

# OBSTACLES AND IMPEDIMENTS TO SUCCESSFUL DELIVERY OF OIL AND GAS PROJECTS: A SOLUTION TO THE NIGERIAN CASE

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## ABSTRACT

*The Nigerian oil and gas industry is a cornerstone of the nation's economy, contributing significantly to its GDP and serving as a vital source of revenue. However, the successful execution of projects in this sector is often challenged by complexities related to scope, time, and cost. This paper explores the critical role of strategic project management in addressing these challenges, enhancing efficiency, and ensuring the successful delivery of oil and gas projects in Nigeria.*

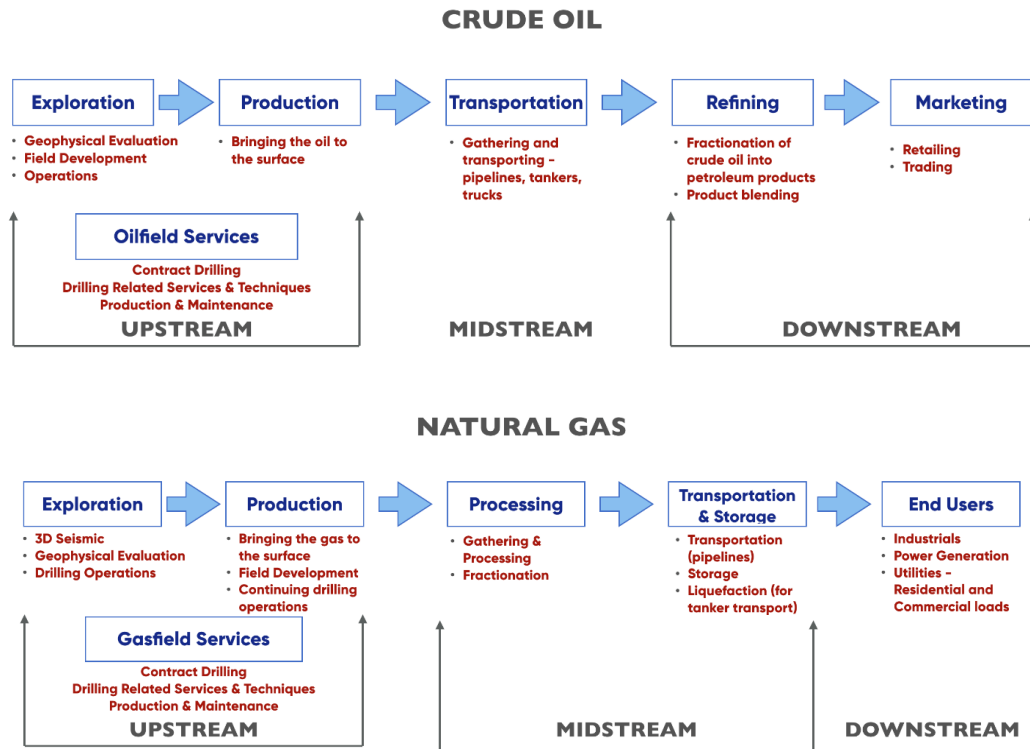
## INTRODUCTION

Every organization's aim is to plan and deliver their projects to meet the objectives for which they are been undertaken (Aniekan, 2019). They employ best practices in the implementation of project management to ensure successful delivery of their projects, using processes and techniques that work best for them see figure 1.

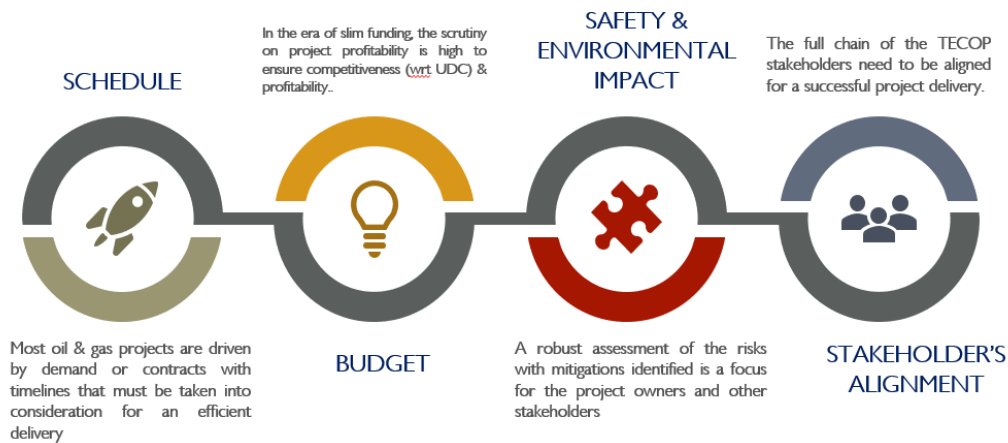
Poor project delivery results in:



**Figure 1**  
**POOR PROJECT DELIVERY RESULTS**



**Figure 2**  
**THE OIL & GAS VALUE CHAIN**



**Figure 3**  
**DRIVERS FOR EFFECTIVE MANAGEMENT OF OIL & GAS PROJECTS**

### Strategic Project Management in Oil & Gas

Strategic project management in the oil and gas industry is the upgrade of traditional project management principles and practices to the level where resource allocation decision, operational planning, risks mitigation is (Egbule, 2020) strategically aligned to deliver the

project in record time with no Loss Time Incident (LTI) and within budget see figure 2 and figure 3.

Technically, strategic project management in the oil and gas industry can be divided into:

- Strategic Planning
- Cost Optimization
- Key Procurement Strategy
- Local Content Management

### **Strategic Planning**

- Optimize performance through adoption of project portfolio management software.
- project portfolio management helps with assignment of personnel, materials, response time etc.
- Have back-up plans for every critical path.
- Dry runs are encouraged before execution.

### **Cost Optimization**

- Reduce costs with the use of the right machinery, right resources/skill sets and equipment to avoid downtimes.
- Draw inferences from past projects and plan strategically for future projects.
- Digitalization of project management processes will greatly improve efficiency, save time, and ultimately reduce costs.

### **Key Procurement Strategy**

- Have a clear SOW and all expectations must be met from the procurement stage.
- Ensure contracting firms involved in procurement show valid connections with OEM and demonstrate past project executions.
- Enable support for employees to anticipate and mitigate issues related to cost, schedule and quality where need be.

### **Local Content Management**

In the oil and gas industry there are strict requirements to meet local content laws. Hence carrying out the strategic project management the manager should have that at the back of his/her mind and clearly spell out the local content requirements and skill sets that can be obtained locally to maintain peace and orderly execution of O& G projects, (Ogbeide, 2018) especially in the onshore locations where host communities can be an obstacle to project delivery. (Onyema, 2019) Contracting firms must factor in local content in their HAZOP.

## PROBLEM DESCRIPTION

### Poor Project Planning

Dedicating time to effectively plan for a project is considered wasteful and once project planning is not detailed, such projects usually run into a lot of issues during execution which in turn results to challenges in meeting deadlines.

### Inadequate Funding

Especially service providers not meeting contractual requirements. Contractors claim at the bidding stage to have access to funds but fail to deliver, which affects project execution and timely delivery.

### Lack of Equipment

The required equipment or tools to execute project scope at times is absent, especially on mobilization. This is a common occurrence in most work sites in Nigeria.

### Poor Project Methodology

Methodology guides the project but in Nigeria; the practice is usually to get started and such leads to inconsistency in the methodology which can cause the project to spin out of control (Oluwole, 2017). In some cases, deviations in the methodology is not agreed and signed off on by both parties (the client and contractor).

### Community Issues

Host communities' engagement cannot be overemphasized in project deliveries. Contractors or project managers who fail to engage host communities are usually faced with some level of uncontrolled agitation and sometimes shutdown of operations.

## RESULTS AND DISCUSSIONS

### Poor Project Methodology

Clear project management plan and schedule detailing expected associated risks and contingencies should be put in place before the commencement of any oil and gas related projects. This is very important because the deviation can increase the cost of the project and makes it less attractive in terms of the economic evaluation.

### Inadequate Funding

- An effective project plan and schedule should be a priority in any project to avoid ambiguous project cost.
- Provision of easily accessible financial facilities with reasonable interest rates to support Oil and Gas related projects by the Government.
- The swift passage of the Petroleum Industry Bill will clearly address uncertainties in the oil and gas sector which in turn will make foreign loans easily accessible.

## Community Issues

A good project model should also incorporate the host community for seamless operation and timely project delivery. This can be achieved by a good Corporate Social Responsibility plan (provision of social amenities, incorporating skilled and unskilled workforce into the project).

## CONCLUSION

Project failure is easily attributed to Technical (technology, project management techniques), People (project leadership, scope management, communication), Stakeholder (involvement, funding, agreed goals)

## RECOMMENDATION

We recommend improved focus on People – emotional content development more than project management methodologies. Promoting employees and stakeholder's engagement (behaviour-based management)

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