

An Approach to Reducing Project Delays and Improving Efficiency in the Nigerian Oil and Gas Industry

Musa Adekunle Adewoyin

An Approach to Reducing Project Delays and Improving Efficiency in the Nigerian Oil and Gas Industry

Musa Adekunle Adewoyin

University of Salford, Manchester, UK



DeepScience

Published, marketed, and distributed by:

Deep Science Publishing
USA | UK | India | Turkey
Reg. No. MH-33-0523625
www.deepscienceresearch.com
editor@deepscienceresearch.com
WhatsApp: +91 7977171947

ISBN: 978-93-49307-62-9

E-ISBN: 978-93-49307-74-2

<https://doi.org/10.70593/978-93-49307-74-2>

Copyright © Musa Adekunle Adewoyin

Citation: Adewoyin, M. A. (2025). *An Approach to Reducing Project Delays and Improving Efficiency in the Nigerian Oil and Gas Industry*. Deep Science Publishing. <https://doi.org/10.70593/978-93-49307-74-2>

This book is published online under a fully open access program and is licensed under the Creative Commons "Attribution-Non-commercial" (CC BY-NC) license. This open access license allows third parties to copy and redistribute the material in any medium or format, provided that proper attribution is given to the author(s) and the published source. The publishers, authors, and editors are not responsible for errors or omissions, or for any consequences arising from the application of the information presented in this book, and make no warranty, express or implied, regarding the content of this publication. Although the publisher, authors, and editors have made every effort to ensure that the content is not misleading or false, they do not represent or warrant that the information-particularly regarding verification by third parties-has been verified. The publisher is neutral with regard to jurisdictional claims in published maps and institutional affiliations. The authors and publishers have made every effort to contact all copyright holders of the material reproduced in this publication and apologize to anyone we may have been unable to reach. If any copyright material has not been acknowledged, please write to us so we can correct it in a future reprint.

Preface

A number of oil and gas projects in Nigeria, operated by IOCs – Total Energies, ExxonMobil, Chevron and indigenous Dangote have had their fair share of delays amounting to losses in ROI, and inability to timely meet consumer needs. Reviews have revealed that project delays are recurring decimal, with specific focus to Nigeria as compared to developed countries – like the United States and the United Kingdom.

This research is aimed at delivering an approach to managing project delay causes in the Nigerian oil and gas industry and explore methods of improving assets and project efficiency, by identifying the correlation between them, the leading causes of delays, their impact on project, and a proactive recovery approach towards managing delays.

With the aid of the mixed approach, quantitative and qualitative analysis were carried out by engaging industry professionals and other key stakeholders in survey questionnaires and interview sessions, in order to verify and validate the applicability of the research literature and response mechanism. The research philosophy employed both positivism and interpretivism paradigm, aligning each to the respective data analysis approach - quantitative and qualitative.

The major findings as per causes of delays were identified as poor project client planning, questionable client leadership decision making, key materials supply concerns from contractors as well as bureaucratic approval processes. Notably, two out of the four first level causes were client-dependent. Also revealed were the interlink between the causes, for example, material shortages due to poor planning or leadership decisions. Other sections of this research are in agreement that project delays have cascading effects of reducing benefit realisation, denting corporate reputation and declining returns-on-investment (ROI).

Using the bowtie analysis which is a combination of a fault tree and event tree, the primary causes (issues) of the major events were extracted through thematic analysis of the interview transcripts, where factors such as lowest bidder selection, poor material quality, unclear scope definition and lack of synergy between stakeholders were identified; in relation to project schedule overrun – while mitigative and preventive procedures and practices are expected to reduce the chances of delays.

This research output could add to existing bodies of knowledge by providing easy-to-understand, quick glance delay control frameworks, that can improve decision-making, improve leadership and provide a resilient project management approach within the Nigerian oil and gas eco-system.

Musa Adekunle Adewoyin

Contents

- 1 Project delays in Nigeria’s oil and gas sector: Context and importance.....1
- 2 Theoretical frameworks and literature review on project efficiency and delays.....5
- 3 Approaches to analyzing project delays in Nigeria’s oil and gas industry23
- 4 Evaluating the causes and impacts of project delays.....32
- 5 Enhancing project delivery and efficiency by addressing project delays in the Nigerian oil and gas sector.....60
- References.....64
- Appendices.....71