of the Oil and Gas Sector, and extensive strategy creation/execution experience, packaged into a best practice methodology, to enable the client to successfully respond to the modern day requirements and challenges of offering oil & natural gas services to its valued customers.



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## Business Transformation: Case Study

### Business Situation

The client's R & D was established by the NNPC Act of 1977. It was initially set up as a department under Administration and Personnel Division (APD). It was established to solve the operational and technical problems of the oil and gas industry through the application of the results of scientific research and the development of technology.

Currently the R&D organization at the client's company lacks focus on research and development activities, and has not quite lived up to its mission to carry out research, develop technology and provide services to Oil & Gas industry participants, especially in comparison to other peer NOCs. This situation led its management to set the transformation agenda for R&D in order to invigorate its existence and making it relevant for Nigeria's development.

R&D setup does not have adequate qualified scientists and researchers, and therefore is largely confined to providing laboratory services, does have equipment which have reached/ crossed its shelf lives. While there are pockets of excellence in R&D, currently it undertakes very limited applied research for upstream, midstream and downstream business units within the value chain. In addition, various business units seem to be having problems regarding routine activities and therefore placing little or no importance on R&D work. R&D has minimal interactions with its Business Units, and hence a weak pipeline of investigative research problems.

All these issues reflected the inability of R&D to be Innovation and Knowledge partner for the Oil & Gas industry and not have Intellectual property framework of its own. Additionally, Lack of a proper funding mechanism, with consistent negative cash flows over many years, along with the absence of commercially savvy scientists /researchers have only worsened the situation for oil company.

In its endeavor to become "One of best Oil & Gas R&D Centre in the world" the client invited Nihilent's expertise for the crafting of a focused R&D strategy. This partnership culminated in the formation of "Project North Star", a 4-staged transformation initiative to enable the company on its journey of becoming a world class R&D Centre.

### Proposed Solution

The client's management selected Nihilent to set the transformation agenda for its R&D department. Companies, in general, are motivated to invest in R&D by basic economics. It is the mandate of Project North Star, to hence projectize the identified opportunities with a clear objective, set of tangible outcomes, adequate resourcing, prudent funding and tight-knight governance mechanism, all tied together by an un-ambiguous business case to monitor and drive benefit realization. These projects, focusing on the near-term reward of immediate shareholder value while maintaining long-term sustainability, will be woven into a practical roadmap emphasizing foundation building, capability strengthening and global expansion, under the leadership of the transformation management office.

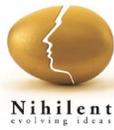
### The Process

Nihilent proposed an approach which covers the entire strategic planning process and included business assessment, strategy design & formulation and implementation of the various strategic initiatives identified to achieve the objectives and goals for the client. Nihilent carried out workshops with all relevant stakeholders in bottom-up and top-down way. The bottom-up approach ensured alignment of the entire organization to the process of strategy creation and hence expected to play a fine role in execution. Top-down approach indicated inspirational target state model for R&D.

#### 1. Business Assessment

This stage involved collating inputs from stakeholders and reviewing existing documents in order to capture internal and external factors to be taken into consideration to determine division's strategic journey.

Business Assessment Report, the primary deliverable of Stage 1, summarized the view points across multiple business factors of various R&D stakeholder groups such as R&D Staff and Internal Customers, and observations made from the analysis of various R&D performance reports. The key relative strengths as well as areas for improvement emerged from this assessment. The business assessment also appropriated the existing situation in terms of policy, workforce, technology (equipment), capability, processes, funding, delivery performance, customer management and project management.



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## Business Transformation: Case Study

### 2. Benchmarking Study

The increasingly competitive and dynamic nature of the global oil and gas industry has driven companies to realize that the deployment of internal resources intelligently is a critical factor in a successful strategy. And this requires companies to organize information to enable comparisons, quantify opportunity gaps and offer clarity on how, when and where to efficiently deploy resources and capital. The objective of Benchmarking was to help the company understand its competitive position and adjust its strategies to enable and build sustainable competitive advantage.

The Oil and gas firms will continue to do what they have done for more than a century: take a long-term view, invest for the future, push the boundaries of technology, and seek new resources and markets in every corner of the world. However the exact nature of these responses remains unique given the operating context and the competitive strategy chosen by each company.

For the purpose of this benchmarking exercise, Nihilent analyzed a wide comparable set of 18 Oil and Gas companies –

- IOC: Chevron, ENI, Exxon Mobil, GE Oil and Gas, Shell, Total and UOP
- NOC: BPCL, Gazprom, HPCL, IOCL, ONGC, Pemex, Petrobras, PetroChina, Petronas and Sasol
- OPEC: Saudi Aramco and NNPC

The information was gathered around 12 key R&D Organization factors such as Capability, Equipment, Thematic Areas, Certifications, Funding, Staffing, Patents, etc. Out of these 18 organizations, Nihilent arranged field visits for R&D Champions to facilities of Sasol (Sasolburg and Secunda) and ONGC, Dehradun India and BPCL R&D Centre, Noida, India to closely monitor and understand the details of R&D business.

### 3. Strategy Formulation

This stage includes identifying R&D division's vision, mission, key success factors, strategic goals and objectives from key stakeholders using various tools and techniques.

Before setting the context for transformation, Nihilent team also carried out Business Factors Evaluation study. The study sets the context for the way the client operates and helps in establishing an effective strategy to address R&D's strategic challenges and leverage its strategic advantages and strategic opportunities.

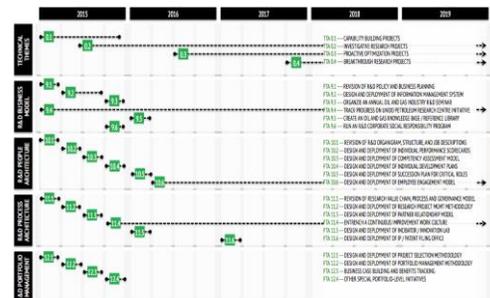
Subsequently, a series of workshops were conducted with R&D top management and managers. The workshop included description of Strategy planning approach with focus on Strategy creation and execution using various management tools & techniques. It was an attempt to co-create future for the client including Mission, Vision Statement, Core Values and strategy map for R&D Division by way of discussing views of R&D management team.

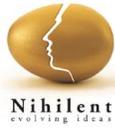
Based on the outcomes of a 2-day strategy workshop which was the oil company's Mission, Core Values, Vision 2020, High Level Strategic Themes, along with its strategic objectives across the Financial, Customer, Operations and Learning & Innovation were agreed upon. Once the Strategy Map was agreed, a Corporate Scorecard was drafted with relevant measurements to track the client's performance on the laid down objectives.

### 4. Strategy Execution

The focus of this stage is to put the formulated Strategy into action. Measurement criteria for each objective were designed and the Strategic Initiatives were finalized through series of workshops with Project champions. An implementation plan (R&D Roadmap 2020) is created in order to facilitate R&D achieve the identified strategic outcomes.

It was essential for R&D to develop a differentiating strategy if it hopes to thrive amidst hyper competition. And it also needed a framework for guiding the mobilization of an organization around its strategic plan. Themes are the essential elements that form the foundation for strategy execution, areas in which the organization must excel in order to achieve our vision. Nihilent team detailed out a "Strategy Roadmap" enabling the client to clearly understand each action and what decisions need to be made. Team also proposed a to-be organization structure which will facilitate the execution of identified roadmap along with the RACI matrix for each thematic area.





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## Business Transformation: Case Study

### 5. Handholding & Facilitation

The objectives of this stage were to handhold and facilitate the R&D team in creating a common understanding of the project objectives, project deliverables and frameworks/tools used during the project. This stage focused on building internal capacity so that internal teams are empowered to run with initiatives, track and realize benefits.

Nihilent team created knowledge transfer/handholding material using the inputs received during the course of activities performed and a Recommendation report on reporting and review mechanism to monitor progress on strategy.

#### Project Continuity Recommendations

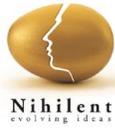
Detailed recommendations were given on key areas of Business continuity identified by the project team to ensure smooth progression of this transformation journey –

- R&D Transformation Manager
- R&D Advisory and Supervisory Committee
- Technical Thematic Areas
- Foundational Thematic Areas

### Business Benefits

R&D should be able to solve the problems of other subsidiaries and help them improve their operations

- Identification of process improvement opportunities, revenue potentials and cost optimization opportunities for the client through R&D Solutioning
- R&D strategic roadmap with a prioritized list of the initiatives
- Identification of set of quick wins in each phase of the project to generate positive momentum
- Detailed Benchmarking report for the client against the best in Oil and Gas industry
- Detailed integrated performance management plan for R&D
- A range of clearly defined solution frameworks used for strategy formulation, execution and tracking, NNPC and client staff to be trained on these frameworks
- Clearly identified deliverables for enhancing the client's value additions to NNPC group and Oil & Gas industry, complete details of initiatives (short, medium and long term) along with the steps involved to achieve the world class status will be articulated in project completion report



**Nihilent**  
evolving ideas

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### For More Information

For more information about Enterprise Transformation Services, call Nihilent Sales at +234 816 463 7830

To access information about Nihilent using the World Wide Web, go to:  
[www.nihilent.com](http://www.nihilent.com)

### About Nihilent

Nihilent is an ISO 9001:2008 and CMMI® Level 5 certified global business consulting and solutions Integration Company. As a leader in the area of learning, innovation and knowledge management with our patented change management framework MC<sup>3</sup>™, Nihilent's Enterprise Transformation Practice partners with clients in successfully translating business strategies into business results.

For more information about Enterprise Transformation Practice, go to:  
[www.nihilent.com/enterprise\\_transformation.html](http://www.nihilent.com/enterprise_transformation.html)

### MC<sup>3</sup> - The Change Management Framework

The MC<sup>3</sup> framework is a metrics based model that helps companies to continuously monitor business goals and undertake initiatives to enhance performance.

Nihilent's MC<sup>3</sup> transforms an organization's Vision (Business Strategies) into Reality (Business Results) by:

- ❖ Identifying the extent of gap between Vision and Reality
- ❖ Defining clear-cut objectives, measures and action plans at all levels
- ❖ Bridging the gap between customer expectations and organizational performance
- ❖ Creating a role based organization
- ❖ Capturing skills and competency matrix of individuals
- ❖ Identifying a learning agenda for every individual
- ❖ Creating a culture of learning, sharing, collaboration and innovation
- ❖ Fostering an environment of continuous experimentation and improvement
- ❖ Introducing change management to institutionalize learning
- ❖ Calibrating corporate performance continuously using Lamat™

For more information about MC<sup>3</sup> the change management framework, go to:  
[www.mc3consulting.com](http://www.mc3consulting.com)

### The Nihilent Advantage

- ❖ A holistic view of consulting on key strategic assets of an organization - People, Process, Technology and Knowledge
- ❖ Strategy execution using the patented MC<sup>3</sup> framework which looks at an all-round organisation transformation
- ❖ Focus on continuous improvement with client engagement at the epicenter of value creation
- ❖ Metrics based delivery model bringing incremental to transformational change in Time, Quality, Cost, and Productivity